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Contents

THE RELATIONSHIP BETWEEN THE UNEMPLOYMENT RATE AND THE SIZE OF THE SHADOW ECONOMY-A NONPARAMETRIC ANALYSIS OF USA DATA WITH SPLINE MODELS

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Abstract: *The paper aims to investigate the relationship between unemployment rate and shadow economy with USA data using spline models. The shadow economy is estimated as percentage of official GDP, using MIMIC model. The size of the shadow economy (SE) is estimated to be decreasing over the last two decades.*

In order to evaluate the nature of the relationship between the two variables, we have estimated cubic B-spline, natural cubic B-spline and smoothing models.

Using an F-test, we compare the smoothing spline to a global linear fit and the results indicate a sufficiently linear relationship.

Finally, we have compared the local polynomial models with the spline model; the smoothing spline model closely matches the linearity between the size of the shadow economy and the unemployment rate.

Keywords: shadow economy, unemployment rate, spline models, U.SA.

JEL classification: C14, E26, H20, H50, O17

1. Theoretical modelling in estimating the size of shadow economy

In the process of econometric modelling of U.S.A. shadow economy we used a particular type of models-Structural Equations Models (SEM).

A special case of SEM is the Multiple Indicators and Multiple Causes model (MIMIC model), that allow to consider the SE as a "latent" variable linked, on the one hand, to a number of observable indicators (reflecting changes in the size of the SE) and on the other, to a set of observed causal variables, which are regarded as some of the most important determinants of the unreported economic activity (Dell'Anno, 2003). A detailed description of the MIMIC model is provided by (Dobre, Alexandru, 2010).

2. Data issues

The variables used in the estimation are defined in Appendix A. The data series are quarterly from 1980:Q1 to 2009:Q2. All the series have been seasonally adjusted. The series in levels or differences have been tested for unit roots using the Augmented-Dickey Fuller (ADF) test. We test I(2) against I(1) and if we reject I(2), we test I(1) against I(0) as appropriate(Appendix). All the data has been differentiated for the achievement of the stationarity. While all the variables have been identified like integrated on first order, the latent variable is estimated in the same transformation of independent variables (first difference).

3. Empirical results. Estimating the size of the shadow economy

In our econometrical demarche of estimating the size of shadow economy, the causal variables considered in the model are: tax burden decomposed into personal current taxes (X_1), taxes on production and imports(X_2), taxes on corporate income(X_3), contributions for government social insurance(X_4) and government unemployment insurance(X_5), unemployment rate(X_6), self-employment in civilian labour force (X_7),government employment in civilian labour force (X_8) called bureaucracy index. The indicator variables incorporated in the model are: real gross domestic product index (Y_1), currency ratio M_1/M_2 (Y_2) and civilian labour force participation rate (Y_3).

The main elements of tax burden, government unemployment insurance and index of real gross domestic product are expressed as percentages of gross domestic product while government employment, self-

employment, unemployment rate and civilian labour force participation rate are calculated like percentages of civilian labour force. A detailed presentation of the variables is provided by (Dobre, Alexandru, 2009)[1].

The results of estimating the structural equation models, by Maximum Likelihood, using the LISREL 8.8 package, over the period 1990-2009 are presented in table 1. The coefficient of the index of real GDP[2] is normalised to -1 to sufficiently identify the model ($\lambda_1 = -1$).This indicates an inverse relationship between the official and shadow economy.

The results suggest a negative none statistically significant relationship between the size of the shadow economy and civilian labor force participation rate. Also, between the dimension of the shadow economy and the currency ratio there is a positive none statistically significant relationship.

Although the causal variables have the anticipated signs, many of them lack individual significance. The unemployment rate and social insurance contributions are the only causal variable positively significant in all MIMIC models. The other causal variables from the model are not statistically significant.

The positive sign of the unemployment rate according with the negative one obtained by the civilian labor force participation rate point out the fact that many workers from the official economy go underground when they are laid off. The positive sign of the unemployment rate indicates the existence of a flow of resources from official to shadow economy in recession cycles.

The econometrical results reveal that the main causes of shadow economy are: taxes on corporate income, contributions for government social insurance, unemployment rate and self-employment. Starting from MIMIC 8-1-3 and removing the variables which have not structural parameters statistically significant, we obtain MIMIC 4-1-2 as the best model.

The MIMIC 4-1-2 model has four causal variables (taxes on corporate income, contributions for government social insurance, unemployment rate and self-employment) and two indicators (index of real GDP and civilian labour force participation rate).

The choice of the model is based on: the statistical significance of parameters, the parsimony of specification, the p-value of chi-square, and the Root Mean Square Error of Approximation (RMSEA) test, adjusted goodness-of-fit index (AGFI).

Taking into account the reference variable (Y_1, $\mathrm{Re}al\,GDP_t \big/ \mathrm{Re}al\,GDP_{1990}$) the shadow economy is scaled up to a value in 1990, the base year, and we build an average of several estimates from this year for the U.S.A. shadow economy.

Table 2: Estimates of the size of U.S.A. shadow economy (1990)

Author	***Method***	***Size of Shadow Economy***
Johnson et. Al(1998)	Currency Demand Approach	13.9%
Lacko(1999)	Physical Input(Electricity)	10.5%
Schneider and Enste(2000)	Currency Demand Approach	7.5%*
Mean 1990		***10.6%***

*means for 1990-1993

The index of changes of the shadow economy in United States measured as percentage of GDP in the 1990 is linked to the index of changes of real GDP as follow:

Measurement Equation: $$\frac{GDP_t - GDP_{t-1}}{GDP_{1990}} = -\frac{\tilde{\eta}_t - \tilde{\eta}_{t-1}}{GDP_{1990}} \qquad (1)$$

The estimates of the structural model are used to obtain an ordinal time series index for latent variable (shadow economy):

Structural Equation: $$\frac{\Delta\tilde{\eta}_t}{GDP_{1990}} = -0.24\Delta X_{3t} + 3.00\Delta X_{4t} + 1.49\Delta X_{6t} + 1.01\Delta X_{7t} \quad (2)$$

[1] Dobre, I., Alexandru, A., "*The impact of unemployment rate on the dimension of the shadow economy in Spain: A structural Equation Approach*", European Research Studies Journal, Volume XIII, issue 4, 2009, pg.179-197, ISSN: 1108-2976.

[2] $Index\ real\ GDP = \mathrm{Re}al\,GDP_t \big/ \mathrm{Re}al\,GDP_{1990}$

The index is scaled to take up to a value of 10.6% in 1990 and further transformed from changes respect to the GDP in the 1990 to the shadow economy as ratio of current GDP. These operations are show in the benchmark equation[3]: $\frac{\tilde{\eta}_t}{GDP_{1990}} \times \frac{\eta^*_{1990}}{GDP_{1990}} \times \frac{GDP_{1990}}{\tilde{\eta}_{1990}} \times \frac{GDP_{1990}}{GDP_t} = \frac{\hat{\eta}_t}{GDP_t}$ (3)

where:

I. $\frac{\tilde{\eta}_t}{GDP_{1990}}$ is the index of shadow economy calculated by structural eq.;

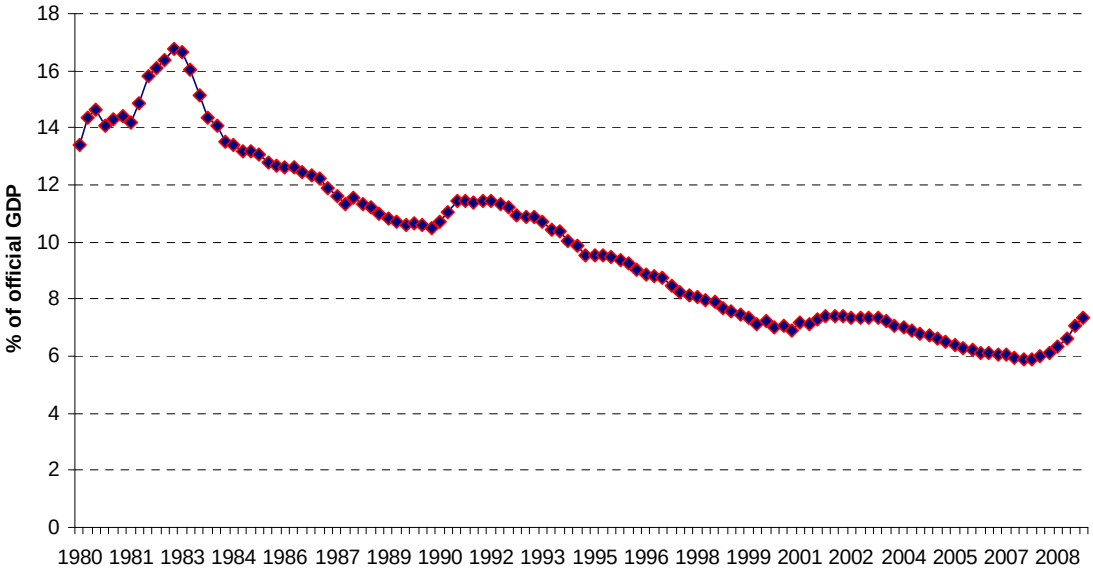
II. $\frac{\eta^*_{1990}}{GDP_{1990}} = 10.6\%$ is the exogenous estimate of shadow economy,

III. $\frac{\tilde{\eta}_{1990}}{GDP_{1990}}$ is the value of index estimated by structural equation;

IV. $\frac{GDP_{1990}}{GDP_t}$ is to convert the index of changes respect to base year in shadow economy respect to current GDP;

V. $\frac{\hat{\eta}_t}{GDP_t}$ is the estimated shadow economy as a percentage of official GDP.

Fig.1. U.S.A. shadow economy as % of official GDP



The shadow economy measured as percentage of official GDP records the value of 13.41% in the first trimester of 1980 and follows an ascendant trend reaching the value of 16.77% in the last trimester of 1982.

At the beginning of 1983, the dimension of USA shadow economy begins to decrease in intensity, recording the average value of 6% of GDP at the end of 2007. For the last two year 2008 and 2009, the size of the unreported economy it increases slowly, achieving the value of 7.3% in the second quarter of 2009.

The results of this estimation are not far from the last empirical studies for USA (Schneider 1998, 2000, 2004, 2007, Schneider and Enste 2001).Schneider estimates in his last study, the size of USA shadow economy as average 2004/05, at the level of 7.9 percentage of official GDP.

[3] As the variables are all differenced to same degree, to calculate the levels of the latent variable multiplying the structural coefficients for raw (unfiltered) data, it is equivalent to compute the changes in the index by multiplying coefficients for the differenced causes and then to integrate them.

Table 1 : Estimated Coefficients[7] of the MIMIC Models

Models	Tax personnal/ GDP	Tax production/ GDP	Tax corporat./ GDP	Social insurance contr./GDP	Governm.unempl. insurance/GDP	Unempl. Rate	Self Empl.	Index Bureac.	M1/M2	Lab.Force Partic.	Chi-square (p-value)[8]	RMSEA (p-value)[9]	AGFI[10]	Df[11]
	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	Y_2	Y_3				
MIMIC 8-1-3	-0.01 (-0.08)	0.83 (0.89)	-0.27 (-0.82)	2.88* (3.85)	2.89 (1.89)	1.06* (3.73)	0.98 (1.67)	0.62 (0.53)	0.05 (1.11)	-0.01 (-0.89)	39.18 (0.0017)	0.11 (0.021)	0.78	17
MIMIC 8-1-2a	-0.01 (-0.08)	0.42 (0.52)	-0.37 (-1.10)	-1.80* (-2.85)	-0.41 (-0.28)	1.48* (4.99)	0.85 (1.72)	-0.15 (-0.15)	-----	-0.02 (-0.79)	27.66 (0.000)	0.15 (0.0049)	0.69	8
MIMIC 8-1-2b	-0.01 (-0.08)	0.83 (0.89)	-0.27 (-0.82)	2.88* (3.85)	2.89 (1.89)	1.06* (3.73)	0.98 (1.67)	0.62 (0.53)	0.05 (1.11)	-----	10.49+ (0.232)	0.052+ (0.42)	0.88	8
MIMIC 7-1-3	-0.01 (0.08)	-----	-0.27 (-0.81)	3.06* (4.22)	2.89 (1.89)	1.09* (3.82)	1.02 (1.73)	0.61 (0.51)	0.05 (1.11)	-0.01 (-0.89)	35.67 (0.002)	0.11 (0.021)	0.79	15
MIMIC 6-1-3	-0.02 (-0.14)	-----	-0.30 (-0.89)	2.98* (4.20)	2.89 (1.89)	1.08* (3.80)	1.01 (1.73)	-----	0.05 (1.11)	-0.01 (-0.89)	15.50+ (0.28)	0.041+ (0.53)	0.90	13
MIMIC 6-1-2a	-0.02 (-0.14)	-----	-0.30 (-0.89)	2.98* (4.20)	2.89 (1.89)	1.08* (3.80)	1.01 (1.73)	------	------	-0.01 (-0.89)	7.44+ (0.28)	0.046+ (0.45)	0.91	6
MIMIC 6-1-2b	-0.02 (-0.14)	-----	-0.30 (-0.89)	2.98* (4.20)	2.89 (1.89)	1.08* (3.80)	1.01 (1.73)	------	0.05 (1.11)	------	7.02+ (0.31)	0.038+ (0.49)	0.91	6
MIMIC 5-1-2	------	-----	-0.29 (-0.88)	2.97* (4.20)	2.85 (1.89)	1.09* (3.83)	1.01 (1.72)	------	------	-0.01 (-0.89)	7.44+ (0.19)	0.065+ (0.33)	0.90	5
MIMIC 4-1-3a	-----	-----	----	-----	2.75 (1.68)	1.14* (3.92)	0.70 (1.12)	-0.24 (-0.19)	0.05 (1.11)	-0.01 (-0.89)	26.88 (0.001)	0.13 (0.011)	0.81	9
MIMIC 4-1-3b	-0.13 (-0.79)	1.93 (1.68)	-0.99* (-2.58)	2.21* (2.41)	-----	----	----	-----	0.05 (1.11)	-0.01 (-0.89)	13.81+ (0.13)	0.07+ (0.30)	0.90	9
MIMIC 4-1-3c	-----	-----	-0.24 (-0.73)	3.00* (4.17)	-----	1.49* (7.99)	1.01 (1.70)	-----	0.05 (1.11)	-0.01 (-0.89)	10.20+ (0.33)	0.034+ (0.55)	0.92	9
MIMIC 4-1-2	**----**	**----**	**-0.24 (-0.73)**	**3.00* (4.17)**	**----**	**1.49* (7.99)**	**1.01 (1.70)**	**----**	**-----**	**-0.01 (-0.89)**	**4.41+ (0.35)**	**0.03+ (0.50)**	**0.93**	**4**
MIMIC 3-1-3	-----	----	-0.15 (-0.46)	2.93* (4.03)	----	1.45* (7.74)	------	------	0.05 (1.11)	-0.01 (-0.89)	8.83+ (0.27)	0.047+ (0.45)	0.93	7
MIMIC 3-1-2	-----	----	-0.15 (-0.46)	2.93* (4.03)	----	1.45* (7.74)	------	------	-------	-0.01 (-0.89)	4.05+ (0.26)	0.055+ (0.37)	0.93	3

[7] The estimations has been made with the software LISREL 8.8

[8] The SEM permits to consider and estimate the correlations between the X-variables and between the Y's. In our analysis greater number of models estimated, the covariances between the observed variables are often not statistically different from zero. Yet, if we decide to estimate these parameters changes in the estimates of structural coefficients are slightness, therefore the covariances are fixed equal to zero in order to have more degrees of freedom (Dell'Anno, 2004). If the structural equation model is correct and the population parameters are known, then the matrix S(Sample covariance matrix) will equal to $\sum(\theta)$ (model implied covariance matrix) therefore the perfect fitting correspond to p-value=1.0.This test has a statistical validity if there are large sample and multinormal distributions.

[9] P-value for Test of Close Fit (RMSEA<0.05). + means good fitting (p-value>0.05).

[10] Adjusted goodness-of-fit index, AGFI.This indicator takes values into the interval [0, 1].

[11] The degrees of freedom are determined by 0.5(q+p)(q+p+1)-t, where p=number of indicators, p=numbers of causes, t=number of free parameters..

4. A nonparametric analysis of the relationship between unemployment rate and the size of the shadow economy using spline models

Instead of assuming that we know the functional form for a regression model, a better alternative is to estimate the functional form from the data, replacing global estimates with local estimates. In the terms of local estimation, the statistical dependency between two variables is described not with a single parameter such as a mean or a slope coefficient, but with a series of local estimates.

Like local polynomial regression (LPR), spline smoothers are another nonparametric technique used with scatterplots. In any spline model, it must be selected the number of knots and the knot placement (Keele, 2008, pg.59). Stone (1986) found that where the knots are placed matters less than how many knots are used.

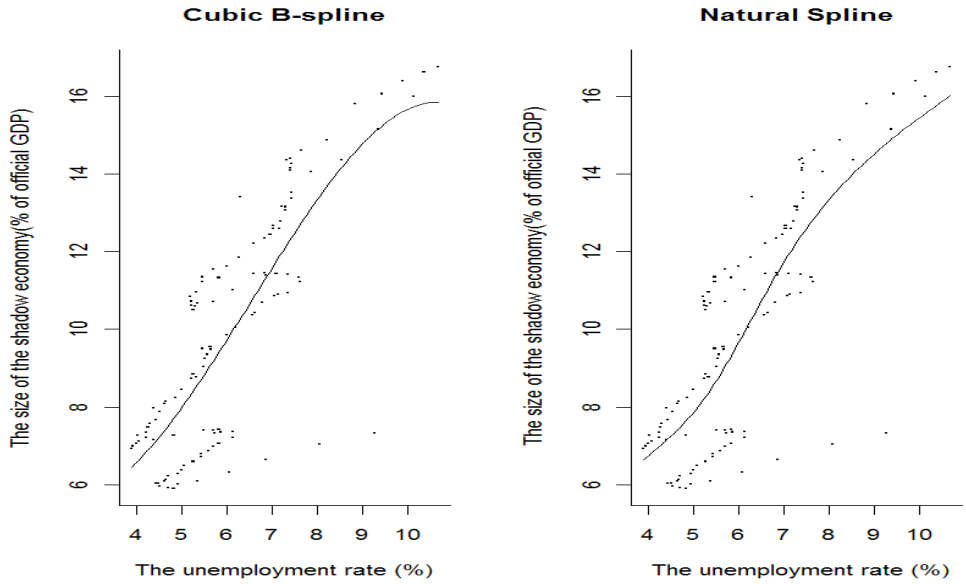
Standard practice is to place knots at evenly spaced intervals in the data. But the question of how to select the number of knots remains and has a important effect on the Spline fit. One method is to use a visual trial. Four knots is the standard starting point. If the fit appears rough, knots are added. If the fit appears overly nonlinear, knots are subtracted. The second method is to use Akaike Information Criterion to select the number of knots. The optimal number of knots is returned by the lowest AIC value.

Thus far, LPR estimates have revealed a linear dependency between the size of the shadow economy and the unemployment rate. It will we interesting to investigate the nature of the relationship between the two variables, using both cubic B-splines and natural cubic B-splines to estimate the nonparametric fit.

For the both spline models, it has been used 4 knots it we will evaluate whether this is the optimal number of knots, using Akaike Criterion.

Analyzing the graphics of both functions, there is a little difference between cubic B-splines and the natural cubic B-splines.

Fig.2. Cubic B-spline and natural spline fit to size of the shadow economy (% of off.GDP)



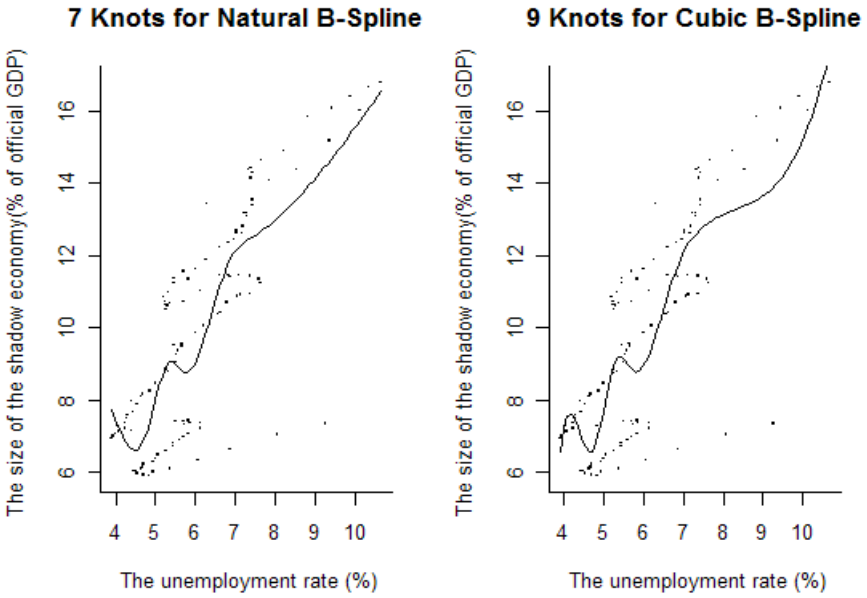
In order to select the number of knots, we use for both models the Akaike Information Criterion (AIC); the optimal number of knots is returned by the lowest AIC value. For the both spline models, it has been estimated several models with 2-9 knots.

Table 3. AIC values for differing number of knots

	Natural Spline	Cubic Spline
2 knots	477.0573	478.7849
3 knots	478.1010	478.7849
4 knots	477.0685	478.7849
5 knots	479.0302	478.7093
6 knots	480.0504	479.2769
7 knots	***475.1998***	477.6035
8 knots	477.5902	479.2186
9 knots	477.2197	***475.646***

Analysing the values of Akaike Information Criterion for several knots we observe that the optimal number of knots for the Natural Spline taking into account the lowest AIC value is 7 knots, while for the cubic Spline the optimal number of knots is 9.

Fig.3. The choice of the optimal number of knots for the both models



In order to estimate the statistical relationship between two variables, both splines and local polynomial regression can provide such an estimate with few assumptions about functional form. A common criticism of the both methods is that it is easy to have a surfeit of local parameters, which produces overly nonlinear estimates that overfit data (Keele, 2008, pg.62).

Penalized splines are a nonparametric regression technique that minimizes the possibility of overfitting. Smoothing splines operate with penalized estimation, placing a penalty on the number of local parameters used to estimate the nonparametric fit.

Like linear regression models, the spline estimate $\hat{f}$ minimises the sum of squares between y and the nonparametric estimate, $f(x_i)$: $SS(f) = \sum_{i=1}^{n}[y - f(x)]^2$ (4)

The main problem is that the estimate of f that minimises (4) use too many parameters. The penalised estimation solution is to attach a penalty for the number of parameters used to estimate f : $\lambda\int_{x_1}^{x_n}[f''(x)]^2 dx$, named roughness penalty that have two components: λ, the smoothing parameter and the second, the integrated squared second derivative of $f(x)$.

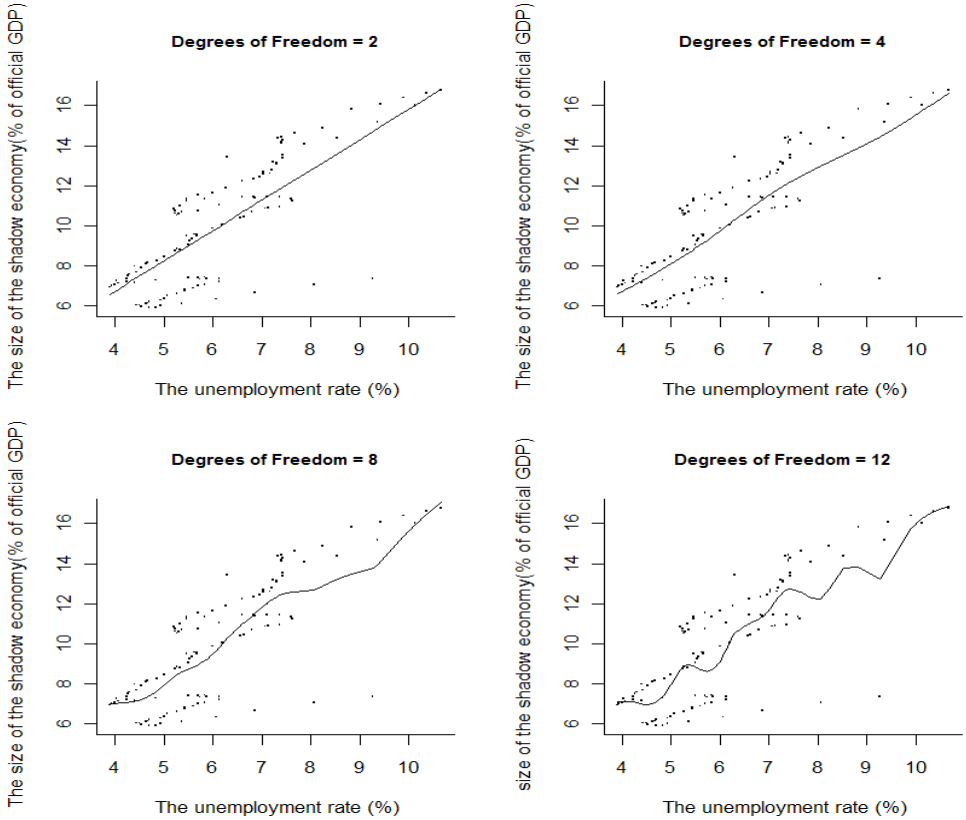
Further, the spline estimate become: $SS(f,\lambda) = \sum_{i=1}^{n}[y - f(x)]^2 + \lambda\int_{x_1}^{x_n}[f''(x)]^2 dx$ (5)

While small values of λ will interpolate the data and large values returns a least squares fit, intermediate values does not offer an interpretable effect on the amount of the smoothing applied to the data. It is proposed a transformation of λ into an approximation of the degrees of freedom; by selecting the degrees of freedom, it is chosen the number of effective local parameters used in the spline estimate.

The penalized splines named also “smoothing splines” differ from the standard splines by the fact that the number of knots have little influence over how smooth the fit is since the value of λ controls now the quality of the fit.

In order to see how different degrees of freedom (2, 4, 8 and 12) affect the fit, it has been estimate the relationship between the size of the shadow economy and the unemployment rate using smoothing splines.

Fig.4. Smoothing spline fit to shadow economy data



The results reveal that the fit with 2 degrees of freedom is identical to a linear regression; for the model with 4 and 8 degrees of freedom we have the same pattern of linearity found with other spline fits. For the fit with 12 degrees of freedom, we have considerable variability, caused by too many parameters and we can conclude that the data are over fitted.

In order to test hypothesis about the nature of the relationship between the size of the shadow economy and the unemployment rate, we compare the smoothing spline model to a model with only a constant to test whether the effect of the unemployment rate is significantly different from zero.

If RSS_1 and RSS_2 are the residual sum of squares from a restricted model and the spline model respectively, the $F-test = \dfrac{(RSS_1 - RSS_2)/(df_{res2} - df_{res1})}{RSS_2/(n - df_{res2})} \approx F_{df_{res2}-df_{res1}, n-df_{res2}}$ (6)

Applying the F-test, we find that the relationship between the two variables is highly significant as the test statistic is 72.718 on 3 and 115 degrees of freedom (p= 2.2e-16). We also test the spline model against a global linear fit, and the value of F-test of 1.9597 on 2 and 114 degrees of freedom is not statistically significant(p=0.1476). The results of the test indicate that the relationship between the size of the shadow economy and the unemployment rate is sufficiently linear and the global linear fit is adequate.

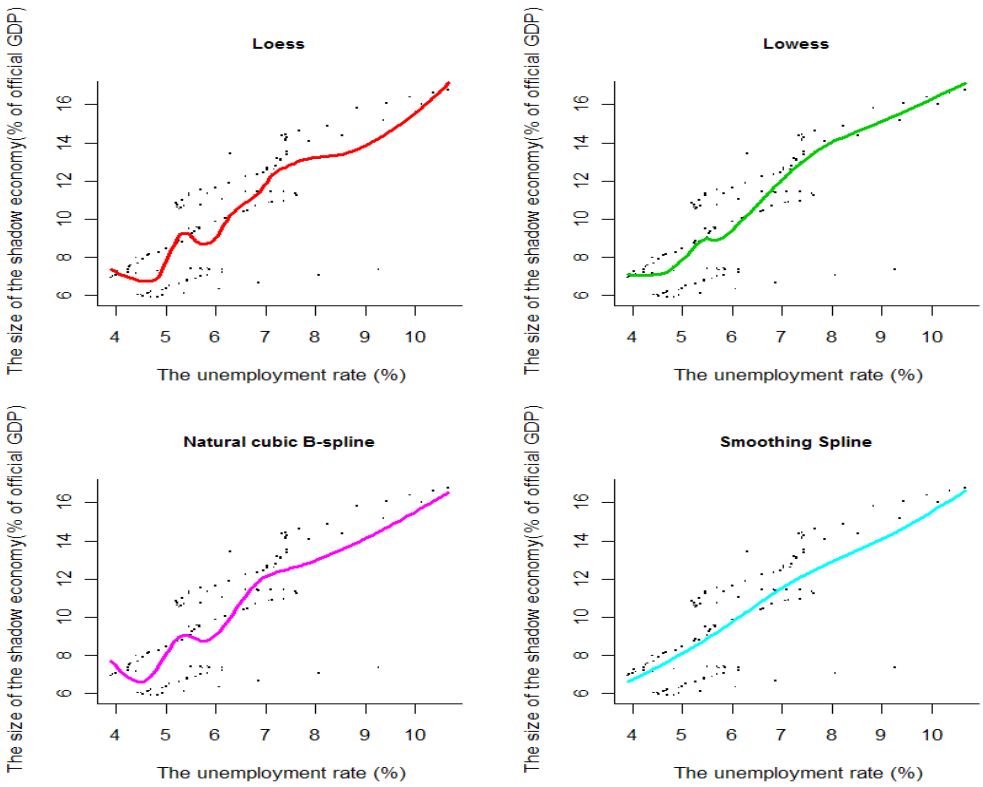
Finally, we provide a comparison of the nonparametric regression models.

The first two nonparametric models are the loess and lowess smoothers. In Dobre, Alexandru[4] (2010) we have estimated the both models identifying the optimal value of span at the value of 0.4. Between the two LPR smoothers, the lowess estimate provides a better fit of the data.

In the lower left panel is the natural cubic B-spline with 7 knots, chosen by the AIC values. This model displays noticeable undersmoothing of the estimate. Finally, we estimate a smoothing spline using 4 degrees of freedom selected through visual trial. The smoothing spline closely matches the linearity between the size of the shadow economy and the unemployment rate.

[4] Dobre I., Alexandru A., „A nonparametric analysis of the relationship between unemployment rate and shadow economy using local polynomial regression models", Economic Computation and Economic Cybernetics Studies and Research, vol.44 1/2010, pg.21-44, ISSN 0424 – 267 X.

Fig. 5. Comparison of smoother fits



5. Conclusions

The main goal of the paper is to investigate the nature of the relationship between unemployment rate and the size of the shadow economy of the USA data using spline models.The shadow economy is estimated as percentage of official GDP, using MIMIC model. The results show that the size of the shadow economy varies from thirteen to seventeen percent between 1980 and 1983 and then decreases steadily up to 7 percent of official GDP in 2009.

We investigate the nature of the relationship between the two variables, using cubic B-splines and natural cubic B-splines to estimate the nonparametric fit. The graphics of both spline models reveals a little difference between the two functions.

Using an F-test, we compare the smoothing spline model to a model with only a constant, and we conclude that unemployment rate has a statistically significant effect on the size of the U.S.A. shadow economy.

We also test the spline model against a global linear fit and the results indicate that the relationship between the size of the shadow economy and the unemployment rate is sufficiently linear and the global linear fit is adequate.

Finally, we have compared the local polynomial regression models (loess and lowess) estimated in (Dobre, Alexandru, 2010) with spline models (natural cubic B-spline and smoothing spline). From the four types of models that we have applied, the smoothing spline model closely matches the linearity between the size of the shadow economy and the unemployment rate.

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- *** Federal Reserve banks
- *** Eviews 6.0 software
- *** Lisrel 8.80 software
- *** R 2.9.1 software

Appendix: Analysis Of Non-Stationarity[5]

In order to discover the unit roots and the order of integration of the time series used in the model the Augmented Dickey-Fuller (ADF) and Kwiatkowski, Phillips, Schmidt and Shin(KPSS[6]) Tests are used; to choose a number of lags sufficient to remove serial correlation in the residuals and the automatic selection of bandwidth we have employed the Schwarz information criterion (ADF) and the Newey-West test using Bartlett Kernel (KPSS).

Table 1: Unit-root analysis

	CAUSES	Source	Unit root analysis		Level		First diff.		Second diff.		Transf.. used
					ADF	KPSS	ADF	KPSS	ADF	KPSS	
X_1	Tax burden/GDP ($X_2+X_3+X_4+X_5$)	BEA	I(1)	C	0.128	0.162*	0.052	0.171*	0.000*	0.172*	$\Delta(X_1)$
X_2	Personal current taxes/GDP	BEA	I(1)	C	0.119	0.098*	0.000*	0.143*	0.000*	0.212*	$\Delta(X_2)$
X_3	Taxes on production and imports/GDP	BEA	I(1)	C	0.045*	0.301*	0.000*	0.182*	0.000*	0.110*	$\Delta(X_3)$
X_4	Taxes on corporate income/GDP	BEA	I(1)	C	0.001*	0.046*	0.000*	0.076*	0.000*	0.240*	$\Delta(X_4)$
X_5	Contributions for government social insurance/GDP	BEA	I(1)	T&C	0.415	0.314	0.000*	0.092*	0.000*	0.050*	$\Delta(X_5)$
X_6	Government unemployment insurance	BEA	I(1)	C	0.020*	0.401*	0.002*	0.155*	0.000*	0.269*	$\Delta(X_6)$
X_7	Unemployment rate	BLS	I(1)	C	0.227	0.677	0.001*	0.169*	0.000*	0.318*	$\Delta(X_7)$
X_8	Self-employment/Civilian labour force	BLS	I(1)	C	0.782	0.848	0.000*	0.352*	0.000*	0.195*	$\Delta(X_8)$
X_9	Index of bureaucracy	BLS	I(1)	T&C	0.239	0.081*	0.000*	0.111*	0.000*	0.099*	$\Delta(X_9)$
	INDICATORS										
Y_1	M1/M2	Federal Reserve Banks	I(1)	T&C	0.527	0.248	0.130	0.079*	0.000*	0.092*	$\Delta(Y_1)$
Y_2	Index of Real GDP[14]	BEA	I(1)	T&C	0.737	0.262	0.000*	0.063*	0.000*	0.095*	$\Delta(Y_2)$
Y_3	Civilian labour force participation rate	BLS	I(1)	T&C	0.983	0.304	0.000*	0.054*	0.000*	0.086*	$\Delta(Y_3)$

For ADF show the MacKinnon (1996) one-sided p-values; the statistical tests are shown for KPSS; * means stationary at 0.05 level.

[5] The econometric software Eviews 6.0 was used in to perform this analysis.

[6] Critical Values: KPSS test equation with constant : 0.347 (10%), 0.463 (5%), 0.739 (1%) and KPSS test equation with constant and trend: 0.119 (10%), 0.146 (5%), 0.216 (1%).

THE MEASUREMENT OF CORRUPTION AND THE IDENTIFICATION OF ITS PROPAGATION FACTORS

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Abstract*: In this paper is realised an evaluation of a series of aspects concerning the corruption phenomenon. Thus, using information obtained at a sample level is evaluated the level of corruption on the ensemble of economy, but also on some domains of activity. Also, are equally evaluated a number of factors that contribute to the corruption maintenance at higher level. An important aspect is related to the public acquisitions from the public sector and on the extent to which they contribute on the reduction of the prices of some goods and services purchased.*

Key words: corruption, statistical survey, sample, questionnaire, public acquisitions.

JEL classification: C83, D73, H83.

1. Introduction

The analysis of corruption is an important domain of contemporary economic research. During the last years, there is a growing interest from the part of academic and research environment, of international organizations (International Monetary Fund, World Bank etc.) for the estimation of the corruption level, for the identification of the causes and mechanisms of its formation and transmission within a system. The main problems of the corruption research are related to its definition and measurement, to the identification of the causes and mechanisms that generate and transmit it in the system and to the measurement of its effects on economic and social environment for a country or development region.

The identification of the causes that generate corruption in a public system is one of the most difficult problems to be solved in the process of the corruption analysis. In the literature are identified a series of factors that directly influence the system's corruption as: political and legal factors, historical, social, cultural and economic factors.

In the category of legal and political factors we include the quality of political system, legal system characteristics (Leite and Weidmann (1999)), especially the legislation and the institutions that are related to the fight against corruption, the quality of the democratic system, the electoral system characteristics for a country, the administrative system characteristics, the level of administrative decentralization from a country etc.

In this paper are presented some particular aspects of the Romania's corruption based on the employees' opinion from the public administration domain. Thus, on the basis of the information obtained using a sample of 530 employees from the field of public administration, the value of admitted error been equal to 2.0%, can be found a series of answers related to the measurement of corruption level, to the identification of its causes, of its evolution during the time, its impact on important areas of activity, the contribution of certain elements on its reduction, the characteristics of public acquisitions and their impact on corruption.

We present the most important aspects concerning: the corruption evaluation, the identification of its causes and of the public acquisitions quality. For each case are presented the questions that were included in the questionnaire used for the scientific research, the variables defined on the questions included in the questionnaire and the values of the statistics calculated using data series collected at the sample level.

2. The measurement of the corruption level

For the evaluation of the corruption level was preferred the measurement of the employees opinion concerning this problem from various sectors of activity and then the aggregation of the obtained information. This approach offers the advantage of corruption evaluation from various sectors of activity. The question included in the questionnaire allows the definition of seven basic variables directly from the information obtained from the questionnaire and also the definition of an aggregate variable.

A. Question from the questionnaire

How do you appreciate the level of corruption from the following sectors of activity on a measurement scale including integer numbers from 1 (generalised corruption) to 5 (there is no corruption)?

	1 Generalised corruption	**2**	**3**	**4**	**5 There is no corruption**
1. In generally					
2. Education					
3. Health					
4. Political domain					
5. Local public administration					
6. Central public administration					
7. In your institution					

B. The defined variables and the statistical indicators calculated

Based on the above information can be defined seven basic variables to measure the level of corruption, as follows:

1. For the estimation of the level of corruption in generally: $CORG : N \rightarrow \{1,2,3,4,5\}$;
2. For the estimation of the level of corruption from the education domain: $CORE : N \rightarrow \{1,2,3,4,5\}$;
3. For the estimation of the level of corruption from the health domain: $CORS : N \rightarrow \{1,2,3,4,5\}$;
4. For the estimation of the level of corruption from the political domain: $CORP : N \rightarrow \{1,2,3,4,5\}$;
5. For the estimation of the level of corruption from the local public administration domain: $CORL : N \rightarrow \{1,2,3,4,5\}$;
6. For the estimation of the level of corruption from the central public administration domain: $CORC : N \rightarrow \{1,2,3,4,5\}$;
7. For the estimation of the level of corruption from the questioned person's institution: $CORI : N \rightarrow \{1,2,3,4,5\}$.

In order to define these variables was used a measurement scale containing five natural values from 1 (if the questioned person considers that the level of corruption is very high) to 5 ((if the questioned person considers that the level of corruption is very low). The distribution of the seven variables values at the sample level are presented in Table 1.

Table 1. The distribution of the received answers

	1 Generalised Corruption	**2**	**3**	**4**	**5 There is no corruption**	**NR**
1. In generally	18.0	34.9	30.2	13.0	3.7	0.2
2. Education	5.9	25.6	45.3	18.7	4.5	0.0
3. Health	15.2	36.2	32.7	11.5	3.9	0.6
4. Political domain	30.4	35.6	19.5	8.7	5.2	0.6
5. Local public administration	9.3	23.6	37.1	20.6	9.3	0.2
6. Central public administration	13.0	32.3	32.3	14.1	7.8	0.6
7. In your institution	5.9	8.7	19.3	35.1	31.0	0.0

A series of indicators, corresponding to the seven basic variables, are calculated in order to charcterize the average, the variance and the form of the distribution. Based on these variables, is defined the aggregate variable CORR, using the following application:

$$CORR : N \rightarrow [1,5],\ CORR = \frac{1}{7}(CORG + CORE + CORS + CORP + CORL + CORC + CORI) \quad (1)$$

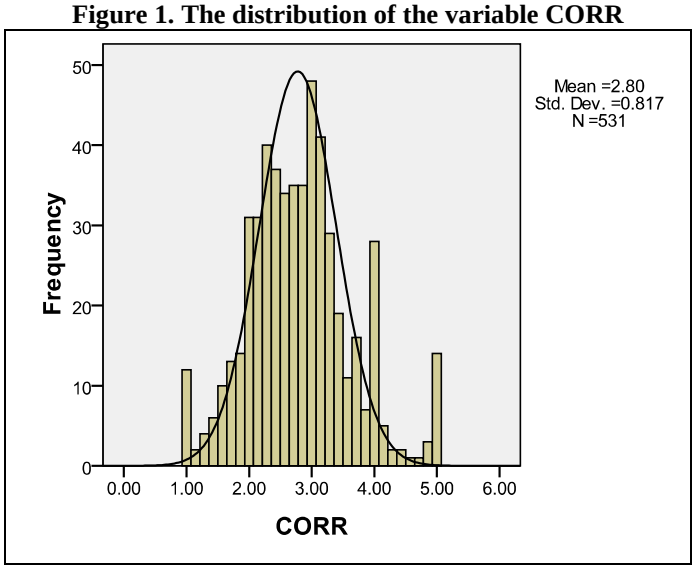
In Table 2 is presented the average level of the variable CORR and the distribution of its values is presented in Figure 1.

Table 2. The average level of corruption from certain domains of activities and at national level

	The level of corruption on a scale from 1 to 5
1. In generally	2.5
2. Education	2.9
3. Health	2.5
4. Political domain	2.2
5. Local public administration	3.0
6. Central public administration	2.7
7. In your institution	3.7
8. CORR	2.8

The average values from the above table indicate that there is a high level of corruption. The average value, equal to 2.8, positioned below the value 3, is indicating a fairly high level of corruption. The employees from the field of administration estimate a very high level of corruption in the political domain. It is also noted a much smaller amount of corruption in the institution of the questioned person. For this reason it is recommended to calculate the corruption at national level based only on the estimations obtained only from the domain from which the respondent doesn't take part. In these conditions, the average level of corruption is calculated using only the following variables CORG, CORE, CORS, CORP and CORC. Thus, resulted an average value equal to 2.5

Figure 1. The distribution of the variable CORR



3. The corruption causes

An important aspect in the analysis of corruption is the identification of the actors that determine its level. In this analysis were retained six major factors, respectively: the legal framework, the wage system, the morality of public servants, the economic environment pressure, the political environment pressure and citizens' behaviour.

A. Question from the questionnaire

What elements do you think that are encouraging the corruption from the public administration?

	In a high extent	Quite enough	Moderate	In an insignificant measure	Not at all
1. The legal framework					
2. The wage system					
3. The morality of public servants					
4. The economic environment pressure					
5. The political environment pressure					
6. Citizens' behaviour					

B. The defined variables and the statistical indicators calculated

In order to identify the main factors which are determining the maintenance of the corruption at a higher level within the public sector, in the case of the questionnaire applied on the public sector employees we take into account of six elements. Based on the information obtained from the application of this instrument were defined six basic variables:

1. The CL variable is estimating in which measure the legal framework is encouraging corruption;

2. The SS variable is evaluating in what extent the wage system is encouraging corruption;

3. The MF variable is evaluating in what measure the morality of public servants might be an important factor which is encouraging corruption;

4. The PE variable is evaluating in what extent the economic environment can encourage a higher level of corruption at the level of public administration;

5. The PP variable is evaluating the impact of the political class on corruption, because this one can represent an important element which can encourage corruption;

6. The CC variable is evaluating in what extent citizens' behaviour can encourage or reduce corruption.

The six variables are defined using the following application:

$$CL, SS, MF, PE, PP, CC : N \rightarrow \{1,2,3,4,5\} \quad (2)$$

For these variables we use the same measurement scale which is defined as follows: 1 – doesn't encourage at all corruption; 2 – is encouraging in a small extent corruption; 3 – is encouraging in a moderate measure; 4 – is encouraging in a quite enough measure corruption; 5 – is encouraging in a high extent corruption.

For a global evaluation of the considered elements on the increase of the corruption level is defined the EFC variable, using the following application:

$$EFC : N \rightarrow [1,5],\ EFC = \frac{1}{6}[CL + SS + MF + PE + PP + CC] \quad (3)$$

In Table 3 are presented the distributions of the six basic variables values.

Table 3. The distribution of the variables CL, SS, MF, PE, PP and CC values

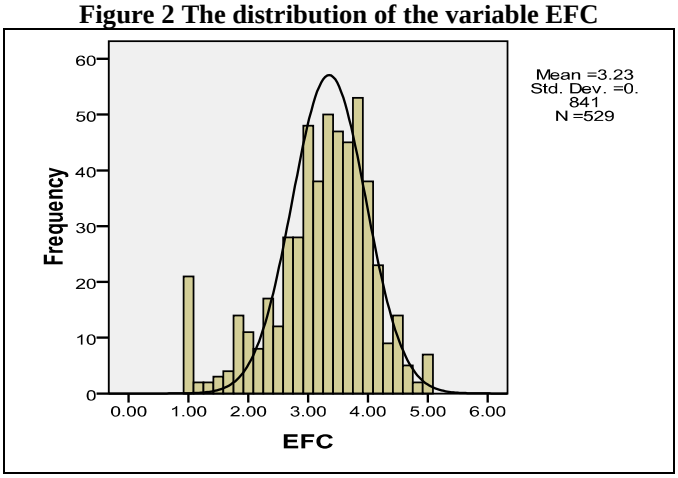
	The level of corruption on a scale from 1 to 5
1. The legal framework	3.2
2. The wage system	3.7
3. The morality of public servants	3.2
4. The economic environment pressure	3.1
5. The political environment pressure	3.4
6. Citizens' behaviour	2.8
EFC	3.2

For the basic variables defined above and also for the aggregate variable, EFC, are calculated the average values. The obtained results are presented in Table 4, and the distribution of the EFC variable values is presented in Figure 2.

Table 4. The average values of the variables CL, SS, MF, PE, PP and CC

	5	4	3	2	1	NR
1. The legal framework	12.6	13.0	28.9	29.7	14.7	1.1
2. The wage system	8.0	9.8	18.4	32.5	30.8	0.6
3. The morality of public servants	11.3	15.4	34.1	22.6	15.6	0.9
4. The economic environment pressure	12.2	15.8	34.0	26.3	11.1	0.6
5. The political environment pressure	11.7	11.3	26.2	25.6	24.3	0.9
6. Citizens' behaviour	13.0	23.6	35.6	20.0	6.9	0.9

Figure 2 The distribution of the variable EFC



4. The characteristics of public acquisitions and their impact on corruption

An important element for the increase of the public services quality and in the reduction of corruption is the improvement of some aspects concerning the Romanian public acquisitions. For each case is presented the question included in the questionnaire, the defined variables and the values of the statistical indicators calculated.

4.1. The analysis of the degree of satisfaction of the public acquisitions system

A. Question from the questionnaire

To what extent are you satisfied by the following aspects of public acquisitions realised at the level of your institution?

	In a high extent	**Quite enough**	**Moderate**	**In an insignificant measure**	**Not at all**
1. The implementation of the public acquisitions process					
2. The prices of the goods and services purchased					
3. The control system of public acquisitions					
4. The analysis of the complaints related to public acquisitions					

B. The defined variables and the statistical indicators calculated

The evaluation of public acquisitions is realised related to the following four elements: the implementation of the public acquisitions process, the prices of the goods and services purchased, the control system of public acquisitions and the analysis of the complaints related to public acquisitions.

In order to measure the degree of satisfaction related to each element is defined a basic variable using a measurement scale with five values: 1 - total dissatisfaction, 2 – the level of complaining is low, 3 – a moderate degree of satisfaction, 4 – the degree of satisfaction is quite high and 5 – the degree of satisfaction is high. The distributions corresponding to the four basic variables are presented in Table 5.

Table 5. The evaluation of the public acquisitions system based on the four elements

Variable	The degree of satisfaction					
	In a high extent	Quite enough	Moderate	In an insignificant measure	Not at all	NR
D_{41}	7.8	7.4	38.0	25.0	21.3	0.4
D_{42}	7.8	12.6	38.4	25.2	15.4	0.6
D_{43}	8.7	10.0	34.0	27.3	19.5	0.6
D_{44}	9.6	15.8	30.8	26.7	16.3	0.7

For a global evaluation of employees degree of satisfaction related to the public acquisitions system is defined the aggregate variable ESA as the average of the four basic variables:

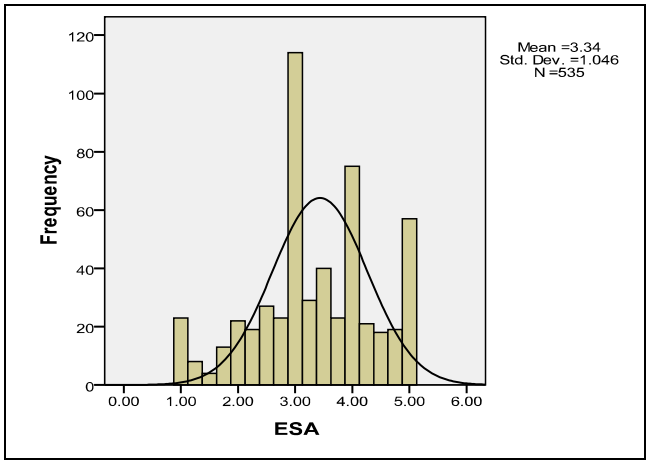
$$ESA : N \rightarrow [1,5],\ ESA = \frac{1}{4}[D_{41} + ... + D_{44}] \quad (4)$$

For the basic variables defined above and also for the aggregate variable, ESA, are calculated the average values using 535 individual values. The obtained results are presented in Table 6, and the distribution of the ESA variable values is presented in Figure 3.

Table 6. The statisitical indicators calculated for the variables used to characterize the public acquisitions system

Variable	Average	Std. Deviation
D_{41}	3.4	1.140
D_{42}	3.3	1.112
D_{43}	3.4	1.165
D_{44}	3.2	1.190
ESA	3.3	1.046

Figure 3. The distribution of the variable ESA



4.2. Public acquisitions system and corruption

Since the public acquisitions system is a major system which can help to reduce corruption from the system, we present three questions in order to quantify the size of corruption from the system generated by the public acquisitions system; to identify the categories of persons which are participating in generating corruption by the public acquisitions system and to quantify the frequency of the penalties applied for the violation of the public acquisitions system legislation.

A. Question defined for the analysis of corruption generated by the public acquisitions system

To what extent the current public acquisitions system is generating corruption in the system?

In a high extent	Quite enough	Moderate	In an insignificant measure	Not at all

B. The defined variables and the statistical indicators calculated

In order to evaluate to what extent the current public acquisitions system is generating corruption in the system is defined the basic variable D_5:

$D_5 : N \rightarrow \{1,2,3,4,5\}$ (5)

This variable was used to define a measurement scale with five values: 1 – the system is inducing in a high extent corruption, 2 - the system is inducing in a quite enough extent corruption, 3 - the system is inducing in a moderate extent corruption, 4 - the system is inducing in an insignificant measure corruption and 5 - the current system does not cause at all corruption.

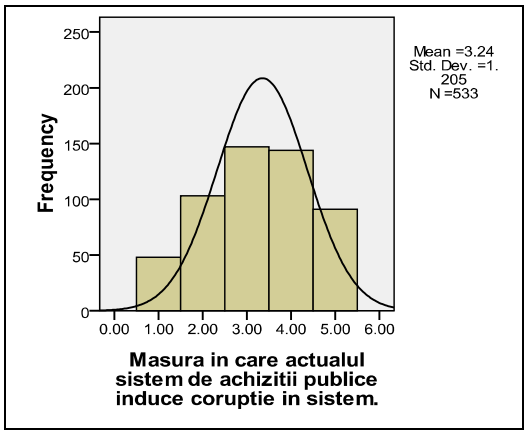
In Table 7 is presented the distribution of the D_5 variable values.

Table 7. Variable D_5 distribution used to characterize the extent to which public acquisitions system is generating corruption in the system %

The measure in which is generating corruption	Frequencies	Cumulative ascending frequencies
In a high extent	8.9	8.9
Quite enough	19.1	28.0
Moderate	27.3	55.3
In an insignificant measure	26.7	82.0
Not at all	16.9	98.9
NR	1.1	100.0

In the graph from Figure 4 is presented the distribution of the D_5 variable values in order to evaluate to what extent the current public acquisitions system is inducing corruption. The average of this variable is equal to 3.2 and the standard deviation is equal to 1.205.

Figure 4. The distribution of the variable D_5



C. The question concerning the categories of persons which are inducing corruption

To what extent, by the current public acquisitions system, the following categories of persons may cause corruption in the system?

D. The defined variables and the statistical indicators calculated

Based on information obtained from the application of the above question were defined seven basic variables which are noted with $D_{61},...,D_{67}$. The distribution of the answers is presented in Table 8.

Table 8. The distribution of the variables $D_{61},...,D_{67}$ values

Variable	The level of corruption induction					
	Not al all	Insignificant	Moderate	Much	Very much	NR
D_{61}	27.6	19.7	18.4	17.1	16.5	0.7
D_{62}	23.7	20.2	16.5	19.1	20.2	0.2
D_{63}	24.1	18.2	19.7	19.5	17.8	0.7
D_{64}	21.4	22.4	18.9	18.2	18.2	0.9
D_{65}	19.7	23.2	26.5	16.5	13.2	0.9
D_{66}	38.2	31.0	20.4	5.4	4.5	0.6
D_{67}	39.3	34.5	18.7	3.0	3.7	0.7

For the seven basic variables is calculated an average level as a measure of the capacity of intervention of each professional category to induce corruption in the public acquisitions system. The average values and standard deviations are presented in Table 9. To calculate these indicators have been used 528 individual values.

Table 9. The statistical indicators calculated for the D_{61},...,D_{67} variables

Indicator	Variable						
	D_{61}	D_{62}	D_{63}	D_{64}	D_{65}	D_{66}	D_{67}
Average	3.3	3.1	3.1	3.1	3.2	3.9	4.0
Standard Deviation	1.44	1.46	1.43	1.42	1.30	1.09	1.02

E. The question from the questionnaire concerning the frequency of some abuses

How many of the following cases you have heard in your institution during the last year?

F. The defined variables and the statistical indicators calculated

	None	1 case	Between 2 and 5 cases	Between 6 and 10 cases	More cases
1. The restoring of an auction for the purchase of goods and services due to the failure of legal procedures					
2. People who have received warnings at the level of the institution for the failure of legal procedures in the auctions domain					
3. Wanted persons for irregularities in this area					
4. Dismissed persons for irregularities in the acquisitions domain					

Based on the obtained information, through the application of the above question, are defined four basic variables. The distribution of the values of these variables is presented in Table 10.

Table 10. Frequencies and cumulative ascending frequencies for D_{71}, D_{72}, D_{73} and D_{74} variables

		Number of cases					
	Frequencies	**0**	**1**	**2-5**	**6-10**	**More cases**	**NR**
D_{71}	**(%)**	81.6	7.8	6.5	0.9	2.6	0.6
	cumulative ascending frequencies	81.6	89.4	95.9	96.8	99.4	100.0
D_{72}	**(%)**	88.5	7.1	2.0	1.5	0.6	0.4
	cumulative ascending frequencies	88.5	95.5	97.6	99.1	99.6	100.0
D_{73}	**(%)**	90.1	3.7	3.5	0.7	1.3	0.6
	cumulative ascending frequencies	90.1	93.9	97.4	98.1	99.4	100.0
D_{74}	**(%)**	93.7	3.2	1.3	0.2	1.1	0.6
	cumulative ascending frequencies	93.7	96.8	98.1	98.3	99.4	100.0

5. Conclusions

The obtained results, based on the sample data, are indicating a higher level of corruption for Romania. According to realized estimations, the level of corruption, on a measurement scale from 1 (a higher level of corruption) to 5 (low corruption) is 2.5. Furthermore, the perception of corruption from different sectors of activities is different. The highest level of corruption is perceived in the case of the political class.

According to the opinion of employees from the field of public administration included in the sample, the most important role in the evolution of corruption is represented by the wage system. The correct implementation of the new wage system in the public sector might be an important factor for the reduction of corruption.

Another important factor for the reduction of corruption and for the increase of the efficiency of public money use is the improvement of the public acquisitions system. According to the opinion of employees from the public administration, the current system does not motivate the acquisitions prices reduction. The corruption increase is also generated through the public acquisitions system by the political class at the local, county and national level.

6. Acknowledgments

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THE IMPACT OF LISABON STRATEGY ON THE DIFFERENT ECONOMICS AREAS IN EU AND THE NEW ECONOMIC STRATEGY EUROPE 2020

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Abstract: *Until the crisis hit, Europe was moving in the right direction. Labor markets were performing well with participation levels rising to 66% and unemployment levels dropping to 7%, while the graph below shows that EU GDP growth was just short of the Lisbon Strategy's envisaged 3% average growth. Although, some of this progress was undoubtedly due to cyclical factors, developments in labor markets in particular owed much to the structural reform efforts of EU Member States.The first part of this article contains the main findings. The second part describes in more detail developments, progress and shortcomings across different critical Lisbon Strategy's areas as: an overview of progress in the macro-economic area; more research, development and innovation; unlocking business potential, especially for SMEs; investing in people; and a greener economy. Another important part of this article analysis the new economic strategy Europe 2020.*

Key words: labor market, the crisis, smart growth, sustainable growth and inclusive grow.

JEL classification: J 08, J 21, O 10, O 52

INTRODUCTION

The original Lisbon Strategy was launched in 2000 as a response to the challenges of globalization and ageing. The European Council defined the objective of the strategy for the EU "to become the most dynamic and competitive knowledge-based economy in the world by 2010 capable of sustainable economic growth with more and better jobs and greater social cohesion and respect for the environment". Underlying this was the realization that, in order to enhance its standard of living and sustain its unique social model, the EU needed to increase its productivity and competitiveness in the face of ever fiercer global competition, technological change and an ageing population. However, the original strategy gradually developed into an overly complex structure with multiple goals and actions and an unclear division of responsibilities and tasks, particularly between the EU and national levels. The Lisbon Strategy was therefore re-launched in 2005 following a mid-term review. In order to provide a greater sense of prioritization, the relaunched Strategy was focused on growth and jobs. A new governance structure based on a partnership approach between the Member States and the EU institutions was put into place.

The Lisbon strategy was not implemented in isolation. The Union has grown from 15 Member States in 2000 to 27 Member States today. Also, the euro has developed into a major world currency: membership of the euro-area has grown from 12 countries in 1999 to 16 countries today, and the euro has proved to be an anchor for macroeconomic stability during the current crisis. Moreover, the Lisbon Strategy for Growth and Jobs is coming to the end of its term at a time when the impacts of the economic crisis are deeply felt in Europe, as in other parts of the world. The economic crisis has had profound and lasting effects on Europe's economies. GDP fell by 4% in 2009. Unemployment is approaching 10%. Public finances are in tatters, with deficits now reaching 7% of GDP and debt levels having increased by 20 percentage points over two years, thus undoing 20 years of consolidation.

I. MAIN FINDINGS

Overall, the Lisbon Strategy has had a positive impact on the EU even though its main targets (i.e. 70% employment rate, and 3% of GDP spent on R&D) will not be reached. The EU employment rate reached 66% in 2008 (from 62% in 2000) before it dropped back again as a result of the crisis. However the EU has failed to close the productivity growth gap with leading industrialized countries: total R&D expenditure in the EU expressed as a percentage of GDP only improved marginally (from 1.82% in 2000 to 1.9% in 2008). It would, however, be too simplistic to conclude that the strategy has failed because these targets were not met.

For the reasons set out in the Annex, the Strategy has broken new ground by promoting common actions to address the EU's key long-term challenges. The main conclusions that can be drawn are as follows:

The Lisbon Strategy has helped build broad consensus on the reforms that the EU needs. The renewal of the strategy in 2005 helped clarify its scope and aims. In particular, the definition of four priority areas (research and innovation, investing in people/modernizing labor markets, unlocking business potential, particularly of SMEs, and energy/climate change) was an important step forward in providing greater focus. In all Member States, these issues are now at the top of the political agenda, demonstrating the Lisbon Strategy's ability to set the agenda for reform. For instance, the success of the Flexicurity concept represents the ability of Lisbon to stimulate and frame policy debates and generate mutually acceptable solutions even though in many cases relevant measures still need to be implemented.

Moreover, the strategy proved sufficiently flexible and dynamic to adapt itself to new challenges and political priorities which emerged over time (e.g. energy/climate change) and smoothly to absorb new Member States as the Union expanded its membership.

Reforms agreed in the context of Lisbon have delivered tangible benefits, including increased employment (18 million new jobs were created before the crisis hit), a more dynamic business environment with less bureaucracy (e.g. the European Commission has proposed administrative burden reductions regarding EU rules which are worth more than €40 billion, subject to their adoption by Council and Parliament)) and more choice for consumers, and a more sustainable future (e.g. economic growth has in many Member States been accompanied by a downward trend in energy intensity). While it is not always possible to demonstrate a causal link between Lisbon reforms and growth and jobs outcomes, there is evidence that reforms have played an important role.

However, employment increases have not sufficiently reached those furthest away from the labor market, and jobs have not always succeeded in lifting people out of poverty. Some groups still face specific hurdles such as poor access to training for the low-skilled or lack of enabling services. Labor market segmentation persists in some Member States. So does child poverty at a high level in some Member States. Lessons need to be drawn from these facts.

Structural reforms have made the EU economy more resilient and helped us weather the storm. For most of the past decade, public finances were going in the right direction with falling deficits and debt levels, and long-term sustainability being improved through the reform of pension systems. Fiscal consolidation created the room for the co-ordinate fiscal stimulus once the crisis hit and demand dropped, and helped stabilize the economy by averting a vicious cycle of falling demand, falling investment and rising unemployment. Similarly, labor market reforms and active labor market policies have helped protect jobs in the downturn and stem the rise in unemployment, while the euro area proved to be an anchor for macroeconomic stability during the crisis. The focus on medium- to long-term structural reforms under the Lisbon strategy no doubt facilitated the design and rapid roll-out of the European Economic Recovery Plan at the end of 2008, ensuring that short-term policy responses would be consistent with the EU's medium to longer-term challenges.

However, the Lisbon Strategy was not sufficiently equipped to address some of the causes of the crisis from the outset. The Lisbon Strategy focused on the right structural reforms. R&D and innovation, labor markets (flexicurity, skills and lifelong learning), the business environment and consolidation of public finances which are all crucial areas to preparing the EU for globalization and ageing and enhancing the EU's prosperity. However, with the benefit of hindsight, it is clear that the strategy should have been organized better to focus more on critical elements which played a key role in the origin of the crisis, such as robust supervision and systemic risk in financial markets, speculative bubbles (e.g. in housing markets), and credit-driven consumerism which in some Member States, combined with wage increases outpacing productivity gains, fuelled high current account deficits. Macro-economic imbalances and competitiveness problems were at the root of the economic crisis, and were not adequately addressed in the surveillance of Member States' economies carried out through the Stability and Growth Pact and the Lisbon Strategy, which tended to operate in parallel rather than complementing one other.

Whilst much has been achieved, the overall pace of implementing reforms was both slow and uneven... While the strategy has delivered tangible benefits, and helped forge consensus around the EU's reform agenda, the delivery gap between commitments and actions has not been closed.

Well-performing Member States pressed ahead with more ambitious reforms, whilst others gradually built up a (sizeable) delivery gap. This meant that important benefits and synergies were missed. The same can be said of the individual policies which make up the Lisbon Strategy, with progress in some policy areas more pronounced than in others. Progress in the micro-economic area has lagged behind progress in the employment and macro-economic dimensions. The Lisbon Strategy's aim of promoting more policy integration across the macro-economic, employment and micro-economic (including environment) dimensions has only partially succeeded.

The importance of interdependence in a closely integrated economy, particularly in the euro area, has not been sufficiently recognized. In our interconnected economies, the potential for growth and jobs will only be exploited if all Member States implement reforms at roughly the same pace, taking account of their national challenges and of the impact of their actions (or the lack of them) on other Member States and the Union as a whole. The economic crisis has brought this inter-dependence into sharp focus: not only were some important positive spill-over effects and synergies missed because of uneven progress, in some cases negative spill-over effects have even been triggered.

A stronger link between the Lisbon Strategy and other EU instruments and sector specific initiatives or policy measures would have improved its effectiveness. Links between the Lisbon Strategy and other EU instruments and/or strategies, such as the Stability and Growth Pact, the Sustainable Development Strategy or the Social Agenda, have not been sufficiently strong, so that rather than being mutually reinforcing some of the strategies have been operating in isolation. Other major policy priorities, such as financial market resulted in faster decision-making or in avoiding dilution. For example, whilst the European Council repeatedly underscored the importance of innovation and the need for a strong, affordable Community Patent, the Council has not (yet) been able to deliver a solution. In other areas, such as removing obstacles to the internal market, improving the free flow of (digital) content, promoting labor mobility or speeding up the setting of interoperable standards, progress has been too slow to produce significant results despite calls from Heads of State and Government to step up efforts. The Community Lisbon Program, introduced as part of the 2005 reform to set out EU level actions, has not generated the necessary momentum for change.

Earmarking of Structural Funds has helped mobilize considerable investments for growth and jobs although there is further to go. The "Lisbonisation" of structural funds has helped target significant European funding (some € 228 billion over the financing period 2007-2013) on growth-enhancing investments, such as innovation, R&D and business support. The major part of those investments will be effectively deployed over the next five years.

The links between National Strategic Reference Frameworks, defining regional policy priorities, and National Reform Programs, defining socio-economic priorities, has helped ensure greater coherence but could have been further developed. The use of structural funds has also contributed to making the Lisbon Strategy tangible to regional and local authorities, which have a major role to play in its implementation. However, experience shows that the impact of structural funds can be enhanced by improving underlying structures (e.g. in research and innovation and/or labor markets), simplifying regulatory frameworks (e.g. business environment, infrastructure development) and by further strengthening administrative capacity and efficiency in some Member States. There is also scope for reflecting how to mobilize to a greater extent the EU Budget in support of growth and jobs.

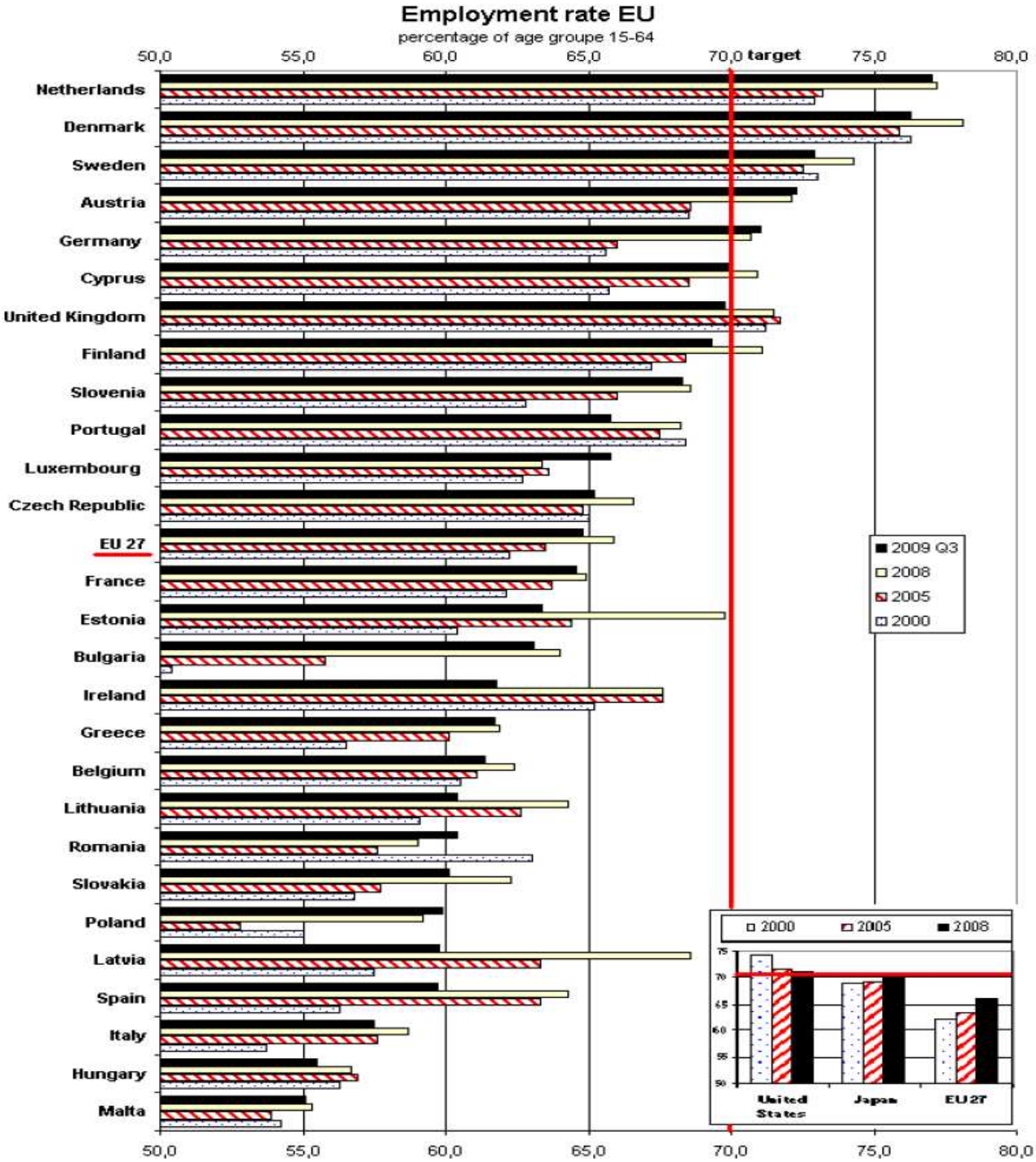
The partnership between the EU and Member States has generally been a positive experience. The partnership concept introduced in 2005 has had a positive impact on the co-operation and division of responsibilities between the European Union institutions and the Member States.

The resulting dialogue between the Commission and the Member States developed into a constructive exchange of views whereby the Commission advised Member States on policy options, often drawing on its experience with other parts of the Union, whilst Member States offered a national perspective, highlighting opportunities for reform as well as identifying constraints. In some cases, Member States associated regional and local authorities as well as social partners and other stakeholders to the Lisbon Strategy partnership, recognizing that they exercise important responsibilities under the strategy (e.g. active labor market policy, education, infrastructure development, business environment). In many cases, however, the involvement of regional, local and social partners was less developed and stakeholders were involved on an ad hoc basis if at all, despite the fact that regional and local actors often have both important policy competences and significant resources in Lisbon areas.

The implementation has suffered from variable ownership and weak governance structures. The role of the European Council in driving forward reform was not clearly defined. It could be argued that the European Council was often over-prepared by intensive work in different Council formations, leaving little room for substantive discussions and decisions by Heads of State and Government themselves. The European Parliament's role could also have been defined more clearly so that it could have played a bigger role in driving the strategy forward.

In terms of instruments, the Integrated Guidelines, which are based on the Treaty, have helped set the direction for national economic and employment policies. While the guidelines were comprehensive and may have helped make the intellectual case for reform, their "catch-all" nature and lack of internal prioritization limited the impact of the instrument on national policy-making. National reform programs

(NRPs), which are based on these guidelines, were useful tools for promoting comprehensive growth strategies with greater links across macro-, micro-, and employment policies. However, the approach to NRPs differed considerably across Member States, with ambitious and coherent reform agendas for some countries contrasting with vague and more descriptive agendas in others that lacked the backing of governments and national (and regional) parliaments. EU-level targets were too numerous and did not sufficiently reflect differences in starting positions between the Member States, particularly following enlargement.



. Source: Eurostat – 2009 forecasts DG ECFIN

The absence of clearly agreed commitments also exacerbated problems with ownership. For instance, the performance of some Member States already exceeded the target, whereas for others targets were set at such level that meeting them within the available time-frames appeared unrealistic.

The impact of country-specific recommendations has been variable. Country-specific policy recommendations, a Treaty-based instrument which the Council addresses to Member States on the basis of a

Commission recommendation when progress should be stepped up, were an important component of the strategy. In some Member States these recommendations have produced real impact. By setting their policies within a European dimension and showing that other countries were addressing the same issues, these Member States used the recommendations to build domestic pressure for reforms. However, in others the recommendations did not give rise to political debates or effective follow-up.

Their formulation tended to range from rather specific advice to general orientations. In the latter case, it was more difficult for Member States to assess which policy measures were required to fulfill the objectives of the recommendation, while in all cases a robust and transparent evaluation framework could have contributed to greater acceptance of the recommendations by the Member States.

Policy learning and exchange of good practices has been stepped up. Every Member State has experienced success with the implementation of reforms, so there is significant scope for mutual learning and spreading good practices, taking account of national contexts and traditions. Since 2005, there has been an intensification of policy learning and exchanges of good practices. Member States showed considerable interest in the experiences of others in areas ranging from pension and health care reform, flexicurity and skills provision, multi-annual budget management, improving the business environment (ways to shorten the time to set up a business), innovation (more than half of all Member States have now implemented innovation vouchers) to combating poverty and social exclusion. Most of the exchanges took place in the context of the Open Method of Co-ordination (OMC).

It seems that the effectiveness of policy learning is greater when there are clear and measurable objectives (e.g. reducing administrative burdens by 25%, setting up a business in one week) and when there is involvement of both technical experts (to adapt policies) and the political level (to facilitate implementation).

Communication has been an Achilles' heel of the Strategy. Overall, there was not enough focus on communicating both the benefits of Lisbon and the implications of non-reform for the EU (or indeed the euro zone) as a whole. As a consequence, awareness and citizens' involvement in and public support for the objectives of the Strategy remained weak at EU level and at national level was not always sufficiently co-ordinate. Where Member States communicated around Lisbon-type reforms, these were only rarely presented as part of a European strategy.

More could have been done to strengthen the euro-area dimension. The Lisbon strategy coincided with the first ten years of the euro. The integrated guidelines recognize the enhanced need for economic policy co-ordination in the euro area, and specific recommendations have been addressed to euro area countries since 2007. These have focused on policy actions that are especially relevant for the smooth functioning of the EMU. In practice, however, follow-up by euro-area countries and in the 'euro group' has been relatively limited. The very different impact of the crisis across the euro-area has shown that some countries made much more progress than others in implementing structural reforms agendas and in sustaining their competitiveness which explains the large intra-area imbalances that are posing difficulties for the smooth functioning of the EMU.

The external dimension could have been stronger. The strategy has perhaps been too inward-looking, focusing more on preparing the EU for globalization rather than trying to shape it. The crisis made it abundantly clear that the global economy has become interdependent as the effects spread quickly around the globe. Since then, the EU has been actively involved in the G-20 process working to put in place a robust architecture to remove shortcomings and prevent the same mistakes from being repeated. The inherent linkages between the EU's economy and major global players such as the USA, Japan and the BRIC countries could also have been given greater prominence. Last but not least, there was little effort to benchmark the EU against the performance of key trading partners and assess the EU's progress in relative terms

Investing in people

One of the two key targets was that the European Union should have 70% of the working age population in employment by 2010. This was supported by secondary targets of a 50% employment rate for older workers (aged 55 and above) and 60% for women. These ambitious targets could only be achieved through structural reforms to tackle a number of challenges within Europe's labor markets; tackling labor market segmentation, addressing skill needs through more and better education and training, promoting a lifecycle approach to active ageing, and inclusive labor markets.

The success of Lisbon in terms raising the profile of structural reform in labor markets also helped to deliver results. Progress towards Lisbon targets is shown in the graph below. The 2005-2008 period in particular was characterized by strong employment growth, with about 9.5 million jobs created and a fall in the unemployment rate to almost 7%**.** Overall employment in the EU rose by close to four percentage points,

reaching 65.9% in 2008. The employment rates for women and older workers increased more substantially, attaining 59.1% and 45.6% respectively by 2008.

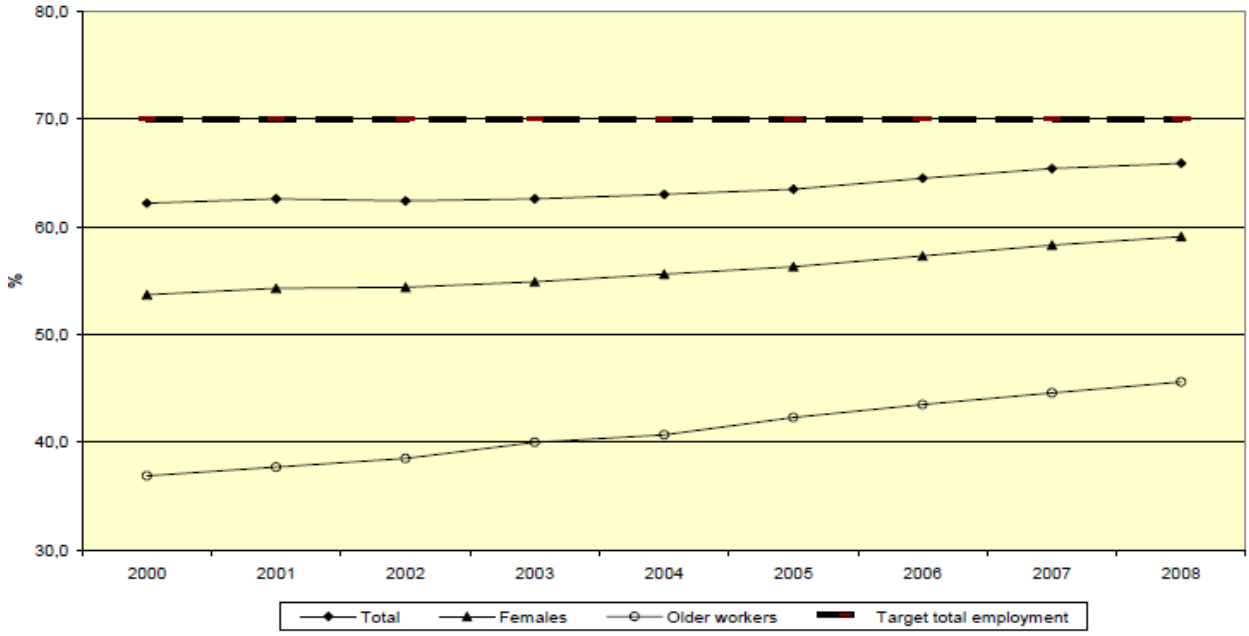
The economic and financial crisis has since had a devastating effect on the labor market, with more than seven million job losses expected in the EU in 2009-10 and unemployment set to reach over 10% by the end of 2010.

While some of the progress made before the crisis was undoubtedly due to a cyclical upturn, there are a number of reasons to believe that structural reforms as well as sustained wage moderation initiated under the Lisbon Strategy had a significant impact:

- Unemployment declined by 28% between 2005 and 2008, and dropped to nearly 7% following decades in double digits;
- In the economic upturn that preceded the crisis there was no significant pressure on wages (as would have been typical in a cyclical-driven expansion);
- In the period before the economic crisis the employment rate increased significantly and over a very long period. Such a rise cannot only be explained by cyclical factors.

Employment rate EU27

Percentage of population



Source: Eurostat - 2009

One of the most important policy developments under the Lisbon Strategy since its 2005 prelaunch has been the development, adoption and progress with implementation of common flexicurity principles, endorsed by the European Council in December 2007. Flexicurity represents a new way of looking at flexibility and security in the labor market. The concept recognizes that globalization and technological progress are rapidly changing the needs of workers and enterprises. Companies are under increasing pressure to adapt and develop their products and services more quickly; while workers are aware that company restructurings no longer occur incidentally but are becoming a fact of everyday life.

Rather than protecting a job, which will ultimately disappear, flexicurity starts from the assumption that it is the worker who needs protection and assistance to either transition successfully in his/her existing job or move to a new job. Flexicurity therefore provides the right reform agenda to help create more adaptable labor markets and in particular to tackle often substantial labor market segmentation. It is encouraging that a majority of Member

States have now developed or are developing comprehensive flexicurity approaches, although the focus of Member States' efforts should now be firmly on pushing forward reforms set out under individual Member States' flexicurity pathways. Major restructuring of Europe's labor markets since the crisis has made the scale of the challenge all the more apparent. Most reforms within this area have tended to focus on easing labor market regulation for new entrants to facilitate more contractual diversity. However, greater flexibility will only be achieved through the reform of legislation on existing contracts and by ensuring transitions between types of contracts and opportunities to progress.

The overall trend in terms of labor market policies has therefore been positive, albeit rather uneven both among Member States and across policy domains. There remains considerable room for improvement, in particular amongst the young and older age groups. Despite progress made in developing the concept of active ageing and avoiding early retirement schemes wherever possible, older workers are still under-represented in the labor market: the employment rate for people aged 55–64 is more than 30 percentage points lower than that for those aged 25–54, while less than 46% of people aged 55–64 are working compared with almost 80% for 25–54 year olds.

Youth unemployment continues to be a severe and increasing problem. Young people are particularly badly affected by the crisis, and in many Member States they suffer unemployment rates of more than twice the rate for the rest of the work force. Youth unemployment is intrinsically linked to skills policy, and despite some focus on this issue under the Lisbon Strategy, progress has been insufficient. Despite some progress in terms of reducing early school leaving, nearly 15%young people in the EU (or approximately 7 million young people) still leave the education system prematurely with no qualifications. Alongside this, there has been virtually no increase in the average levels of educational attainment of the young, and those who become unemployed often do not receive the support they need. In spite of EU-level activation targets which were set in 2005 and stepped up in 2007, many Member States still fail to ensure that every unemployed young person receives a new start in terms of active job search support or re-training within the first four months of becoming unemployed.

Education and skills policy is at the heart of creating a knowledge-based economy, but it is apparent that the EU has some way to travel in this regard. Progress in increasing youth educational attainment levels has been too slow, with outcomes only improving moderately since 2000. Since 2004, the level of adult participation in lifelong learning has remained stable or even decreased in 12 out of 27 Member States.

II. EUROPE 2020: Commission proposes new economic strategy in Europe

The European Commission has launched the Europe 2020 Strategy to go out of the crisis and prepare EU economy for the next decade. The Commission identifies three key drivers for growth, to be implemented through concrete actions at EU and national levels: smart growth (fostering knowledge, innovation, education and digital society), sustainable growth (making our production more resource efficient while boosting our competitiveness) and inclusive growth (raising participation in the labor market, the acquisition of skills and the fight against poverty). This battle for growth and jobs requires ownership at top political level and mobilization from all actors across Europe. Five targets are set which define where the EU should be by 2020 and against which progress can be tracked.

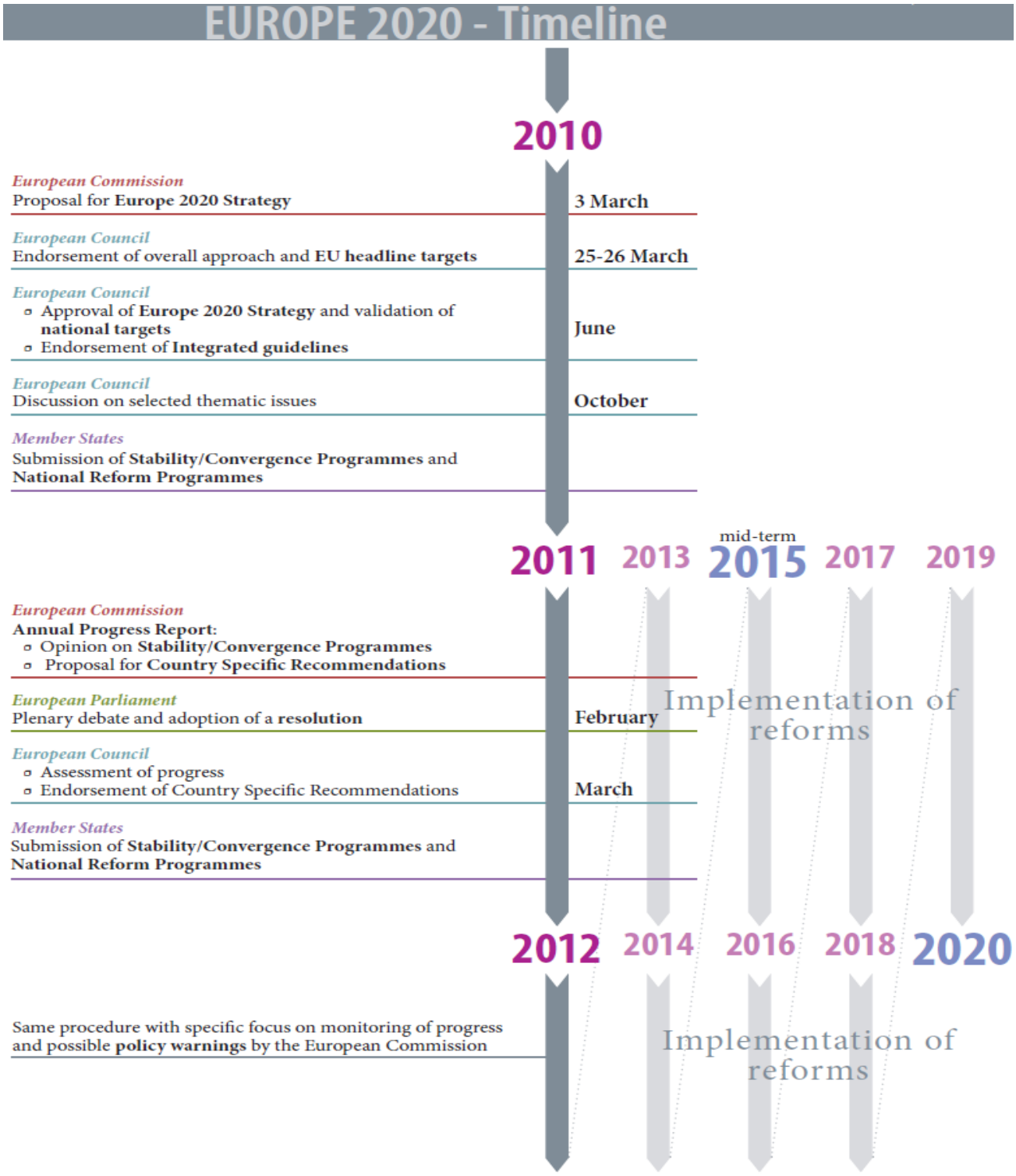
President Barroso said, "Europe 2020 is about what we need to do today and tomorrow to get the EU economy back on track. The crisis has exposed fundamental issues and unsustainable trends that we cannot ignore any longer. Europe has a growth deficit which is putting our future at risk. We must decisively tackle our weaknesses and exploit our much strength. We need to build a new economic model based on knowledge, low-carbon economy and high employment levels. This battle requires mobilization of all actors across Europe."

First of all, Europe must learn the lessons from the global economic and financial crisis. Our economies are intrinsically linked. No Member State can address global challenges effectively by acting in isolation. We are stronger when we work together, and a successful exit therefore depends on close economic policy coordination. Failure to do so could result in a "lost decade" of relative decline, permanently damaged growth and structurally high levels of unemployment.

The Europe 2020 Strategy therefore sets out a vision for Europe's social market economy over the next decade, and rests on three interlocking and mutually reinforcing priority areas: Smart growth, developing an economy based on knowledge and innovation; Sustainable growth, promoting a low-carbon, resource-efficient and competitive economy; and Inclusive growth, fostering a high-employment economy delivering social and territorial cohesion.

Progress towards these objectives will be measured against five representative headline EU-level targets, which Member States will be asked to translate into national targets reflecting starting points:

- 75 % of the population aged 20-64 should be employed.
- 3% of the EU's GDP should be invested in R&D.
- The "20/20/20" climate/energy targets should be met.
- The share of early school leavers should be under 10% and at least 40% of the younger generation should have a degree or diploma. .
- 20 million less people should be at risk of poverty.



In order to meet the targets, the Commission proposes a Europe 2020 agenda consisting of a series of flagship initiatives. Implementing these initiatives is a shared priority, and action will be required at all levels: EU-level organizations, Member States, local and regional authorities.

- Innovation union - re-focusing R&D and innovation policy on major challenges, while closing the gap between science and market to turn inventions into products. As an example, the Community Patent could save companies 289€ million each year.
- Youth on the move - enhancing the quality and international attractiveness of Europe's higher education system by promoting student and young professional mobility. As a concrete action, vacancies in all Member States should be more accessible throughout Europe and professional qualifications and experience properly recognized.
- A digital agenda for Europe - delivering sustainable economic and social benefits from a Digital Single Market based on ultra fast internet. All Europeans should have access to high speed internet by 2013.

- Resource-efficient Europe - supporting the shift towards a resource efficient and low-carbon economy. Europe should stick to its 2020 targets in terms of energy production, efficiency and consumption. This would result in €60 billion less in oil and gas imports by 2020.
- An industrial policy for green growth – helping the EU's industrial base to be competitive in the post-crisis world, promoting entrepreneurship and developing new skills. This would create millions of new jobs ;
- An agenda for new skills and jobs – creating the conditions for modernizing labor markets, with a view to raising employment levels and ensuring the sustainability of our social models, while baby-boomers retire ; and
- European platform against poverty - ensuring economic, social and territorial cohesion by helping the poor and socially excluded and enabling them to play an active part in society.

The ambition of Europe 2020 means that leadership and accountability must be taken to a new level. The Commission invites Heads of State and Government to take ownership for this new Strategy and endorse it at the Spring European Council. The role of the European Parliament will also be enhanced.

The governance methods will be reinforced to ensure that commitments are translated into effective action on the ground. The Commission will monitor progress. Reporting and evaluation under both Europe 2020 and the Stability and Growth Pact (SGP) will be carried out simultaneously (while remaining distinct instruments) to improve coherence. This will allow both strategies to pursue similar reform objectives while remaining as separate instruments.

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SCHOOL-TO-WORK TRANSITION AND LABOUR MARKET INTEGRATION OF ROMANIAN UNIVERSITIES GRADUATES

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Abstract: *School-to-work transition and labour market integration of young people represent a very important problem of modern societies. Innovative potential of young people is a real factor of progress in modern economies and societies. Also, their lack of experience, the new behaviors and attitudes can be a serious obstacle to labor market insertion of young people. This paper examines the process of insertion of higher education graduates in the labor market in Romania based on a national survey conducted on a sample including the 2003, 2005 and 2007promotions[7].*

Keywords: labour market integration, graduates, labour force mobilities.

JEL classification: J01, I23

1. Theoretical framework and literature review

Transition from school to work is a major research topic in the last decade (Hannan and Werquin 2001 and Ryan 2001). The main reason is related to the fact that after graduating finding a job is difficult and more often the graduates occupy vulnerable positions. In everyday language, "transition" means transformation from one state to another, from one situation to another, etc., while "transition from school to work" refers to the period between leaving school and filling a full time stable job (OECD, 1996). Therefore, the transition from school to work means the process of insertion/integration of graduates, of young people leaving the education system, on the labor market.

Specialists believe that young people transition from school to work has become more protracted and difficult now than it used to be several decades ago (OECD, 1996, 1998). Today, few young people that graduate mange to quickly integrate into the labor market and to "secure" their job. High rates of youth unemployment and significant incidence of underemployment indicates the important challenges which young people experience in their transition from school to work.

Young people today face a more difficult transition than those of a few decades ago. In the past, the transition from school to work formed a linear, mass phenomenon, including a single phase transition, which was largely depending on the family of origin, social class, gender, individual, etc. Thus, young people with similar backgrounds and education levels had similar experiences in labor market integration. Currently, youth transition to work has become more complex, fragmented, extended, with a highly individualistic accent, depending more on personal skills for negotiating (Cartmel et al., 2002). Accordingly to an OECD (1998) study youth integration is not smooth, being often accompanied by a period of turbulence and uncertainty.

Pastore (2007) considers that the EU perception on youth unemployment has changed with the launch and re-launch of the Lisbon Strategy and the Bologna Process. A dramatic change occurred in 1990 when the labor flexibility importance increased, being the main instrument for reducing youth unemployment, as well as measures for improving human capital through reforms of education and training system. Recent studies have shown that labor flexibility can increase the chances of employment if the human capital among young people is high. To reduce the difference in "experience" between youth and adult the education system should aim to reduce drop-out, to increase flexibility and facilitate youth transition from school to work.

[7] Research contract no.91-020/2007 PN-II *Partnerships in priority areas*, ***Determinants of labor market insertion of higher education graduates***, coordinated by the National Scientific Research Institute for Labour and Social Protection (NSRILSP)

Caroleo and Pastore (2009) consider that insufficient work experience of young workers against more elderly employees negatively influence the occupancy level and the wage size. Economists believe that the market should solve the young people difficulties by offering them: a) a lower entry wage on the labor market that reflects their productivity level; b) an increasing labor market flexibility, so that young people can move more easily from one job to another until they found the best place for them; c) the possibility of part-time activity that allows young people to acquire experience.

On the other hand, other economists criticize the flexibility and temporary work, unless they are accompanied by other additional instruments, because these measures can only encourage those who already have higher levels of motivation and skill.

Integrating young people into the labor market depends on how fast the labor market can absorb new graduates. This process may be explained by the insiders-outsiders theory (Lindbeck and Snower,1988). This theory distinguishes between "insiders" - namely workers on the inside and "outsiders", the unemployed, those outside. Young people are part of the "outside" after leaving school. Wage bargaining takes place between employers and insiders. The latter wants a salary as high as possible and also the job security. By negotiating a salary high enough demand for labor will decrease, and those on the outside remain without a job due to the insiders.

Labor market regulation, which varies from country to country, can explain the speed with which young people can integrate in the labor market. Differences between countries consist in the existence or absence of any connection between the education system on the one hand and employment system on the other hand (Maurice, Sellier, and Silvestre 1982, Hannan, Raffi, 1997 and Smyth, Müller and Shavit1998). Some countries such as Romania offer a general education. In these countries education is poorly linked to the actual work and training is achieved at the workplace. In other countries, skills development and training are acquired in school. In this case, the link between education and the workforce employment system is strong. The specificity of the education system directly affects integration/insertion of youngsters on the labor market.

Antos and Mellow (1978) conducted a national cross-section survey that comprised 10.000 men and women aged 18-27 years during 1966-1971. This study investigated how the youth labor market works and tried to identify their main problems and how they should be resolved by policy makers. Following this study it was found that: a) the relationship between educational attainment and later labor market success is striking; (b) education has a positive effect on wages; (c) increasing labor mobility can improve the economic position of young people; d) the size of unemployment and wages are directly affected by economic conditions, because any economic downturn directly influence the young population, increasing their duration of unemployment; e) workers generally do not stay too long in jobs that are not consistent with their level of qualification; f) competitive forces act on the youth labor market.

2. Methodology and database

In the first part of the paper we conducted an overview of the youth situation before graduation, focusing more on young people who have graduated an economic profile. In the second part of the paper we analyze how they are integrated into the labor market. The data used was obtained as a result of studies conducted under the research contract no.91-020/2007 PN-II *Partnerships in priority areas,* ***Determinants of labor market insertion of higher education graduates***, coordinated by the National Scientific Research Institute for Labour and Social Protection (NSRILSP), in which the authors have participated as members of the AES research team (consortium partner). The methodology used for data collection consisted of a survey at the national level in the second half of 2009. 2100 youth who graduated in 2003, 2005 and 2007 were interviewed.

3. The presence of youth on the labor market before graduation

The importance given by employers to work experience, the difficult economic circumstances, the high costs of training etc. led many students to work before graduation. Thus, from the total graduates investigated, nearly half of the 2003 and 2005 promotions and over half for the 2007 promotion have worked before graduation.

Depending on the graduated profile, most graduates, except those who have graduated the university, worked before leaving school (Figure 2). This can cause a more rapid insertion into employment after graduation.

Areas where young people worked before graduation coincide in a large proportion with the graduated faculty, which creates favorable conditions for better insertion on the labor market. Economic education graduates work in trade (22%) and public administration (13%). 58% of medical graduates have

worked in health and social assistance sector and those who have graduated an agricultural profile worked in agriculture, forestry and fishing at a rate of 26%. We can say that there is a match between the economic unit in which respondents worked during the faculty and the graduated faculty.

Figure 1: The dynamic of the graduates who worked before graduation

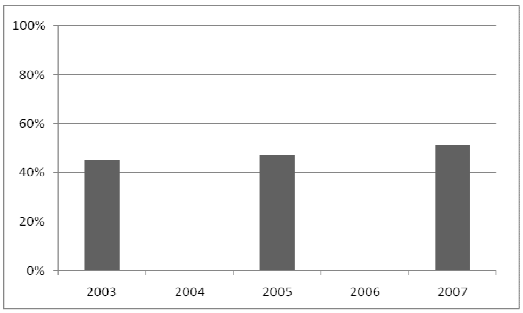
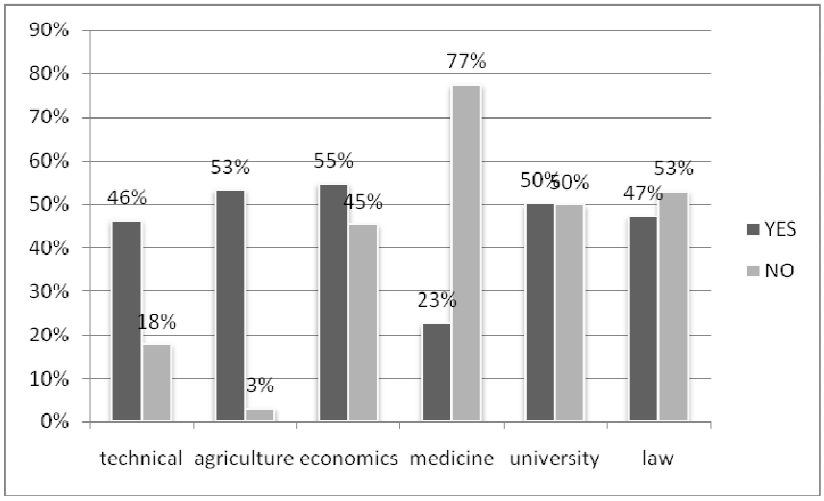
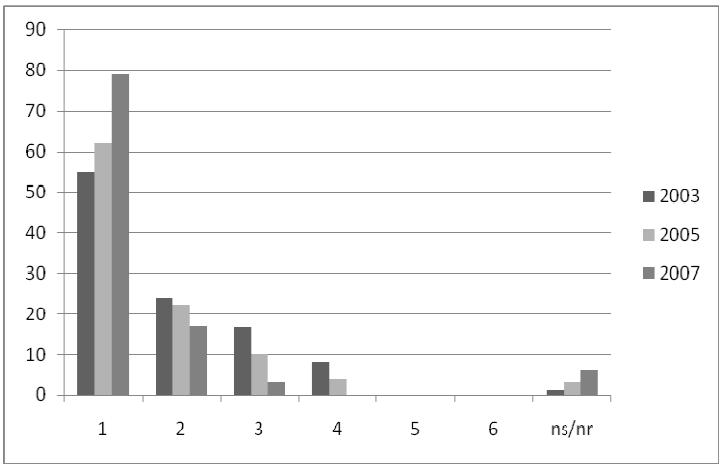


Figure 2: The graduate's structure who worked before graduation depending on the graduated profile



Although student employment is usually an accommodation with the labor market, the increase in the share of those who had working experience at one place (from 53% in total for the 2003 class to 63% for the 2005 class) indicate that investigated graduates have sought a stable allocation on the labor market (Figure 3).

Figure 3: Distribution of graduates by the number of jobs held until graduation

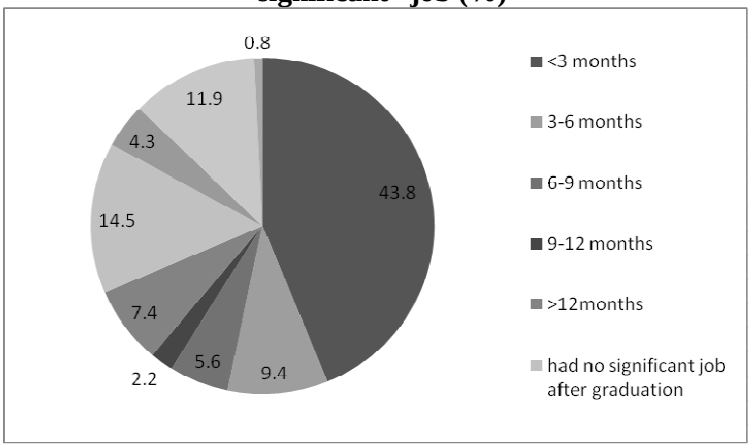


4. Youth condition on the labor market after graduation

Given that more than half of young people interviewed had worked prior to graduation, their integration into the labor market appears to be quite easy.

According to the National Statistics Institute survey results published in December 2009, "Access of young people on the labor market", 33.6% of graduates had a job one year after graduation. Insertion rate of higher education graduates was 60.9%, while the share of high school was 35% and 14.6% for people with low education. These results are confirmed by our study showing that **11.9% of respondents had a job upon graduation, 43.8% were able to occupy a significant job within three months** after graduation (passing the License exam) and 9.4% between 3 and 6 months from graduation (Figure 4).

Figure 4: Distribution of graduates by the duration (months) elapsed from graduation to the first "significant" job (%)

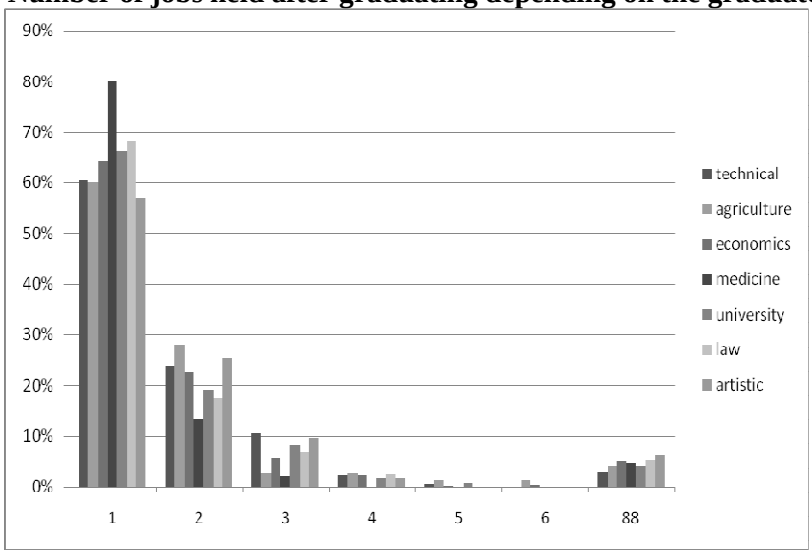


Only **14,5%** of respondents **had no significant job** after graduation while 4,3% had no job. Concerning the educational profile, **the most difficult** insertion is for the **artistic profile** while **the fastest** insertion is made in the **technical field**.

Depending on the number of jobs filled by the time of the survey (2009), we can say that most of the respondents had one job. Those who had more jobs were the 2003 graduates, which have greater labor market experience.

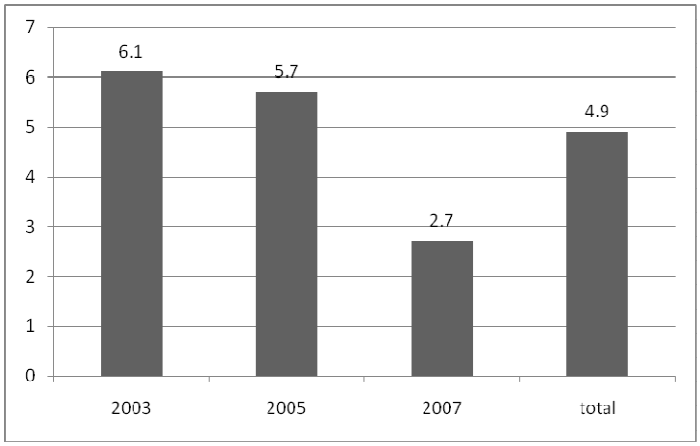
Depending on the faculty, the occupants of a single job are mostly medicine graduates (80%), followed by law graduates (68%). This can be explained by their specific activities (in both cases after graduation they have to undertake a probation period). 60% of the graduates with economic education had one job while 22% had two jobs. This situation suggests that in general young people have a low mobility, they search for a stable job and have professional adjustment problems. Last but not least we need to take into consideration the situation on the labor market in 2009, which was characterized by great instability, due to the world economic crisis (Figure 5).

Figure 5: Number of jobs held after graduating depending on the graduated profile



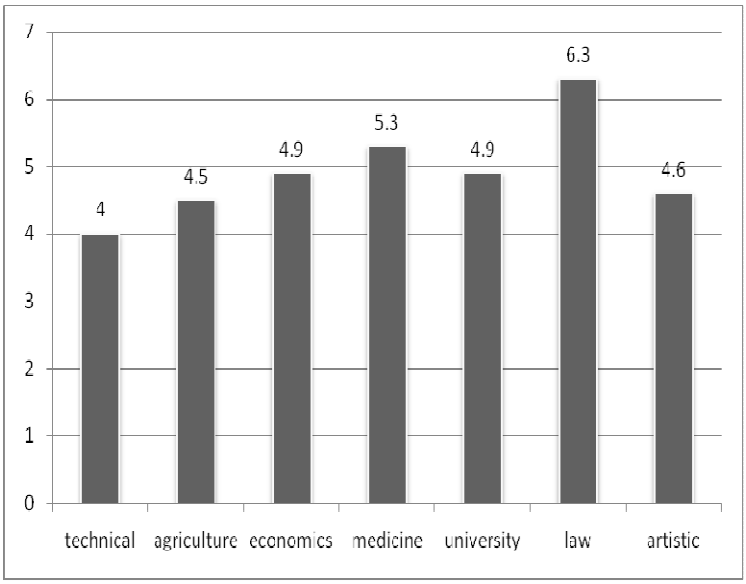
The 2007 graduates had the lowest average waiting time (2,7 months) until the first significant job, which was correlated with the pace of economic development in that period. The 2003 and 2005 classes had an average waiting time to the first significant job greater than the sample average (Figure 6).

Figure 6: The average time until the first significant job (months)



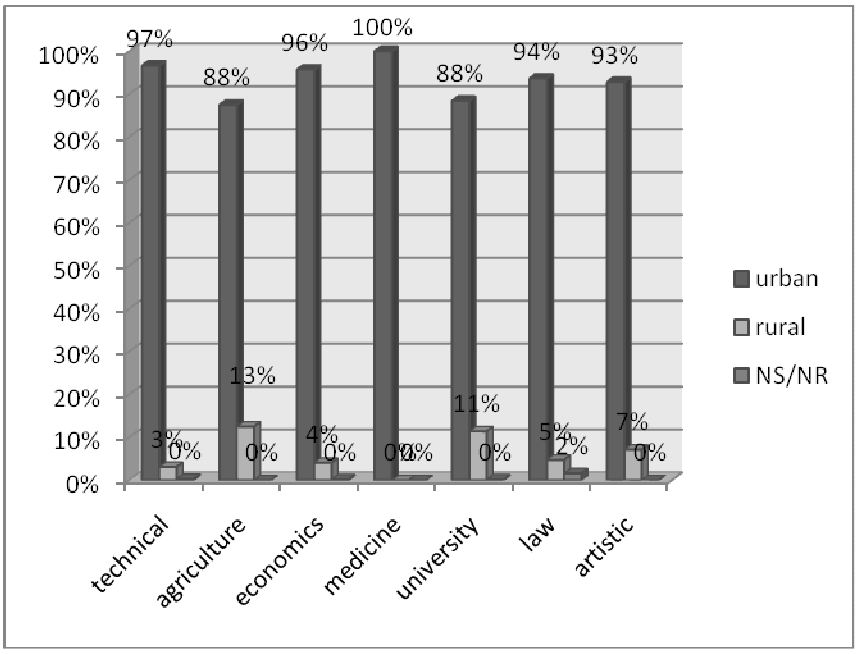
Compared to the average expectation time for a significant job (4.9 months), medicine and law graduates expected significantly more (between 5,3 months and 6,3 months). The shortest time until filling a significant job has been for the technical profile graduates (an average of 4 months).

Figure 7: The average duration since graduation to first "significant" job, on promotions and educational profiles (months)



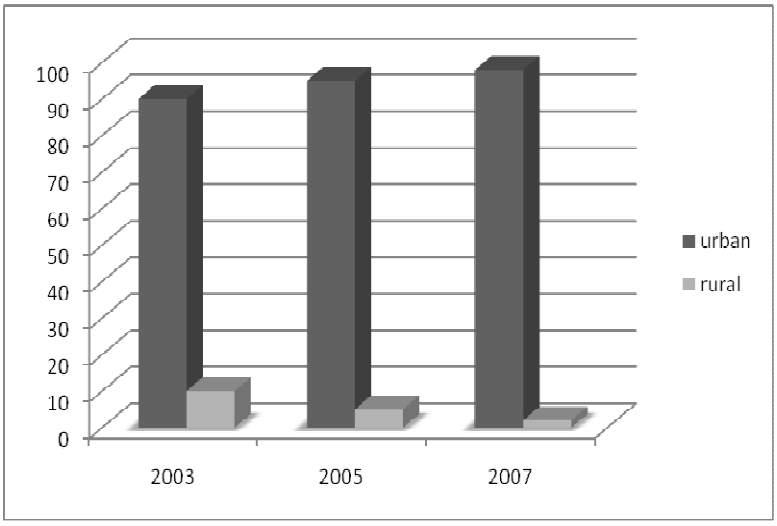
Depending on the residential environment most of the graduates come from urban areas. This reveals the existence of serious discrepancies between urban and rural areas (given the high percentage of rural population in our country) regarding the number of graduates. Concerning the economic education only 4% of graduates came from rural areas.

Figure 8: Graduates structure depending on the area of residence



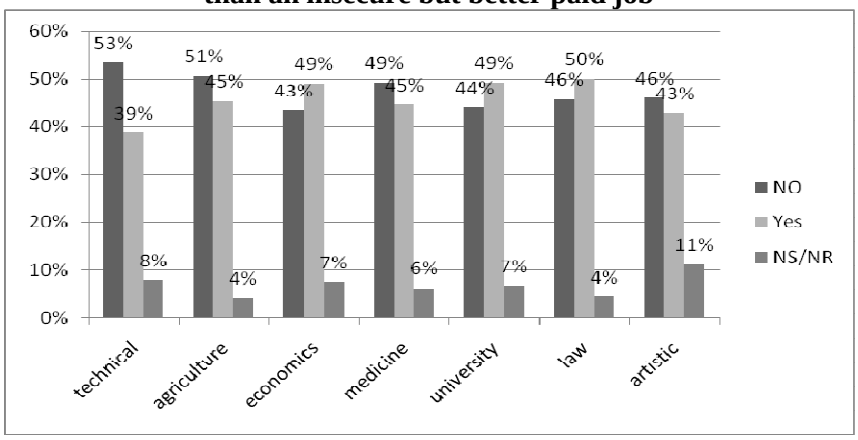
For the most cases (90-95%), the first job after graduation was in urban areas, which creates a major disparity between the two residential areas in terms of educational level structure, suggesting the prospect of a shortage of specialists with higher education in rural areas (Figure 8).

Figure 9: The first job distribution depending on the residence



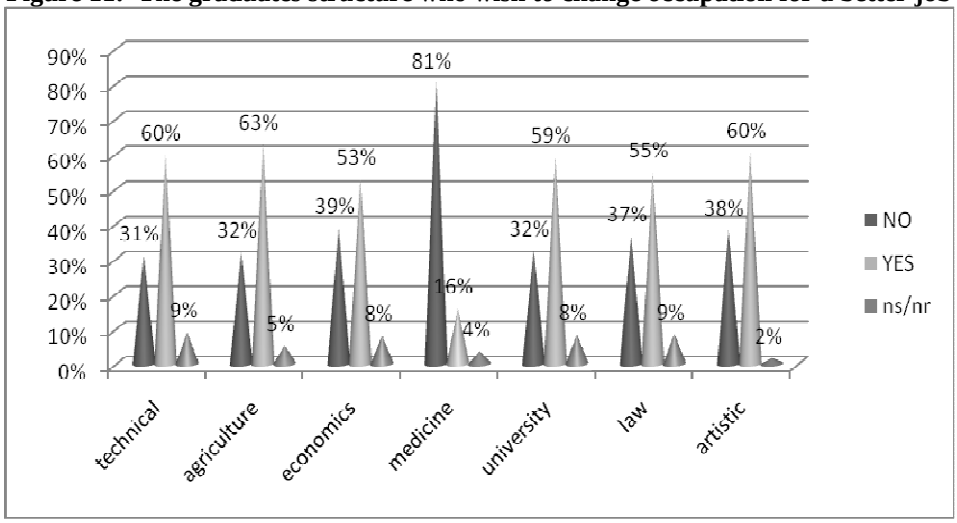
From the chart below, we notice that in general young people do not agree to a safer but poorly paid job, the exceptions being the university, economics and law graduates who prefer a more secure job.

Figure 10: The structure of those who prefer a more secure but poorly paid job, than an insecure but better paid job



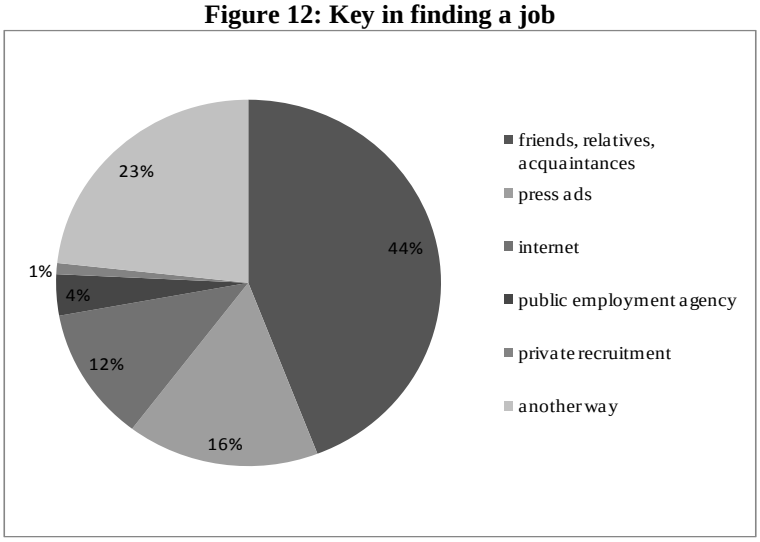
Except for medical graduates (81%), most of the respondents want to change occupation to a better job (Figure 11). So we can say that generally, young people have a high level of occupational mobility.

Figure 11: The graduates structure who wish to change occupation for a better job



From the chart below we see that **the key in finding a job** is related to friends, relatives and acquaintances at a rate of 44%. This might suggest the existence of certain functional rigidities on the Romanian labor market.

Figure 12: Key in finding a job



Conclusions:

Statistical data seem to indicate a relatively good insertion (60,9% after one year of graduation) of higher education graduates in the labor market in Romania. However, if we consider that nearly 12,5% of them already had a job after graduation and almost half of them have already worked before such time, the youth insertion process on the labor market is quite difficult in our country. This is also revealed by the high percentage of graduates whose waiting time for acquiring a job exceeds one year. The fastest integration on the labor market takes place with the technical education graduates, while the most difficult is with art education graduates. For economic education graduates the time for finding a job is at the average.

Most young people had one job and worked as an employee for a period between 1-2 years before graduating. Very few were self-employed, which shows that entrepreneurship among young people is limited, in spite of many EU money allocated for this purpose.

It is interesting that most graduates (44.2%) have found a job through friends, relatives or acquaintances, revealing the difficulty of the young people insertion process on the labor market. This might suggest the existence of certain functional rigidities on the Romanian labor market. These rigidities are compounded by large disparities between residential environments in relation to the origin of higher education graduates, indicating an underdevelopment of the rural potential.

Generally young people prefer a more unstable but better paid job, except for economic education and university graduates who prefer more stable and less better paid jobs. More than half of respondents would change their occupation for a better job.

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THE COORDINATED EFFORTS OF THE EUROPEAN UNION AND THE MEMBER STATES IN FIGHTING THE ECONOMIC CRISIS

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Abstract: *The paper is a very short investigation into the coordinated efforts made at the European level by both the Member States and the European institutions in order to control the financial crisis and its influence over the functioning of the national economies. In a very concise manner we are looking at what has been done so far, at the recent developments, the Euro zone, the exit strategies and the measures taken in the area of justice and home affairs.*

Key words: Economic crisis, European cooperation, exit strategies, justice and home affairs

JEL classification: F 59, K 42

The unprecedented crisis in international financial markets has created major challenges for the European Union. Co-ordinated action at European level by all 27 Member States has been effective in stabilising Europe's banking system. Implementation of measures has been rapid in order to put the much needed liquidity back into the financial system. But the financial crisis has affected the wider economy, hitting households, businesses and jobs. Europe's strength in fighting the adverse effects of the crisis lies in its solidarity and the ability to act together. All Member States have been affected, albeit in different ways and to different degrees; unemployment has increased, demand has fallen and fiscal positions have deteriorated. Acting jointly means a more effective and credible response.

The fact that the EU was able to take collective action when the pressure on financial markets was at its most intense was central to the stabilisation of the banking sector. Coordinating national action inside a set of clear EU principles, complemented with direct EU action, proved to be the right approach. It was backed up with decisive, coordinated and effective action: at the European level by the rotating Presidencies of the Council, the Commission and the European Central Bank, and at the national level by the Member States, with full support and cooperation from the European Parliament.

1. What has been done so far

In 2008 Europe, together with the rest of the world was suddenly faced with the most serious financial crisis since the 1930s. With this it became clear just how interlinked the financial markets were. In the course of only a few months, governments in the European Union, more or less, adopted a series of support measures. In its 2009 European Financial Integration Report the European Commission identified some of the main tools used by both the EU and the Member States institutions for the management of the financial crisis (European Commission, 2009):

- In order to improve credit conditions and ensure the functioning of the money markets, the European Central Bank and other central banks have, since the beginning of the financial turmoil, made repeated liquidity injections, supported by a progressive cut down of interest rates.
- To address funding problems of liquidity constrained but solvent EU banks, a concerted European action programme was launched where EU leaders committed to make available for an interim period and on appropriate commercial terms, directly or indirectly, a Government guarantee, insurance, or similar arrangement of medium term (up to 5 years) bank senior debt issuance. Leaders also encouraged Member States to facilitate medium term funding of banks through purchase of high quality assets or through swaps of government securities. Moreover, Governments remained committed to support the financial system through appropriate means, including recapitalisation, while respecting the interest of tax payers and ensuring that existing shareholders and management bear the due consequences of the interventions.
- To strengthen retail customers' confidence in the financial system and to promote a level playing field, the Commission proposed urgent legislative change in October 2008, which entered into force in March 2009. Minimum retail deposit guarantee levels has already been raised from €20,000 to €50 000 across Member States, and will be increased to €100 000 by the end of 2010 (European Commission, 2008).

- The Commission has set out the principles governing the application of State aid rules to ailing EU financial institutions. Specific guidance has been published as regards Member States' involvement, in particular in bank guarantees and recapitalisation and in designing restructuring and asset relief measures.
- A comprehensive reform package to build a stronger financial system for the future is under delivery, as presented in the Commission Communication on Driving the European Recovery (European Commission, 2009). Even though these measures will be implemented in the future, they are also expected to strengthen confidence in the short term. Key areas that are addressed are supervision and oversight, the bank capital framework, the remuneration structure in the financial sector and regulatory gaps in jurisdictions/market segments that are crucial for the sound operations of markets. The European policy has been broadly coordinated at international level.
- To support the real economy, a fiscal stimulus package is under implementation in Member States. It was coordinated by the Commission, as presented in the Commission Communication "A European Recovery Plan". The discretionary European and national stimulus packages are expected to amount to 2.1% of GDP for 2009- 2010; if automatic stabilisers are included the total stimulus is expected to amount to 5-6 % of GDP (European Commission, 2009).

2. Recent developments

During the last months the EU financial sector, while continuing to be fragile, showed some signs of stabilisation, the banking sector experienced improved access to market liquidity and investors seemed to have regained some confidence.

Already from the start of the crisis, the European Central Bank made liquidity injections in the market. By mid-2009, the acute lack of money market interbank funding started to ease and the majority of Euro area banks did not any longer experience problems in their access to the money market as a result of the turmoil. The increasing net liquidity volumes in the Euro area monetary financial institutions conveyed the same message.

Confidence has started to return to European capital markets. Euro area equity market prices progressively increased since the spring of 2009, with a parallel reduction of price volatility. These developments reflect a more positive market sentiment among investors as well as reduced uncertainty.

A series of policy measures have been used in the crisis management phase to promote a stabilisation of the EU financial system. This policy has also been coordinated at the global level, within G-20, taking account of the increasing financial globalisation and the progress of EU financial integration.

There are many examples of how the policy measures have supported the financial system. One example is the important role public guarantees and recapitalisation has played for the stabilisation of the European financial system. In the period between October 2008 and August 2009, the Commission approved a total of Euro 3.7 trillion – equivalent to 31.4 per cent of GDP – of state aid measures to financial institutions. Up to August 2009, Euro 1.5 trillion (12.6 per cent of GDP) had been effectively used (European Commission, 2009).

Capital injections – from private and public sources - have been made to fund the bulk of the losses and avoid systemic consequences. Most banks have not started their repayments of their public funds, which should be only available on a temporary basis. As a result, many European banks have become dependent on public guarantees and funding. Additional fresh capital could also be needed to bring down banks' leverage ratios further and to finance new credit losses. This could require considerable efforts since financing costs are more expensive than before, as a result of the downgrading of many banks' credit ratings. Moreover, most European banks face bleak prospects at their earning side due to the weak economy and mounting credit losses.

3. The Euro zone

As mentioned by Jean-Claude Trichet, President of the European Central Bank, during the meeting of the Committee on Economic and Monetary Affairs, held in Brussels on 22 and 23 March 2010 (Council of the European Union, 2010), economic and financial conditions of the Euro zone have continued to improve over the last few months, albeit only at a moderate pace. Economic activity is estimated to have increased by 0.1% from the third to the fourth quarter of last year. Recent information confirms that we can expect a moderate recovery in the current year. This is in line with the latest European Central Bank staff projections. Also forecasts by other institutions confirm this expectation, with an annual growth rate round 1% in 2010, gaining pace in 2011. In the assessment by the Governing Council, the risks to this outlook remain broadly

balanced, but as predicted already last year, the recovery is likely to be uneven across regions and sections and over time. High uncertainty continues to prevail.

As regards price developments, we have continued to witness low inflation and low inflationary pressures over the recent months. Inflation in February 2010 stood at 0.9%. The outlook for inflation remains in line with price stability and risks to this outlook remain broadly balanced. Specifically, inflation is expected to stay around 1% in the near term, and to remain moderate over the policy-relevant horizon, in line with a relatively slow recovery in demand.

The monetary analysis of the European Central Bank continues to confirm the expectation of low inflationary pressures over the medium term, as reflected in weak expansion of money and credit. The growth of loans to enterprises in particular is anticipated to remain weak for some time ahead, while the annual growth rate of loans to households is positive and strengthening. These developments are still in line with regularities over past business cycles. While there is no clear evidence of credit constraints in the euro area as a whole, the situation differs across countries, sectors and company sizes. To a large extent, the weak growth of loans is due to the unprecedented severance of the 2009 recession.

Indicators of inflation expectations over the medium to longer term remain firmly anchored in line with the European Central Bank's aim of keeping inflation rates below, but close to, 2% over the medium term

The significant monetary impulse stemming from the interest rate reductions last year has spread to market interest rates, and the transmission to rates charged by banks to households and corporations has continued to perform well. This transmission needs to be seen in conjunction with the nonstandard measures that the European Central Bank has taken. These measures, notably the provision of full allotment of liquidity to banks with a one-year maturity against collateral, have been effective in providing funding to banks at favourable conditions, stabilising the money market, and fostering the pass-through of the interest rate reductions.

As Mr. Jean-Claude JUNCKER, President of the Euro Group remarked at the meeting of the Committee on Economic and Monetary Affairs held in Brussels on 22 and 23 March 2010, essential points of the Euro Group strategy for the coming years are the relaunching of its budget coordination policy, in particular the exit strategy, as there is now greater public awareness of budgetary issues, consolidation of public finances through a gradual and timely withdrawal of tax stimuli, phasing out of the support measures in all economic fields, including the labour market, in particular the partial unemployment measures, as they become unsustainable for public finances. He urged the need for the exit strategy to be tailored to the particular situation in each Member State. Moreover, the single currency has to be managed more collectively and not only budget policies have to be coordinated, but also economies.

4. Exit strategies

All these measures designed to help the recovery of the economies of the Member States represented an impressive response to the crisis, but they came with a price: the aggregated European deficit in public finances now amounts to almost seven per cent of GDP, which is over three times more than last year. Twenty Member States are experiencing excessive deficit procedures.

In order to limit the rising of the deficits, at the end of October 2009 the Council agreed on a fiscal exit strategy, which should start in 2011 at the latest, provided that the Commission forecasts continue to indicate that the recovery is strengthening and becomes self-sustaining, while in December the European Council agreed on principles for exiting from financial support schemes. The Council also agreed on a fundamentally new structure for financial supervision in Europe, based on the idea that when financial flows are international, supervision can no longer be national and that the bonus culture could not continue in the way in which people had become used to. EU managed to convince the G20 to agree on far-reaching changes to this policy. The new rules will reinforce the need for a link between result and reward.

According to Council conclusions on exit strategies for the financial sector (Council of the European Union, 2010), the exit strategies from financial support schemes should be based on the following principles:

- Phasing out of public support schemes should be duly coordinated among Member States to avoid negative spill-over effects, taking into account country-specific specificities. In this respect, a coordinated strategy should be based on: facilitating adequate incentives to return to a competitive market; ex-ante exchange of information on the intentions to phase out – the Commission should centralize the information provided by Member States and make it available to all Member States on a regular basis; transparency towards the public and the financial sector; an assessment of the stability of the financial system.
- The timing of exit should take into account a broad range of elements, including macro-economic and financial sector stability, the functioning of credit channels, a systemic risk

assessment and the pace of natural phasing out by banks. Since the crisis has affected Member States and their financial sector differently, Member States specific circumstances should be taken into account, thereby allowing Member States to exit from support schemes at different points of time, while maintaining an adequate level of competition.

- Depending on individual Member State's circumstances, the phasing out of support should start with government guarantees. Action to phase out guarantee schemes would incentivise the exit of sound banks and give other banks incentives to address their weaknesses.
- The exit of individual measures must take into account the legal framework, including the relevant state aid decisions, which provide a coherent framework for exit.
- The withdrawal of state support should also take into account the legitimate interest to minimize the potential loss of public money.

In its Conclusions on exit strategies for crisis-related measures in labour and product markets (Council of the European Union, 2010), the Council emphasises that it is important to complement existing principles for exit strategies in the areas of fiscal policy and financial markets with principles to underpin the coordinated withdrawal of short-term measures in labour and product markets. If left in place too long these measures could hinder adjustment processes within and across sectors by distorting price and cost signals and by introducing wrong incentives. The Council notes there have been some extensions of temporary measures beyond 2010 and calls for Member States to withdraw these measures as soon as possible.

A credible long-term structural reform agenda is an integral part of any comprehensive exit strategy. The Council further stresses that exit strategies in the area of product and labour markets should be accompanied by the phasing in of medium and long term reforms that bolster potential growth and employment, improve competitiveness and support fiscal consolidation efforts.

The Council agrees on the following principles for the withdrawal of temporary measures in product and labour markets, while emphasising that country-specific conditions, including the economic situation and different fiscal constraints, should be taken into account.

Regarding temporary crisis-related sector support measures:

- these should be phased out as quickly as possible given their relatively large budgetary costs and the risks that the continuation of supply side measures may hamper efficient resource allocation and hence distort competition and the functioning of the internal market;

- in view of recent Commission economic forecasts, no new short-term schemes should be introduced nor existing ones extended;

- where they have longer term objectives and are considered for extension, e.g., restructuring, greening or research and innovation, they should continue to be scrutinised under the relevant State Aid rules.

Regarding measures to ease financing constraints:

- withdrawal of temporary schemes to ease financing constraints should depend on the capacity of financial institutions to supply adequate credit to the credit-worthy corporate sector and should be consistent with agreed principles for exit from support schemes in the financial sector and the end of the temporary state aid framework;

- continued careful monitoring is required to prevent the recovery from being hampered by undue credit supply constraints;

- SMEs may continue to be more limited in their access to finance than larger firms even as the recovery takes hold, which should be taken into account when deciding on the withdrawal of measures to address financing constraints given the central role that SMEs play in the restructuring of the economy.

Regarding temporary labour market support measures:

- these should be gradually withdrawn when the recovery is secured. On the basis of the most recent Commission forecasts on growth this could begin with a benchmark of mid-2010 for the EU as a whole, taking into account the historic lag before employment reacts positively to an upturn in economic activity;

- the precise timing of withdrawal should depend on the country-specific situation;

- the gradual phasing out of temporary labour market support measures should be accompanied where necessary by a strengthening of activation, training and other policies to facilitate job reallocation and workers' reskilling.

Regarding reduced working time schemes, the too late withdrawal of measures may carry substantial costs in terms of locking in labour to declining activities, thereby preventing the necessary reallocation of resources, damaging future growth prospects, distorting competition and interfering with the functioning of the internal market.

As far as temporary increases in the generosity and coverage of unemployment benefits are concerned, temporary measures that increase the generosity and coverage of unemployment benefits and other income support should be phased out in a way fully consistent with the objective of facilitating sector reallocation of labour and employment creation, and taking into account the relative level of coverage and benefits in the social insurance system.

5. The crisis and the area of Justice and Home Affairs

In order to tackle the influence the financial crisis has over criminality in Europe, Member States have taken a series of measures in the area of Justice and Home Affairs. These measures can be divided in two categories, measures taken in the civil law area and measures and measures taken in the criminal law area (Council of the European Union, 2010).

In the civil law area:

The aim of many of the measures taken by the Member States is to provide relevant economic bodies with more flexibility, and to reduce administrative burdens while increasing the stability and predictability of various business activities.

Several Member States have introduced changes to their insolvency regimes in order to make them more flexible. On the other hand, in some cases measures have been taken to avoid insolvency declarations, where this outcome is not inevitable. Agreements between debtor and creditor have been encouraged and facilitated. Moreover, certain guarantees are or can be provided to employees of companies in a serious financial predicament.

Consumer insolvency is being considered or introduced as a constructive response to the worsening financial situation of numerous households.

Several measures of procedural simplification have been introduced by the Member States, also in order to increase the flexibility of business activities. These include facilitating the establishment of new entities, or providing significant infrastructural projects with fast-track financing. Electronic procedures, which are simpler and less burdensome, are being put in place or developed by the Member States. In addition, various fees have been reduced, to make legal and administrative procedures less costly.

A key challenge that is being addressed in this area is the increasing need for legal aid to private individuals and enterprises facing economic difficulties. Numerous Member States have reacted to this increase in demand, making legal aid more readily accessible, and cheaper. Cooperation with NGOs/non-profit entities is seen as a valuable option in some cases.

In the criminal law area:

Numerous criminal-law aspects of the crisis have also been taken into consideration. Member States are monitoring changes in criminal behaviour directly or indirectly related to the economic instability. They are also developing tools, like Asset Recovery Offices, to address and counter specific streams of organised crime possibly intended to take advantage of some features of the crisis.

The transparency of various procedures, including those with an international dimension, has been increased in order to limit their misuse by criminals. Additional safeguards have been introduced into financial relations with non-cooperative jurisdictions, so as to foil tax evasion or money laundering.

6. Conclusions

While a melt-down of the financial system has been avoided, and recent signals are positive, the European banking sector is yet fragile. At the funding side, the European banking sector is considerably weakened by massive losses. Since the beginning of the crisis, the losses of top European banks amounted to almost 350 billion euro, due to a combination of mark-to-market losses and credit losses.

Can it be expected that the present market stabilisation will be durable and that the situation in the European financial sector will continue improving? It is too early to know. Even if the improvements we have seen so far mainly have been policy induced, this may have started a self-generating positive process. The decrease of market volatility and rise of stock market prices indicate that such a process may have started. Ultimately the recovery of the financial sector will depend on the development of the real economy, on investments and consumption, both in Europe and globally. Most forecasts on the general economic prospects are cautiously optimistic, indicating that the worst may be over.

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DEMOGRAPHIC PRESSURE ON HEALTHCARE FINANCING IN ROMANIA

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Abstract: *The EU has already experienced an accelerated ageing process of its population through the increase in life expectancy and the decrease in fertility rate, with all the economic and social consequences following from it. The aim of this paper is to analyse Romania's situation in comparison with the EU countries within the framework of demographic pressure. The main results shows that, if the current trend holds, in the next 30 years Romania's population will decrease and age at the same time at a faster rate than the population of EU against the background of the state's incapacity to plan ahead and to produce long-term strategies, to coherently set goals and design steps or to allot constant budgetary resources for the completion of long-term coherent economic and demographic projects.*

Key words: Demographic pressure, healthcare financing, Romania

JEL classification: H51, H55, I18

1. Introduction

The increase in life expectancy and decline in fertility rates combined with the dynamic evolution of past variations in birth and death rates lead to a significant change in the global age structure, to an accelerated ageing of the population in the European Union and in other parts of the world. In the medium-fertility scenario made by the United Nations, the number of people over the age of 60 is expected to reach 1 billion by 2020 and almost 2 billion by 2050, representing 22% of the world's population. The proportion of individuals aged 80 or over (the so-called "oldest old") is estimated to rise from 1% to 4% of the world population by 2050 (Kinsella and Phillips, 2005). It is widely accepted that, unless serious changes take place, the growth in the size and proportion of the elderly population will affect many aspects of economic and social development. The continuing augmentation of the ratio of people in older dependent age groups relative to those in working-age groups all over the world will increase the financial pressure on the health and security systems. An elderly population requires support in the form of pensions, healthcare and long-term care. We can mention also that the new generation of older people will be healthier than previous generations and, therefore may remain active in the labour force for longer. In a phenomenon referred to by demographers and health specialists as the "compression of morbidity", the length of healthy old-age is rising due to increases in the length of life, and to an even greater increases in the length of life free of chronic illness. Therefore, it will be a decrease in the lifetime burden of illness. This will result in serious pressure on the public budget, as well as on public policies that must be adapted to the new age structure of the population. Since different age groups have different productive capacities and different economic needs, a country's economic characteristics should transform as its population age structure changes. An adequate health policy, including health care finance, and retirement policy, could be the link between population ageing and macroeconomic performance.

2. Ageing population

An ageing population has effects both for a country's budget, and also for the labour market, and hence for the economic growth. In this context, Romania's position is less favorable as compared to the 27 EU average, as it will be shown further on.

Table 1. The ratio of Romania's and the EU's population over 65 years old between 2000 and 2008

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008
Population over 65 years in Romania (%)	12.50	13.63	14.04	14.30	14.53	14.76	14.77	14.90	14.90
Population over 65 years in EU 27 (%)	15.60	15.80	16.00	16.20	16.40	16.60	16.80	16.90	17.00

Source: Eurostat

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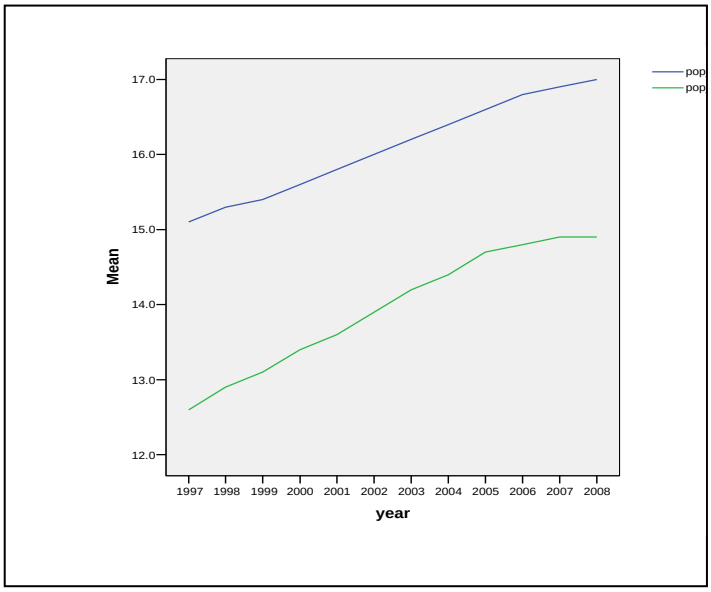
In Table 1 and Figure 1 are presented both the evolution of Romania's population over 65 years old and the EU 27 average. A downward trend is obvious in both Romania and the EU after 2000, although in Romania this fraction is comparatively smaller than in the EU; despite a 2% difference in favour of Romania along the entire period considered, values over 12% mean a demographically ageing population. A constant ageing trend can be thus noticed in both Romania and the EU, with all the economic and social consequences following this process.

Figure 1: The evolution of the population over 65 in Romania and in EU between 2000 and 2008



Source: Romania's Statistical Yearbook 2007, INS, Bucureşti, 2008; Eurostat.

The economic pressure that inactive population places on active population can be measured by the ratio between inactive population versus active population. In Europe, the estimates for 2025 are 55 inactive persons for 100 active persons, while the ratio for 2050 is 72 inactive persons for 100 active persons (UN, 2009). In 2008, in Romania there were 43 inactive persons for 100 active persons, while in EU this ratio was almost 49 (Table no. 2).

Table no. 2 The dependency ratio in Romania and EU between 2000 and 2008

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008
Romania (%)	43,98	45,81	45,74	44,96	44,26	43,59	43.30	43.4	43.1
UE-27 (%)	48.9	48.9	48.8	48.7	48.6	48.7	48.7	48.6	48.7

Source: processed according to the data in the Statistical Yearbook of Romania 2006, INS, Bucureşti and Eurostat.

In order to highlight the second period of inactivity[8], that is people aged 65 and older, the dependency ratio of elderly population is calculated, which measures the number of aged people (inactive) related to 100 adult (active) people. The EU highest old-age dependency ratio was already the highest in the world in 1950, and its increase has been the fastest over the period 1950 to 2000, rising by 10 %. The largest increases are projected to take place in Japan, China, and the EU 27 (European Commission, 2009a).

In a demographically aged population, the dependency ratio increases, which results in an increased economic pressure on active population. The ageing process of the population is rooted in a number of factors. Higher living standards, improved health care in terms of quality and quantity resulted in a higher life expectancy in the population of developed countries. Other factors that simultaneously co-occur to increase the ratio of oldest-old population within total population are increased age at the time of first marriage, increased number of active women and a decrease in birth rate. The same is applicable to Romania, however, on a slightly diminished scale in comparison to other EU countries, which can be explained through the poverty trap Romania finds itself in. Romania ranks highest among the EU countries regarding the danger of pauperization, at a value of 23%, being outranked only by Latvia at 26% (Eurostat).

[8] The two periods of inactivity are: 0-14 years old and 65 years and older.

Poverty makes the living standard lower than that of the EU, forces the young active population to emigrate and, at the same time, it decreases birth rate.

3. Population data and projections

The 2008-based national population projections EUROPOP2008 convergence scenario[9] show the population of the EU27 rising from 495.4 million in 2008, reaching 520.7 million in 2035 and thereafter declining to 505.7 million on 1st January 2060. The share of people aged 65 years or over in the total population is projected to increase from 17.1% to 30.0%.

The old age dependency ratio is expected to increase substantially from its current levels of 25.4% to 53.5% in 2060. Whereas in 2008 in the EU27 there were 4 persons of working age (15-64 years old) for every person aged 65 years or over, in 2060 the ratio is expected to be 2 to 1. Fourteen Member States will have a smaller population on January 1st 2060 than on January 1st 2008. From among these countries, Bulgaria, Latvia, Lithuania, Romania, Poland, Estonia and Hungary are projected to have a decreasing trend for their population over the entire period 2008-2060. Thus the median age of the total population is likely to increase in all countries without exception due to the combined effect of the existing structure of the population, persistently low fertility rate and a continuously increasing number of survivors to higher ages (Giannakouris, 2008). In this context, Romania is among the ten countries of the EU with highest 2050 elderly population or rapid change from 2000 to 2050 (the percentage of population over 60 will be 39.1 in 2050).

The projection of the ratio of population over 65 among total population is presented in Table 3 and Figure 2. If currently Romania's values are higher compared to the EU average, in the future the situation will be different; for instance, in 2060, the ratio of the population aged 65 and over will be by about 5% higher than the European average. This can be explained through the poverty risk mentioned earlier, which ensues in a much lower birth rate than in the EU and in the emigration of young population.

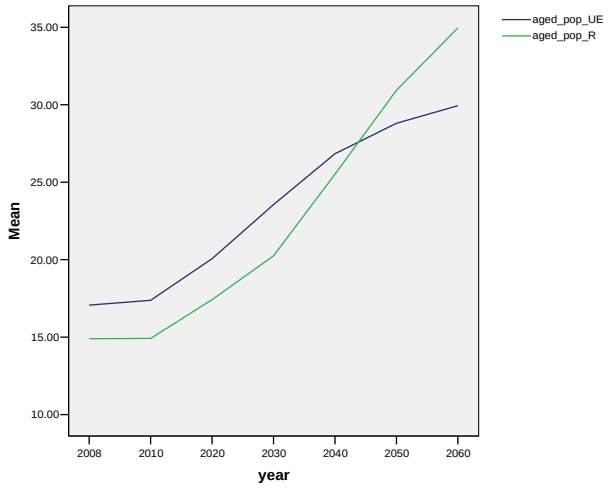
Table 3: Aged population in the coming 50 years in Romania and the EU 27

Year	2008	2010	2020	2030	2040	2050	2060
Romanian Population aged over 65 years old (%)	14.91	14.93	17.43	20.25	25.52	30.93	34.96
EU Population aged over 65 years old (%)	17.08	17.38	20.06	23.55	26.85	28.81	29.95

Source: Eurostat

During 1960 and 2009, in Romania, birth rate decreased continually, with the exception of the years 1967 and 1968. During these two years, values of 105.5 and 102.9 respectively to 1000 were recorded, far over the values recorded in the previous years or in any of the years that followed (this peak can be accounted for through the enforcement of a decree on forbidding abortion given by the communist authorities).

Figure 2: Aged population in the coming 50 years in Romania and the EU 27



Source: Eurostat

[9] The EUROPOP2008 "convergence scenario" is based on the population on 1st January 2008, and the assumptions have been developed in a conceptual framework where the socio-economic and cultural differences between Member States of the European Union would fade away in the long run.

Following 1990, a decrease in the birth rate compounded with the emigration of a part of the active population resulted in a downward trend for Romania's total population. If the current trend of birth rate is stable, Romania will have 16.7 million people in 2050 and no more than 11.9 million in 2075, as compared to 22 million in 1990.

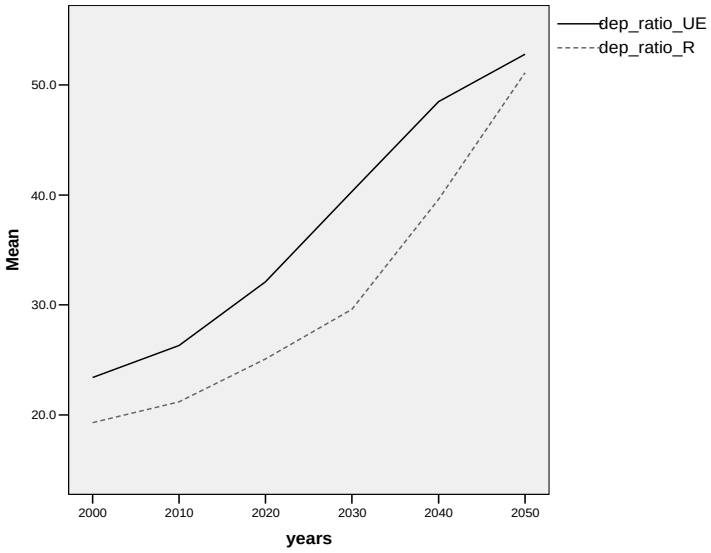
If the current trends are stable and no major changes occur in the evolution of birth rate or of migration of population, it is estimated that by 2050 the number of aged persons will equal or even exceed the number of active population (Table no. 4 and Figure no. 3)

Table no. 4: The evolution of the dependency ratio of aged population in Europe and in Romania

Country	2000	2010	2020	2030	2040	2050
EU	*23,4*	*26,3*	*32,1*	*40,3*	*48,5*	*52,8*
Romania	19,3	21,2	25,1	29,6	39,6	51,1

Source: Eurostat, http://epp.eurostat.ec.europa.eu

Figure no. 3: The evolution of the dependency ratio in the next 50 years in EU and Romania



Source: Eurostat

The demographic boom in Romania in the years 1967 – 1968 will be felt around the year 2030, when the people born in that period reach their retirement age. As it can be seen in Table no. 4, the dependency rate of the elderly will be double in 2050 as compared to 2020. In 2050, the ratio will be 52.8 elderly people (inactive persons) to 100 active persons. The problem of budgetary balance and of maximizing the efficiency of public expenditure necessary to support such a great demographic pressure is the more urgent and important for Romania, which is a country far behind the European average regarding economic performance.

4. Healthcare financing

From financial and economic perspectives, the ageing of the world's population presents a number of major challenges. Changes in age-specific health profiles are important in studying the demographic pressure on health care financing. As Kulish et al. wrote, if people moving into their 60s and 70s are healthier than preceding generations, the demands for health care will be less intense and many will be able to work, and contribute to economies for longer (Kulish et al., 2006). Older individuals require more health care and, in many countries, rely on social pensions for a large part of their income. Economically, there will be increased pressure on working populations, whose taxes pay for the health care and pensions of their elders but whose numbers relative to those elders will be reduced.

Individuals faced with the prospect of increased life expectancy, where they can now expect to live well into their 80s, have a number of choices to smooth their financial path: they can rely on social security payments, they can work longer to finance consumption in later years, they can have access to private pensions, or all three. Bloom, Canning, Mansfield, and Moore have shown that the theoretically optimal response to an exogenous rise in life expectancy is to increase working life proportionately, without increasing savings rates (Bloom et al, 2007). The impact of demographic changes on public health

expenditure will be significant, although not equally across all countries. The increase will be, for most countries, between 1 and 2.5% of GDP (European Commission, 2009a).

An elderly population requires support in the form of pensions, specific healthcare and long-term care. Of these, in the public budget, old-age pension provision is currently the most significant budget item, although its share of GDP varies widely in EU countries, from 5% in Latvia to 14% in Italy (European Commission, 2009b). In the EU 27, public pension expenditure was about 10.1% of GDP in 2007. Compared with 2000, the pension/GDP ratio has increased in eight countries (Romania, Norway, Malta, Portugal, Denmark, Sweden, France and Italy) (European Commission, 2009a).

Table no. 5 and Figure no. 4 present the percentage of the GDP allotted to health care in the EU and in Romania in 2000 and in 2006; a slight increase can be noticed for the EU, while in Romania this element of public expenditure can be noticed to decrease.

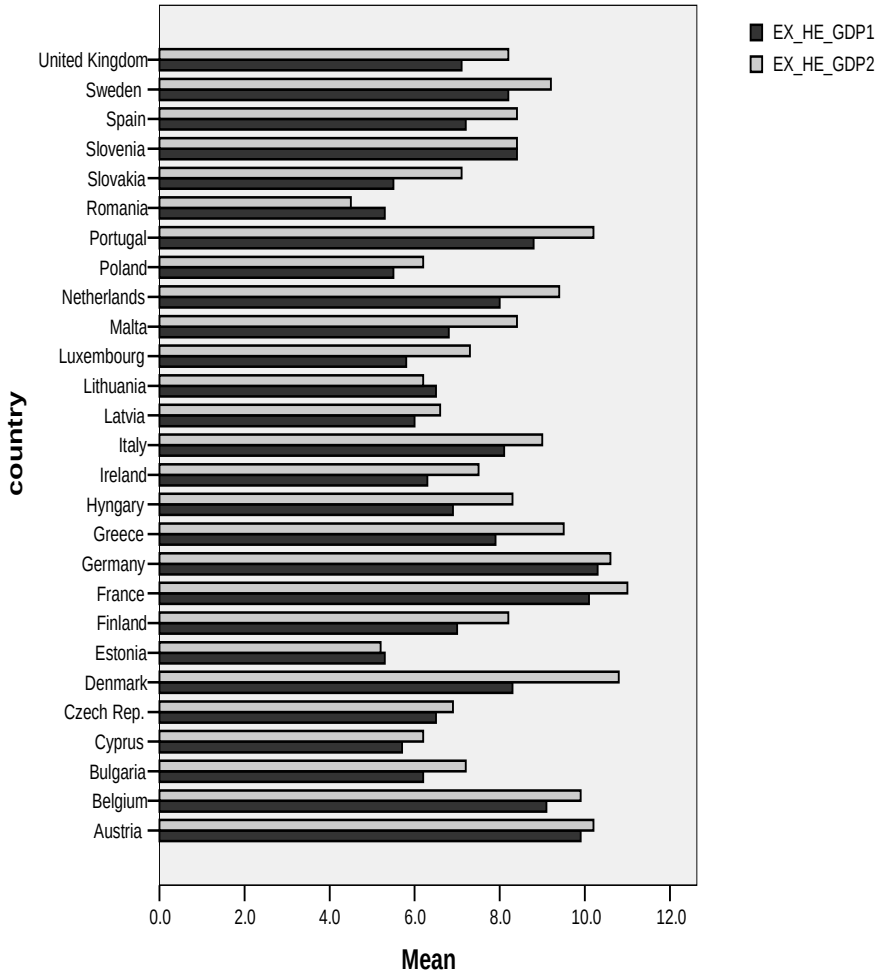
Table 5: Expenditure on health as % of GDP

Years	Expenditure on health as % of GDP in EU	Expenditure on health as % of GDP in Romania
2000	7.3	5.3
2006	8.2	4.5

Source: author's computations on World Health Statistics 2009, World Health Organization

Figure no. 4 shows that Romania is the country in the EU with the lowest percentage of the GDP allotted to health care in spite of the need to actually increase this expenditure. In the year 2000, Romania's situation was comparable to that of Estonia, while in 2006, half as much was allotted as compared to the average sum that the EU countries allotted to health care. This explains the profound crisis the Romanian health care system is going through, as it is inefficient and unable to meet the population's increasing needs.

Figure 4: Expenditure on health as % of GDP in Romania and EU in 2000 and 2006



Source: author's computations on World Health Statistics 2009, World Health Organization

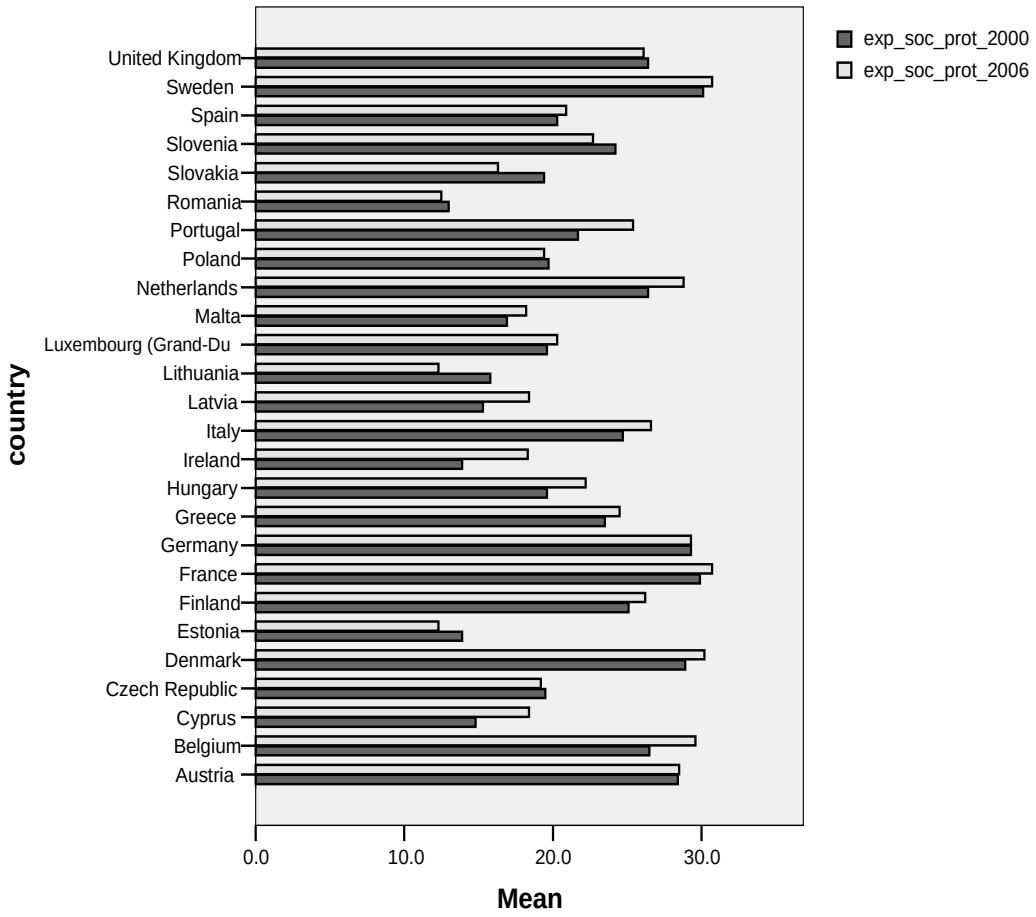
Table no. 6 shows public expenditure on social protection in the EU and in Romania for the years 2000 and 2007. As it can be noticed, Romania's percentage of the GDP alotted to social protection is the lowest among the 27 EU countries, lower even than that of Bulgaria, who in 2006 alotted 16% of the GDP to this very sensitive chapter of public expenditure.

Table 6: Expenditure on social security as % of GDP

Years	Expenditure on social security as % of GDP EU	Expenditure on social security as % of GDP in Romania
2000	26,5	13
2006	26,7	12,5

Source: author's computations on Eurostat Statistics, http://epp.eurostat.eveuropa.eu/

Figure 5: Total expenditure for social protection



Source: author's computations on World Health Statistics 2009, World Health Organization

The Romanian system of state pensions is faced not only with the problem of sub financing which results in a smaller amount of the pensions than in the EU countries, it also faces the problem of early retirement. The insured persons who have exceeded the total period of subscription to the retirement funds by ten years can claim benefits for early retirement five years previous to standard retirement age at the most. Therefore, it can be seen that in Romania, retirement age is actually 57.4 years. Against the general background of instability of social policies and of the economic crisis the country is facing, the number of the Romanians who choose to retire before they reach the standard age stipulated by the legislation has increased by 300%, and the number of the people who have retired from the active life on the grounds of various diseases has increased by 50%. Consequently, in 2009 Romania had around 900,000 people retired on grounds of various degrees of invalidity, while another 115,000 chose to give up work and stay at home five years earlier than the law stipulates. The compound number of pensioners rises to over a million people supported by the already adverse budget of public pensions, meaning about 20% of the total number of pensioners in Romania.

Since Romania is the last among the EU countries where this system of retirement is still operative, the Ministry of Labour intends to repeal it in the future. Therefore, starting in 2010, the Romanians who want

to retire when they reach the age of 60 – which is five years earlier than the retirement age stipulated by the future legislation for both men and women – will have to content themselves with a pension smaller by 50% compared to the legal pension; at present, early retirement pension is only by 30% smaller than the legal pension. Moreover, 253,000 pensioners will be out of the system through the elimination of early retirement and an increase in retirement age. Although early retirement represents an alternative to unemployment for the beneficiary – a smaller benefit, yet certain, it represents a further burden and for the already poor budget of the country and a deterioration to the demographic balance.

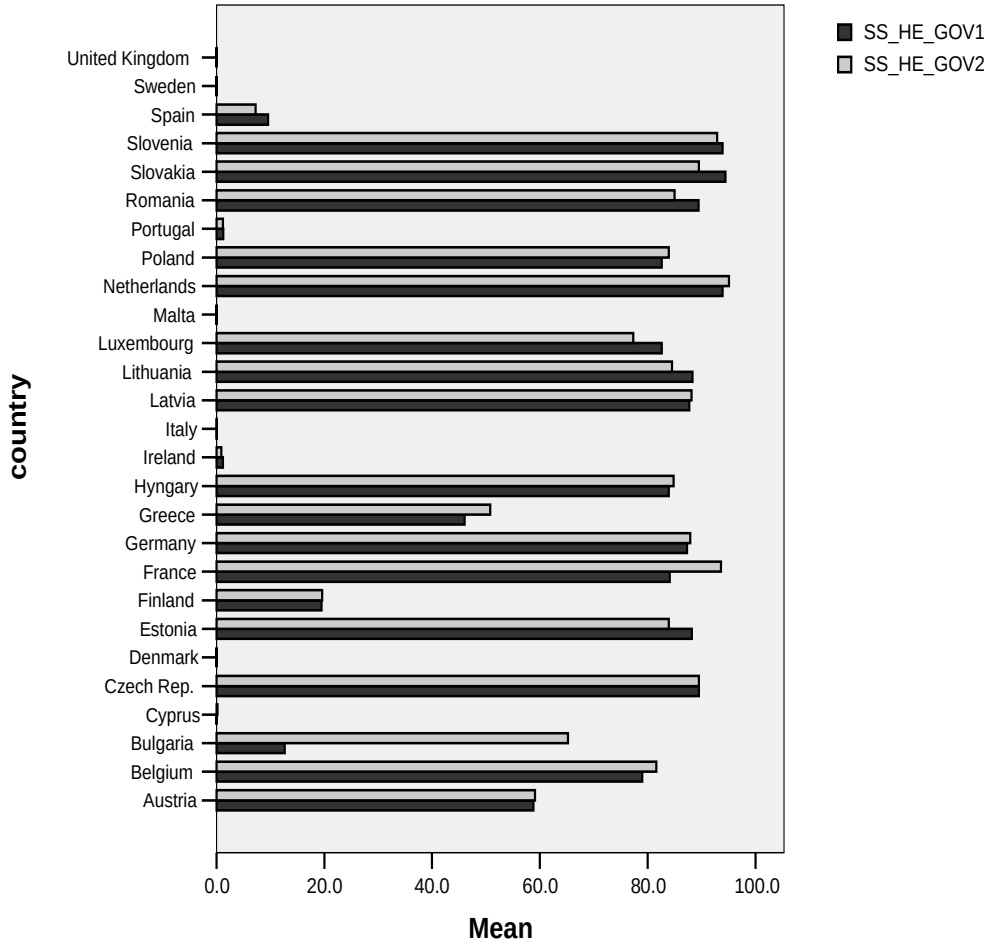
Table 7: Social security expenditure on health as % of general government expenditure on health

Years	Social security expenditure on health as % of general government expenditure on health EU	Social security expenditure on health as % of general government expenditure on health in Romania
2000	50.9	89.4
2006	52.7	85.0

Source: author's computations on World Health Statistics 2009, World Health Organization

Table no. 7 and Figure no. 6 show the ratio of the public expenditure alotted for health protection from the total expenditures for health care. It is apparent that in the case of Romania, this ratio is much higher than the EU average and slightly on the decrease in 2006 as compared to 2000. This difference can be accounted for through the fact that in Romania the private medical insurance system is not operative yet; the reform of medical insurance and of private pensions is at its beginnings, its results are expected to show in 20 – 25 years from today.

Figure 6: Social security expenditure on health as % of general government expenditure on health



Source: author's computations on World Health Statistics 2009, World Health Organization

The fact that public financing is predominant in the health care system and in the pension system, while the sums allotted in quantum as well as in terms of percentage are far smaller than the European average, makes the health care system and the social protection system severely sub financed.

5. Conclusions

In terms of economic policies, demographic ageing requires identifying solutions with the aim of restoring the balance, in other terms, of increasing the amount of contribution to the social security budget. What is required is a decrease in the dependency ratio, which is achievable through increased use of the working force of the aged, an increase in the retirement age, the stimulation to create new employment opportunities in the private sector. At the same time, it is necessary to secure a level of the pension sums that will allow a decent lifestyle all along the retirement period.

The solutions to demographic pressure have to be adopted as soon as possible and involve an increased capacity of strategic planning, since the entire set of public policies are interrelated in the demographic policies. Social policies need to be efficient, as well as fair, well focused and coherent, but especially stable, in order to minimize the risks associated with social pressure and to maintain budgetary balance.

On the short term, demographic pressure is strong on the budgetary balance. Within the framework of the current economic and financial crisis, steps must be taken in order to resize and rebalance the various chapters of budgetary expenditure. Thus, the problem that all countries are faced with is a decrease in public income against the background of the crisis at the same time with a need to increase the spending on social protection.

As it has been shown in the paper, the ageing of the population causes specific problems, such as the need to increase public financing in order to support the volume and quantum of the pensions, whose level must be adapted to the actual needs of lifestyle of the people of the 4th age; besides them, there are other problems such as: a development of such medical specialties as geriatrics and gerontology, an increased consumption of specific medical products and services, the promotion of the population's increased general health through specific programmes of dissemination of health knowledge and of promoting health to improve prosperity and solidarity.

In the case of Romania, the weaknesses of the state institutions raise questions as to the state's capability to plan and act strategically on the long term, to show coherence in setting the goals and steps or to identify constant budgetary resources necessary to implement coherent demographic solutions on the long term. Decisional and institutional lack of coherence, perpetual experimentation, a state of uncertainty and of provisional steps in social policies have resulted in a collapse in the birth rate and accentuated general poverty among the population. Romania is among the countries with the highest rate of material deprivation, which is 50%, exceeded only by Bulgaria, whose rate is 51% compared to the EU average which is 17% (Eurostat). Increased poverty among the elderly generates an increased demand for specialised out patient's medical services (especially a demand for primary medical assistance, out patient's geriatric services and subsidized medical products), which emphasizes once more the state of chronic subfinancing of the social areas that the elderly population of Romania depends on, i.e. the public health care system and social protection.

The public health care system faces a deterioration of its infrastructure, the lack of basic medical material and a migration of the medical staff on the ground of insuficient financial incentives. The deterioration of the health care system is compounded with a policy in the state pension system that is discretionary, unfair and inconsistent, which renders as preposterous the entire public policies system in Romania, as well as the ability to rise up to the future challenges related to demographic pressure.

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REGIONAL ATTRACTIVENESS IN ROMANIAN DEVELOPMENT REGIONS

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Abstract: *Nowadays, one important issue to be considered for fighting the economic crisis is attracting foreign investors. The main objective of this paper is to present which are the opportunities for the foreign investors if they chose to invest in one region or another and also which are the main attractions of each regions whether we talk about industries or services. Therefore, the authors made a comparative analysis of Romania's development regions trying to emphasize the main strengths each region has. We also underlined the main weaknesses which should be solved in order to make sure that they don't interfere with the strengths and opportunities of each region.*

Key words: regional development, foreign direct investment, regional attractiveness

JEL Classification: O18

Romania is divided in 41 counties and the capital city Bucharest and starting from 1998 it was divided in eight development regions, according to four criteria: number of inhabitants, surface, cultural identity and functional-spatial relations. These regions serve as a framework for development policies' elaboration, implementation and evaluation and correspond to the NUTS II level units, while the counties serve as NUTS III units. The model was criticized on the one hand for the few and only weak competencies of the regional institutions and on the other hand for the lack of coherence in the composition of the regions (Heringhaus 2008 p.58).Generally the Capital and the surrounding county Ilfov are considered to be better developed, followed by Transylvania and Banat whereas the North-east and the south-west part are considered backwarded.

1. Population and migration

In terms of population North-East and South have over 3 million inhabitants and the smallest regions are West, with a little under 2 million people, followed by Bucharest-Ilfov and South-West. In what concerns the area, the capital region, Bucharest-Ilfov is the smallest region, with only 1,821 km² and on the first place is North-East, with an area of 36,950 km².

As one can notice in the picture bellow, Bucharest-Ilfov and North-East regions have the highest population density (1,272 inhab/km², respectively 103 inhab/km²) and Center and West are the regions with the lowest population density (75 inhab/km², respectively 61 inhab/km²).

In the last decade there was a decrease in total population of Romania and in the birth rate, a trend that can be noticed also at regional level. In 2009 there were only two regions that knew an increase in population, Center and Bucharest-Ilfov, which being the capital region presents a powerful attraction for employment opportunities.

The total internal migration increased in the last years, with North-East as the region with the highest loss of population and Bucharest-Ilfov and West regions as the net recipients, due to the better living standards and employment opportunities offered. A special case is South region which is among the first regions both at inflows and outflows, due to the closeness to the capital region.

2. Regional economy

2.1. Gross Domestic Product and sectoral Gross Value Added

Since 2001 there has been a constant annual growth in GDP/inhabitant due to strong activity volume, especially in services and industry (including constructions) sectors. These increases were stopped at the end of 2008 and in 2009 due to the effects of the worldwide economic and financial crisis. This trend in growth in GDP/capita is common in all regions, with three regions above the national average (Bucharest-Ilfov, West and Center) and the rest below the national average.

Figure 1 – Romanian development regions – population and area in 2009

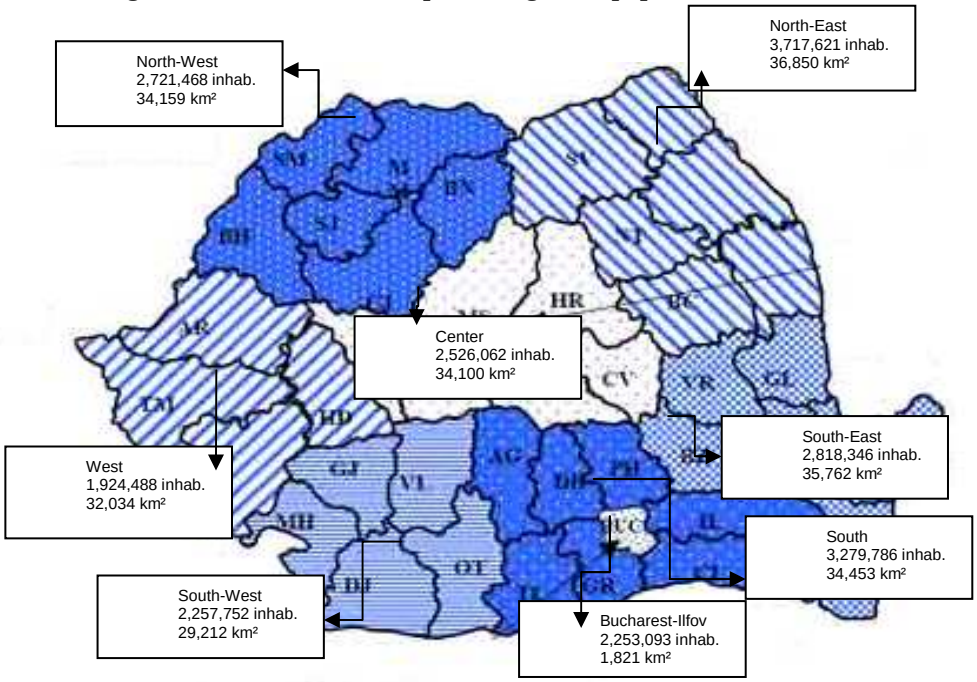
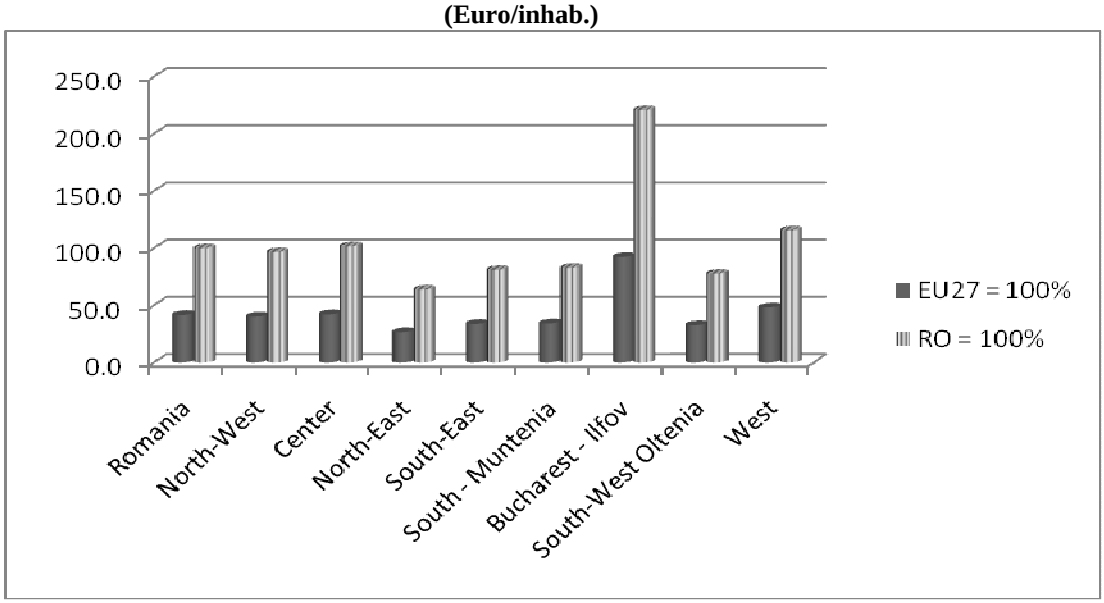


Figure 2 – Disparity index of GDP per capita in 2007 versus EU27 (PPP/inhab) and national average (Euro/inhab.)

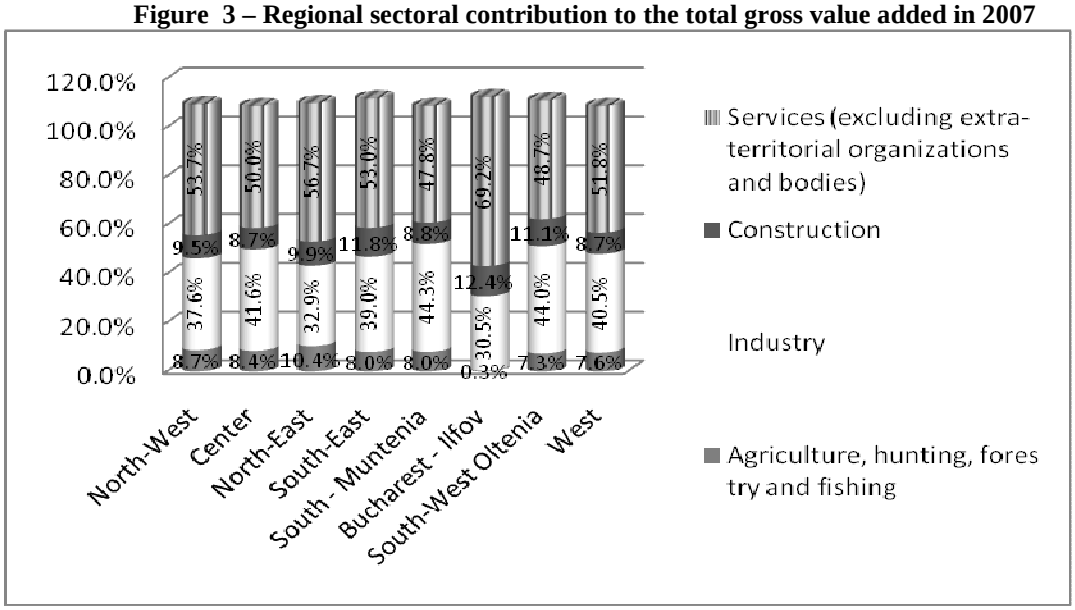


Source: EUROSTAT database and authors' calculations

In what concerns the sectoral gross value added one can notice that in 2007 services had the highest contribution to the total GVA at national level (55.7%) followed by industry, including construction (37,8%).

Looking at the territorial situation one can notice that North-East is the region with the highest contribution of agriculture to the total regional GVA, South and South-West's industries have the highest contribution to regional GVA and Bucharest-Ilfov, North-East and North-West have the highest contribution of services sector to the regional GVA.

Figure 3 – Regional sectoral contribution to the total gross value added in 2007

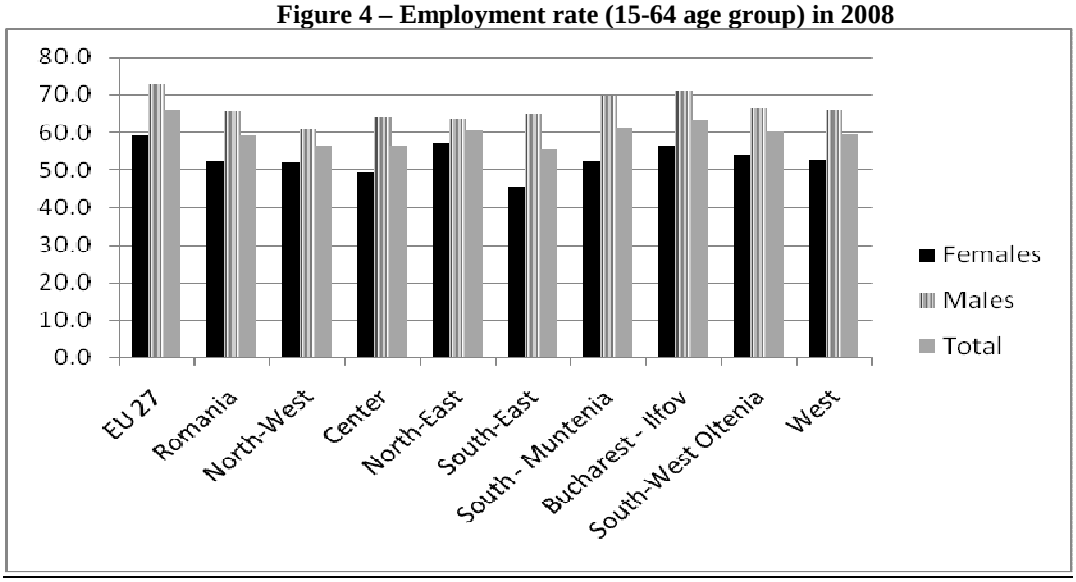


Source: EUROSTAT database and authors' calculations

2.2. Labour market

Since 2002 the employment rate knew a constant level between 57% and 59%, a level below the EU27 average, remaining far from Lisbon objective of 70% employment rate. There are four regions that registered an employment rate over the national average: Bucharest-Ilfov, South, North-East and South-West. The male employment rate is higher than female employment rate in all regions, with North-East having the highest female employment rate and South-East the lowest level for this indicator.

Figure 4 – Employment rate (15-64 age group) in 2008



Source: EUROSTAT database and own calculations

Taking into consideration the sectoral distribution of employment in 2008 one can notice that the highest employment is in services with 39.8% of total employment, followed by agriculture (28.8%) and industry (23.5%). North-East and South-West regions have the highest percentage of employment in primary sector (47.8%, respectively 44.8% of total employment), agriculture being the main occupation, and Bucharest-Ilfov (71.7%), Center, South-East and North-West have the highest employment in services sector (over 40% of total employment).

If one refers to employment taking into consideration the level of education attended, one can notice that the highest shares of employment with pre-primary, primary and lower secondary education are in North-East and South-West regions, while a high share of employment in Bucharest-Ilfov, West, North-West and Center regions attended tertiary education in 2008.

In what concerns the unemployment rate, it fell in the last decade reaching 5.8%, with a lower female unemployment rate (4.7%) than the male unemployment rate (6.7%). North-East region registers a low female unemployment rate due to the fact that there are many jobs for women in textile and tourism sectors, and to the fact that many women left for work abroad.

The regions with the highest unemployment rate in 2008 were South-West, South and North-East, due to the fact that the main activities in these regions are rural, while Bucharest-Ilfov, North-West and West registered the lowest tares of registered unemployed, due to the lower dependency towards agriculture and to the proximity of EU large markets, and thus a better attractivity for foreign investors. In what concerns long-term unemployment Center, South-East and South regions are confronted most with this phenomenon.

Since the end of 2008 there was registered an increase in the number of unemployed, for both sexes, the negative trend continuing in 2009 and 2010.

2.3. Foreign direct investments

A key contributor to the growth in GDP is the level of foreign direct investments, which remained strong until 2008, and consisted of direct equity investment or retained earnings and net credits (loans) from foreign investors. In 2009 FDI inflows decreased due to the high reduction in investments in real estate, privatization deals and merger and acquisition activity.

Foreign direct investment inflows are concentrated in Bucharest-Ilfov (over 60% of total FDI), Center and South due to availability of labour, and extensive transport infrastructure networks (facilitating exports) and were low in North-East and South-West (with only 1.6%, respectively 3.2 % of total FDI). In recent years there can be noticed the trend was for foreign investors to develop greenfield projects in large cities being attracted by the relatively cheap and qualified labour and improved business and transport infrastructures.

2.4. Entrepreneurial development

Economic growth in Romania is driven also by small and medium enterprises which continued to represent more than 99% of total active enterprises, the contribution of private sector to GDP, exports and imports being around 70%.

The discrepancies at territorial level observed in terms of economic development are also reflected by the territorial distribution of SMEs, with Bucharest-Ilfov (49.9), North-West (25.3), West (24.3) and Center (24.2) regions having the highest number of SMEs/1000 inhabitants and North-East having the lowest value for this indicator (14.5 SMEs/1000 inhab.), but the values are low compared to the EU average of over 50 SMEs/1000 inhab.

2.5. Tourism

Tourism sector also has a high potential for further development in all regions of Romania. In what concerns accommodation capacity South-East region is placed first with 45% of total number of places in 2008, followed by Center and North-West regions. This indicator knew a small increase in the last years, except for Bucharest-Ilfov and Center regions which registered a more important growth. There was also registered a significant growth in tourist arrivals (especially in domestic tourists) in all regions in the last years and also in overnight stays, especially in Bucharest-Ilfov, South and North-East.

3. Regional development potential – strengths and weaknesses

3.1. North-West development region

North-West region ranks fourth at national level in what concerns regional GDP/capita. It has a relatively high degree of urbanization.

The region is very well supplied with financial services, this sector being the main contributor to the regional GDP. The unemployment rate is among the lowest at national level.

The economic activities are concentrated in Cluj and Bihor. The relatively good infrastructure offers an easy access to occidental markets and creates a friendly environment for businesses and FDI. The effects of industrial restructuring were diminished by the important development in the construction sector.

There are important disparities in the economic development of the component counties: the south and western part being more developed (industrialized counties – agro-food industry, light industry, wood and auto) than the counties in center and eastern part (wood and furniture, non-ferrous metal, gold-argentiferous and light industry).

Although forestry represents an important sector of the region, there were some problems registered in this field (uncontrolled land clearing, lack of a coherent programme for forestation and building forest roads.

North-West region also has an important potential for development in tourism sector having archeological artifacts, natural reservations, glacial and barrier lakes, caves, balneary resorts, favourable conditions for mountain, recreational and holiday tourism, folkloric and agro-tourism.

3.2. Center development region

Despite the high GDP/capita, Center region has a lower salary average than the national one and also a higher unemployment compared to the average registered at national level.

The region managed to attract an important share of the total FDI due mainly to the well developed infrastructure and a diversified industry sector.

The main industrial fields are handcrafts, car construction industry, metal processing, wood manufacturing, construction materials, extractive, chemical, textile and food industry.

Center region is well known due to its educational and research potential in medicine, pharmacy, and theater, technical and forestry,

The touristic potential is very high due to its relief, historical and cultural variety but is limited by the low standards in hotel services. The tourism types that can be developed in Center region are: winter, spa, agro-tourism, cultural, but the infrastructure is old, the services are poor, deficient promotion and undiversified tourism products.

The region has a potential for developing business infrastructure due to the existence of industrial unmined locatins that have been transformed in industrial parks.

Agriculture also present a high potential especially in animal breeding, viticulture, textile plants, potatoes and sugar beet.

3.3. North-East development region

North-East region registered the lowest value for GDP/capita in 2008 in Romania and even EU with only 3700 euro/inhab., reaching 63.8% of national average and only 15% of EU27 average. This weak economic performance of the region is due to the breakdown of the forced industrialization (especially in chemical, petro-chemical and auto industries), low urbanization level and poor developed infrastructure, thus being unattractive for foreign investors. The region also has a low share in total exports and imports.

The highest share of employment is in agriculture, which has a low value added. The unemployment rate is among the highest among the regions of Romania.

North-East region is confronted with a low level of new technology in industrial and agricultural sectors and a low level of qualified population. In North-East region critical points remain the low labour productivity, weak business environment, especially in small and medium sized cities and the poor infrastructure.

The economic activities of the region are concentrated in few economic centres (Bacău, Iaşi, Namț and Suceava).

The counties in the eastern part of the region (Botoşani, Iaşi, Vaslui), which are lagging behind from development point of view, have the chance to develop themselves as transit services areas, due to the fact that they are at the border with Ukraine and Moldavia. For this to happen they have to invest in infrastructure in order to create areas with specific facilities such as logistic parks.

The construction activities are well developed in this region, using wood as row material. Wood processing (furniture) is a traditionally developed sector in this region and the fact that this sector increased its share in total turnover means that there is a high level of processing in this sector.

North-East region holds beautiful sightseeing, clean air and water, beautiful mountain areas, cultural and religious patrimony especially in Bacau, Neamț and Suceava. These counties have a very high touristic potential also due also to the well known hospitality, folk customs and traditions preserved from old times, specific gastronomy and wine. There are many types of tourism that can be developed in this region: cultural, religious (Putna, Neamț, Sucevița, Moldovița, Voroneț, Humor, Agapia, Voroneț, Sihastria, Caşin), spa (Vatra Dornei, Câmpulung Moldovenesc, Bălțătești, Slanic Moldova, Târgu Ocna), ethnographic, agro- and rural tourism, recreation and sports tourism (rafting, mountain bike, ski, climbing, hunting, fishing). Although the potential is high and very diversified it was insufficiently used and developed.

3.4. South-East development region

The regional GDP of the region is under the national average and there are strong regional disparities between Constanța and the rest of the counties. Economic activities are concentrated in Constanța, Galați, and to a less extent in Tulcea and Buzău.

Unemployment rate is pretty high especially in some of the counties such as Galați, Buzău and Brăila due to restructuring in heavy industry. Intense activity in housing around the big urban centers, seaside and other touristic areas offered jobs for the unemployed.

Critical points are lack of proper jobs, unattractive salaries and inadequate qualification that led to an increased migration.

Even if there were some years of industrial restructuring the situation became better in the last years. The region succeeded to attract a high level of foreign investments, due to attractive infrastructure, the maritime and fluvial links to European and Asian markets, an important touristic potential, the diversified industry and the cheap energy from nuclear power station at Cernavodă.

The South-East region has a high level of natural resources, such as oil, natural gas, granite, salt, which can play an important role in economic and social development if well capitalized.

The main industrial sectors with potential for development are metallurgy, petrochemical, equipments, nuclear power, naval shipyards, cellulose and paper and wood and glass processing, textiles, construction materials.

The economic profile of the region is diversified but the main activities are in the services sector such as tourism and transports, where most of the population is employed due to the high number of tourism resorts along the coast. The harbors in Constanța, Galați, Brăila and Tulcea represent an important advantage that the region can use, as they assure the link to the important harbors of the world, providing raw materials necessary for regional development and for exporting the goods produced in Romania.

Agriculture also represents an important sector for the regional economy, cultivated land covering over 60% of the total area, especially in grapes, sun-flower, wheat, cereals, beans, mutton and goat meat and wool. Even though this sector has a high potential for development, there are some problems that should be solved: low processing capacity of the agricultural products due to old technologies used.

Tourism resources offer the most important potential for regional development: Black Sea coast with 13 resorts offering accommodation, treatment and recreation, Danube Delta, which represents a scientific attraction especially after becoming reservation, balneary resources (Techirghiol Lake, Eforie Nord – with curative mud). Other potential types of tourism that can be developed in this region are agro-tourism and recreational tourism (hunting and fishing), mountain tourism with unique attractions (Soveja, Lepşa, Vulcanii Noroioşi, Bozioru caves, Focurile Vii) and cultural and historical tourism (getic, roman, greek, byzantine citadels, monasteries).

3.5. South development region

South region also has a GDP per capita below the national average and it can be divided in two taking into consideration the different economic performances. Călăraşi, Giurgiu, Ialomița and Telorman are traditionally underdeveloped depending mostly on agriculture, having a high unemployment due to industrial restructuring and the low value added of coal mining sector, and Argeş, Dâmbovița and Prahova with a dynamic and diversified industrial activity (oil and gas production and processing, car and electrical industries).

The region managed to attract FDI inflows due to Pan-European transportation corridors that pass its territory, and its natural resources such as oil, gas, coal, salt and mineral waters.

Industry contributes in a high proportion to the regional GDP, being the most important economic sector, especially machinery, equipments and transportation, building materials, garment and textile industry and food industry.

Over 70 % of the total area is agricultural area, out of which over 80 percent arable land, thus agriculture having a high agricultural potential especially in southern part of the region.

South region also has a touristic potential having mountain resorts and natural parks (Valea Prahovei, Bucegi, Piatra Craiului) and balneary spas (Slănic Prahova, Vălenii de Munte, Pucioasa, Câmpulung Muscel).

3.6. Bucharest-Ilfov development region

This region is dominated by Bucharest the capital city of the country, which represents the biggest market for businesses and services. Services sector contributes with more than 70% to the regional GDP, the main activities being financial and real estate.

Unemployment is very low, being affected only the unqualified labour.

Bucharest-Ilfov region attracts more than 60% of the total FDI due to a well developed infrastructure, a very diversified industry, and a high supply of qualified workforce (a third of the Romanian universities are located in Bucharest).

The most important sectors of the region are construction, transport, education and research, and ITC, having a high potential for innovation due to the use of qualified and well prepared workforce.

The critical problem in this region is the lack of space for new houses and businesses.

3.7. South-West development region

South-West region has the second lowest GDP/capita, after North-East region, and a high level of unemployment due to the mining sector restructuring. A high percentage of the population lives in rural areas, working in agriculture and having a low standard of living.

The region managed to attract very little of the foreign investments in Romania, the critical points being the poor infrastructure, low density of railways, weak commercial links with the neighbors across the Danube, low standards in hostelling, weak capacity to offer business consultation and a low efficiency in agriculture.

The economic activities are concentrated in Vâlcea, Dolj and Gorj counties.

Two priority transport corridors are being developed across the region, assuring a higher accessibility for the region and mobility of the labour force, assuring also jobs for the workforce.

The region has a high agricultural area of very good quality and important hydro energetic and thermo electric resources. In agricultural sector the most developed fields are cereals, sun-flower, vegetables and fruits, potatoes, sugar beet and wine production and due to reduced use of chemicals the region presents a high potential for developing organic agriculture.

Coal-fired and hydroelectric power plants characterize the regions industry.

South region also has a potential in developing diversified tourism: mountain Valea Lotrului – winter sports, hunting, fishing, climbing), speological, balneary and thermal (Olăneşti, Căciulata, Călimăneşti), ecotourism, religious, due to its position, diversified relief, old monuments and cultural traditions (Clisura Dunării – Porțile de fier, Subcarpații Gorjului şi Vâlcii).

3.8. West development region

West region is placed among the first regions of Romania in what concerns economic development and potential, with a high GDP/capita, mainly generated by viable services sectors and a low unemployment. One can also notice some regional disparities inside the region, with Hunedoara and Caraş Severin being less developed than Timiş and Arad counties, due to industrial restructuring and shutdowns, but still with relatively good economic performance.

The workforce in West region is motivated, flexible, innovative and a high level of qualification and specialization. A critical problem in West region is the high level of migration that left the labour market short of specialists and qualified workforce, a fact that also tends to affect the regional attractiveness for foreign investments.

The region profits from its position and its links to high quality transportation networks (road and railway) across borders toward the EU-markets, being also a transit area for international trade with non-EU countries. The region significantly contributes to the national exports and imports.

The region offers important subsoil and soil resources (coal, anthracite, metals, silver, gold, hard rocks, radio-active deposits, thermal and mineral springs, fertile soils and forests with valuable essences), favourable climate and facile transport connections.

West region has a high potential in research-development-innovation (medical, auto, mining, chemistry and agriculture), services and tourism. Tourism potential is very diversified offering opportunities for agro-tourism (Munții Apuseni, Sarmisegetuza), thermal and balneary tourism (Băile Herculane, Moneasa, Lipova, Baziaş, Geoagiu), business (Timişoara), transit tourism and urban tourism (valuable architectural patrimony and museums).

Conclusions

A deeper analysis of the regional patterns of the Romanian economy reveals sharp regional disparities such as GDP per capita, employment rates, the structure of the regional economy and employment and consequently the attractiveness for foreign investors. The extent of regional disparities becomes even much more pronounced at county (NUTS III) level perspective.

As the statistical data show FDI-activities prefer the regions which already exhibit a developed economic environment, a qualified labor force and better infrastructure.

Each of the regions has an important potential for tourism development due to the natural endowment, whereas for the agriculture the South region would be the most attractive due to its fertile soils. Services would be better developed in Bucharest-Ilfov, West and North West regions especially for ITC, RDI and financial services. Regarding the industry, all the regions have a certain degree of attractiveness, but the most profitable investments would be directed to Center, West and North West regions, these being also the most developed in terms of income, endowments and economic potential.

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THE NECESSITY TO IMPLEMENT A NEW MODEL OF GOVERNANCE IN ROMANIA

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Abstract: *Romania goes through periods of economic and social transformations, due to the faulty management of economic resources and social and societal values ever since the early 90s. The current crisis is deemed a systemic crisis. Getting out of this crisis requires a fundamentally profound change, related to mentalities and behaviors, as well as to national and local resource management.*

Key words: governance, governing, good governance, institutions

JEL classification: A11

The Romanian economy is not an atypical economy; the modality of implementation of the economic principles is atypical. The divergence between the political decisions on the economic growth and development, on the distribution and redistribution processes and the concrete actions of the real economy undertaken by the business environment makes the entire economic process to become inefficient, for several reasons, including the achievement of a national consensus between the political parties on the sustainable development of Romania. Thus, the promulgation of the normative acts, the economic policy decisions, the institutional measures, will seek to increase the economic efficiency both on short and long term, taking into account the meeting of the immediate and future needs and interests of the population, under the use of their own and attracted economic resources. The political class should initiate development conditions on a competitive basis of the business environment, eliminating the personal and group interests in awarding exploitation agreements, facilitating equal opportunities for participation in tenders for all the eligible economic agents.

In Romania the interest for the exploitation of some strategic resources, such as the ones in tourism, are related to the immediate earnings, which highlights the lack of depth of the economic act as a whole, starting from the actual investment, the variability of the investment recovery terms, the creation of development opportunities along the way, by attracting new investors, in order to concentrate the economic activities as poles of development, having the catalytic role of the medium and long term profits. The political class should encourage the business development starting from the comparative advantages of Romania in relationship with other countries, creating the premises of the business environment attractiveness through coherent, anti-cyclical economic policy measures, capable to generate the obtaining of some cost advantages arising from moderate monetary and fiscal policies.

The invocation of the political class is related to the identification of the best way to implement a functional economy in Romania and the need for institutional flexibility in Romania and the purification thereof, as a restriction or elimination of the corruption in the system. The institutions or the institutional territory (Marius Profiroiu, 1998) represent a gear in which there are expressed the relationships between State and citizen, based on mutual control and a transparency of the rights and obligations thereof. The modern state represents the main pillar in organizing the society. The production involves a political power based on well-defined territorial units. This constitutes an operating condition of the state and the forces in power in this state cannot make any public act, nor can take taxes and fees, without which the state cannot fulfill its role.

In this respect, the primary role of the state, namely of the political class, is to create conditions for achieving wealth, for creating laws to preserve and multiply the wealth, by the elimination of the factors that generate waste or actions of corrupt nature. So, the state must act on the principles of good governance.

While *governing* refers to the decisions that define expectations, the power exercise or the performance verification, being different from the management and leadership processes, the

governance is a general concept, being associated with the contemporary social sciences, particularly economics (corporate governance) and social policies (public governance) with respect to the economic and political behavior of the organizations related to the decisional, executive and judicial process (Stoker, 2006).

The governance involves the structure, a response to "who is authorized to decide ...” The *leadership* involves the way in which people work inside and around the formal authority structure in order to get what was decided. Governing and the "intelligent design" involve a kind of supreme, rational reasons, for the way things should be presented, while the "leadership" implies being knowledgeable about how things are, dropping the explanations for how they are performed.

A major objective of democratic **governing** is to engage in solving the citizens' interests and to mobilize resources for this purpose. The mobilization will certainly generate conflicts, so, irrespective of the "system", the success or the failure will depend on the way the conflict is resolved. A good system will provide an equitable distribution of the rights and resources. Governing - is a neutral structure and expresses what a government does. But governing is the exercise of the management and political power, while the government is an instrument (usually collectively) for the exercise of a political power. A reasonable or rational purpose of governing could be the provision (sometimes on behalf of others) of the efficient economic goods production.

Perhaps the moral and natural purpose of governing is to provide a worthy, good model, while avoiding an undesirable, bad pattern. Good governance, following this line of thinking, might consist of a set of relationships linked to the exercise of the coercive power that provides a good model, while avoiding a model with adverse effects, making decisions that define the expectations and using the power that it holds in order to check the performance. The politics provides a means by which the governance process operates. Thus, the concept of governing can be applied to the state, corporations, nonprofit organizations, associations, economic agents in general. An alternative definition sees governing as the action of using the institutions, authority structures and even collaboration in order to allocate resources, as well as the action of coordination or control within the society or the economy (Chhotray, Stoker, 2008).

According to the United Nations, governing was defined as the rules of the political system to solve the conflicts between players and decisions. In addition, the governance term is used to describe the proper functioning of the institutions, subsequently accepted by the public (legitimacy). The governance concept is also used to invoke the effectiveness of the governing action and the achievement of a consensus through democratic means (participation).

Some experts suggest that there should be made a clear distinction between the concepts of governance and politics. The politics involves processes by which a group of people with divergent views reaches collective decisions, generally, considered as mandatory for the group, and applied as common politics. Governance, on the other hand, transmits guidance and administrative elements. Such an argument militates for the traditional separation between "political" and "administration".

The specificity of approaching the "*good governance*" lies in the potentiality of the players interested in negotiating and co-deciding the relevant aspects, but also in monitoring and evaluating the results achieved, being rather related to the conceptual nuances. However, one of the immediate consequences refers to the fact that such vagueness is reflective in the way of interpretation and organizational coordination or institutional development. In other words, the consequences refer to the conceptual and factual optics promoted by the *new institutionalism* current of thinking.

The new institutionalists’ aim is to highlight the crucial role of the institutions (of the rules, norms, social practices), of the institutional context in shaping the political behavior and the results of the political action. The new institutionalists emphasize the role of the political behavior, as well as the way in which the decisions are built in the good governance of the institutions. Furthermore, once established, the institutions deepen into the routine, in the convention and are difficult to reform, to change, to be replaced. Thus, there are periods of stability, regularity in political behavior, in political institutions (which may be followed by phases of intense institutional change) that have a decisive influence on both governing and on the governance of the public and private institutions within an economic system.

Gerry Stoker elucidates the persistent confusion in many theoretical and descriptive approaches published during the past decade. Thus, this author proposes a definition of "*governance*" as opposed to the concept of "*governing*”.

Therefore, it is clear that the difference between "governing" and "governance" lies in the modality and the process of governing, whether it is about governing a state entity, or it is about governing a profit or nonprofit organization. In principle, if considering the management of the organizational systems, then the concept of *'governing'* has a systemic administration of top to bottom model, while for the term "*governance*" the nuance is centered on the from the bottom up model. That is why, under this approach, it is used the concept of "***directing***" which is specific to the unilateral, centralized, rigid and punitive public management. While, for the open, decentralized, participatory, consensual and incentive public management, the term ***'governance'*** is used.

Table nr. 1 Terminological delimitations of the governance concept

Governing	Leadership	Management	Governance
a set of rules, procedures, institutions and practices for the configuration of the way in which the executive power at the state, regional and local level is performed	a set of actions involving the way people work inside and around the structure of the formal authority in order to implement the decision	concerns the implementation of a set of goals pursued based on some established rules, following the efficiency, good functioning and the quality of the services	is a broad concept that includes a solid and effective supervision of how ***something*** is made, led, controlled or managed, in order to protect the interests of the components of that area, organization or institution

Source: Gerry Stoker, 1998

Consequently, the difference between governing and governance lies in the manner and process of governing regardless of the fact that it refers to different levels - state or companies (profit organization) or institutions (nonprofit organizations). We stress the fact that in the public policies field, the governance concept involves the existence of a participatory and deliberative system of making public policies within which the players interact and influence each other.

Figure nr. 1 Characteristics of good governance

Source: http://www.undp.org/governance/docs/Policy-Pub-LDCReport.pdf

Good governance represents an ideological instrument of a minimal state politics, a state where the public administration has not only the mission to serve the society as a whole, but also to provide goods and services to consumers-customers, having the risk of worsening the inequality between citizens. Among the major characteristics of the good governance, we highlight: participation, consensus orientation, accountability, transparency, responsiveness, effectiveness, efficiency, equity and inclusiveness.

By the implementation of the good governance practices it is aimed enforceability of the rules of law principles and the provision that a series of acts and deeds will be met: minimizing the corruption, taking into account the views of the minorities, hearing the most vulnerable voices, inclusively, in the decision making process, taking into account the present and future needs of the society.

Enforceability of the good governance characteristics in the Romanian economy

Participation has the role to create the freedom of association and expression on the one hand, and an organized civil society, on the other hand. In Romania, the principle of good governance is not met for several reasons:

- ✓ the participation in the governing act is discretionary - even if politicians are elected by vote, the appointment within the public institutions is based on client criteria, irrespective of competence and professionalism;
- ✓ the quantitative assessments and appreciations prevail in the detriment of the qualitative ones;
- ✓ the powers conferred to each participant are chaotic and divergent, either because of the specialization – it would be required a strict specialization, consistent with the objectives sought, or because of the overcharge of the position - in this case the efficiency is minimal;
- ✓ there are cases where there are found discrimination attitudes towards citizens, institutions or even regions.

Rule of law in Romania is observed on an arbitrary basis. The legal system creates the possibility of interpreting the rules of law based on the interest and the pressures of some groups. The government's use of the emergency ordinances in order to avoid the rule of law directly or indirectly, calling the court for the clarification or indication of some pecuniary or patrimonial rights of the individuals or legal entities, due to the failure to observe some collective rights on the whole, lead to the failure to comply with the governing, in terms of rule of law.

Transparency deals with the way in which the decisions are made, as well as the implementation thereof; follows the rules and regulations in force. It also shows that information is freely available and directly accessible to those who will be affected by such decisions and their enforcement, enough information is provided, in easily understandable forms and in media. In Romania, the transparency issue is somewhat reversed, in the sense that many receivers of information do not have the necessary capabilities to disseminate and understand them, not using the information received in real-time. In addition, a great part of the population has no access to information, whether because of the lack of the sources of transmission, ignorance, indifference or the lack of time to access and use the information. Under these conditions, knowing the information by a part of the population can become a real power that can be seized in the personal interest or in the interest of the community (as an example, information on accessing the European funds is public, however the degree of fructification thereof is very low, namely 14%).

Responsiveness of the individuals and institutions in Romania is differentiated, depending on the interest, the importance of those interested, the image benefit or the material benefit brought to those concerned.

Consensus orientation requires the mediation of the various interests in the society, in order to reach a broad consensus in the society on what is in the interest of the entire community, also identifying the ways of achieving the consensus, in time, taking into account what is necessary for the sustainable development. In Romania, in order to achieve good governance, it is necessary to harmonize the principles and group interests of the political class to guide all the factors influencing the economic growth and development towards the future: the responsible allocation of the resources by introducing multi-annual budgets, the control of the public expenditure implementing a function of measuring the effect created at the community or institution level, following the benefits brought to them at the expense of public investment. In addition, by the economic policy measures undertaken by the government, the economic activity can be guided in its entirety.

Equity concerns all the groups, but particularly the most vulnerable ones, with opportunities to improve or maintain their well being. In Romania, the equity issue is complex, being influenced by religion, morality, mentality, loyalty towards the community, respect, consideration, wealth, friendship, kinship, privileges. The fact that the number of deprived persons is increasing, the social and economic rehabilitation thereof is not only a problem of the state institutions in charge, it becomes a national priority to identify the causes that converge to poverty, reduction of the living standards, the job loss, the school abandonment, discrimination, and finding solutions by involving the entire society.

Effectiveness and efficiency show that the economic processes and the institutions have the role to produce results that meet the needs of the society in time, while making the best use of resources at their

disposal. The efficiency concept in the context of good governance covers to the sustainable use of the natural resources and the protection of the environment.

The **accountability** is a key requirement of good governance. Not only governmental institutions but also the private sector and the civil society organizations must be accountable to the public and those concerned. The accountability varies depending on whether decisions or actions taken are internal or external to an organization or institution. In general, an organization or an institution is accountable to those who will be affected by the decisions or actions thereof. Accountability cannot be enforced without transparency and the rule of law. I think that the biggest problem in Romania with respect to good governance is the accountability. As long as the economic policy decisions will not be accountable, in the sense that the involvement of the resources and the economic wealth in economic acts and deeds do not converge towards prosperity and welfare, under conditions of freedom of action of the economic agents, the consequences in the long run will be adverse with repercussions on the development potential, and, hence, on the social and economic autonomy.

The specificity and the complexity of the principles of good governance are complex and difficult to achieve without an economic and social consensus of all the institutional players. However, in order to ensure sustainable human development, actions must be taken in line with achieving the current and future goals.

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GLOBALIZATION AND EDUCATION FOR SUSTAINABLE DEVELOPMENT

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Abstract: *Characterized by shrinking space, shrinking time and disappearing borders, globalization is a concept that is at the centre of debate by education policymakers, scholars, professionals and practitioners, referring to the worldwide discussion, processes and institutions affecting local educational practices and policies.The interlinks between globalization, trade, poverty, development and environment cannot be ignored. Education and higher education in particular has a key role enabling people to better resist or survive globalization, taking advantage from it, learning for change and learning to change, in order to support sustainable development.*

Key words: Globalization, sustainable development, Education for Sustainable Development (ESD)

JEL classification: A13

1. Introduction

Globalization ushered in issues such as economy, culture, democracy, health and education on the global agenda for sustainable development, integrating not just the economy but culture, technology and governance, creating at the same time, both opportunities and challenges. Sustainable development may be seen as an antidote to some of the negative incidents of globalization, a way to contribute to a better life and a safer world for all. Related to this, we have to examine the crucial role education plays in sustaining and further developing of the capacities to assess and address to the sustainable development concerns.

2. About Globalization

Characterized by "shrinking space, shrinking time and disappearing borders", in Human Development Report 1999 „Globalization with a Human Face**",** globalization has swung open the door to opportunities. Globalization refers to increasing cross-border movements of goods, money, information and ideas as well as people, and to an ensuing interdependency of people and institutions around the world. (Wong, 2005)

Globalization has been defined as "the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa" (Held, 1991). Held suggests that these relations are the product of the emergence of a global economy, expansion of transnational linkages between economic units creating new forms of collective decision making, the development of intergovernmental and quasi-supranational institutions, the intensification of transnational communications, and the creation of new regional and military orders (Held, 1991).

Some authors (Torres, 2002) see globalization as increasing the homogeneity of societies, whereas others see it as increasing the hybridization of cultures and diversity. For still others, globalization is an evolving operation of power by multinational corporations and state power, or the linchpin for environmental action, democratization, and humanization.

Globalization cannot be analyzed only in terms of polar discrete opposites but should be seen as a borderline situation between two historical epochs. As such, it is a complex, multidimensional phenomenon "*that involves different levels, flows, tensions, and conflicts, such that a trans-disciplinary social theory is necessary to capture its contours, dynamics, trajectories, problems, and possible futures*" (Axtmann, 1998)

The process of globalization is seen as blurring national boundaries, shifting solidarities within and between nation-states, and deeply affecting the constitutions of national and interest-groups identities. (Torres, 2002). It integrates not just the economy but culture, technology and governance. People everywhere are becoming connected—affected by events in far corners of the world (HDR, 1999). This interconnectedness changes the living conditions and perspectives of current and future generations, creating, at one and the same time, both opportunities and challenges (Wong, 2005).

Global markets, global technology, global ideas and global solidarity can enrich the lives of people everywhere. The challenge is to ensure that the benefits are shared equitably and that this increasing interdependence works for people—not just for profits (HDR, 1999).The international community needs to place stronger emphasis on the impact of globalization on human well-being, minimizing its negative side-effects by reforming governance on the international, regional and local levels.

Globalization is a concept that is at the centre of debate by education policymakers, scholars, professionals and practitioners worldwide, provoking intense debate and examination. The discussion, in terms of the nature, causes, elements, consequences and implications of globalization is prolific, rather controversial and very important. Globalization affects each country in a different way due to each nation's individual history, traditions, cultures, resources and priorities (UNESCO, 2004).

The process of globalization has a strong influence on education. As Spring mentions in "Globalization of education: an introduction", globalization of education refers to the worldwide discussion, processes and institutions affecting local educational practices and policies (Spring, 2009). It could be considered as an intertwined set of global processes affecting education, such as worldwide discourses on human capital, economic development and multiculturalism; intergovernmental organizations; information and communication technology; nongovernment organizations and multinational corporations. This means that events are happening on a global scale that affect national school systems. Globalization creates a image of global educational policies and practices existing in a superstructure above national and local schools, with a constant dynamic of interconnection: global ideas about school practices interact with local school systems while, through mutual interactions, both the local and global are changing. Nations continue to independently control their school systems while being influenced by this superstructure of global education processes, adopting their policies in order to compete in the global economy.

The emergence of the global knowledge economy has put a premium on learning throughout the world, being marked by increasing labor market demand for more highly skilled workers. Societies have become increasingly knowledge-based so that higher learning and research are essential to the cultural, socio-economic and environmentally sustainable development of individuals, communities and nations (Ludeman, 2009). Ideas and know-how as sources of economic growth and development, along with the application of new technologies, have important implications for how people learn and apply knowledge throughout their lives. Thus, the knowledge based economy requires an education system which not only permits learning through the lifetime of its citizens and encourages their creativity, but is sufficiently flexible to adapt to the changing demands of a knowledge based economy (Dahlman; Andersson, 2000) Opportunities for learning throughout one's lifetime are becoming increasingly critical for countries in general, and for workers particularly - to be competitive in the global knowledge economy. But lifelong learning is important for other reasons as well: by improving people's ability to function as members of their communities, education and training increase social cohesion, reduce crime, and improve income distribution, all together going in the straight direction of sustainability - (World Bank Report, 2003)- contributing to education for democracy and peace.

The Human Development Report 2009 on "Human mobility and development" (HDR, 2009) shows a strong link between globalization and education, as related to migration. Human migration, especially the migration of highly skilled people, is having a significant impact on education and economic development in less developed countries (ED.2009/Conf.402/Inf.12 UNESCO, 2009). The emigration of people with university degrees has attracted much popular and academic attention, especially because the shortage of skills is acute in many poor countries. The prospect of moving can strengthen incentives to invest in education. Predicted in theory, this fact was shown in practice in some countries: migration of Fijians to high-skilled jobs in Australia has encouraged the pursuit of higher education in Fiji. A number of governments, including the Philippines, have deliberately sought to promote work abroad in part by facilitating the generation of skills at home.

In sufficient numbers, migrants can affect the ethnic and cultural diversity of a society, literally changing the face of a nation. But on the other hand, several countries - Australia, Canada, New Zealand and United States- that today are highly prosperous were historically founded by migrants and continue to welcome large inflows over time, in successive waves from different countries of origin. Generally they have been highly successful in absorbing migrants and giving them a common sense of belonging to the new nation despite their cultural differences

Families with migrants appear more likely to send their children to school, using cash from remittances to pay fees and other costs. This reduces child labor. And, once there, the children of migrants are more likely to finish school, as the better prospects associated with migration affect social norms and incentives. Like

other migrants, skilled people abroad often bring benefits to their countries of origin, through remittances and the development of networks (HDR, 2009).

Globalization opens people's lives to culture and all its creativity— and to the flow of ideas and knowledge. But today's flow of culture is unbalanced, heavily weighted in one direction, from rich countries to poor, states being increasingly unable to handle on their own cross-border flows of ideas, images and resources which affect cultural development. As shown in the Human Development Report 1999 (HDR, 1999)**,** the expansion of global media networks and satellite communications technologies gives rise to a powerful new medium with a global reach, while the spread of global brands is setting new social standards from Delhi to Warsaw to Rio de Janeiro. The report highlights the fact that the single largest export industry for the United States is not aircraft or automobiles, but entertainment—Hollywood films. The world is experiencing the rapid disappearance of local languages, of traditional cultures and their underlying spirituality, of other forms of intangible and oral heritage, and of knowledge traded over generations, which is profoundly relevant for sustainability (UNESCO WSSD, 2002). Globalization has created new forms of inequality which threaten diversity, pluralism, access knowledge and creativity and put cultural diversity at risk. It may lead to loss of cultural diversity and the destruction of traditional communities while offering the world's poor next to nothing, causing cultural conflict rather than cultural dialogue, making people fear losing their cultural identity.

The effects of globalization are not uniform and are not consistently the same from place to place or time to time: sometimes the poor benefit and sometimes they not, sometimes the environment is threatened in new ways, and sometimes globalization reduces such treats. As a result, sustainable development may be seen as an antidote to globalization at one extreme, while at the other, globalization is regarded as an opportunity, even a precondition-for sustainable development, and at particular times and places either may prove to be true (Gough; Scott, 2009**).**

Globalization ushered in issues such as economy, culture, democracy, health and education on the global agenda for sustainable development. Not least, education was put forward as a key strategy for change. Education for Sustainable Development, ESD, started its way towards the attention it has today (Kaivola; Rohweder, 2007).

What is needed is support to indigenous and national cultures, letting them flourish alongside foreign cultures. In this case, higher education-s key role is seen as enabling people to better resist or survive globalization, through equipping them to instigate or participate in local-scale organization and production.

Given the ever-increasing internalization of both teaching and research it is clear that universities have an important place in all this. And at the same time they will have the responsibility-within the political context they inhabit as institutions- of determining for operational purposes what "all this" actually amounts to (Gough; Scott, 2009).

3. Sustainable Development

Sustainable development is a difficult concept to define, being also continually evolving, which makes it doubly difficult to define. There is no one established universal definition of sustainable development, nor is there a universal model of education for sustainable development. While there is a general consensus on the principles of sustainability and their underlying concepts, differences according to local contexts and priorities will prevail. Therefore, content, context and relevance become important aspects of quality (Kaivola;Rohweder, 2007).

Sustainable development was discussed for the first time on a global level at the UN Conference on the Human Environment, held in Stockholm in 1972. This was the first United Nations conference on the environment as well as the first major international gathering focused on human activities in relationship to the environment. Putting for the first time environmental concern on the international political agenda, it laid the foundation for environmental action at an international level. The conference acknowledged that the goal of reducing human impact on the environment would require extensive international cooperation, as many of the problems affecting the environment are global in nature.

In 1987 the UN World Commission on Environment and Development published a report entitled Our Common Future (also referred to as the Brundtland Report) comprising the first meaning of sustainable development (A/42/427):

„In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations".

The Brundtland Report, would lead to many international follow-up meetings and processes. According to it, sustainable development is the development which meets the needs of the present without

compromising the ability of future generations to meet their own needs. It involves changes in attitudes, in social values, and in aspirations that will depend on vast campaigns of education, debate and public participation.To more fully and meaningfully refine the concept, the Earth Council indicated that such development should be economically viable, socialy just, and environmentally appropriate (Payne; Raiborn, 2001).

The Brundtland Report paved the way for the UN's Earth Summit, held in Rio de Janeiro, Brazil, in 1992. The conference led to a declaration and a comprehensive action plan, called Agenda 21. There was also a conscious shift away from mere identification of environmental problems towards finding solutions to them. Thus it has been recognized that pertinent solutions are not any more the sole prerogative of natural sciences, but they require a multidisciplinary approach embracing e.g. economics, management and social sciences at large, understanding of human health issues, and even psychology.

With Agenda 21, sustainable development acquired the international aims necessary to propel it forwards and it also became an established concept in international politics. In the following UN conference on sustainable development, which was held in Johannesburg in 2002, sustainable development had evolved as an entity which comprises the interconnectedness of the three key equally important and reciprocal dimensions of ecology, economy and socio-culture. In addition, globalization has ushered in issues such as culture, democracy, health and education on the global agenda for sustainable development. The Summit stressed the significance of regional cooperation and implementation, laying special emphasis on the social dimension of sustainable development.

There is a clear trend in the developing world towards better environmental policies that include the pursuit of economic development alternatives that minimize negative environmental impacts (Payne; Raiborn, 2001).

Sustainable development is generally thought to have three components: environment, society, and economy, the well-being of these three areas being intertwined, not separate. The sustainability paradigm rejects the contention that casualties in the environmental and social realms are inevitable and acceptable consequences of economic development. Thus, sustainability is consider tobe a paradigm for thinking about a future in which environmental, societal, and economic considerations are balanced in the pursuit of development and improved quality of life (McKeown, 2002).

Sustainable development is both a moral precept as well as a scientific concept, involving natural sciences, economics and policy-making. Being linked as much with notions of peace, human rights and fairness as it is with theories of ecology and global warming, it is primarily a matter of culture and concerned with the values people cherish and the ways they perceive the relationship with others and with the natural world (Kaivola; Rohweder, 2007).

In Rio a special emphasis was placed on environment and development and especially on the ecological dimension that had to be supported by the economic and social dimensions. In time, the world leaders' vision of how to promote the development of the world in a sustainable way has changed, the concept of sustainable development continuing to evolve, encompassing key areas such as society, environment and economy, with culture as an underlying dimension (ED-2009/WS/11, 2009).

At Johannesburg Summit, sustainable development was defined as an entity which comprises the equally important and reciprocal dimensions of ecology, economy and socio-culture. In the concern about our common future, the ecological dimension of sustainable development could no longer be given a special position. Also the other two dimensions – the economic and the socio-cultural – should be taken into consideration in a mutually reinforcing way (McKeown, 2002).

From the time sustainable development was first endorsed at the UN General Assembly in 1987, the parallel concept of education to support sustainable development has also been explored (McKeown, 2002). Education for sustainable development is the result of the 1992 United Nations Conference in Rio. Environmental education before 1992 was that the environment had become a very broad subject encompassing many independent sciences, including economic, natural and social sciences. Rio Conference advised that the environment should be expanded to sustainable development.

The relation between education and sustainable development can be properly understood only in the context of wider political debate about globalization. Those who think that globalization is both real and beneficial, tend to see it as a process capable of liberating individuals from the vagaries of national government policy decisions and resource management so they can compete freely in a global marketplace. The role of higher education is to equip learners to compete (Gough; Scott, 2009).

Why is education so important for sustainable development? First and foremost, as Dinah M. Payne and Cecily A. Raiborn stressed, people generally and businesses specially, need to recognize and acknowledge the sustainable development issue as well as the need to educate others about it. In their roles

as managers, consumers, stockholders, employees, and society, people need to be aware of the problem before they can do anything about it. Thus, businesses and the society in which they exist must be informed as fully as is reasonable with today's constraints of educational level, resources, and desire to be informed. Learning, accepting, and changing proactively with the environment, business, government, and other publics are the foundations upon which progress (Payne; Raiborn, 2001).

Education is not an end in itself, but a vital tool addressing virtually all global problems relevant for sustainable development, in particular poverty, HIV/AIDS, environmental degradation, knowledge formation and sharing, rural development and changes in production and consumption patterns. (UNESCO WSSD, 2002)

This vision of education emphasizes a holistic and interdisciplinary approach to developing the knowledge and skills needed for a sustainable future as well as changes in values, behavior, and lifestyles. This vision requires reorienting education systems, policies and practices in order to empower everyone, to make decisions and act in culturally appropriate and locally relevant ways to live sustainability in their communities (Fien, 2005; Kaivola; Rohweder, 2007).

4. Education for sustainable development worldwide

The 1972 United Nations Conference on the Human Environment, recommended that the Secretary-General, the organizations of the United Nations system and the other international agencies concerned should take the necessary steps to establish an international program in environmental education, interdisciplinary in approach, in school and out of school, encompassing all levels of education and directed towards the general public, in particular the ordinary citizen living in rural and urban areas, with a view to educating him to manage and control his environment (CEP/AC.13/2004/8 **)**.

In 1975, participants of the United Nations Educational, Scientific and Cultural Organization environmental education workshop in Belgrade proposed a global framework for environmental education, referred to as the Belgrade Charter. It states that the goal of environmental education is to develop a world population that is aware of, and concerned about, the environment and its associated problems, and has the knowledge, skills, attitudes, motivations and commitment to work individually and to collectively solve current problems and prevent new ones. Two years after this workshop UNESCO held an environmental education conference in Tbilisi. The Tbilisi Declaration built upon the Belgrade Charter produced the goals and identified objectives for individuals and groups that should be acquired through environmental education.

In 1990 at the World Conference on Education for All held in Jomtien, Thailand, basic learning were defined as comprising both essential learning tools (such as literacy, oral expression, numeracy and problem solving) and the basic learning content (such as knowledge, skills, values and attitudes) required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions and to continue learning (WDEA, 1990) .

The Dakar Framework for Action (World Education Forum, Dakar April 2000) also confirms that education is a fundamental human right. It is the key to sustainable development and peace and stability within and among countries, and thus an indispensable means for effective participation in the societies and economies of the 21st century, which are affected by rapid globalization.

The Rio Declaration on Environment and Development and Agenda 21: Programmed of Action for Sustainable Development was adopted at the United Nations Conference on Environment and Development in 1992 in Rio de Janeiro, Brazil.

In chapter 36 of Agenda 21, it is emphasized that education, including formal education, public awareness and training should be recognized as a process by which human beings and societies can reach their fullest potential.

Initial thoughts concerning ESD were captured in Chapter 36 of *Agenda 21*, “Promoting Education, Public Awareness, and Training.” (UNA /CONF.151/26, 1992)

„Both formal and non-formal educations are indispensable to changing people's attitudes so that they have the capacity to assess and address their sustainable development concerns. Education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues. It is also critical for achieving environmental and ethical awareness, values and attitudes, skills and behavior consistent with sustainable development and for effective public participation in decision-making. To be effective, environment and development education should deal with the dynamics of both the physical/biological and socio-economic environment and human (which may include spiritual)

development, should be integrated in all disciplines, and should employ formal and non-formal methods and effective means of communication."

This chapter identified four major goals to begin the work of ESD: improve basic access to quality education; reorient existing education to address sustainable development; develop public understanding, awareness and provide training programs for all sectors of private and civil society.

Education has a core role for promoting sustainable development. At all United Nations conferences thereafter sustainable development has been a common concern and there has also been a consensus that education is a driving force for the change needed. It has been pointed out that peace, development, health and democracy are mutually reinforcing prerequisites for sustainable development.

The World Congress for Education and Communication on Environment and Development, held in Toronto, Canada, in 1992, was the first major international gathering, after the Rio Conference to focus on education, promoting education, public awareness and training. Since 1992, an international consensus has emerged that achieving sustainable development is essentially a process of learning. At major United Nations conferences of the 1990s, including those on human rights in Vienna (1993), population and development in Cairo (1994), small island developing states in Barbados (1994), social development in Copenhagen (1995), women in Beijing (1995), food security in Rome (1996) and human settlements in Istanbul, Turkey (1996), the critical role of education was stressed. The International Conference on Environment and Society: Education and Public Awareness for Sustainability (Thessaloniki, Greece, 1997) stated that a curriculum reoriented towards sustainability would place the notion of citizenship among its primary objectives.

The UE concern about education is shown from the very beginning of this construction, in the Treaty Establishing The European Community, in Chapter 3 of the Title XI — Social policy, education, vocational training and youth. According to this, the Community shall contribute to the development of quality education by encouraging cooperation between Member States and, if necessary, by supporting and supplementing their action, while fully respecting the responsibility of the Member States for the content of teaching and the organization of education systems and their cultural and linguistic diversity. Community action is planned to aim at developing the European dimension in education, particularly through the teaching and dissemination of the languages of the Member States, encouraging mobility of students and teachers, by encouraging inter alia, the academic recognition of diplomas and periods of study, promoting cooperation between educational establishments, developing exchanges of information and experience on issues common to the education systems of the Member States, encouraging the development of youth exchanges and of exchanges of socio-educational instructors, encouraging the development of distance education. The same concern on education was shown in all documents that follow.

As an outcome the United Nations General Assembly declared 2005–2014 a Decade for Education for Sustainable Development (DESD). The decade is being coordinated on an international level by UNESCO, which in turn lays the foundations for national actions. The United Nations Decade of Education for Sustainable Development (2005-2014), whose international coordination has been entrusted to UNESCO by the United Nations General Assembly, illustrates the importance accorded to education in efforts to achieve sustainable development.

Under the leadership of the United Nations Economic Commission for Europe (UNECE), a Regional Strategy for Education for Sustainable Development was developed through a participatory process involving Governments, international organizations, non-governmental organizations, the academic community and other stakeholders. It was adopted at the UNECE High-level Meeting held in Vilnius, on 18 March 2005 to launch the Decade in the UNECE region, aiming to facilitate the introduction and promotion of ESD. (UNESCO/UNECE, 2007)

Thus, globalization, quality education, and sustainable development are intricately linked, in many ways globalization impacts on ESD and vice versa (Wong, 2005).

5. Education and Higher education for sustainable development

The 1998 World Declaration on Higher Education calls for a major global effort to improve the delivery of higher education in every country in the world (WCHE, 1998).

In the context of globalization and knowledge economies, higher education in its knowledge producing and disseminating function, is recognized as an essential driving force for national development in both developed and developing countries. At the same time, in its universality and international dimensions, higher education can be seen as both an actor and reactor to the phenomenon of globalization, playing an important role in the improvement of the social, cultural, political, economic and environmental aspects of the global society

The challenges that the concept of sustainable development offers to the contents and processes in higher education are not a matter only of any single country or region, but the issues of global developmental trends. Higher education at large, by its very nature, is an international and social enterprise, having the duty to provide support and responses to this challenge (Kaivola; Rohweder, 2007). It is a kind of education about learning for change and about learning to change.

ESD aims to encourage a shift towards more inclusive education systems, grounded in the respect for diversity and recognition of interdependence, because if education systems are characterized by inequality, discrimination and exclusion, they risk perpetuating or even deepening the social and economic disparities that exist. (UNESCO WCESD, 2009)

ESD is a complex and evolving subject, and how it is applied and implemented is a challenge for developed and developing countries alike. Some features and characteristics must be taken in consideration when talking about ESD:

- It is locally relevant and culturally appropriate.
- It is based on local needs, perceptions, and conditions, but recognizes fulfilling local needs often has global effects and consequences.
- It engages formal, non-formal, and informal education.
- It is a life-long endeavor.
- It accommodates the evolving nature of the concept of sustainability.
- It addresses content, context, pedagogy, global issues, and local priorities.
- It deals with the well being of all three realms of sustainability – environment, society, and economy

Some key elements of globalization are relevant to ESD: the growing importance of the knowledge society/economy; the development of new trade agreements which cover trade in education services; the innovations related to ICTs; and the emphasis on the role of the market and the market economy. These factors have been generated new developments in higher education including the emergence of new education providers such as multi-national companies, corporate universities, and media companies; new forms of delivering education including distance, virtual and new face-to-face, such as private companies; greater diversification of qualifications and certificates; increasing mobility of students, programs, providers and projects across national borders; more emphasis on lifelong learning which in turn increases the demand for postsecondary education; and the increasing amount of private investment in the provision of higher education. These developments have important implications for higher education in terms of quality, access, diversity and funding (UNESCO, 2004).

At the heart of the Education for All goals and indeed the entire Millennium Development agenda is the belief that everyone has the right to learn, ESD based on the belief that by learning, everyone gains the capacity to contribute and the commitment to ensure that others share in the benefits of development.

Many people and organizations must share the responsibility for more sustainable societies through good government, enlightened policy, civic participation, and commitment, but education is essential for moving toward a more sustainable future.

In order to drive the education more toward the sustainable development, the quality education has to be implemented , orientating the value and skills of sustainability into the various kinds and levels of education, thus, the role and responsibility of higher education can never be overemphasized or overestimated (Lee, 2008).

Higher education institutions, being by nature, international in their outlook, are knowledge-producing institutions that have the possibility to establish links between knowledge and both social and economic development. Through their knowledge-producing and transmitting capacities, higher education institutions have the potential "*to respond to inequities due to poverty and social injustice by strengthening citizen rights and voice, influencing policy-making, enhancing local governance, and improving the accountability and responsiveness of institutions. Their role as producers as well as transmitters of knowledge is important in a globalizing world, as well as in the national contexts in which they operate*" (Taylor, 2007). They also have the potential to do the opposite.

One of the most important aspects is that higher education incorporates institutions that train and produce teachers for primary and secondary education, and also for the vocational, technical schools. Quality education completely depends on the degree of qualified teachers and education for sustainable development can be practiced only through the teachers that have been trained and conscientized of the value and perspective of sustainability.

Higher education also produces leaders and elites of the country and society, who are directing and managing political parties, governmental bureaucracies, economic institutes and private industries, all the

stakeholders of sustainable development. Applying a holistic approach in education for sustainable development helps students become aware of their place in the surrounding society and environment. Since most business students go on to work in the private sector once they have graduated, they become the key promoters of sustainability. But, if higher education fails to educate the students for sustainability, the future leaders of various sectors and areas cannot be qualified agents for sustainable development. (Lee, 2008)

Sustainable development cannot be achieved or realized by some successful efforts of individuals or some groups in a sector. Stakeholders of sustainable development are from the broad areas of a country and society; scientists, businessmen, politicians, local governments, engineers, agricultural producers, journalists, students, and teachers etc. So it is very crucial to educate and build up a vanguard group of leaders in each sector of society, public or private, that will take leading roles in promoting the values of SD and transforming the unsustainable sector toward the more sustainable society. Emerging challenges such as globalization call for graduates of higher education to understand and address issues inherent in the quest for a sustainable future (Van Ginkel, 2005).

6. Conclusions

The process of globalization is seen as blurring national boundaries, shifting solidarities within and between nation-states, and deeply affecting the constitutions of national and interest-groups identities. On the one hand, it opens the door to opportunities, increasing cross-border movements of goods, money, information and ideas as well as people, and to an ensuing interdependency of people and institutions around the world. On the other hand, it creates new forms of inequality which threaten diversity, pluralism, access knowledge and creativity, putting cultural diversity at risk.

As a result, sustainable development may be seen as an antidote to globalization, at the same time globalization being regarded as an opportunity, even a precondition-for sustainable development.

Sustainable development is both a moral precept as well as a scientific concept, involving natural sciences, economics and policy-making, notions of peace, human rights, theories of ecology and global warming. It is considered to be a paradigm for thinking about a future in which environmental, societal, and economic considerations are balanced to ensure the needs of the present generations without compromising the ability of future generations to meet their own needs

As we move towards the United Nations Decade of Education for Sustainable Development (DESD), questions about the role of ESD in promoting and implementing sustainable development are more frequently taken in consideration.

ESD is necessary for learning to address these changes while improving the quality of life in the present without compromising it in the future. It is not just any kind of learning, however, it is learning through quality education, offered through the full range of approaches and modalities.

As ESD addresses the local contexts of sustainability, it will take many forms around the world. The sharing of best practices and different experiences and perspectives is vital for identifying key needs and for designing viable approaches to ESD.

Education for sustainable development should be based on an integrated approach to the processes of economic, societal-cultural and environmental development, aiming to create links between these three dimensions in a holistically enhanced vision.

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THE IMPACT OF THE CURRENT CRISIS ON THE ROMANIAN ECONOMY

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Abstract: *The paper is intended to be primarily a factual developments illustrate the main economic indicators in the context of Romania's crisis by creating a digital picture to illustrate the main effects of the country. The idea started more from a personal desire to make a passage highlighted "the crisis, where some of it not felt it directly, seem to be amplified in an unduly by the media". Secondly, we proposed the application of an econometric model using as a set of macroeconomic indicators compiled data for Romania for the period 2001 to 2008. This will allow certain scenarios and forecasting developments in the context of model assumptions. Another issue raised by the paper is related to the validity of the model used and how plausible conclusions can be reached after application.*

Key words: crisis, model, endogenous variables, exogenous variables

JEL classification: E01,E17, E20, E32, E40

1. Introduction

In early 1960, Federal Deposit Bank of St. Louis (Bari 2002) developed in an economic analysis model, which stressed the role of monetary aggregates. Initial analysis of economic data was performed using diagrams that after 1960 will be used regression techniques as a tool of analysis. Some of the quantitative research efforts were consolidated in 1970 with publication of what followed is known as ***"The St. Louis".***

2. The model St. Louis

The first theoretical consideration that underlies the development model was the modern quantitative theory of money. The emphasis of the modern quantity theory is the behavior of economic units in response to changes in the stock of money. Moreover, the existing stock of money must be held by someone. As a result, a change in the stock of money will induce a discrepancy between the current owner and interested possession of money that will change because alternate portfolio of assets. Included in this adjustment is a change in spending on goods and services.

The second theoretical issue that has been implicit in the construction of the model, although not explicitly recognized by those who developed the model at the time, was the search and information costs on economic behavior. Information on the equilibrium price is not to gather cost and thus economic units should seek balance in market prices. As a result, prices do not necessarily have been adjusted instantaneously to the new equilibrium level in response to a step change in total spending.

As a result of these theoretical considerations, the relative impact of fiscal and monetary measures requires careful assessment. This assessment includes the differentiation between short and long, and granting special focus methods are to finance government expenditure.

Model *St. Revised Louis "allows* analysis and forecasting economic fundamentals following developments: nominal national income; level of prices; real national income; rate of employment.

All these issues are raised as a result of certain changes to monetary and a certain variation of expenditure, given the potential of production, related full employment. The starting point for this quantitative analysis is reformulated theory, whose main thesis is that the evolution of national income and prices depend on monetary developments.

3.The Structure of the model

Main assumption in developing the model equations is that the evolution of nominal national income depends on the evolution of monetary and budgetary. In other words, changes in national income depend on monetary and fiscal policy. Thus, the merit of this model is that it provides information on developments in the basic macroeconomic variables in different ways of combining measures of monetary and financial policy, which allows the design of monetary policy in line with the overall objectives of economic policy in terms of income national employment and prices.

Equation of nominal national income: $\Delta Y_t = f_1(\Delta M_t \ldots\ldots\ldots \Delta M_{t-n}, \Delta E_t \ldots\ldots \Delta E_{t-n})$ **(1)**

Equation of price level: $\Delta P_t = f_2(D_t \ldots\ldots D_{t-n}, \Delta P_t^A)$ (2)

Identity equation: $D_t = \Delta Y_t - (X_t^F - X_{t-1})$ (3)

Identity equation of total expenditure (nominal national income): $\Delta Y_t = \Delta P_t + \Delta X_t$ (4)

Equation of exchange rate: $R_t = f_3(\Delta M_t, \Delta X_t \ldots \Delta X_{t-n}, \Delta P_t, \Delta P_t^A)$ (5)

Equation predicted prices: $\Delta P_t^A = f_4(\Delta P_{t-1} \ldots P_{t-n})$ (6)

Equation of unemployment rate: $U_t = f_5(G_t, G_{t-1})$ (7)

Deviation of GDP actually from potential GDP: $G_t = \dfrac{X_t^F - X_t}{X_t^F}$ (8)

Equation (1) expresses the evolution of nominal national income in the reference period (ΔY_t) according to the monetary developments during the period (ΔM_t) and in previous periods (ΔM_{t-1}-ΔM_{t-n}) and costs budget in the reference period (ΔF_t) and in previous periods (ΔF_{t-1}—ΔF_{t-n}). Changing the nominal national income in the reference period (ΔY_t) is defined by identity (4), as the amount of change the real value of national income calculated in constant prices (ΔX_t) and the change of prices (ΔP_t). Equation (2) expresses the general movement of prices in the reference period (ΔP_t), depending on the application period (D_t) and in previous periods (D_{t-1}-D_{t-n}) and in anticipation of future growth reference to the general level of prices (ΔPt). Behavior is expressed through the demand growth, defined by identity (3), as the difference between changing the nominal national income in the reference period (ΔYt) on the one hand and spread between production potential associated full employment of labor in reference (X_t^F) and actual production achieved during the previous period (X_{t-1}), on the other. Thus, demand is greater, the spread is less pointed, and increase national income in current period nominal is higher - and vice versa. The price equation is essentially a Phillips curve in the short term extended to include the changes in prices and total expenditure anticipated. Equation (5) defines the evolution rate, which depends on: Monetary developments in the current period (ΔM_t), changes in real national income during that period (ΔX_t) and in previous periods (ΔX_t-ΔX_{t-n}) of price in current period (ΔP_t) and early evolution of prices (ΔP_t^A). Equation (6) describes the early movement in the general level of prices (ΔP_t^A), namely as a variable dependent on previous trends in prices (ΔP_{t-1}-ΔP_{t-n}). Employment equation in the reference period (7) expresses this degree (U_t) as the coefficient of irregularity of the actual production to production potential, related to full employment in the current period (G_t) in the previous period (G_{t-1}). This coefficient is, according to the identity (8), the ratio between on the one hand, the difference between production potential associated full employment in the current period (X_t^F) and actual production during the same period (X_t), on the other hand, the production potential period (X_t^A). This transformation is based on “Okun's Law".

The relationship model is a fundamental equation of total expenditure. Total expenditure is determined by the actions of monetary and fiscal (spending financed from taxes or borrowing from the public). Although no details are known is that such actions affect costs. Change in total revenue is combined with an estimate of potential production that leads to the modification application. An estimate of the anticipated price change is combined with the modification request to determine a change in the price level. To describe the model, its characteristics are summarized in relation to four key assumptions money. They are:

1. Monetary actions are the dominant factor contributing to economic fluctuations.
2. Monetary actions have little, if any, lasting effect on real variables, with effects lasting only for nominal variables.
3. Fiscal actions, defined as changes in government spending with a given stock of money, have only a transitory impact on economic activity.
4. The economy is in a private stable inert.

4. Effects of crisis in Romania

Under the model assumptions can build national income equation in the form of a linear econometric model multi-factorial: $I^{PIB} = \alpha_1 I_{t/1}^{ChGuver} + \alpha_2 I_{t/1}^{M} + b$ (9)

where the indicators used are: real GDP index, index of real monetary, government spending index.

$$I^{PIB} = 0{,}160129 + 0{,}84211 I_{t/1}^{ChGuver} + 0{,}20644 I_{t/1}^{M} \quad (10)$$

Therefore, we interpret the estimated parameters as to an increase of 1% of government expenditure, national income has increased in the review, on average, 0.84211%, respectively an increase of 1% of average monetary income of national increased in the range examined, on average, 0.20644%, which confirm the theoretical results of the influence of fiscal and budgetary policy.

To accept the hypothesis of linearity is calculates the coefficient of linear correlation:

$$r_{y/x} = \frac{\operatorname{cov}(y,x)}{\sigma_x \sigma_y} = \frac{\sum (y_i - \bar{y})(x_i - \bar{x})}{n\sigma_x \sigma_y} = 0.964$$

Linear correlation coefficient is defined in the interval [-1, 1], that the value 0.964 obtained indicates a stronger linear correlation between the two variables. Test Fisher - Snedecor shows that the results are significant, with a significance threshold of 5%..

$$F_c = 39{,}7768 > F_{0,05;2;6} = 10{,}43$$

So, we can say that the model is good. Checking the significance of default and correlation coefficient of linear correlation is done using the test Fisher - Snedecor:

$$F_c = \left(\frac{n-2-1}{2}\right)\frac{R^2}{1-R^2} = 3 \cdot \frac{0{,}9298}{0{,}0702} = 13{,}24 > F_{0,05;2;6} = 10{,}43$$

Therefore, the model correctly describes the dependence of the three variables, the independent in explaining the proportion of 93% of total variation in the dependent variable.

The effects of economic crisis - evolutionary scenarios

If the equation of our revenue to perform a forecast for next year after the 2 scenarios: optimistic, and pessimistic.

If we consider the following *scenario optimistic* assumptions: government expenditure will increase in real terms by 3% and average money will increase in real terms by 5%.

For the pessimistic scenario, consider the following assumptions: government spending will decrease in real terms by 3% and average money will remain constant. Substituting the above equation for each scenario in part refrained forecast for the period 2008-2011.

Thus:

- In the optimistic scenario where the pace of growth will be 2.5%.
- If pessimistic scenario was obtained a decrease in growth of 2.5%.

Exchange Rate equation is: $$R = \alpha_1 IPC + \alpha_2 I^{PIB} + \alpha_3 I^{M} + b \quad \textbf{(11)}$$

where the indicators used are: interest rate, index of consumer prices, monetary mass average GDP dynamics.

$$R = 46{,}48 + 1{,}73 \cdot IPC - 0{,}0771 \cdot I^{PIB} - 10{,}73 \cdot I^{M}$$

The interest rate is influenced by positive and negative dynamic pricing dynamics of GDP and the monetary. All influences are analyzed in accordance with economic theory. Romanian economy to the equilibrium interest rate is 10.12%. Influences factors are analyzed as follows: for each percentage increase in the CPI rate increases by 1.73% for a percentage of GDP growth rate falls to 0.0771% for each percentage increase in monetary leads to lower interest rates with 10.73%. The lowest influence has therefore GDP.

Coefficient of linear correlation shows that there is a strong linear correlation between variables (0,9147).

Test Fisher - Snedecor shows that the results are significant, with a significance threshold of 5%.

$$F_c = 8{,}54 > F_{0,05;3;5} = 7{,}3$$

Significance F = 0.02 <threshold of significance (0.05). Deduce that the model is obtained semnificativ. Checking the significance of default and correlation coefficient of linear correlation is tested using the Fisher - Snedecor:

$$F_c = \left(\frac{n-3-1}{3}\right)\frac{R^2}{1-R^2} = \frac{5}{3} \cdot \frac{0{,}8367}{0{,}17} = 8{,}2 > F_{0,05;3;5} = 7{,}3$$

Therefore, the model correctly describes the dependence of the four variables in explaining the independent proportion of 83% of total variation in the dependent variable.

Scenarios development

And if the interest rate equation in our model build a forecast for next year after the 3 scenarios: optimistic, pessimistic and average. *If* we consider the following *scenario optimistic* assumptions: government expenditure will increase in real terms by 3% and average money will increase in real terms by 5% and a CPI of 4.5%. *For the pessimistic scenario***,** consider the following assumptions: government spending will decrease in real terms by 3% and average money will remain constant while the CPI is 3%. Substituting the above equation for each scenario in part refrained forecast for the period 2008-2011. Solutions in the short term trends indicate libratory interest rate. Thus, the optimistic scenario where the interest rate would record a level of 8.87% in case of moderate 10.21% while the pessimistic scenario it will rise to 12.27%.

5.Conclusions

Current economic crisis, burst into the U.S. (Daianu 2008) to quickly propagated globally affecting international economic system. Put on the irresponsible policies of financial institutions, the crisis raises worrying questions about the security. Transmission of the crisis was not only geographically but also in society, the financial plan in the real economy, both social and gradually installed and psychological level. The latter seems to be the most dangerous contaminants, whereas the frozen actions practically blocking economic growth for fear and mistrust. The effects of the crisis are felt in Romania. This is seen primarily at economic indicators, which after a period of growth began to come together with this crisis on a downward trend. Regarding short-term evolution of economy and living standards in Romania, according to evolutionary scenarios outlined in the model St. Louis reviewed the pessimistic scenario (which is most likely in the current context) GDP will decrease by 2.5% and interest rate (real) will be an average of 12.27%.

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COHESION AND DISPARITIES IN THE EUROPEAN UNION – CAUSES AND EFFECTS OF ECONOMIC CRISIS

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Abstract: *Real convergence study began with the development of neoclassical models of growth and especially with the passage of econometric applications of these models. In this paper we present applications of indicators and patterns of convergence on the example of European Union member countries and some current economic impact assessments on European convergence process. This analysis is based on the estimated σ- and β convergence and on Markov chains. The study deals with the economic convergence of the European countries and especially the convergence of the EU countries, including Romania. In the end of the study presents several economic scenarios for a faster and easier exit from the current crisis in Romania.*

Key words: real convergence, σ-convergence, β-convergence, Markov chains.

JEL classification: F15, C13, C15

1. Introduction

The convergence is an essential objective of the integration process of Romania in the European Union, minimizing gaps in the level of development that arise between Romania and the average of European Union.

There are two types of convergences: the Beta (β) and Sigma (σ) Convergence. 'Sigma' convergence measures the dispersion of real GDP per capita (in constant prices) between regions or countries based on standard deviation of the cross-section series (Barro 1992). When the standard deviation is falling (rising) over time, the differences of GDP per capita between regions or countries in absolute terms gradually decrease (increase) and convergence (divergence) is approached. If standard deviation does not show any clear tendency but instead, increases or decreases successively, then a mixed process of convergence and divergence is realized. A different way of measuring the 'sigma' convergence is to use the coefficient of variation which results by dividing the standard deviation with the mean of the sample. The coefficient of variation is a measure of relative variability and is expressed usually, as percentage and not via the units of data in which is referred. If the coefficient of variation decreases over time we have convergence otherwise we have divergence.

The 'beta' convergence of the neo-classical approach is obtained by a regression analysis estimating the growth of GDP per capita over a certain period of time in relation to its initial level. If the regression coefficient 'beta' has negative sign indicates that GDP per capita of countries with lower initial GDP per capita grow more rapidly than this of countries with higher initial GDP per capita. The neo-classical theory presents two types of convergence: unconditional and conditional (Sala-i-Martin 1996). When all regions (or countries) converge to the same terminal point (steady-state point) the convergence is calling unconditional. In such a case, having considered that the economies do not differ significantly in terms of variables like the investment level, coefficient β is estimated without introducing structural variables. On the contrary, when the economies have different structures, it is assumed that they converge to a different steady state point. In this case convergence is calling conditional and both the coefficient β and the structural variables (influencing the level of growth of GDP per capita) are introduced in the model. According to the neo-classical model the query of why poor regions (or countries) grow faster than rich regions (or countries) can be answered by the diminishing returns to capital explanation.

A Markov chain is a multistage experiment consisting of a sequence of trials in which the state, or outcome, of each trial depends on the state of the trial that immediately precedes it. The goal in a typical problem involving Markov chain is to compute the probability that the system will be in a particular state at a specified time.

For a Markov chain with *m* states, the transition matrix *P* is the *m x n* matrix in which the entry p_{ij} is the probability of going from state *i* to state *j* in one step.

2. Convergence sigma and beta

A commonly used indicator for measuring convergence is the variation coefficient on the level of GDP/capita, denoted by σ. This indicator is used to measure Sigma convergence. It can be used to evaluate the real convergence level by measuring the dispersion of GDP/capita over a one year period, using for this purpose cross series (countries and regions). In this case, the relevance of the convergence indicator appears only when making comparisons.

In our study, we have used this indicator to measure and predict the real convergence level for some EU countries, specifically the group of EU 12. Data series refers to the 1998-2007 period. They will be symbolized with UE12 and are: Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, and Slovenia.

Sigma convergence values for this period are: 0,6656; 0,6774; 0,6427; 0,6098; 0,5817; 0,5692; 0,5398; 0,4918; 0,4512; 0,3841.

By analyzing the level and trend of the variation coefficient, we can conclude the following:

- The considered indicator concerning the GDP/capita variation coefficient of the EU countries shows an increase during 1998-1999. This increasing process reveals a divergent growth of the economies inside this group of countries, with the real possibility that every less developed country will strive for higher levels of development;
- During 2000-2007 the evolution of the variation coefficient of GDP / capita is a decreasing one, which indicates the tendency of increasing convergence of the economies of the mentioned countries.
- Besides Sigma indicator, expressed by the variation coefficient or standard deviation, there were numerous concerns within econometric research, a significant place being occupied by the Beta parameter estimation and interpretation of growth regression equation.
- Beta indicator, estimated by using the regression equation, expresses the speed (rate) with which different countries achieves convergence to a steady state. This indicator studies sigma convergence in terms of evolution over time.
- Beta indicator's values are increasing throughout the period 1999-2007, compared to 1998: they range from 0.06889 to 0.2866. This means that if in 1998 the indicator's GDP / capita would have increased by 1 unit, in 2007 it would have reached values of 0.2866 or higher.

Total crossing matrix between 1998-2007 is presented in the following table. We used eight stages for indicator GDP/inhabitants. All data are expressed in Euros.

Table 1: Total matrix of GDP/inhabitants stages

	[1400-3650)	**[3650-5900)**	**[5900-8150)**	**[8150-10400)**	**[10400-12650)**	**[12650-14900)**	**[14900-17150)**	**[17150-19400)**	**1998**
[1400-3650)	19	3	1	1					**24**
[3650-5900)		28	3	1	1				**33**
[5900-8150)			11	3		1			**15**
[8150-10400)				9	2				**11**
[10400-12650)					11	1			**12**
[12650-14900)						4	2		**6**
[14900-17150)							3	1	**4**
[17150-19400)								3	**3**
2007	**19**	**31**	**15**	**14**	**14**	**6**	**5**	**4**	**108**

Based on this matrix we calculated the matrix of probability.

	[1400-3650)	[3650-5900)	[5900-8150)	[8150-10400)	[10400-12650)	[12650-14900)	[14900-17150)	[17150-19400)	1998
[1400-3650)	0.791667	0.125	0.041667	0.041667					**1**
[3650-5900)		0.848485	0.090909	0.030303	0.030303				**1**
[5900-8150)			0.73333	0.2		0.66667			**1**
[8150-10400)				0.818182	0.181818				**1**
[10400-12650)					0.916667	0.083333			**1**
[12650-14900)						0.666667	0.333333		**1**
[14900-17150)							0.75	0.25	**1**
[17150-19400)								1	**1**
2007									

Probability vector is:

[1400-3650)	[3650-5900)	[5900-8150)	[8150-10400)	[10400-12650)	[12650-14900)	[14900-17150)	[17150-19400)
17.59259	28.7037	13.88889	12.96296	12.96296	5.555556	4.62963	3.703704

The forecast based on probability vector for the next three years is as follows:

	[1400-3650)	[3650-5900)	[5900-8150)	[8150-10400)	[10400-12650)	[12650-14900)	[14900-17150)	[17150-19400)
2008	13.93	26.55	13.53	14.99	15.11	5.71	5.32	4.86
2009	11.03	24.27	12.91	16.35	17.38	5.97	5.90	6.19
2010	8.73	21.97	12.14	17.16	19.64	6.29	6.41	7.67

We can say there are increases the probability for higher stages, for example the last stage [17150-19400) increase from 4.86% in 2008 to 7.67% in 2010 and on the other hand the first stage [1400-3650) decreases from 13.93% in 2008 to 8.73% in 2010.

3.Conclusions

This paper has reviewed a number of methods and instruments developed for the analysis of economic and/or social inequalities and that can be used for examining disparities among EU12 countries.

One objective of the paper was to produce an update analysis of the convergence process among EU countries. Another was to show that instruments vary significantly in terms of their specificities and qualities and that it is therefore important to be aware of their limits when measuring the extent and evolution of countries disparities within the EU. These results also underline that the analysis of convergence is in fact complex.

Finally, even if the analysis of countries disparities is conducted thoroughly, it says little about the effectiveness of EU Cohesion Policy. Keeping track of countries disparities and monitoring their evolution is definitely of key importance for the design and management of Cohesion Policy. However, it must be kept in mind that the analysis of disparities, whether pointing to the presence or absence of convergence, generally cannot be used to infer firm conclusions concerning the success or failure of the policy. For this, it is necessary to proceed to further analysis, notably by controlling other variables likely to

affect the convergence process, as a proper econometric analysis would do.

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LISBON STRATEGY REVIVAL AND EUROPEAN UNION STRATEGY 2020 - SOME REMARKS

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Abstract: *European Union approaches regarding employment, competitiveness and environmental protection were strongly supported in the latest years; due to the quite significant gaps regarding European and especially the USA economy competitiveness. In this context, the article presents the main moments of the European concerns about these subjects, figured in a chronological manner.*

Key words: unemployment, competitiveness, environmental protection, strategy

JEL classification: F02, O33, Q58

1. Introduction

For over 30 years, the precarious working conditions and the persistence of mass unemployment within the European Union are major economic and political challenges that are invariably the main preoccupations of national politics. In the future, the most important challenges will be creating more and better working places for EU citizens through stimulating action in several fields, and increasing European economy competitiveness including potentiating the role of SMEs; all these will be accomplished through a economy based on knowledge and fulfilling the objectives in the energy and climate change fields. Also, the aspects previously mentioned have been and constantly reappear among the European concerns through the Lisbon Strategy, which was, over time, released and revised. Therefore, we will consider the chronological order of these steps until its current stage.

2. Main moments of the European concerns

The Lisbon Strategy was decided within the Lisbon European Council, held on March 2000, and supported employment, economic reform and social cohesion, as parts of an economy based on knowledge. Thus, the attempt was to radically convert the European economy (Lisbon European Council, 23 and 24 March 2000),which should be able to face the new challenges induced by globalization, challenges which refer to increasing the interrelationships between countries, competitive pressure of European economy compared to US economy. The steps started off by analyzing the situation, in fact the European economy at that time. Among the advantages that EU economy guarantees should be mentioned: low inflation rate, low interest and public deficit, but also a skilled and efficient social protection. The weak points referred to unemployment (at that time, there were over 15 million unemployed) and to the tertiary sector, underdeveloped, especially telecommunications and the Internet. EU's strategic objective has been revealed by the most cited phrase in this document, that is to become, until 2010 "the world's most dynamic and competitive economy based on knowledge, capable of sustainable economic growth, creator of new and better jobs, and characterized by a tighter social cohesion. (Lisbon European Council, 23 and 24 March 2000)

The results of implementing this strategy were below expectations. Thus, midway of implementing the strategy, within some European countries the economic and social situation appeared to worsen. For example, in Germany and France unemployment had reached approximately 10%, and economic growth, at European level, was under 2% compared to USA, which had a growth of over 3%. On the other hand, it cannot be denied that in some fields, in the same period of time, there has been progress, as it happened with the electricity, telecommunication and financial services markets liberalization.

Thus, the relaunch of the Lisbon Strategy was outlined. In the spring of 2004, the task of evaluating the results of implementing the Lisbon Strategy was given to Holland's Prime Minister, Wim Kok, who was assigned to lead a group of experts and to edit a report, in order to boost the Lisbon Strategy. According to the conclusions of "Kok's Report" (April 2008), presented to the European Council at the autumn meeting of the same year, the results were disappointing because of "the busy agenda, lack of coordination and conflicting priorities". Moreover, the report suggests that the main fault belongs to the members, which

didn't have enough political will to implement the necessary reforms in order to attain the objectives of the Lisbon Strategy.

Due to the report, which referred to increasing adaptability, European labor market attractiveness , investments in human capital (through continuous learning, throughout life), and the workforce's mobility, the European Commission decided relaunching the Lisbon Strategy, renaming it Lisbon Strategy for Growth and Jobs (April 2008) in 2005. This new approach focused rather on the activities that need to be set to work than the objectives that need to be reached. This is why, the year 2010 and the objectives concerning reaching a certain employment rate or a level of economic growth are not considered priorities anymore. The European Commission and the members have decided that the new strategy, structured in a 3 year cycle, should be based on a tight partnership between them, and implementing it should be based on the Community Lisbon Program(issued on July 2005) and on National Reform Programs, updated each year. On December 2007, three years after the relaunch on the Lisbon Strategy, the strategic report of the Commission concludes that the policies defined by the Lisbon Strategy are finally giving results. Nevertheless, the report stresses that "not all countries have undertaken reforms with the same determination" and that reforms in some fields (opening the energy and services market) have been implemented slowly. The report, presented to the spring Council on 13-14 March 2008, considers that, for the next 3 year cycle, the reforms have to continue to be implemented, both nationally and locally. Also, it establishes a series of new initiative policies in the four main fields, identified in the spring of 2006: investments in people and modernizing the labor market, business environment, knowledge and energy and environment.

The Lisbon Agenda and its objectives remain valid after 2010 also, strengthening the part taken by the European Commission in elaborating the future EU 2020 strategy. The decision of creating the 2020 Strategy is an indirect acceptance of the failure of the Lisbon Strategy. It is unclear how the future strategy will respond to the immediate objectives concerning getting out of the economic crisis, and to the medium-term objectives. There will not be searched a universal solution for all the members but the specific nature of each one. It has been considered that the experience and mistakes of the Lisbon Strategy shouldn't be neglected when elaborating the 2020 Strategy so that its success would have an essential impact on citizens' perception of the European Union.

Nevertheless, it was necessary to review the Lisbon Strategy after 2010 so that the European Union would be capable of meeting the new challenges: the financial and economic crisis, climate changes, raising the agricultural products' prices at international level, population aging, and global competition for resources. Also, it is considered continuing the opportunity of supporting the new members in the convergence process the European economic average. It has been noticed the need of establishing some clear criteria for evaluating each country's performance, based on the main targets agreed upon and customized depending on the starting position of each member. Equally, the idea of avoiding the overlap between monitoring at the Lisbon's Strategy implementation level and monitoring other local instruments was outlined, such as the Stability and Growth Pact. In the new European economic context, an evaluation of the efficiency of the local financial tools dedicated to social dimension is considered convenient: European Social Fund, European Globalization Adjustment Fund.

Within the European Council of 25-26 March 2010, the heads of state and government from EU have accepted the general framework of the 2020 Strategy for getting out of the crisis and preparing European economy for the next 10 years. The 2020 Strategy is meant to replace the previous Lisbon Agenda. The decision of the European leaders was based on the elements included in the Commission's communication "Europe2020: a strategy for smart, sustainable and inclusive growth UE 2020)" presented on 3rd March 2010. The economic crisis potentates problems and fundamental vulnerabilities that enforces promoting a new economic model with an strategic goal: strengthening EU's competitiveness worldwide, and implicitly an additional economic growth for the European Union in the next decade.

In order to achieve its strategic goal, EU-2020 is assigning 3 major goals, which can also be found in the Lisbon Agenda: intelligent economic growth through developing an economy based on knowledge and innovation; sustainable economic growth by promoting a competitive economy, with low carbon emission and an efficient use of resources; inclusive economic growth through promoting a economy with a high employment rate, generator of social and territorial cohesion. Within the communication a list of 5 reference indicators was outlined in order to measure the implementation level of the major objectives, which EU members are summoned to implement nationally:

- Reaching an employment rate of at least 75%, for the population between 20-64 years
- Investing at least 3% of EU's GDP in research and development

- Fulfilling the objectives for the energy and climate change fields – „20/20/20", respectively reducing carbon dioxide emissions with 20% compared to the 1990 level, reducing energy consumption with 20% and producing 20% energy out of renewable sources
- Early school drop rate should be under 10%, and at least 40% out of the young generation should have university level studies
- Reducing 20 million of the number of persons who run poverty risk

One of the strategy's targets will tackle the main jams that restrict national and European economic growth, especially through improving the internal market's performance. There have been mentioned two possible main sources of additional growth: implementing the directive concerning services and creating an internal energy market. Knowing that the objectives included in the strategy take into consideration fields targeted both by the local legislation and by the national legislation as well, following them will need a combination and coordination of actions at members' level and locally.

Implementing the EU-2020 objectives nationally will be realized by taking into consideration the initial position of the members and the national context, in this direction there will be conducted a discussion in order to ensure coherence. Another relevant element from the strategy's perspective is regarding supporting it through current local policies, especially concerning collective agricultural and cohesion policies, which is in compliance with Romania's interest (as Romanian officials have noticed). Considering the strategic objective of improving global competitiveness, EU-2020 includes an important external dimension in order to ensure compatibility between tools and EU policies and the need of promoting EU's interests internationally, by promoting open and fair markets globally. Noticeable with the latter objective is the reference to the fair market and not to the free market, which stresses the European paradigm of approach for the process of liberalizing world trade. Regarding financial regulations, the European Council has stressed the necessity of strengthening regulatory framework and financial surveillance both at European and international level.

The assessments regarding the EU 2020 Strategy refers to the aspects which mark a process compared to the Lisbon Strategy and refers to including a more concrete proposal and some mechanism for monitoring implementation. On the other hand, a more rigorous substantiation remains necessary for establishing the parameters provided in the document, in order to ensure the strategy's proper functioning. The established objectives by the strategy were overall appreciated, but the success of implementing this action will depend on ensuring the implementation and on the political will of the members to transpose the objectives on a national level. On the other hand, ideally, aggregated targets should be created starting from national targets, not vice versa. The intention of mobilizing national authorities is highlighted, in order to assume some even more ambitious objectives. On the other hand, critics have disclosed the fact that despite its ambitious objectives, EU 2020 seems relatively vague concerning the gains that would be achieved and actually highlights the negative effects of the lack of implementation of such a strategy. Also, some experts consider that the proposals included in the strategy do not cover every relevant sector for a sustainable growth point of view, thus mentioning the importance of structural reforms in the public sector, in the current context marked by fiscal deficit and negative demographic tendency. It was called for a different indicator which would watch the business environments' improvement, essential to ensure economic growth.

Employers' organization from European countries generally had positive assessments regarding EU 2020, with the condition that members would implement it. The Association *of European* Chambers of Commerce and Industry *(Eurochambres)* supports the European initiative, but highlights the need of coordinating the measures of the 2020 Strategy with the processes in progress within European architecture. The association criticizes excessive focusing on the private sector, highlighting a much too extensive accountability of the public sector, which does not provide details about actual measures of regulation meant to support European territory, severely affected by global financial crisis.

At unions, environmental organizations and NGOs' level, which approach the social issue, there have been registered a series of critics with regard to neglecting social and environmental aspects in favor of competitiveness. The European Trade Union Confederation considers that the 2020 Strategy is a disappointing, vulnerable initiative, especially in the global financial crisis. The European perspective is considered to lack an actual battle plan against the rising unemployment, especially among young people, as well as a vision for decreasing the attractiveness of speculative trends on the capital markets and the predominance of short term strategies on these markets, to long term strategies' detriment. Repeatedly, a relevant vulnerability is the risk of estranging the European strategy, which essentially is a long term strategy, from contemporary circumstances, especially economic ones. The Lisbon Strategy is considered a failure because of the lack of political will and of political and financial instruments correctly adapted to European needs.

3. Conclusions

EU's wish of initiating a medium term strategy in spite of the Lisbon Strategy's relative failure, can be put into account of the wish of creating a proper setting for the economic recovery process- which would support the expectations of the population and companies, but also supporting the Lisbon Strategy's implementation. A local strategy can represent a supporting element for economic and political reforms and reducing protectionist pressure which can affect the integration and possibly EU's enlargement). The assumed objectives ad targets are not considered to have an inner value, but only the extent in which they lead to increasing EU's long term competitiveness compared to its main competitors on the global market- USA, Japan or the countries with an emerging economy. Although the current form of the strategy hasn't solved the different approach between Great Britain, which emphasizes on competitiveness and continental Europe, which tends to favor social aspects, although it is a useful compromise. An extremely important aspect from EU 2020 perspective is regarding the formula for strengthening European economic governance. Although the current legal framework is creating the premise for such a step, its redefinition requests, especially in the Euro area –Germany being very vehement in this sense, points out the fact that there are pressures for adopting a more compelling mechanism for the members. It remains to observe the negotiations and consultations which will be held on the issues remaining in suspension in prospective of the general EU 2020 framework on June 2010.

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THE INTERRELATIONS BETWEEN LABOR MARKET POLICIES AND DEMOGRAPHIC BEHAVIOR WITH SPECIAL EMPHASIS ON NEW MEMBERS OF EU

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Abstract: *The main objective of this paper is to show how labor market policies and demographic behavior are interrelated and how they could enhance increases in fertility rates. To achieve the above objective, the most recent theoretical and empirical studies are analyzed. The literature review has revealed sometimes contradictory results. The conclusion of our empirical analysis is that in new member countries of EU the fertility rate depends to a great extent on the specific economical-social conditions, on major changes in economy. The relationship between the family policies and the demographic behavior is stronger in developed countries, with more stable economies.*

Keywords: labor market, demography, fertility rate

JEL: J13-J11- J16- J2

1. INTRODUCTION

Over the last 20 years total fertility has fallen below replacement level in almost all European countries. The persistently low fertility in Europe has incited public and political interest in policies that could maintain or increase fertility levels. If empirical research has been accumulated globally and on different regions of Western Europe on this issue, only limited studies exist for Central and East European Countries.

The main objective of this paper is to show how labor market policies and demographic behavior are interrelated and how they could enhance increases in fertility rates. To achieve the above objective, the most recent theoretical and empirical studies are analyzed. The literature review has revealed sometimes contradictory results about the links between labor market policies and demographic behavior. For example, the study of Gauthier and Hatzius (1997) on 22 OCDE member states proves that there is no significant relationship between maternal leave and maternal benefits and fertility rates. Conversely the study of Blanchet and Ekert-Jaffe (1994), shows that there is a moderate impact but significant of public policies on fertility rates.

Demographic behavior is interrelated to the family policies. After December 1989, in Central and East European Countries the transformation into democratic societies and market economies was not smooth: the breakdown of the economic and social infrastructure was followed by unemployment, underemployment, and job insecurity, all of which translated in economic hardships for many families and communities. The marriage-rates had descendent evolutions, the divorce-rate had increasing trends and fertility rates recorded major decreases after 1990s. The mean age of women at childbearing had an increasing trend due to the economical and social changes, to the higher women-implication in economical, social and political life.

The second part of the paper is an empirical analysis based on World Bank datasets. Firstly, we use descriptive statistic methods, simple and multiple regression models to make a comparative analysis between new members and old members of European Union about the impact of labor market policies on demographic behavior. Secondly, we use factorial methods to detect the interdependencies between them and to detect some patterns in demographic behavior. We have included in our analysis demographic and labor-market variables, like fertility rate, mean age of women at childbearing, unemployment rate, women participation to economic and political decisions, school life expectancy.

Finally, there are outlined some concluding remarks about possible labor market policies that should enhance increases in fertility rates in our country.

2. LITERATURE REVIEW

Ermisch (1986) states that the demographic policies and those that are not primarily intended demographic (including employment policies, fiscal and monetary policies, education policies and subsidies, policies related to social security, family, etc..) may affect demographic behavior.

In its review on fertility and child care, Rindfuss and Brewster (1996) argue that "as long as participation in labor force acts as a constraint on fertility, we expect fertility to rise in response to improving relations between woman and work. They argue that when all other factors remain unchanged, improvements in access, acceptance and quality of various methods of childcare will have positive impact on fertility." At the heart of these statements is the assumption that childbirth is a rational decision and that parents compare costs and benefits of having children against their income, professional expectations, personal standards of childcare quality, etc.

The models that analyze and measure the impact of policies on fertility may be divided into two main categories: microeconomic models and macroeconomic models. Neyer and Andersson (2007), talk about the methodological aspects of investigating the effects of family policies on fertility. Their conclusion is that the effects of such policies can be seen only through studies at the individual level, aggregate patterns at macroeconomic level not leading to relevant conclusions. Family policies are part of a general welfare policy applied to the economic, social and family level. Taking as an example the case of Sweden in two historical contexts, the authors show that family policies are temporary and related to economic cycles. Although at the individual level, in Sweden, was observed a significant increase in fertility since the 80s, at macroeconomic level the conclusions are not significant. They estimated an econometric model with the dependent variable - the birth rate and the independent variables - macroeconomic indicators as GDP, the average salary for women, etc. After the estimation of these models they couldn't draw a significant conclusion on the impact of family policies on fertility. Taking into account the complexity of family policies, the use of models with aggregated indicators at the macroeconomic level may not surprise subtle links between these policies and behavior of individual families.

Salanie and Laroque (2004) consider a model logit at microeconomic level for France measuring the impact of the reform of 1994 (the adoption of the Parental Allocation for Education for the parents which want to stop to work until the third year of the child). By this model it was estimated that the family policy did not affect the probability of having a first child, increased by 5% the likelihood of having second child, increased by 2.1% the likelihood of having the third child and increased by 1.3% the total overall probability of having a child.

Barmby and Cigno (1990) use the maximum likelihood estimation to study the fertility in families with more than 10 years of marriage, using data from the year 1980. The dependent variable was the birth after 10 years of marriage, for a sample of women in Britain. An index of maternal benefits was constructed to reveal family policies during 1954-1980. The other explanatory variables used were: the ratio between male wages and women wages, maternal age, maternal birth year, year of marriage, educational attainment, annual income, work experience. The study concludes that fertility is adversely affected by the following factors: women wage higher then men wage, advanced maternal age. Also, increased maternal benefits increase the total fertility rate.

Milligan (2004) uses probit regression to model the impact of the introduction of incentives maternal birth in Quebec, Canada. The dependent variable is a binary variable indicating whether or not there was a birth in the family. The independent variables were the socio-demographic variables and a binary variable indicating the status of resident in Quebec. The conclusion was that for residents of Quebec, the fertility increased by 5.5% compared to the rest of the country following the introduction of these measures.

Blanchet and Ekert-Jaffe (1994) estimates a macroeconomic model for the OECD countries, trying to express fertility rate as a function of several variables related to demographic policies. The conclusion of this study was that such policies have a moderate impact upon fertility rate, both on short and medium term. Using a quite similar methodology, Gauthier and Hatzius (1997), based on a sample of 22 OECD countries, are analyzing the impact of familial spending and number of weeks of maternal leave upon fertility rate. Their conclusions are interesting: time period of maternal leave and family spending do not have a significant influence upon fertility rate. On a long term, one important factor is the level of financial benefits for new born babies.

d'Addio and d'Ercole (2005) have estimated a model for 16 OECD countries, using aggregated data, using a Pooled Mean Group estimator. The main assumption is that a long term influence of demographic policies can be revealed and for every country can be found specific influences. The dependent variable was the total fertility rate and explanatory variables were unemployment rate among women, total unemployment

rate, men to women wage ratio, and difference between tax level for families with two children and families with no children. The main conclusion was that an increase by 100 cents of this difference will raise total fertility rate by 0.05%.

The studies using data on fertility by age and number of births, show that the impact of policies on fertility is higher on the fertility calendar then on the total number of children. For example, Ermisch (1988) proved that higher allowances for children in United Kingdom increased the number of births per woman, but the most important effect was the encouragement of young mothers. Studies based on data from Canada, Germany, Norway and Sweden concludes that subsidies for child care and maternity or parental leave have positive impact on fertility but this effect is relatively small. Kravdal (1996), based on Norwegian data, estimated that an increase of 20% in child care services has as result an increase in fertility of only 0.05 children per woman. Hyatt and Milne (1991) estimated on the basis of Canadian data that an increase of 1% in real value of maternity benefits will have as result an increase in the total fertility rate between 0.09 and 0.26%.

Del Boca (2002), using a logistic regression model on data available for Italy, the estimated probability of having a child according to the availability of childcare. Dependent variable was an indicator that a woman did or did not have a birth over the past two years. As explanatory variables were used: the proportion of children in childcare aged 1 up to 3 years for each region of Italy, the share of women employed in part-time system in each region of Italy, age of mother at first birth, household income, transfers family (the family), educational attainment and an indicator of the fact that grandparents are still alive. The conclusion of the model is that an increase of 1% in availability of childcare increases the chances of having a child by 0.198%. The maternal age has a negative influence and receiving help from the relatives has a positive influence on the fertility rate.

3. EMPIRICAL INVESTIGATIONS

3.1. The description of panel data

The empirical analysis is based on a World Bank database. There is done a selection of aggregated data at country level, for all the 27 members of European Union.

The explanatory variables used in our analysis are divided in two groups: the first group for family policies and the second group for labour market policies.

Two variables are available for all EU countries describing family policies: maternal leave benefits and the number of weeks of maternity leave. Maternal leave benefits ranges from 70% to 100% for EU27 countries. In Romania, they decreased from 94% to 85% from 1998 to 2004. With the exception of Finland and Denmark, in all the other EU27 countries maternal leave benefits remains stable or they increased over the same period. About the number of weeks of maternity leave, it was an increase from 16 to 18 weeks in Romania from 1998 to 2004 (the mean for EU27 countries was 18 weeks).

In order to describe the labour market policies we have chosen the Female labour force participation rate and the Female unemployment rate. In female labor force participation rate is a great variability between EU countries. It rages between 40% and 75%. Generally Northern European countries have higher female participation rates then Southern European countries. The female labor participation rate for Romania is under the EU27 average (55.6% compared to 61.45%). The female unemployment rate is a heterogeneous variable raging from 3.7% to 19.9% with a mean of 9.28% for all EU countries. Romania has an unemployment rate for female under the mean value (of 6.9%). If the female participation rate is also a variable related to the cultural heritage of a country, the unemployment rate is strictly related to the economic stability and development of the country.

Due to the lack of data about maternal leave period, time dimension is limited to only three years, when we have found complete information: 1990, 1998 and 2004.

In order to answer to the question “which is the impact of family policies on the demographic behavior?” it is estimated a regression equation for panel data with fixed effects. The interest area is the European Union. We try to answer also to the question “which is the specific influence of each country?”.

The dependent variable used in the regression analysis is Total fertility rate (as percent), denoted by **y**. As explanatory variables have been used the previously described variables:

- X_1 -Maternal leave benefits (% of wages paid in covered period);
- X_2 - Number of weeks of maternity leave
- X_3 - Labor force participation rate, female (% of female population ages 15-64);
- X_4 - Unemployment, female (% of female labor force)

The method used for estimation was least square dummy variable model-LSDV[10].

3.2. The econometric model

Econometric model presented below is a generalization of the Gauthier and Hatzius model (1997) conducted by Anna Cristina d'Addion, Marco Mira d'Ercole (2005) by including in the model a range of policy variables taking into account the heterogeneity between countries in terms of dynamic effects.

The general model is:

$$y_{i,t} = \lambda y_{i,t-1} + \beta' X_{i,t} + \mu_t + \eta_i + \varepsilon_{i,t}$$

where:

- y is the logarithm of the total fertility rate;
- X is a set of variables that reflect labor market trends, intervention of public power and economic opportunities;
- μ_t is time specific effect;
- η_i is country specific effect;
- ε is error term;
- Indices i and t represent country-specific effect and time effect.

The estimation of this model implies many problems of specification, of endogenously and aggregation. In our paper we simplified this model by:

$$\mathbf{y} = \mathbf{D}\alpha + \mathbf{X}\beta + \varepsilon$$

where:

- y is the vector of dependent variable
- D is a matrix of dummy variables, $D = [d_1, ..., d_n]$, where $d_i = \begin{cases} 1, \text{ for country } i \\ 0, \text{otherwise} \end{cases}$.
- α is the vector of fixed effects, corresponding to each country in the sample
- **X** is the matrix of the explanatory variables
- β is the vector of the coefficient for the explanatory variables
- ε is the residual term.

The above matrix models had nT rows, corresponding to n=27 European Union countries and T=3 time periods 1990, 1998 and 2004.

3.3. Regression estimates - panel data

Using the model described in previous paragraph on available data, the regression analysis estimates obtained are presented in table 1.

The model has a high explanatory power (R-squared value is almost 93%). It could be validated with a significance level of 0.01. The results may be affected by the presence of autocorrelation of residuals, Durbin-Watson statistic being very high (DW=3.68). One explanation may be the insufficient time dimension we have used.

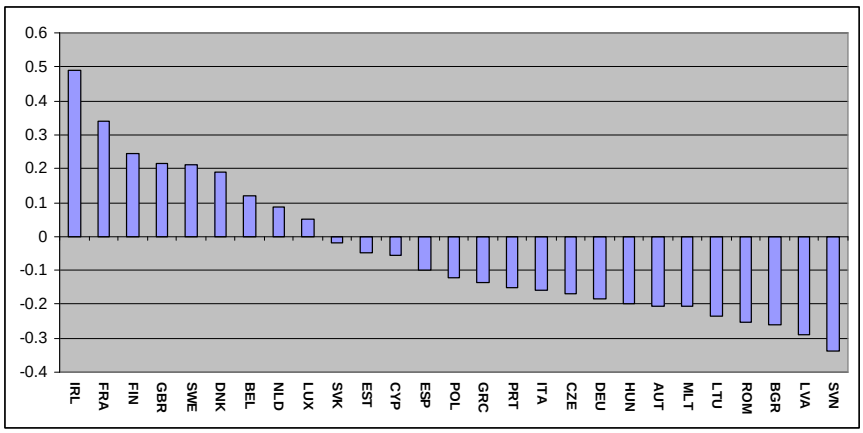

Figure 2 - Values of cross sectional coefficients

Table 1 – Regression analysis estimates - Panel data

[10] Greene, W., Econometric Analysis, Prentice Hall, 6th Edition, 2008

(Results obtained used EWiews Software)

Dependent Variable: Total Fertility Rate
Method: Pooled Least Squares
Date: 05/13/09 Time: 16:59
Sample: 1997 1999
Included observations: 3
Cross-sections included: 27
Total pool (unbalanced) observations: 59

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X_1	0.001541	0.002411	0.639284	0.5278
X_2	-0.007475	0.006893	-1.084428	0.2874
X_3	-0.000502	0.004204	-0.119426	0.9058
X_4	-0.012900	0.006291	-2.050492	0.0498
C	1.661609	0.323269	5.140022	0.0000
Fixed Effects (Cross)				
AUT--C	-0.204163			
BEL--C	0.118759			
CZE--C	-0.168948			
DNK--C	0.190079			
FIN--C	0.245176			
FRA--C	0.338750			
DEU--C	-0.185229			
GRC--C	-0.135727			
HUN--C	-0.197621			
IRL--C	0.491476			
ITA--C	-0.159201			
LUX--C	0.048760			
NLD--C	0.086434			
PRT--C	-0.151417			
SVK--C	-0.019346			
ESP--C	-0.101094			
SWE--C	0.212700			
GBR--C	0.217169			
CYP--C	-0.056380			
EST--C	-0.049123			
SVN--C	-0.336555			
BGR--C	-0.261460			
LVA--C	-0.291818			
LTU--C	-0.235710			
POL--C	-0.121757			
ROM--C	-0.254088			
MLT--C	-0.204835			

Effects Specification

Cross-section fixed (dummy variables)			
R-squared	0.926290	Mean dependent var	1.517119
Adjusted R-squared	0.847315	S.D. dependent var	0.250875
S.E. of regression	0.098029	Akaike info criterion	-1.501592
Sum squared resid	0.269071	Schwarz criterion	-0.410005
Log likelihood	75.29698	F-statistic	11.72893
Durbin-Watson stat	3.677150	Prob(F-statistic)	0.000000

Analyzing the coefficients estimates it could be seen that only the constant and the female unemployment rate have significant impact upon the fertility rate. An increase of female unemployment rate by 1 percent will determine a decrease of total fertility rate by 0.01 percent. All the other variables included in the model have no significant impact upon fertility rate.

On the other hand, it could be observed some specific characteristics from country to country. From the values of cross sectional coefficients, we can distinguish some countries where total fertility rate is significantly higher than the average: Ireland, France, Finland, UK and Sweden. New member countries of EU has lower values of fertility rates than the average. Romania is among the countries with the lowest values of cross sectional coefficients, like Latvia, Bulgaria and Slovenia. The total fertility rate for Romania, apart from the unemployment influence is 0.25% lower than the EU average.

In Central and East European countries since the beginning of the 1990s, fertility has dropped significantly because the institution of the family has been experiencing essential changes, the population faces economic difficulties, particularly its younger segment (in seeking education, entering the labour market and acquiring a dwelling) and job insecurity. Families lack the external and internal strengths required for them to adapt to the new conditions and to rise to the new challenges confronting them.

3.4. Regression estimates – dummy variables

In order to improve the model, it is applied a factorial analysis on the initial values. The database used in this analysis includes the explanatory variables (X1, X2, X3 and X4) for the year 2004.

Running Principal Component Analysis on the described data, 74% of the initial information is preserved by projection of the variables on the first two principal components. Each of the components is determined by the variables with the coefficients in absolute value very closed to one on the corresponding column (table 2).

Table 2 - Rotated Component Matrix(a)

	Component	
	1	2
Number of weeks of maternity leave	**,912**	,049
Maternal leave benefits (% of wages paid in covered period)	**-,895**	,069
Unemployment, female (% of female labor force)	,108	**,814**
Labor force participation rate, female (% of female population ages 15-64)	,125	**-,789**

Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 3 iterations.

The first principal component is determined mainly by the variables related to family policies (maternal leave benefits and number of weeks of maternal leave). This component will be named Maternal Leave Component.

The second principal component is determined by female participation on the labor market (Female labor force participation rate and unemployment rate). This component will be named Labor Market Component.

Analyzing Figure 3 it could be observed that the relationship between the fertility rate and maternal leave component is different for EU15 countries than for new member countries of EU. In old member countries of EU there is a direct relationship between them and in new member countries of EU is an inverse relationship. Therefore, in the specification of the regression model will be included a dummy variable (D=1 for EU15 countries and D=0 for New Members).

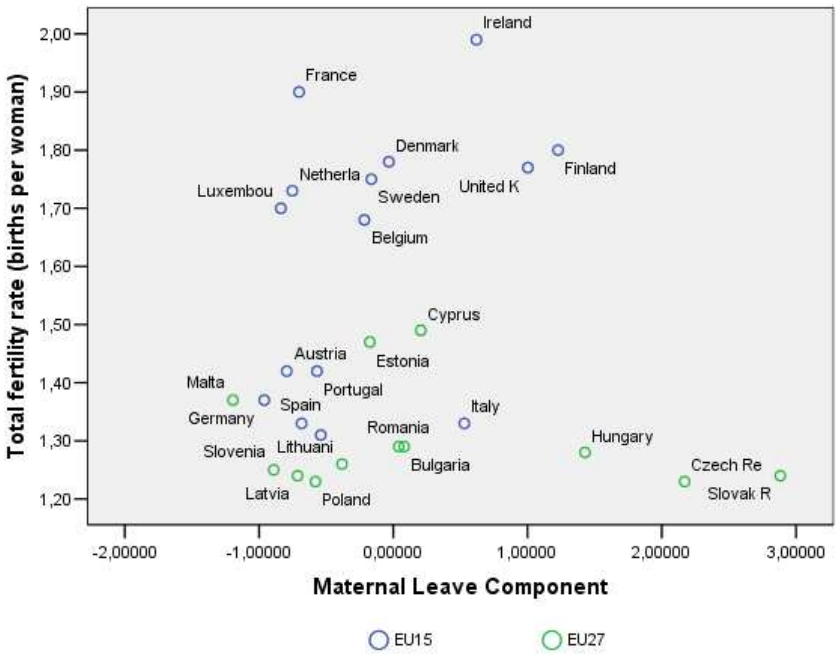

Figure 3 – Total fertility rate versus Maternal leave component, 2004
(Source data: World Bank)

The first result obtained by the regression analysis with dummy variable is that the Maternity Leave Component has a significant impact on Total Fertility Rate for EU15 countries (Equation 1, Table 3). Moreover the membership of the country to EU15 countries has a significant influence on Total Fertility Rate. Another conclusion that could be formulated is that in old member countries of EU the number of weeks of maternity leave has a positive and significant impact on Total fertility rate and on new members, Maternal leave benefits (% of wages paid in covered period) have a positive impact on Total Fertility Rate.

If in the regression equation is introduced also the Labor Market Component, the model remains valid (Equation 2, Table 3). Moreover, this component has a negative and significant impact on Total Fertility Rate. As long as Labor Market Component is determined positively by Unemployment rate, this result is consistent with the one obtained in the previous paragraph.

Table 3 – Regression Equation Estimations (t-stat between parentheses)

Eq.	Regression	N	R^2/F
1.	TFR = 1.307 + 0.337·D – 0.017·C1 + 0.149·D·C1 (25.38) (4.831) (-0.402) (1.91)	27	0.529 (8.608)
2.	TFR = 1.339 + 0.272·D – 0.013·C1 + 0.110·D·C1– 0.086·C2 (27.9) (4.015) (-0.338) (1.542) (-2.536)	27	0.635 (9.587)

4. CONCLUSION

In this paper the main question was how family and labour policies are interrelated with demographic behavior. Because of the vastness of this field of research we have restricted the analysis only to the impact of policies on fertility rate.

The first result obtained using regression analysis on panel data is that the dependency between the demographic behavior (expressed here as the total fertility rate) and the family policies (reflected through the variables: maternal leave benefit and the length of maternal leave) differs in space and time, as it has specific elements from country to country and from one year to another, due to the specific economical, political and social environment.

The second result obtained by combining data analysis techniques and regression analysis method is that the demographic behavior of new member countries of EU is different from the one of old members: the membership of the country to the EU15 group has a significant influence on Total Fertility Rate. While in old members of EU the number of weeks of maternity leave has a positive and significant impact on Total fertility rate, on new members of EU Maternal leave benefits (% of wages paid in covered period) have a positive impact on Total Fertility Rate. The regression model turned out significant for EU15 countries, while for new members the regression coefficient had a low value.

The obtained results from our econometric models, related to the demographic behavior, are consistent with the conclusions of the literature-studies, based on macroeconomic models. Moreover, for Romania it turned out that the Labor Market Component (unemployment rate) has a negative and significant impact on Total Fertility Rate.

So, as a final conclusion, we may say that in new member countries of EU the fertility rate depends to a great extent on the specific economical-social conditions, on major changes in economy. If such major changes appear in one country' economy, than the family policies have no such significant impact on the demographic behavior of that country. On contrary, this relationship is stronger in well developed countries, with more stable economies.

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WORLD FINANCIAL MARKETS DECOUPLING THEORY POST REVIEW

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Abstract: *On January 23rd – 27th2008 on Davos conference within World Economical Forum, in Swaziland, Mr. Bergsten, director of The Peterson Institute for International Economics in Washington USA raised a question: "If America Sneezes, Does the World Still Catch a Cold?". He said that decoupling theory had been falling down and the world will meet "reverence coupling". I think that it will be very interesting to check market generally situation, and to see if there are some markets which are coupling ones with others. Do we can expect reverse coupling? Do other financial markets keep USA market afloat (as Mr. Bergsten states)?*

Key words: Decoupling Theory, Reverse coupling, Market Index

JEL classification: G14, G15, G16

Introduction

"There's not the slightest possibility that America
would be decoupled from Europe by the
pursuit of this vital initiative"
(Caspar W. Weinberger)

Nowadays, more often we can meet relative simply but really confusing term: "Decoupling Theory". What is really mean? "In mathematics, decoupling refers to the rearrangement of systems of equations so that they are independent of each other ... In economics, decoupling is often used in the context of economic production and environmental quality. In this context, it refers to the ability of an economy to grow without corresponding increases in environmental pressure ... Similarly, decoupling can refer to "breaking" the link between a dependent variable and its cause for a specific industry or activity"[11]

"Braking the link" – what does it can means?

Decoupling Theory states that European and Asian economics (especially the emergent one) no longer depend on United States economy, growing and developing as independent bodies. This theory tried to state that no meter what happens with USA, other countries will be doing as usual, even is US will meet recession times.

On Davos meeting (from World Economic Forum, Davos, Switzerland January 23rd – 27th 2008) — including one called "If America Sneezes, Does the World Still Catch a Cold?" — Mr. Bergsten, director of The Peterson Institute for International Economics in Washington USA, also plans to defend the hotly debated notion that the rest of the world can sustain solid growth if the U.S. tanks. Economists call the theory decoupling. "My thought is not only that we have decoupling," he says, "but we have reverse coupling," or a reversal of the notion that stateside slowdowns are globally contagious. "I think now it's the opposite. The rest of the world will actually keep the U.S. afloat during this period when the U.S. is slowing down for internal reasons. That slowdown will be substantially mitigated by the strength of the world economy."[12]

I am really interested in knowing is Mr. Bergsten had right? Did we meet reverse coupling? I decided to investigate this topic and to see if Financial Markets are still coupling and have a stong correlation between them.

1. Decoupling theory overview

Decoupling theory exist for a long time. It stars from mathematics (algebraic and geometric approach) area and becoming deeply and deeply used in various fields. The last biggest using was raised in 2008. Whole word started to discus financial markets coupling or decoupling and predict future way of developing. A lot of financial analysts explained personal point of view about recession and decoupling from US markets:

- "The credit crunch that began in midsummer is not just a U.S. phenomenon; the rise in risk aversion is global and will have an impact on credit terms and availability everywhere."[13]

[11] http://en.wikipedia.org/wiki/Decoupling
[12] www.wsj.com
[13] www.nytimes.com

- "The irony is that these economies are more coupled with the rest of the world than they ever were in the past ... That's why they're so strong, and that has allowed them to become more independent."[14]
- "The U.S. economy had slowed dramatically in 2001, and you had places in the world like China and India that continued to grow at mid to high single digits. That set in motion the thinking that the U.S. might not be the leading economic force going forward."[15]
- "I'm a moderate decoupling believer ... I'm in the camp that believes that China is rapidly moving from being dependent on exports to the U.S. to enjoying a virtuous circle of rapidly rising incomes for Chinese consumers and very strong momentum behind internally driven growth."[16]

Mr. Bergsten**,** director of The Peterson Institute for International Economics in Washington USA, expressed a very good idea about reverse coupling. He launched the idea that whole world will help US to keeping afloat during recession period.

The International Monetary Foundation World Economic Outlook from October 2007 brought the strong idea about decoupling of global markets. "Strong domestic demand growth in emerging market economies should continue to be a key driver of global growth, with more robust public balance sheets and policy frameworks providing scope for most countries to weather some weakening in external demand. Indeed, somewhat slower capital inflows from the torrid pace of the first half of 2007 may serve to ease concerns about excessive currency appreciation or too rapid credit growth" (IMF 2007).

In April 2008 publisher of IMF idea of "decoupling" theory were replaced by "divergence". "Most merging and developing economies have maintained disciplined macroeconomic policies in recent years, bringing down fiscal deficits and reducing inflation. Public balance sheets have been strengthened, and external vulnerabilities have been substantially reduced as international reserves have risen to historic highs and reliance on external borrowing has been largely contained" (IMF 2008).

2. Selecting of database and research method

2.1. Correct selected database is key to successful research

In order to see possible relationship between USA market evolution and other markets evolutions I decided to collect data for past full 5 years and to highlight any possible correlation between USA and other developed or emergent (by important) financial markets.

Evolution of any financial markets is measured by market Index. Each independent market created specific index which collect the most important market information and in this way represent whole market evolution. In most of cases market index is kind of canalization weight of most important public companies, usually blue cheep companies which tried to reflect immediately events.

USA financial market is generally represented by New York Stock Exchange. This is not the single US Stock Exchange but the most important one. Dow Jones Industrial Average or just DOW is used to reflect US capital market performance because it is showing how 30 large, publicly owned companies based in United States have been traded.

In my analysis DOW supposed to be dependent variable. Topic of my paper tried to show you if decoupling theory exist. I see further if DOW market evolution is influenced by other markets and vice verso. It means that decoupled economy / market should be independent. No one could influence it. In case I will see strong correlation between most important international markets and DOW it means that world markets are still coupling and falling of one of them obligate the fall down other market too.

I thought that 5 biggest European financial markets and 2 Asian can be considered like most important representatives of whole world financial market.

Used European markets indexes are: FTSE 100 (measure London Stock Exchange evolution), CAC 40 (measure French stock market evolution), DAX (measure Frankfurt Stock Exchange evolution), IBEX 35 (measure Bolsa de Madrid, Spain's principal stock exchange evolution) and AEX (measure Dutch companies evolution that trade on Euronext Amsterdam).

Used Asian market index are: Nikkei 225 (stock market index for the Tokyo Stock Exchange) and Hang Seng (stock market index in Hong Kong, China).

I decided to see all correlation between above mentioned indexes within 5 year period.

[14] Andrew Foster, head of equity research for Matthews International Capital
[15] Michael Avery, chief investment officer of Waddell & Reed
[16] Tim Guinness, chairman and chief investment officer of Guinness Atkinson Asset Management

2.2. Research method general approach

For determinate the relation between dependent variable – names for *y* and independed (explanatory) variables – name for *xs* I will use an Econometric model. The econometric model is a statistical model that provides a means of forecasting the levels of certain variables, known as endogenous variables. In order to make these forecasts, the model relies on assumptions that have been made in regard to the levels of certain other variables supplied by the model user, known as exogenous variables.

The linear regression model is the single most useful tool in the econometrician's kit. Though to an increasing degree in the contemporary literature, it is often only the departure point for the full analysis, it remains the device used to begin almost all empirical research.

The multiple linear regression model is used to study the relationship between a dependent variable and one or more independent variables. The generic form of the linear regression model is

$$y = f(x1, x2, \ldots, xK) + \varepsilon = x1\beta1 + x2\beta2 + \cdot\cdot\cdot + xK\beta K + \varepsilon, \qquad (1)$$

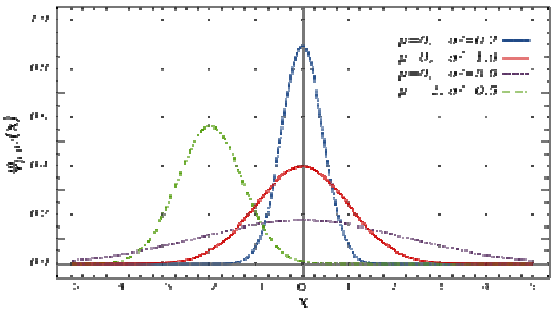
where y is the dependent or explained variable and x1, . . . , xK are the independent or explanatory variables. One's theory will specify f (x1, x2, . . . , xK). This function is commonly called the population regression equation of y on x1, . . . , xK. In this setting, y is the regressand and xk, k=1, . . ., K, are the regressors or covariates. The underlying theory will specify the dependent and independent variables in the model.

The chosen database contains of different data type. It is explained by the fact that Index contains of market price for publicly company in each of county. Each country financial market make all financial operations only in national currency that is why we meet a big problem: data cannot be comparable in original format.

These differences in data types make me obligated to transform original data for to have the *normal data distribution*, also called the *Gaussian distribution*, is an important family of continuous probability distributions, applicable in many fields. The *standard normal distribution* is the normal distribution with a mean of zero and a variance of one (the red curves in the plots to the right). Carl Friedrich Gauss became associated with this set of distributions when he analyzed astronomical data using them, and defined the equation of its probability density function. It is often called the *bell curve*, because the graph of its probability density resembles a bell.

The normal distribution may also be parameterized using a precision parameter τ, defined as the reciprocal of σ^2. This parameterization has an advantage in numerical applications where σ^2 is very close to zero and is more convenient to work with in analysis as τ is a natural parameter of the normal distribution.

Figure 1. The normal graphic distribution



Sourse:www.wikipedia.org

The continuous probability density function of the normal distribution is the Gaussian function

$$\varphi_{\mu,\sigma^2}(x) = \frac{1}{\sigma\sqrt{2\pi}}\, e^{-\frac{(x-\mu)^2}{2\sigma^2}} = \frac{1}{\sigma}\varphi\left(\frac{x-\mu}{\sigma}\right), \quad x \in \mathbb{R}, \qquad (2)$$

where $\sigma > 0$ is the standard deviation, the real parameter μ is the expected value, and

$$\varphi(x) = \varphi_{0,1}(x) = \frac{1}{\sqrt{2\pi}}\, e^{-\frac{x^2}{2}}, \quad x \in \mathbb{R}, \qquad (3)$$

is the density function of the "standard" normal distribution: i.e., the normal distribution with $\mu = 0$ and $\sigma = 1$. The integral of φ_{μ,σ^2} over the real line is equal to one as shown in the Gaussian integral article.

As a Gaussian function with the denominator of the exponent equal to 2, the standard normal density function φ is an eigenfunction of the Fourier transform.

It is possible to relate all normal random variables to the standard normal random variables.

If $X \sim N(\mu,\sigma^2)$, then

$$Z = \frac{X - \mu}{\sigma} \qquad (4)$$

is a standard normal random variable: $Z \sim N(0,1)$. An important consequence is that the cdf of a general normal distribution is therefore

$$\Pr(X \le x) = \Phi\left(\frac{x-\mu}{\sigma}\right) = \frac{1}{2}\left(1 + \operatorname{erf}\left(\frac{x-\mu}{\sigma\sqrt{2}}\right)\right). \qquad (5)$$

Conversely, if Z is a standard normal distribution, $Z \sim N(0,1)$, then

$X = \sigma Z + \mu$ (6)

is a normal random variable with mean μ and variance σ^2.

3. Resulted data and their signification

3.1. Empirical results

Collected data were researched with Econometrical software – E-views. By using this tool I could receive accurately calculated data which support me in state high quality conclusion.

In Table 1 "DOW evolution explained by world financial market influence" (please see below) first I saw how deeply international markets can influence DOW. Do they have any influence? Do the markets are correlated between each other?

Table 1: DOW evolution explained by world financial market influence

Evolution of Y explained by Xn	Substituted Coefficients	Probability	R-squared	Akaike criterion	Schwarz criterion	Durbin-Watson stat
DOW ~ FTSE, CAC, DAX, IBEX, AEX, NIKKEI, HANG_SENG	**DOW** = 0.418*FTSE + 0.420*CAC + 0.103*DAX - 0.106*IBEX + 0.598*AEX - 0.505*NIKKEI + 0.085*HANG_SENG	0.0000 (excepted DAX = 0.0006)	0.9637	-0.4675	-0.4382	0.2434
DOW ~ FTSE	**DOW** = 0.9544*FTSE	0.0000	0.9111	0.4184	0.4226	0.1088
DOW ~ CAC	**DOW** = 0.940*CAC	0.0000	0.8842	0.6830	0.6872	0.0694
DOW ~ DAX	**DOW** = 0.885*DAX	0.0000	0.7842	1.3052	1.3094	0.0369
DOW ~ IBEX	**DOW** = 0.910*IBEX	0.0000	0.8282	1.0771	1.0813	0.0668
DOW ~ AEX	**DOW** = 0.946*AEX	0.0000	0.8959	0.5763	0.5805	0.1004
DOW ~ NIKKEI	**DOW** = 0.853*NIKKEI	0.0000	0.7290	1.5330	1.5372	0.0406
DOW ~ HANG_SENG	**DOW** = 0.471*HANG_SENG	0.0000	0.2220	2.5879	2.5921	0.0099

I will highlight more important aspects of above empirical data:

- Durbin – Watson stat shows us data correlation. Its value should be above 2. All results are very small, it means that markets are Strongly correlated between them and Decoupling theory is falling dawn! Correlation other words mean "Coupling". All markets are still coupled!
- Probability in most of cases is 0. It means that stated hypothesis about relationship between DOW and rest of all is really exist;
- R-squared show us how much DOW evolution can be explained by exogenous variables. It is really important to notice that for Hang Seng Index we have really slow relation. It means that DOW evolution depends really low from Hang Seng Index;
- For test validity Akaike and Schwarz tests should have as closer values as possible.

Table 2 shows us the reverse relation. Wham much world evolution can be explained by DOW influence. We can see the same main conclusions:

- Durbin – Watson is too slow which means that all data are strongly correlated – no way for decoupling theory!
- It is really important to highly that FTSE (London Stock Exchange) has higher R-squere, it means that evolution of FTSE has significant influence on DOW evolution too and the lower one is for Hang Seng (China);
- In the same way FTSE Durbin – Watson stat is the highest one and the Hang Seng is the lowest one. It means that any DOW variance is filled more deeply in Hong Kong then in London.

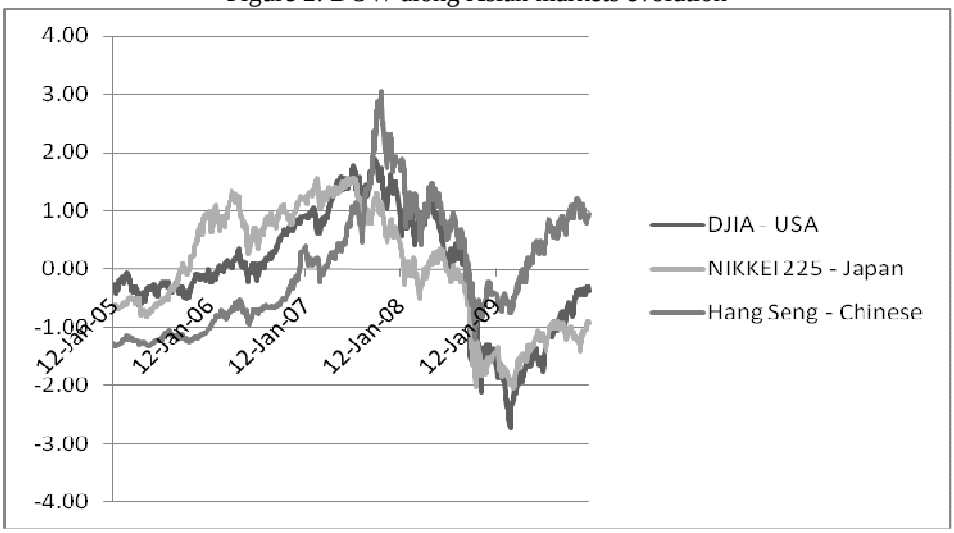
Table 2 World evolution explained by DOW influence

Evolution of Y explained by Xn	Substituted Coefficients	Probability	R-squared	Akaike criterion	Schwarz criterion	Durbin-Watson stat
FTSE ~ DOW	**FTSE** = 0.954*DOW	0.0000	0.9111	0.4182	0.4224	0.1105
CAC ~ DOW	**CAC** = 0.940*DOW	0.0000	0.8842	0.6827	0.6869	0.0673
DAX ~ DOW	**DAX** = 0.885*DOW	0.0000	0.7842	1.3049	1.3091	0.0356
IBEX ~ DOW	**IBEX** = 0.909*DOW	0.0000	0.8282	1.0767	1.0809	0.0656
AEX ~ DOW	**AEX** = 0.946*DOW	0.0000	0.8959	0.5759	0.5801	0.0965
NIKKEI ~ DOW	**NIKKEI** = 0.853*DOW	0.0000	0.7290	1.5328	1.5370	0.0377
HANG_SENG ~ DOW	**HANG_SENG** = 0.471*DOW	0.0000	0.2220	2.5977	2.5919	0.0079

3.2. Graphic results

Using graphically analyse I decided to see market evolution within 5 years period.

Figure 2: DOW along Asian markets evolution

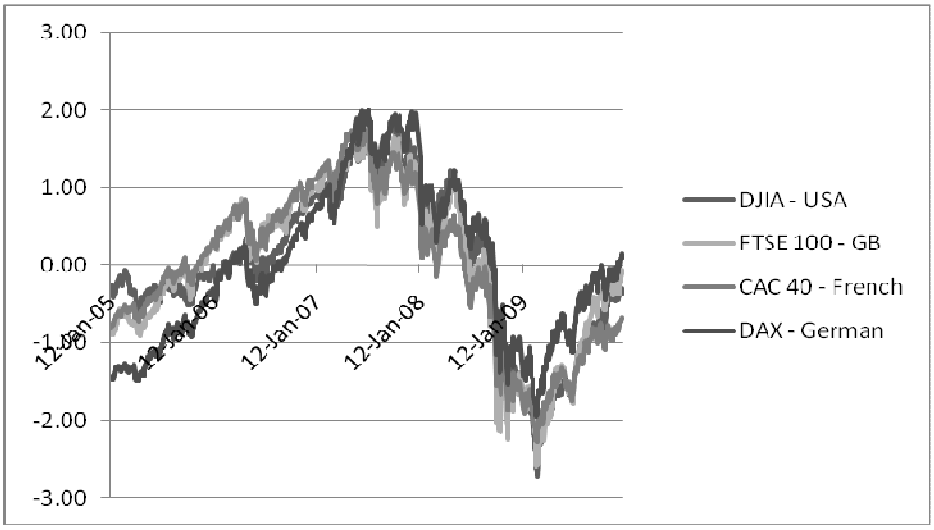


Source: Collected database

Figure 2 fully confirm data from empirical studies: Chinese financial market (expecially in last period) follow DOW trand more deeply then othe Asian index but its evolution is influenced on the large scale but a lot of other variables.

Figure 3 fully confirm empirical studies too. DOW evolution has significantly high impact on European markets evolution. Relationships are really close and data correlation are strongly visible.

Figure 3: DOW along European markets evolution



Source: Collected database

It is really important to notice that before recession pick period (2007-2008) all financial markets Asian and European tried to have kind of independent evolution. DOW influence was a little more important. For example in 2006 Japan Index significantly raised while DOW follow the same trend.

Conclusions

Below presented research strongly state that USA market, represented by values of New Your Exchange Market Index – Dow Jones Industrial Average are still coupled this whole financial markets making global market which reject Decoupling theory statements.

Using econometrical tool I saw how much the market are correlated. Values are showing incredible strong correlation between performances of all main financial markets. It is really important to notice that as much stronger market is as lower correlation exists. For example, correlation for Asian financial markets or Dutch financial market is higher than for London Stock Exchange.

It is really important to notice too that R-squared result which shows as how important is exogenous variable (X) for explanatory variable (Y). Please notes, that for developed counties relation Y~X is stronger for the emergent ones.

Finally, we get to the answer: all financial markets are still coupling! Before recession period (2005 – 2006) we can notice some temptation to be independent ones but they are falling down on really yang age. Is it can be returned? I think Mr. Bergsten was perfectly right: "My thought is not only that we have decoupling," he says, "but we have reverse coupling ... I think now it's the opposite. The rest of the world will actually keep the U.S. afloat during this period when the U.S. is slowing down for internal reasons. That slowdown will be substantially mitigated by the strength of the world economy."[17]

It's happened: after small decoupling period whole word is keeping US afloat during recession period and probably we need a really long period of time to decouple World financial markets from USA financial market and never come back. Does Globalization can permit us such things? I think – NO ... and for more couple of years we will meet the same situation: decoupling temptation and reverse coupling returns.

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ECOLOGICAL PROCESSES UNDER THE IMPACT OF GLOBALIZATION: CONTRADICTORY TRENDS OR SUBJECTIVE INTERPRETATIONS? CASE STUDY: ROSIA MONTANA

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Abstract: *Globalization, as the most challenging process of the contemporary society, generates important changes at national level. Ecological processes are not apart from this. Therefore the paper aims to explore the nature of these processes discerning between contradictory trends and subjective interpretations. Since the current empirical support cannot support the prevalence of constructive or destructive processes, these were analyzed in a case study concerning the extractive industry. The outcomes reveal that subjective interpretation of costs and benefits could favour destructive processes. The main points of bias could be the financial and technical capacity of the investors and the assessment of ecological restoration costs.*

Key words: extractive industry, cost-benefit analysis, environmental impact, Rosia Montana

JEL classification: F21, Q51

- **Introduction**

Globalization is a more and more frequently invoked reason for explaining the economic, social and political transformations of the contemporary period. In the last years, economic growth recorded a significant regression in many states due to the incapacity of national governments to apply measures that protect economies against the effects of the financial crisis unleashed in USA. The process was interpreted as the one of the most obvious symptoms of globalization (Bran and Balu, 2009). Malnutrition problems that feature developed states are deployed more and more intensely in developing countries since the globalization of western consumption patterns and the expansion of public food networks. The intensification of security measures in air passenger transportation was the answer for border less terrorism.

A number of recent project allowed the assessment of ecosystems and environmental conditions at global level and the publication of some detailed reports (Millennium Ecosystem Assessment, Climate Change – Physical Basis, Stern Review, Ecosystem and Biodiversity Economics etc.). The conclusions are converging in emphasizing the intensification of environmental degradation process and the need for urgent application of protection measures.

Globalization triggered numerous transformations. At what extent environmental degradation is one of these is a question that preoccupied the international scientific community. The answers found until now are contradictory. Dauvergne (2005) appreciates that the ones who consider that the net impact is constructive and the ones who consider that the net impact destructive have conclusive arguments.

These results could be explained the high complexity of the analyzed systems and by the interdependencies among that since this exceeds the capacity of research methodologies to provide equivocal, leaving room for different interpretations. The sources of bias, respectively the factors that influence the differentiation of interpretation are to be identified by invoking the mutual character of the globalization-environment relation and by analyzing the cost and benefits of the Rosia Montana project.

Knowledge on these factors will allow the re-interpretation of previous results contributing to the clarification of essential aspects for the correct appreciation of globalization s potential in solving the major ecological problems of the contemporary society.

- **Globalization and environment – mutual linkages**

Globalization is an intense process of the contemporary period, to which various effects are attributed. Important research efforts were concentrated for defining the concept and for the analysis and assessment of its consequences on different plans.

A special focus was granted for globalization's relation with one of the global community's priority – preservation of ecological equilibrium. These studies used different perspectives and methodologies providing a number of explanations on the interdependencies among the globalization process and the ecological processes. Najam et al. (2007) analyze these results and conclude that there are mutual linkages relation, which comprises direct and indirect influences of globalization on environment, and also

environmental changes influence on globalization. These relations are grouped according to three means of interaction – economy, knowledge, governance (table 1).

Table 1: Environment and globalization – interactions

Globalization → Environment	Means of interaction	Environment → Globaliaztion
Scale and composition of economic activity changes, and consumption increases, allowing for more widely dispersed externalities Income increases, creating more resources for environmental protection Techniques change as technologies are able to extract more from nature, but can also become cleaner	Economy	Natural resource scarcity or/and abundance, as they incite supply and demand forces in global markets The need for environmental improvement can extract costs from economy and siphon resources away from development goals
Global interactions facilitate exchange of environmental knowledge and best practices Environmental consciousness increases with emergence of global environmental networks and civil society movements Globalization facilitates the spread of existing technologies and the emergence of new technologies, often replacing existing technologies with more extractive alternatives; green technologies may also be spurred Globalization helps spread a homogenization of consumption-driven aspirations	Knowledge	Signals of environmental stress travel fast in a compressed world, environmentally degraded and unsustainable locations become marginalized from trade, investment etc. Sensibilities born out of environmental stress can push towards localization and non-consumptive development in retaliation to the thrust of globalization Environmental stress can trigger alternative technological paths (dematerialization, alternative energy) which may not have otherwise emerged Environmentalism becomes a global norm
Globalization makes it increasingly difficult for states to rely only on national regulation to ensure the well-being of their citizens and their environment There is a growing demand and need for global regulation, especially for the means to enforce existing agreements and build upon their synergies to improve environmental performance Globalization facilitates the involvement of a growing diversity of participants and their coalitions in addressing environmental threats, including market and civil society actors	Governance	Environmental standards influence patterns of trade and investment nationally and internationally The nature of environmental challenges requires the incorporation of environmental governance into other areas (trade, investment, health, labour etc.) Stakeholder participation in global environmental governance – especially the participation of NGOs and civil society – has become a model for other areas of global governance

Source: Najam, A., Runnalls, D., Hall, M. (2007), *Environment and Globalization: Five Propositions*, International Institute for Sustainable Development.

Nevertheless, the means of interaction are not discrete. These interactions were reorganized considering the interactions among the means of influence and value criteria: their constructive or destructive ecological potential (table 2).

Table 2: Ecological processes under the impact of globalization

Constructive ecological processes	Destructive ecological processes
Increase of resources needed for environmental protection Improving the environmental performance of technologies Exchange of environmental knowledge and best practices Increase of environmental consciousness Spreading of environmental standards Integration of environmental goals in other areas (trade, investment, health, agriculture etc.)	Adoption of consumption-driven aspirations Increase of technologies' capacity to extract resources Widening environmental externalities' dispersion Impairment of the national legislative process in environmental protection Marginalization of environmentally degraded locations

Nevertheless, the means of interaction are not discrete. These interactions were reorganized considering the interactions among the means of influence and value criteria: their constructive or destructive ecological potential (table 2).

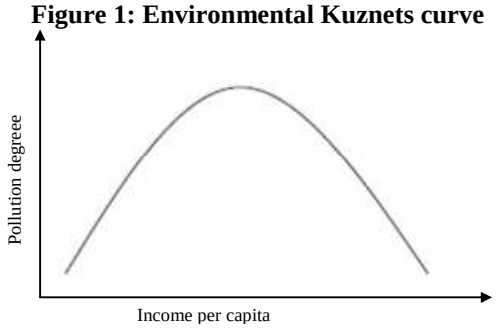
This new division of globalization – environment linkages illustrates the dichotomist nature of the possible outcomes. The question of shaping out their future structure or establishing which will have a greater potential to manifest is a great challenge for scientists. They addressed the issue in various studies by building scenarios. The most recent one, proposed in the Millennium Ecosystem Assessment (2005), opposes globalization with regionalization and ecosystem management with consumption and provide four scenarios.

Worldwide adoption of consumption-driven aspirations and the increase of resources available for environmental protection are both examples of processes that are favoured by globalization. They have opposite ecological outcomes. The first one will lead to a major increase of the ecological footprint, eventually beyond the environmental capacity support, while the second one will allow the intensification of environmental action in terms of prevention, mitigation, and adaptation. By means of simplification, we assume that only these processes are favoured by globalization and attempt to identify what is needed to answer the question: which process will be stronger? The answer implies a wide analysis that exceeds the scope of this paper. Nevertheless certain points could be identified as sources of subjective interpretation.

Thus the term *aspiration* is a value representation that is influenced by cultural, spiritual, economic factors. It is also a challenge for assessment, since the subjective interpretation of values has a great impact on the material size of these aspirations. Thus consumption-driven aspirations could comprise a wide range of aspirations, which will be difficult to separate from other types of aspirations.

Another problem is to separate the influence of globalization from other processes. Thus the adoption of consumption-driven aspirations is intepreted as an effect of globalization. But, these aspirations will be adopted in countries that are developing supposing independently, without being exposed to globalization.

Figure 1: Environmental Kuznets curve



The greater availability of financial resources due to globalization is also questionable for at least two reasons:

1. Firstly, this larger availability supposes a direct and positive relation between globalization and development;
2. Secondly, the development environmental relation is supposed to be also a direct and positive relation or a Kuznets type curve relation (fig.1).

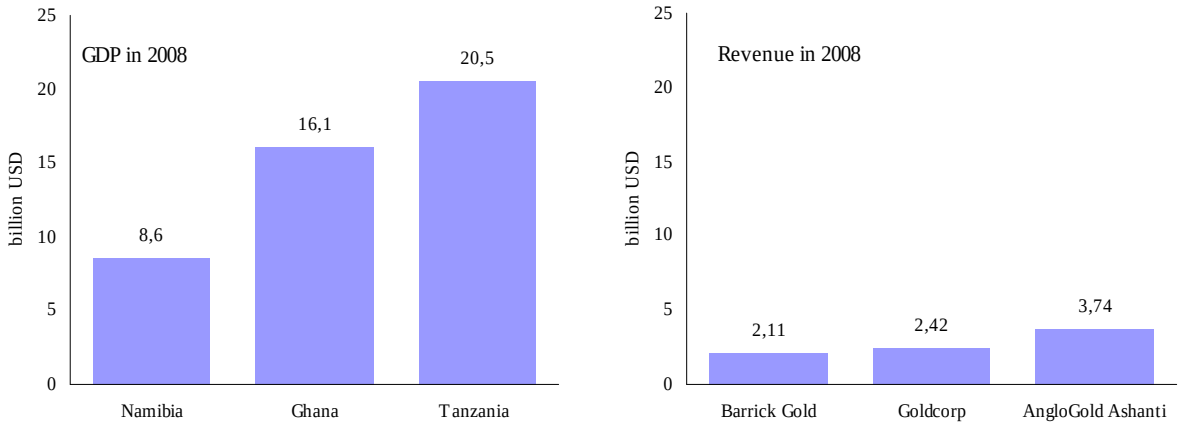
Both of the above mentioned relations are yet to be proved. The available empirical support is still failing to provide conclusive results.

This random example of constructive and destructive processes favoured by globalization illustrates that ecological processes could be influenced by globalization and that their outcome is subject of debate. Thus, there are contradictory ecological processes in a globalized world and the result of their confrontation is a mater of subjective interpretation since the theoretical and empirical support is unable yet to provide strong enough arguments.

- **Globalization and the extractive industry**

The increase in consumption needs of the contemporary society by both demographic growth and higher affluence generated a growing pressure on natural resources. Therefore, the exploration and exploitation of new reserves pursue to minimize spatial restrains, and the extractive industry is highly attractive for worldwide investors.

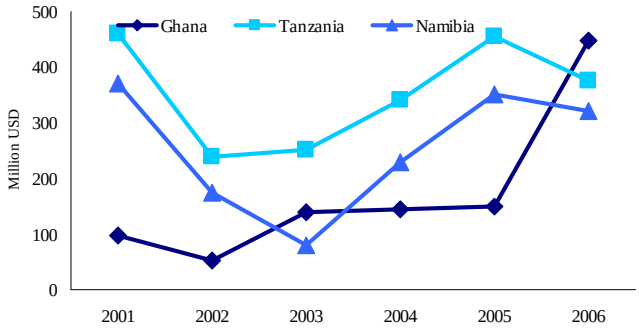
Figure 2: Turnover of major multinational companies versus GDP of national states



Source: for GDP – World Bank; for Revenue – annual reports of the companies

The access to natural resources represented and continues to represent an important stake. For a long while restrictions in this field shaped the geopolitical relations representing an important source for power. Within globalization the concentration of financial resources reached record levels being comparable with the one of national states (fig.2). For example, the annual revenue of the largest gold extraction companies is on tenth to one quarter of the GDP of the major gold ore holding countries (Barrick Gold versus Tanzania: 2.11/20.5 billion USD; AngloGold Ashanti versus Namibia: 3.74/8.6 billion USD).

Figure 3: FDI inflows in countries with major gold ore reserves



Source: UNCTAD

The political power of national state, built up on their natural resources and managerial abilities for valuing them in the benefit of nation, could be eroded by the economic power of corporations. In these conditions, the power source of nations – natural resources – is exposed to the new configuration of international relations, which is dominated by economic power (geoeconomical relations).

In other terms, the exploitation of resources could be shaped geoconomic relations. The fact that FDI in countries that own important mineral reserves became a habit illustrates the expression of such relations. Ghana, for example, is a scene of modern time gold rush, with increasing FDI flows (fig.3), out of which a significant proportion (more than half) is exclusively in gold mining (Awudi, 2002).

- **Costs and benefits of gold mining – interpretation bias sources in the Rosia Montana project**

In order to analyze the bias sources in the interpretation of costs and benefits for investments encouraged by globalization it was chosen as case study the Rosia Montana Gold Corporation project (RMGC). This project was submitted to Romanian authorities as a proposal for the exploitation of gold ores from Rosia Montana, perimeter which is situated in the Apuseni Mountains. A brief description of the project is provided in box 1.

Box 1: RMGC project - a brief description

The perimeter for the exploitation license is of 2 388 hectares; 218 million tones of ore will be milled in the 1+17 years of the mine s life. In each year will be milled on average 13 million tones of ore, with a maximum content of 1.52 grams of

gold per tone of ore and 7.47 grams of silver per tone of ore. The project will impact on four mountains: Cetate and Carnic in the first 7 years, and then Orlea and Jig; the surface mines will be digged at 220 and 260 meters below the current topographic level. The sterile from ore milling will made up a settling pound with a 299.8 hectares surface behind a 185 meter dam that will be built at a 2 kilometers distance from Abrud city, replacing the current Corna village. It is provisioned the possibility that the Bucium mine will also send its sterile to this pound.

The project will impact on four out of sixteen villages of the Rosia Montana settlement, the most impacted being Rosia Montana village. That means 960 families (2 064 persons) out of 1362 families (3 865 persons) that belonged to the Rosia Montana settlement in 2002.

Until now RMGC bought 77% of the properties comprised in the project site. There was provisioned a protection are around the historical center and this will comprise 140 houses (out of which 33 are historical monuments). Nine houses with the status of historical monuments have to be declassified along while several churches and cemeteries will have to be moved. The project will affect important terrestrial and aquatic ecosystems. The first concerns will be the noise and vibrations produced by explosions and the activity of 23 trucks (150 tones capacity), which will transport rocks. The installations will work 365 days, 24 hours a day, seven days a week. The schedule of the project: 2-3 years building the site; 17 years exploitations; 2 years enclosing the site.

Currently the project is stagnating since the civil society made strong interventions supported by arguments regarding the incorrect assessment of costs and benefits of the project.

The project's benefits are represented by the creation of jobs, development of local infrastructure, incomes to the national budget. The costs are institutional expenses (control, monitoring, and risk management), environmental degradation, hazardous waste disposal, ecological restoration, loss of historical and cultural values.

For each of these characteristics the assessment of costs and benefits is influenced by the interests of the parties. Thus the investor is tending to over appreciate the benefits and to emphasis the share of the Romanian government. Meanwhile local authorities and civil society tend to enlarge costs. The confrontation has the potential to eliminate theses subjective judgments. This potential will be manifested depending on the action of factors such as: access to information, correctness degree of procedures, corruption level among public administration, organization capacity of the local/national community, quality of legal norms.

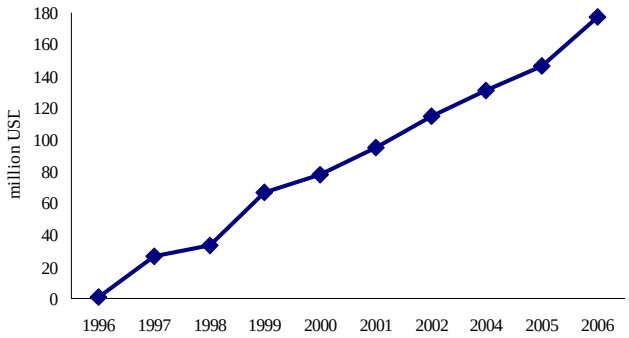
The most important divergence points are the following:

1. financial, technique, and managerial capacity of the investor;
2. institutional capacity of public authorities;
3. ecological impact
4. gold and silver content of ore and the size of the reserve;
5. costs of ecological restoration
6. length of post-exploitation period

Further there are presented some details on the divergences regarding the financial and technique capacity of the investor, the direct investments, and the costs of ecological restoration.

The financial capacity of the investor is a subject of intense debate. From the investor's perspective this capacity will be secured through acquiring financial resources from the capital market and this means is regarded as appropriate for such project. However the local community finds it difficult to trust in a company that had, according to the financial reports, successive losses since 1999. Meanwhile, according to the company's annual reports, the share capital of Gabriel Resources increased from 1 040 478 USD in 1996 to 177 200 268 USD in 2006 (fig.4). It is also possible that the present proponent will sell the business to other investors which are not assessed at the decision moment.

Figure 4: Evolution of Gabriel Resources share capital

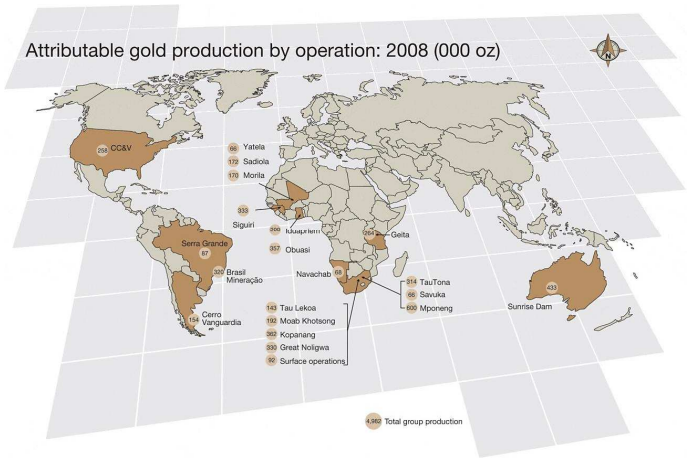


Source: Annual reports 1997-2005

Within the project there were already made investments in explorations, payments for different studies, real estate procurement in the project area. Nevertheless, only a little amount could be considered direct investment since most of the studies were made by foreign experts and most of the equipment that was purchased are imported.

The technical capacity of the investor could be proved by the investor in various ways. It is expected an investor to be something like Barrick Gold or Anglo Gold Ashanti. Indeed, these companies' operations are spread worldwide, in the most promising locations with gold ore (fig.5). In the case of RMGC, the investor does not look like these companies. Nevertheless, it managed to prove its technical capacity and obtained an exploitation licence. This was achieved by enclosing an agreement with Minvest, the former state owned company that was bankrupt, but owned specific technical devices.

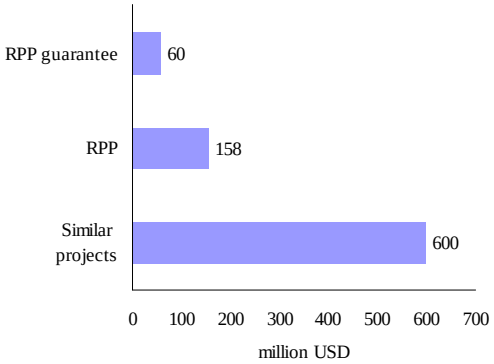
Figure 5: AngloGold Ashanti's worldwide operations



In the assessment of restoration and maintenance costs there are many bias sources in the technical documentation prepared by the investor. These generate important differences in cost assessment that are large enough to impair decisions.

In fact, the documentation makes reference to the concrete measures involved in restoration. There are recommended means of interventions in case of accidents, but it is not mentioned which are these means, where will be located, who will operate them based on what plan. Consequently there is no estimation about the costs of these interventions. This is also true for the monitoring in the post enclosing period. Bran et al. (2004) and Bran et al. (2009) appreciate that this task will necessitate at least 60 jobs to be paid with 720 000 USD annually.

Figure 6: Different outcomes in ecological restoration cost assessment for RMGC



Source: Cretu et al. (2009), RMGC (2004), press

The total cost of restoration is evaluated differently, with impressive gaps between the results (fig.6). Cretu et al. (2009) refers to similar cases worldwide and advance the amount of 600 million USD for restoration operations. In the project (RMGC, 2004) there is indicated the amount of 158 million dollars, out of which 32 million USD are for the investment in environmental protection and 126 million USD are for the

pounds. In a later discussion with the Romanian government the investor gave guarantee for only 60 million USD to be used for ecological restoration.

The patterns of this project and the nature of the above mentioned disagreement reveal that in this case the foreign investment, as exponent of globalization, will have little contribution in constructive ecological process. The costs of ecological restoration and the uneven share of benefits (the Romanian partner, Minvest, owns only 19.3% of the projects) made as reluctant in foreseeing increased resources for environmental protection. The 58chnologies to be applied could be good enough from a financial perspective, but they are included among the ones with the highest environmental impact (Brown, 2001). However, the intense debate around the project, with relatively high media and international visibility could be interpreted as a contribution to an improved environmental consciousness, although its strength is still questionable since the project occurrence increased again after a counter decision was almost certain. Meanwhile it could be easily identified the increased capacity of technologies to extract resources as the most prominent ecological process. Further, the future marginalization of the project site is could be also inferred by referring to the evolution of other similar projects worldwide.

- **Conclusions**

Globalization's confrontation with the challenging environmental issue is a highly debated topic today. There are expressed both expectations and worries regarding its outcomes. At what extent these are the result of contradictory trends or of subjective interpretation is the overarching question of this study. By exploring the nature of the processes emerging from the mutual linkage of globalization with environment ecological processes favoured by globalization were grouped in two categories: constructive and destructive ones. According to Dauvergne (2005) the theoretical and empirical support for the occurrence of both is strong enough to make difficult the decision about the environmental impact of globalization.

The extractive industry, especially in case of gold ore, is a highly globalized economic sector. Major gold producing corporations are large enough to compare their power with the one of national states and also operate mining sites all over the world. The Rosia Montana Gold Corporation project is a case with high resonance for Romania's economy and environmental movement. The analysis of some aspects that generate divergences the assessment of costs and benefits revealed that capital market's volatility; arrangements lying at the border of legality; and ecological restoration are important sources of bias, which could be interpreted subjectively depending on the interest that prevail in a certain moment. In fact, ecological processes triggered by this investment are not found in the list of constructive processes, excepting the increase in environmental consciousness, although this could lack the strength needed to fight in the network of geoeconomical interests. Further research could add on this topic by going in depth in the analysis of each ecological process based on either case studies or horizontal approaches.

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GLOBAL ECONOMIC CRISES AND ITS IMPACT ON ROMANIA

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Abstract: *Currently, the global economy is facing its worst economic and financial crisis. Crisis began in the USA and through the effects of globalization has been sent in all countries. The credit crisis has expanded gradually in all the world's financial centers and strong confidence between financial institutions has decreased, because banks not knowing the financial situation of competitors feared to borrow money for fear it could not recover them. Financial deadlock appeared initially in strong financial centers of the world, evolved in waves also to Romanian financial institutions. During crisis, the hardest blow was received by Romanian exporters because the demand for goods fell down and funding opportunities from EU and U.S. which are major trading partners of Romania.*

Keywords: *economic crisis, global economy, financial deadlock, economic recovery*

JEL classification: E66

1. Introduction

Currently, the global economy is facing its worst economic and financial crisis that goes far beyond that of the years 1929-1933. Crisis began in the USA and through the effects of globalization has been sent in all the developed countries, developing and third world countries. In the beginning of 2007, increased the number of customers in the United States that no longer paid mortgages for loans the banks accorded for minimum guarantees. U.S. banks gave massive loans and in time, the population, was unable to repay them. Lack of liquidity escalated in crisis when more and more banks began to refuse to lend money to other banks for fear that it will not recover the money.

2. USA – the country the crisis triggered

In early 2007, the U. S. financial crisis broke out and until it triggered none of the heads of government departments did not want to formally recognize this fact. These leaders, when they were interviewed gave evasive or even false answers, supporting that the U.S. economy is robust, the financial system and inflation are under total control and therefore the world should not concern.

The current economic collapse occurred after a period of economic development, in the '90s after the fall of the socialist bloc. In the beginning of 2007, increased the number of customers in the United States that no longer paid mortgages for "subprime" loans, which are high risk loans offered in exchange for minimum guarantees. U.S. banks gave massive loans and in time, the population, was unable to repay them.

In years 2002-2005, interest on mortgage loans was approximately 1-2% which encouraged their request (www.expert-grup.org). Also, the pledge was 3 times less than the loan amount, as bankers forecast future business growth and increased borrowers income. But, contrary to expectations, the U.S. economy went into recession, property prices fell, many buildings construction stopped and borrowers were facing credit repayment problem. From regulated banking system large sums of money have been extracted through loan mortgages.

Lack of liquidity which begun to confront some banks has escalated in liquidity crisis when more and more banks began to refuse to lend money to other banks for fear that it will recover the money. The liquidity crisis has gradually expanded to all major financial markets and included world economy. Although the Federal Reserve System (FRS) on 22/01/2008 decreased with 0.75% discount rate and the U.S. administration gave important tax breaks, U.S. economic recession was inevitable (www.expert-grup.org). Some banks have entered bankrupt, production declined, unemployment rose, the financial titles value fell down. Many owners of the financial titles tried to sell and get cash, which stimulated their decrease rate.

The U.S. started crisis brought about the expression of some anti-Semitic views. Thus, it is speaking of a Jewish conspiracy in circumstances where large amounts of money in the U.S. have moved to Israel, shortly before the collapse of major U.S. financial corporations. But such views are stereotyped anti-Semitic views, centuries old, which occur whenever it comes to money and crisis.

The current recession has "reached the end" in the U.S. in mid-2009, the economy in the last quarter giving signs of recovery. For the period 2010-2011 is expected a slow economic growth, requiring time to rebuild deposits and restoration of consumption which has been contracted substantially during the crisis. Disappointing economic growth is caused by the current global economic weakness. It is not excluded any possibility of recovery attempts in 2010 to fail and return to the economic mess by the end of the year or in 2011, according to findings of Nouriel Roubini, an economist named “apocalypse doctor” (Economist 2010). The causes of a possible recession in W shape could be: rising oil prices, fees and interest rates, the debt of many advanced economies in the context of increasing concerns about fiscal sustainability over the medium term, inflation due to monetarisation of fiscal deficits. However, the most plausible option is improving the economic situation in late 2009 and early 2010 as a result of aggressive policies to stimulate economic activity.

3. Crisis premises

Crisis premises are multiple and have accumulated in time, among them are: granting huge loans without coverage, increasing financial risk, exchange rate depreciation, increased unjustified governmental spending, expansion of outsourcing process to obtain large profits for private companies and stocks holders of these companies, etc. The triggering of economic mess was preceded by an increase of bankers lending to stimulate trade and boost bank profits.

After 1990, some bankers were inoculating the idea that people can buy on credit indefinitely. The system worked for a while, have accumulated debt and the global economy collapsed. Bankers have made substantial commissions from triggered financial developments, leaving payment of expenses on taxpayers. About such a danger warned, 250 years ago, Adam Smith, father of the theory of market economy. He then spoke of morality in economics. In "Theory of moral sentiments" said that is not enough people to enjoy themselves by their wealth and that they must invest for the good of all. The rich man must be fair to the society, otherwise leading to the economic and social convulsions.

In general, the ideas of former Scottish politician and economist are contained in all economics textbooks, less the idea of morality, which, if is not taken into account favors development crisis.

In U.S. commercial ads are made for the average American to make consolidated loans based on credit card it holds. Thereby renounce the credit cards held and get a higher loan to a lower interest rate. After hearing the ad, more people rush to change credit cards and get the desired loan. Then make several purchases, in conditions that they are heavily indebted. Normally all people have debts, but must maintain a balance between receivables and payables. Unfortunately, most people have large debts on goods that have not the quality of assets, of goods that gain income into future.

The U.S. banking system gets used as a home to be remortgaged on average every 7 years (www.expert-grup.org). The reality shows that most people work hard, get higher wages and when they buy their new homes they will mortgage them. However, the state provides tax exemptions to encourage taxpayers to buy bigger houses, which means that higher incomes will fuel the state budget. If you are mortgaged, the houses will be provided to insurance agency, which brings more revenue to the state.

In the period preceding the emerging of crisis, bankers granted loans in a high rate and guaranteed loans with debts that were to be paid by the population, respectively with virtual money. The result was the false capital accumulation, and the money-commodity-money relations, the monetary item has become a fiction, in which bankers have received fat fees, in real money.

The crisis started from the most powerful country in the world, USA, has had among other factors the greed of some people to accumulate as many goods as quickly and the greed of bankers who gave more risky loans, receiving fat commissions and also have attracted serious banks in the race to achieve higher returns with any risk.

Internationalization of business and bank loans increased the risks facing banks. Globalization of financial markets, facilitated by advances in communications and informatics, contains premises of global financial crisis.

Under the influence of globalization of markets, has developed the portfolio of financial assets (stocks, bonds, treasury money, etc.) and has increased the number and size of companies traded on international exchanges.

Company shares are traded on financial markets and their products are traded on economic assets markets. These two kinds of markets sent signals that managers take into account to increase profits. They are ready to give up certain units or sell the entire company if this operation increases the value held by shareholders. Since maximizing profits takes precedence over developing market segment, the dominance of

finance capital has emerged in relation to actual production of goods and services. Currently, the value of financial securities (shares of all sorts, bonds, treasury assets, etc.) far outweighs the economic value of produced goods in the international financial exchanges; there are fears of collapsing financial assets portfolio value.

International capital flows contribute to the spread of financial instability and crisis. Thus, growth of interest rate as a measure to attract owners of cash resources can trigger a worsening of financial instability and may slow down getting out of the crisis.

Short-term capital movements are influenced by changing interest rates and exchange rate expectations on a country. Long-term capital movements are influenced by expectations of profit opportunities and currency exchange rate of that country.

ompanies from various countries are willing to invest in a country where they could earn profits higher than in their own country. They have greater reason to invest in a country where the currency exchange rate appreciates or at least, there is no reduction in purchasing power. World states budgets were and continuous to be affected by huge costs in last years.

Much of excessive budgetary costs are covered by foreign loans and taxes which are the main sources of budget revenues. Amounts of money to be paid for service by a state institution (taxes) and contributions owed to the state administration by individuals and juridical institutions without direct services given in return (taxes) are necessary and bring a number of advantages in society. They are a condition of modern civilization. Thanks to them, people can receive services of vital importance for the functioning of society.

The use of taxes to cover budget excessive expenditure and sometimes irrational means reducing or liquidation of national programs for the repair of infrastructure in each state or does not allow hiring of persons required to improve quality of public services (teachers, policemen, etc.).

Usually, politicians and governments make too many promises that do not comply. Many of the current financial problems derive from the previous periods, being taken from predecessors.

Parliaments and governments are trying to find solutions to financial problems which are becoming bigger and bigger, but not always succeed. In the coming years problems will take larger scale. Promises regarding employees wage, health care, social assistance, public pensions will be more difficult to achieve, and some even remain unfulfilled.

All these immediate and long-term effects do not stop at country borders. They extend, world states confronting them and other various aspects of current economic crisis.

Conducting business is influenced also by outsourcing processes. The concept of outsourcing has emerged in the last few decades and means moving of entire sectors of activities to other specialized companies that offer benefits in terms of quality-price relationship. Another related process is the "offshoring", which consist in moving production facilities in new areas, potential markets with cheap qualified labor force.

In a globalized world, certain events in a country are related to events taking place in another distant country. In current crisis exchange stocks are in a situation of instability and have recorded some fall from very high levels to extremely low value of fractions.

4. Impact of economic crisis on Romania and its mitigation measures

In Romania, there are not used financial titles such as derivative loans subprime - mortgage loans with high risk. Their absence did not prevent affecting Romania the crisis that began in USA in summer 2007.

The credit crisis has expanded gradually in all the world's financial centers and strong confidence between financial institutions has decreased, because banks not knowing the financial situation of competitors feared to borrow money for fear it could not recover them. Financial deadlock appeared initially in strong financial centers of the world, evolved in waves also to Romanian financial institutions. Many have stopped loans given to different companies, leading to reduced production and investment. During crisis, the hardest blow was received by Romanian exporters because the demand for goods fell down and funding opportunities from EU and U.S. which are major trading partners of Romania. The worst hit areas are manufacturing, timber, mining, auto industry in the beginning of 2008, real estate, etc. In 2008 many companies producing furniture went bankrupt, most of their workers increased number of unemployed.

For some employers the economic crises was an opportunity to bankrupt firms and take money, get rid of employees and sell the land on which the company is located. In this way employers could get more money than if production continues for a long period. Later, on these lands are built residential areas. In the

fourth quarter of 2009 there are some signs that the crisis peak has been passed. The exchange rate stabilized at 4,2-4,25 Ron for one euro, investors began to regain optimism regarding perspective of business in Romania.

In November 2009, according to Eurostat data (Economist 2010) the numbers of unemployed in Europe reached nearly 23 million and were recordings of interest rate increases. The highest unemployment rates were registered in Latvia (22.3%) and Spain (19.4%). Low unemployment rates were registered in the Netherlands (3.9%) and Austria (5.5%). In Romania, in the third quarter of 2009 was an unemployment rate of 7.2%. In the euro area, region comprising the strongest economies of the EU, the unemployment rate was 10% in November 2009.

In 2010, Romania's economic situation will improve gradually, without this to be reflected immediately on welfare of population. As arguments of a timid economic recovery is the resumption of exports based on economic recovery in Europe and maintaining of a high level of exports of Dacia cars in Western Europe. A major contribution to good assessment of Dacia car by western buyers was that it occupied 3rd place in a top of brands published in France.

For 2010, the government forecast growth of 3.5% of Romanian exports, given that much of the production of Ford cars and Nokia phones from Jucu is exported. Although the government expects exports growth to be the locomotive of economic growth, it allocated only one third of the export support fund from last year (2009) due to reduced budgetary collections and small opportunities to increase it as long as the flat tax and VAT remain unchanged (www.romania-actualitati.ro).

In 2010 recalls of consumption and production are reduced, while the companies continue to dismiss workers, at least in the first half of year. If Romania population would buy more local products to meet various needs, economic growth would be more stimulated by consumption. In this case is Poland, which is the only EU country which experienced growth in 2009 and which ensures its development by consumption of local products.

Economic recovery in 2010 depends on the evolution of economic activity in the euro area and the macro-economic policy. In our country, the state, most businesses and households have net debtor position towards the banking system; the loans are greater than deposits. This means that banks no longer have local resources to give new loans to stimulate the economy and must rely on funds brought from abroad.

Effects of crisis are felt in a smaller scale on the banks, because banks were able to cover the decrease of profits due to the creation of provisions which are made by increasing interest to good customers. One of the sectors that will stop the decline in 2010 will be the hotels, and real estate will continue to be affected by the crisis at least in the first half of year. Areas to be supported by economic policies are the infrastructure and agriculture. Agricultural production in Romania is below potential standing at less than 10% of this potential. Romanian agriculture covers only a small fraction of consumption. Thus, although it could produce for 100 million inhabitants, Romania is still dependent on food imports.

The analysts forecasts on global developments in economic activity in 2010 are contradictory. Some say 2010 will be one in which the economy will resume its upward trend and others that have been developed so far only the first phases of the crisis. As arguments for returning of recession are unemployment rate evolution, retail sales, oil prices and problems in areas such as automotive, real estate and capital markets.

Since the second half of 2009, the largest and richest economies of the world, with some exceptions, such as Great Britain and Spain have started increasing again. Other countries are still in recession such as Ireland and Latvia. Global economic downturn has been reduced by developments in economies such as China, which has stalled but not decreased, India and Indonesia.

To stop the recession extensive measures have taken: Governments have given guarantees billions of dollars to save banks from bankruptcy and have implemented fiscal stimulus programs, banks have reduced interest rates, etc. Economic growth in 2010 and 2011 will be a particularly slow due to contraction of consumption and low medium-term recovery and needs of deposits reconstruction spent in the meantime. In 2010, GDP will pick up slightly due to abroad increasing. Domestically, demand remains low due to reduced consumption in conditions of relatively low incomes and government intervention to reduce the budget deficit to 6.4% of GDP (Economist 2010). However, the government announced that it will not increase wages of civil servants and will implement further reforms in the pension system.

For government expenditures reduction is necessary to cut public spending but must also consider the requirement to stimulate positive processes in the economy through fiscal policy measures.

During the crisis period, as Keynes said, government should not be limited to reduce spending because on medium and long term, it reduces resources for economic growth. Romanian Government has taken measures to stop 28 decline and restore growth, which are government

priorities for 2010. Objectives of measures to stop crisis are various, their synthesis is given below (Beck 2003).

• Support for economic activity and employment through substantial public investments. In 2009 and 2010, Romania government allocated the highest percentage of GDP for investment in the last 20 years. The objectives of investment are continuing work on Transilvania motorways, subway modernization, works for the rehabilitation of schools, hospitals, agricultural modernization.

• Support business through reinvested profits tax free. This measure contributes to maintaining and creating new jobs.

• Support companies that hire unemployed through exemption from social security contributions.

• Encourage construction of housing by providing bank guarantees. In 2010, through the "first house" program encourage new house construction.

• Continuing and Extended Program “Rabla” and imposing the Program “first track”.

• Construction of houses for rural specialists. The measure supports economic activity by building over 25,000 homes in rural areas and improves the quality of medical and educational act in villages.

• Rehabilitation of building blocks, thus contributing to job creation and lower maintenance bill.

• Increase storage capacity of agricultural production through "first silo”. The measure contributes to keeping production on longer period and uses them on favorable terms.

• Restoration of county roads.

• Sales of ANL houses to tenants. The measure seeks to ensure that the sale of homes to facilitate building new homes.

• Supporting SMEs and local authorities accessing EU funds by providing state guarantees.

• Helping companies with postponing payment of due liabilities of economic agents affected by the economic crisis.

• Exemption from payment of income tax to the state budget and budgets of social security contributions during temporary interruption of work on a maximum of 90 days. The measure is saving a significant number of jobs.

• Compensation of recoverable VAT with payable VAT or other taxes due to the state.

• Accelerate small and medium enterprises by according state aid.

• Reducing no fiscal taxes and tariffs.

• Maintain VAT at 19%, flat tax and personal income at 16%.

5. Conclusions

For year 2010 is expected a modest economic growth of 1.2%. Romania's exit from the crisis, probably in the second half of 2010 does not necessarily end problems. Thus, for social indicators (income, unemployment) to reflect an improvement in the situation it will take several quarters. However, after returning to growth in economic activity, the Romanian economy will be characterized by a lack of competitiveness and efficiency in both public and private sectors in comparison with the EU economies. Deficit reduction requires continued efforts to raise economic efficiency of activities in our country.

Romania's economy suffered a severe recession in 2009 (Economist 2010). Gross domestic product contracted by about 7.1%. Decrease in economic activity was caused primarily by declining domestic and external demand. In 2009, Romania's budget deficit increased to 7.8% of GDP.

Gross Domestic Product estimated for the fourth quarter of 2009 was declining in real terms by 6.5% over the fourth quarter of 2008 (Economist 2010). Volume increases in activity were recorded in agriculture, forestry and fishery (0.7%) and industry (4.0%).

Workload was significantly reduced in construction, in trade, transportation and telecommunications. GVA volume decreases were registered in financial activities, real estate, renting and business services.

As a consequence of negative developments recorded throughout the economy the volume of collected taxes to the state budget reduced, net taxes on registering a decrease of 12.2%. In terms of Gross Domestic Product in the fourth quarter 2009 domestic demand decreased by 9.9 percent compared with same quarter in 2008, mainly on decreasing with 25.2% of gross fixed capital formation. Total final consumption decreased by 4.0%, mainly on account of decline of final consumption expenditure volume of households by 5.8 percent, therefore reducing the volume of goods sales by retail (-13.7%) and public services (-14.9%). A positive effect is improving net exports as a result of reducing the volume of imports (-11.1%) and the growth of exports (2.9%).

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GLOBALIZATION OF ECONOMIC DEVELOPMENT

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Abstract: *Globalization is characterized by amplifying the linkages between national economies and eliminating barriers between nations. Major contributions to the globalization of economic development have had costs reducing of transport and revolution induced by information technology. They have made possible the globalization of trade, investment and financial markets. Technical innovations in communications and finance led to the globalization of financial services. Currently, people can quickly come in contact wherever they are in the world, thanks to modern means of communication. New techniques allow creditors and debtors to inform quickly about market conditions and to transfer the funds to banks offering the best interest rates.*

Keywords: *globalization, economic development, economical growth, sustainable development*

JEL classification: F01

1. Introduction

Now a fundamental feature of world economy is the increasing of globalization. It is characterized by amplifying the linkages between national economies and the increased trend of reducing and eliminating barriers between national economies.

Globalization - definition and causes

Globalization reflects carrying a greater part of economic activity between firms and individuals from different countries. It represents the current state of economic development characterized by economic internationalization and globalization of trade and economic interdependence of national and world states.

Thus, a number of humanity activities take place on a scale and a horizon so large that go beyond national borders, within which sovereign states exercising their right to governance. Globalization, as worldwide movement, means declaring a specific territory, a locality or a state such as international or global territory, with responsibilities and rights at worldwide scale.

After the views of economists, the process of internationalization of the economy has gone through two phases, now being in the third phase. The first phase was conducted in the first three decades of the postwar period, characterized by the development of trade between the economies of the world, who retain their national character. The second phase, specific to period 1970-1990, the Tran-nationalization, is characterized by the appearance of foreign investment flows. The third phase begins in the 90s and is characterized by the existence of technology and information transfer flows at global level. It is also called borderless economy or global economy.

Major contributions to the globalization of economic development have had costs reducing of transport and revolution induced by information technology (Lipsey1999).

They have made possible the globalization of trade, investment and financial markets. Technical innovations in communications and finance led to the globalization of financial services. Currently, people can quickly come in contact wherever they are in the world, thanks to modern means of communication.

New techniques allow creditors and debtors to inform quickly about market conditions and to transfer the funds to banks offering the best interest rates. Large firms can only make transfers while banks near them are open. Once closed these banks, firms can make transfers to their reopening the following day. In that time, the funds can be transferred to another bank (money market) where are used until it closes and then moved to another bank. Globalization was not possible before the computer age when international communications were much slower and expensive than today. Transferring abroad or bringing into the country of cash funds is facilitated by the establishment of increased bank deposits of national currency in exchangeable currency.

The first favoring factor of globalization has been the development of currency markets in last decades of the twentieth century. This development was stimulated by the progressive elimination of global domestic interest rate ceilings and the removal of exchange control, which occurred gradually in different

countries. Removing restrictions caused the rapid integration of domestic monetary markets in international markets.

Globalization of financial markets is caused by the behavior of trained creditors and debtors handling large sums of money and investigating the possibilities of placing or purchasing monetary funds in favorable conditions.

Until the last decades of the twentieth century, financial markets were highly specialized. Because obtaining and analyzing information was heavier, more specialized institutions were needed that expertise, each of them relatively narrow operations. Speed in obtaining information led to collapse of the high degree of specialization of financial markets. Communications development and scale economies have led to integration of various financial operations in an investment. Thus, in many countries banks have entered on the market where value titles are traded, while many firms selling value titles began to offer a wide range of banking services. As integrated companies are growing also are expanding operations conducted by them. Current trend is unifying commercial and investment banks, transforming them into universal banks.

2. Implications of globalization

Globalization has several implications that government officials and executives of firms should consider in their decisions.

1. Increased intensity and speed with which events are taking places produced in various places around the world

Due to globalization, external economic shocks are transmitted rapidly and quickly affect the socio-economic developments in different countries. Currently the world economy is facing the biggest financial and economic crisis that goes far beyond that of the years 1929-1933. Crisis began in the United States of America and by the effects of globalization has been transmitted in a relatively short time in all developed, developing countries and third world countries. Rapid spread of economic and financial phenomena raises at least two problems for governments:

- to create mechanisms to ensure protection against unforeseen financial and economic shocks;
- to develop policies based on anticipation of external events to valorize the opportunities of development and minimize costs incurred by propagation of phenomena.

2. Overlapping globalization with phenomenon of increased regionalization

Regionalization is a consequence or a way to protect against globalization. It is seen as an area where capital flows, goods, people, information and culture take place. Regionalization is a form of interrogation to support their national economies to become more competitive on global market, facilitating multilateral cooperation on a global scale. In essence, countries in a regional economic bloc reduced customs barriers mainly for its members and less for other countries, which constitutes a discriminatory measure contrary to the characteristics of globalization. Forms of economic integration occurred, represented by regional political and economic organizations that reflect the concentration of economic activity into three main regions: North America (NAFTA), Europe (EU) and Asia (ASEAN).

3. Influencing economic policy by globalization process

Economic policy, namely the set of principles, rules, means and methods used to achieve a proposed strategy for development is influenced by globalization. Thus, macroeconomic policy of supporting economic growth must take into account the high degree of openness of an economy comprised of globalization. High economical growth can not be supported by an expansionist economic policy based on low interest rates because it would facilitate access to new loans of firms with losses or without markets. Such a production increase would be unsustainable.

Also, lower interest rates causes capital outflows that would lead to currency depreciation. Reducing cost of information and support transparency of economic environment allow relatively easy to identify the economic policy decisions and anticipate its effects. Globalization of economic development affects also the national currency depreciation. Thus, to eliminate the trade deficit could act upon regulating quantities imported and exported, or (and) the prices of imports and exports. Typically, direct intervention on prices is difficult because they are under restrictions of global market.

A method practiced to eliminate the external deficit is depreciating national currency, which stimulates exports. Favorable impact of national currency depreciation on the current account is temporary, the effect disappearing with the growing of domestic prices of goods and services.

In some cases, the economic policy aims to prevent or eliminate negative phenomena in the economy, the others to create conditions for accelerating socio-economic progress. Economic policy

comprises a multitude of partial policies, such as investment policy, industrial policy, agricultural policy, policy to train labor resources, trade policy, financial and credit policy, exchange rate policy, monetary policy, foreign economic policy.

Government intervention, characterized by measures designed to influence economic life, aim finally, long-term development. It seeks determining economic agents to accept guidance and decisions subordinate to public interest and keeping under control of key economic and social variables.

4. Increase competitiveness of economic agents

In conditions of globalization, companies must improve their ability to cope with international competition. They must take measures to increase the employment skills, increase investment, and improve management.

Greater competitiveness based on know-how and research activity, have international corporations, which contribute to the internationalization of flows of goods, services and capital. They tend to gain advantages in all sectors in which application of technology is possible. Emerging and growth of multinational corporations have changed the data on competition. Thus, appeared new global economic branches which are branches of the economy in which the competitive position of firms in a country is significantly affected by their position in other countries and vice versa.

The overall strategy of multinational corporations is based on increased interdependence between geographically separated activities of parent companies and subsidiaries. It involves the optimization of local advantages for each subsidiary and meeting the target market demand conditions.

According to global strategy, subsidiaries tend to specialize in the type of production which exploits the comparative advantage of the host country. Thus, labor activities are located in geographic areas with cheap labor force. However, research and development laboratories are built near the major universities in countries with high scientific potential.

In this way, transnational corporations globally redistribute production factors. They seek to gain advantages in production, marketing and research by combining all production factors at world scale, as a result of increasing economic globalization. There is a tendency of concentration of business in areas of greatest competitive advantages and to markets with high growth potential and demand a greater degree of liberalization and openness.

Currently, multinational corporations not countries are the first agent of international trade. Also, multinational corporations are promoters of the globalization of capital which includes a wide range of activities, dominated by services and featuring sophisticated financial instruments. Financial capitals contribute to the rapid development of global financial markets and has freedom to move where is better rewarded.

In the global economy, the size of firms has become an essential feature. Size of enterprises condition their expansion abroad, while creating operational and financial synergy designed to reduce vulnerabilities. Through purchases and mergers of firms it can be obtained advantages having more extensive and diversified activities.

5. Globalization increases the competitive pressure.

Telecommunications revolution has led the globalization of economic competition; national markets couldn’t be protected by the high costs of transport or by blocking access to foreign companies. Globalization of competition is beneficial for consumers who can choose quality goods from a variety of goods.

Domestic firms facing foreign businesses, to survive are forced to raise economic efficiency and to adapt quickly to market requirements. Increasing competition leads to a continuous pressure on manufacturers to reduce costs, increase quality and productivity. To reduce labor costs, firms seek areas with cheap labor and qualified for the "implantation" of business units. Thus lead to phenomenal of activity migration in the U.S. and Canada to South, then from Western Europe eastward to economies in transition.

A country with cheap labor and growing market is the Czech Republic. Currently, many transnational corporations and some Central European companies move eastwards, redirecting to areas with cheap labor force.

6. *Globalization diminishes or reconsiders state sovereignty.*

State plays an important role in global politics but can not control the policy and globalization. State ability to control domestic life has diminished. State become more globalized and internationalized, an important component in its policy is supporting regional and global market forces.

Undermining state sovereignty and authority is reflected in its inability to control migration. International labor movement is a characteristic of the globalization process. In past decades there have been significant movements of labor and capital in less developed areas to economically developed areas. Process

was favored by some countries (Canada, USA, for example) policy to attract highly skilled migrants. However, the process was accompanied by an illegal emigration of unskilled or semi-skilled workers. Usually immigration policies are characterized by attracting highly qualified people and stop the entry of unskilled workers.

7. *Risks of globalization*

Globalization involves numerous risks including increased environmental degradation, widening gaps between rich and poor, spread in various countries of information (textual or image) and patterns of undesirable human behavior, global financial crisis, etc.

Global economic growth accelerated reduction of global resources and has affected the planet's regenerative capacity including the balance between different life forms and structures that they generate. It is estimated that economic activity in the last two centuries has consumed natural resources at a pace that exceeds the capacity of the planet to regenerate.

Human assault on nature has made important changes in the relationship between man and nature, especially by disruption of the natural environment. In the relationship with nature people must have a responsible attitude, because economic growth and quality of life are conditioned by maintaining and improving the quality of the natural environment. Any breach of the relationship between economy and ecology lead, sooner or later, to economic and social disturbances with negative consequences for society.

After the collapse of "socialist camp" and the end bi-polar power at world scale, the line of world conflicts is not between East and West, but between rich and poor. Globalization of economic development has helped to increase the proportion of the general wealth which is unequally distributed. This inequality can be expressed by figures: 40% of world population, namely 2.7 billion people live on less than $2 per day, (i.e. the World Bank's criteria) - they are part of the poorest population (Economist 2007).

The contradiction between rich and poor has become chronic in both developed countries and the richest countries. Widening inequalities have various causes: rising incomes in the context of globalization, increased competitiveness of firms by introducing new technologies, the emergence of huge gain opportunities, etc. In a globalized world, laws are similar or nearly identical for the rich and the poor. The rich are able to use laws in their favor. Thus, in a market economy increases the importance of consulting a lawyer, which can warn the employee, entrepreneur, investor, a freelancer about changes of law which is expected, and when laws change, property owners can change.

Laws must be respected; businesses must be conducted without their violation. Employers have some "legal loophole" to protect its revenues. They can shelter incomes, passing income streams on their business and can pay less money in the form of taxes. Employers can reduce their taxable income by shifting expenses to their company, benefiting from the deductibility of some taxable income. However, employers retain some income on companies they hold, which enables them to make spending with untaxed money. Employers have legal advisers who lower the risk of money or goods loss.

Everyone faces the risk of revenue loss, but the consequences and losses are different for employees or employers. Employers are likely to reduce income, which exceeds the level required to meet various needs. Employees and retirees live a fierce battle for survival when revenues are substantially reduced.

To a certain point, inequality is inevitable and desirable. Perspective of well fare encourages people to work harder to develop new skills and take risks. A special problem is to establish "fair contribution" through taxes on rich people satisfying the general needs of society. Tax rates should not diminish the economic initiative and not to encourage a massive avoidance of taxation.

With the continuing development of media and communication, information are transmitted very quickly from side to side of the globe. Rapid transmission of information has some negative consequences. Along with very useful information transmitted between people from different countries, also information (as images or text) less necessary, as triviality and pornography etc.

A negative consequence of globalization is the dehumanization of individuals caused by the huge gap that was created between technological and social components of human society. Thus, if technological progress has made huge leaps from antiquity to the present, social and ethical-moral component of the planet has seen very little progress, if not, in some aspects even regressed.

People face major existential shortcomings related to recreational needs, peace, love, self-fulfilling, contemplation. Eliminating existential gaps require the creation and adherence to a value system that contributes to the fulfillment of human life. To enjoy life and really live, the individual must deal with what life gives. However, to mitigate the serious problems created by people and troubles they are facing, must improve human behavior and institutions activity. Man must enjoy life, along with the loved ones with more pleasure, to enter, when the opportunity arises, in an atmosphere of play and joy. He should help to relieve stress situation through an appropriate conduct.

3. Economical growth - advantage of globalization

Economical growth is the fundamental factor of human development. It expresses enhancing capacity of economy to provide more final goods in the structure and quality of demanded by consumers. Economical growth medium made possible increased economic welfare, level of investment, average lifetime. In turn, human development becomes a factor to support economical growth.

Economic growth is stimulated by the widespread use of high technology, deepening international division of labor as a result of increasing trade and capital movements, economic expansion of market goods, etc.

From the results of economic growth should benefit a large number of people and not just small groups. For this must be simultaneously satisfied certain conditions in the growth, such as:

- Economic growth to generate employment;
- People must have access to education systems to enable them acquire the knowledge and skills required by new jobs;
- Corruption to be reduced;
- People who, for specific reasons, not have a place in a competitive system to receive social protection from state and social communities.

A special problem for Romania is to bridge the gap of economic development levels of the overwhelming majority of EU countries; gap reflected by the level of per capita gross domestic process.

Table 1: Gross domestic product per capita, calculated on the euro exchange rate

Country	Years					
	2002	**2003**	**2004**	**2005**	**2006**	**2007**
Austria	27100	27500	28500	29700	31100	32600
Bulgaria	2100	2300	2600	2800	3300	3800
Denmark	34400	35000	36500	38300	40500	41700
Italy	22700	23200	23900	24400	25100	25900
Luxembourg	53800	57200	60100	65000	71800	75600
United Kingdom	28800	27700	29600	30400	32000	33700
Romania	2232	2419	2816	3688	4530	5743
Slovakia/Slovenia	12300	12900	13600	14400	15400	17100
Spain	17700	18600	19700	20900	22300	23400
Sweden	29600	30800	32000	32600	34500	36300
Hungary	6900	7400	8100	8800	8900	10100

Source: Statistical Yearbook of Romania 2008, p. 892

It finds that GDP per capita calculated on the euro exchange rate in 2007 is 7.8 times lower than in Denmark, 13 times lower than that of Luxembourg, and is higher than that in Bulgaria by 51%. In 2009, Romania's GDP decreased by 7.1% since 2008 (Economist 2010).

The decrease was due to lower volume of gross value added of all sectors and household items: hotels and restaurants, transport and telecommunications (-11.2%), construction (-13.6%), whose contribution to the formation of Gross Domestic Product was 31.1%. Net taxes on products decreased by 12.4%.

Total final consumption decreased by 8.2% in 2009 compared with the previous year, especially by lowering with 10,8% the expenditures of households. Gross fixed capital formation recorded a 25.3% reduction.

4. Conclusion

Gap reducing requires a growth rate higher than average annual growth rate in the whole EU. Achieving sustainable economic growth on long term requires ensuring political conditions, economic and social to favor:

- Physical and human capital accumulation;
- Efficient allocation of resources;
- Continuous improvement of technology.

Sustainable economic development involves quantitative qualitative and structural transformation in scientific research, manufacturing technologies, organization of work, human behavior that ensure the consumer's satisfaction without compromise or harm those of future generations.

The concept of sustainable development reflects the enlargement of opportunities for choice of present and future generations in all fields - economic, social, cultural or political. It involves ensuring economic, cultural and environmental friendly conditions.

Sustainable development implies the maintenance of opportunities and living conditions for future generations, especially renewable natural resources, at least at the level existing for current generations and diminishing existing environmental factors affected by pollution. For this purpose to be possible must be achieved an economic environment, that through its inputs and outputs, is in compatibility with the dynamic natural environment, with the needs of present and future generations to coexist and succeed.

Sustainable development aims to find the optimal interaction and compatibility of economic systems, human, environmental and technological trends. These systems are dimensions of sustainable development which include energy, agriculture, industry, investment, human settlements, and biodiversity.

Achieving sustainable development requires provision of minimum conditions, such as: resizing growth by increasing the quality sides of production, eliminating poverty in conditions of satisfying basic human needs, conservation and enhancement of natural resources, monitoring environmental impact of economic development, maintenance of ecosystems, risk control of the technologies, increasing participation grade in decision-making on environment and economy.

At the center of development actions is man. To highlight opportunities of people options express is calculated a human development index based on the following indicators: life expectancy, literacy level and educational coverage level and the domestic product per capita. These indicators are used to highlight three essential aspects of human life: longevity, education and standard of living.

Achieving sustainable development is based on macroeconomic policies able to promote compatibility of economic, human, environmental and technological systems.

These policies include:

- measures taken by government to stimulate economic development such as: creating an adequate legal framework, creation of proper infrastructure, redistribution of income in accordance with generally accepted principles of social justice, harmonization of conflict of interest;
- creating conditions for expression of competition in the economy;
- adopting a rate of economic development targeted outwards, towards international trade.

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TRIANGLE MANUFACTURING WITHIN EAST-EUROPEAN APPAREL INDUSTRY

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Abstract: *The paper attempts to shed some light on the developments within the global apparel value-added chain, setting the East-Asian sourcing networks as a benchmark. The basic hypothesis is that apparel exporting firms from central and Eastern Europe can draw on the Asian "tigers" experience, by shifting from mere assembly of imported inputs to other forms of exporting, which are more domestically integrated and higher value-added. They can thus concomitantly, follow the Asian model of triangular trade and turn to account their own trumps, resulting from European integration. In this process, FDI by Western firms located at the upper-end of the apparel chain, which is essentially buyer-driven, might play a critical role.*

Keywords: value-added chain, sourcing networks, triangle manufacturing, offshore assembly, technological upgrading

JEL Classification: F 12

1. Textiles and clothing: the driving force of industrial development

Textiles and clothing have always been the spearhead of industrial development, regardless of time and place. In the 19th C, they played an important role in Western nations' industrialization, helping them conquer leading positions in international trade. In the 20th C, many developing nations also used these two sectors in order to expand their exports and become competitive on the world markets. Although sustainability of their economic growth remains a controversial issue (Krugman 1994), primarily because their overall gains in factor productivity relative to the high rate of factor input are below expectations (Young 1995), it is generally admitted that the Asian countries' success is largely due to the adoption, ever since the 1950s, of export-oriented development strategies, which heavily relied on textiles and clothing.

Yet the Asian group is not a homogenous one but consists of two types of countries: the old "tigers", also called NIEs (Republic of Korea, Singapore, Taiwan and Hong Kong), which are the most industrially advanced, on the one hand, and the new "tigers" (Indonesia, Malaysia, Thailand etc.), which are on a lower development stage, on the other hand. (Lull, 2001) The nations in the latter sub-group have closely followed those in the former one by adopting the same kind of export-based policies. The difference between the two lies in their technological standard: the new tigers are lagging behind the old ones, having been unable to go beyond the offshore-assembly stage.

A clear illustration of this technological gap is offered by the apparel industry, a true driving force of Asian industrial development. The NIEs, which were specialized in offshore assembly activities between the 1960s and the 1980s, gradually became traders and overseas buyers, thus managing to pass the bulk of labour-intensive assembly operations further onto the new tigers. This major trend is still manifest: assembly operations are now being further transferred to the even poorer countries in the region such as Vietnam Bangladesh, Sri Lanka and others. Obviously, a large share also goes to India and mainland China, two large countries that are relatively abundant in unskilled labour.

2. NIE's apparel sourcing networks: a global model

Success in complex exports is based on a genuine development of technological knowledge and skills. (Lull, 2001) East-Asia's rapid industrial development is a solid proof that the developing world is not fatally condemned to remain shackled at the bottom of the technology ladder. Developing countries can climb up the value-added chain, should they be able to turn into account their physical and human resources. This means acquiring higher technological knowledge and skills. The global apparel chain visibly epitomizes this process, despite the fact that clothing ranks among the domains where industrialized countries have been most protectionist. "Within manufactures, the protection of industrial countries against imports from developing countries has traditionally been most severe and most important in the textile and apparel sectors". (Cline 2004)

Since the apparel chain is buyer-driven, firms in the NIE's endeavoured to improve their position therein, by shifting from low value-added activities such as mere assembly of imported inputs to more complex forms of exporting, aimed to secure better use of home resources and higher value-added. The first

move was shifting to full-package supply, by providing additional services (mainly of a logistics nature) beside basic assembly; subsequently, they embarked upon more sophisticated operations, by "joining their production expertise with the design and sale of their own branded merchandise in domestic and overseas markets". (Gereffi, 1999)

Briefly, the Asian apparel chain has been constantly developing over time so that now it's made up of two distinct components: full-package sourcing networks, functioning globally and driven by Western retailers and marketers, and production networks, which are organized on a regional scale and driven by branded manufacturers. (Gereffi, 1999) More specifically, while firms in the mature tigers have got more and more involved into the building, expansion and coordination of full-package sourcing networks, the new tigers remained stuck in offshore-assembly schemes. Actually, the old tigers managed to create some kind of *multilayered sourcing networks* (Gereffi, 1999), in which they are acting as middlemen: dealing with Western retailers and marketers, to whom they ship full-package garments on the one hand; carrying out the assembly work in other low-wage countries in the region, on the other hand. By doing this, they benefited from an industrial upgrading, stemming from a set of linkages and spill-over effects, both upstream (with the lower end) and downstream (with the upper end) the commodity chain. Upstream linkages are based on the information flows with the manufacturers that carry on the assembly of imported inputs; downstream linkages are based on the information flows with foreign buyers acting on large Western retail markets.

3. The European apparel industry: specific features

Because of their flexibility and effectiveness, the Asian sourcing networks might rightly be considered as a working model for the global apparel industry. This organizing pattern is also to be found in other regions of the world, in similar but not identical forms. Yet everyone seems eager to draw on Asia's experience in this field. A large amount of research work has focused on investigating the organization and functioning of the global apparel chain, trying to ascertain whether the NIEs model could be implemented, as successfully, in the case of other big exporters of clothing such as Mexico (Gereffi, 1999), India (Ramaswamy-Gereffi, 2000) or China (Yang, Zhong, 1998).

In the case of Europe, the configuration of the commodity chain in the apparel industry is also roughly similar to Asia's but at the same time, slightly different from it. The semblance resides in that, just like the Asian NIEs, a large group of European countries (mostly from central and eastern-Europe) have acted, for decades, as large suppliers of garments for Western firms. But unlike the Asian NIEs, European suppliers have been unable as yet, to shift from lower to higher value-added activities within the chain. The prevailing communist order until the early 1990s precluded European countries from carrying out the investments required for the upgrading of export industries, mainly in the textiles and clothing sectors, which have always held a substantial share in their exports. In the apparel business, well-known retailers and marketers from Western countries would place orders to manufacturing factories in the East, also providing blueprints and designs and furnishing fabrics, linings as well as all required accessories such as buttons, zippers etc. Thus, production was generally subcontracted to Eastern manufacturers, whose unique obligation was to produce the final product by cutting the material and sewing the parts together. Due to this state of affairs, in the early 1990s, Europe offered an industrial background that was strikingly contrasting: the West and the East exhibited quite different factor endowments, euphemistically called complementarities. Capital and technology were relatively abundant and therefore cheaper in the West; labour was relatively abundant and therefore cheaper in the East. In this particular context, not at all surprisingly, trade relations between Western and Eastern firms continued under the same terms as before 1989: the former ship parts to be assembled by the latter and import the finished product. This form of cooperation, dubbed by the German term of "lohn" is still in practice.

Secondly, the EU is holding a different position within the world trade in clothing, relative to its main competitors. This particular aspect has been apparent ever since the early 1990s (during the Uruguay Round), when the decision to phase out the Multi-fibre Arrangement was taken. It was then presumed the removal of the MFA would yield graver consequences (materialized in greater losses) for Europe as compared with other regions, especially the United States. According to scholars, the bigger loss for Europe is due to the high volume of export trade of the EC with other developed countries in MFA products which are quota restrained from developing countries. (Trela & Whalley 1990) The accuracy of the above prediction was confirmed by reality. As data in table 1 below indicate, in 2003, the last year MFA was in force, the inter-bloc trade in clothing was visibly unbalanced: while exports of clothing from EU (15) accounted for 3.7 percent and 8.5 percent of US's and respectively Japan's imports of clothing, US's and Japan's exports of clothing accounted for merely 0.4 respectively 0 percent of EU's imports of clothing.

A third discrepancy resides in Europe's high integration degree relative to other regions of the world, reflected by the sizable share of intra EU-trade in EU's total foreign trade. In the clothing sector, the share was 44.9 percent in 2005; by comparison, in the same year, only 9.8 percent of US's imports of clothing came from North America.[18] Secondly, factors of production are highly mobile within the single market; because persons and capital can move freely across national boundaries throughout Europe, multinationals have a more important role to play, to the effect that vertical FDI can gradually become a substitute for subcontracting. This can make a great difference in that FDI will give rise to technological spillovers, thereby enabling eastern countries to upgrade their apparel industry. The evidence was provided by firms headquartered in Honk Kong, whose investments in the apparel industry of mainland China – after the annexation of the small province in 1996 – have yielded outstanding results. We are going delve more into this matter later on.

4. International subcontracting: advantages and drawbacks

Subcontracting is still being used on a large scale in global marketing, as a convenient non-export mode of penetrating foreign markets. Also known under the name of "contract manufacturing", this type of strategic alliance is "a cross between licensing and foreign investment. A company contracts for the manufacture or assembly of its products by manufacturers established in foreign markets, while still retaining the responsibility for marketing and distributing its products." (Albaum, Strandskov, Duerr, 2002). In the apparel chain, "firms supply intermediate inputs (fabric, thread, buttons and other trim) to extensive networks of offshore suppliers, typically located in neighbouring low-cost countries with reciprocal trade agreements that allow goods assembled offshore to be re-imported with a tariff charged only on the value added by foreign labour". (UNIDO, 2003)

International subcontracting has proved its efficiency mainly in labour-intensive industries, for two main reasons: firstly, increasing competition among producers in these industries (fuelled by a booming demand on developed countries' markets for labour-intensive products) has strongly pressed them to transfer labour-intensive manufacturing operations to low-wage countries, in order to cut their costs. Secondly, since apparel is unskilled-labour intensive, thereby offering a natural comparative advantage to developing countries (Cline 2004), the wage rate differential turned out to be a good opportunity for everyone: firms in industrialized countries have used it in order to become price-competitive; firms in developing countries have used it as a means to increase their exports. The apparel sector provides ideal conditions for this type of business because the production of ready-made clothes requires a number of operations such as sewing, embroidering etc., which are mostly hand-made.[19] Perhaps the most important single operation which resists mechanization is sewing…This makes garment-making an ideal operation for international subcontracting, from the technical point of view. (Sharpston 1975) Statistics clearly confirm this fact: in a classification by EU Commission, comprising 43 industries ranked according to average capital intensity (measured by investments in tangibles per person employed in 13 EU countries, during 1999-2001), the clothing sector ranks last.[20]

Subcontracting within the apparel chain may occur on either an *industrial* or a *commercial* basis. In the former case, it consists of merely assembly operations performed by sewing plants located abroad, generally in low-wage countries. In the latter case, subcontracting takes the form of full-packaging, in which the buyer-seller linkage between foreign merchants and domestic manufacturers allows for a greater degree of local learning about the upstream and downstream segments of the apparel chain. (Gereffi, 1999) European subcontracting in the apparel sector has generally taken the form of OPT[21], which is basically an industrial-type arrangement. A typical OPT involves the export by a Western firm of semi-finished components (fabrics, accessories etc.) to a manufacturer located in a CEE country, in order to be processed there, and subsequently, the re-import of the finished products. In this way, certain phases of the garments production (mostly the labour-intensive ones such as sewing) are carried out by foreign subcontractors located in central and Eastern Europe.

[18] The greatest supplier is Mexico, with 8 percent. (WTO – *World Trade Statistics*, 2006)

[19] "This means that almost all garments are still assembled and stitched together by hand. Partly, that is because hands have remained cheap in some places and the cost of transporting their products has dropped enormously...But a group of European firms and research organisations hopes to change that. ("Automated tailoring comes closer", *The Economist*, Jul 13th, 2006)

[20] European Commission – "EU Sectoral Competitiveness Indicators", Office for Official Publications of the European Communities, Luxembourg, 2005

[21] Outward Processing Traffic

Generally, it won't require much effort to demonstrate that subcontracting yields uneven results for the parts involved. As a rule, gains are larger on the contractor's side because he is able to control the whole business, both technologically and commercially, while the subcontractor is almost entirely dependent on him. This is all the more true in the apparel industry, where the value-added chain is buyer-driven. Unlike hi-tech industries such as mobile phones, flat-screen TV-s, internet equipment etc., whose functioning is based mostly on producer-driven chains (implying that the manufacturer is much closely linked to the market), the apparel sector involves a more strict separation between manufacturing and retailing. Obviously, this is a serious drawback for the subcontractor: the lower he is placed on the commodity chain, the bigger the handicap; hence the necessity and wish to climb up the chain. Before 1990, clothing-manufacturing plants from central and Eastern Europe were less concerned about this particular detail. Naturally, since they weren't really concerned about their profitability (due to the generalized soft budget constraint policy), why ever would they have bothered about industrial upgrading? Their unique objective was to fulfil the export plan targets.

If subcontracting relations between East-European enterprises and Western firms were biased in favour of the latter, why weren't they wound up after the fall of the Iron Curtain? After all, once the trade between the two groups of countries became liberalized, ex-communist nations were free to opt for those export formulas that would best suit them. Yet despite their shortcomings, subcontracting relationships were not abandoned and for good reasons. First, in the early 1990s, the possibility of choice for East-European nations may have been wide in theory but in reality, it was quite limited. Following a long period of intra-COMECON relations, their industries (textiles and clothing in particular) were facing a technological gap (weak managerial expertise, lack of own brands etc.) that made them virtually uncompetitive on Western markets. In this context, subcontracting was an efficient means to further sustain exports. Moreover, in this way, industrial mechanisms in the newly-emerged market economies were kept in motion, thus preventing a dangerous economic breakdown.

That subcontracting could still be beneficial to manufacturers in CEE countries was highlighted by Deardorff and Djankov (2000), using evidence from Czech firms during 1993 through 1996. The authors set out from the realistic hypothesis that, after the fall of the Iron Curtain, "some sort of cooperation between a Western and an Eastern firm can be profitable". Their study focuses on the significance of subcontracting (generally characterized as non-equity arrangements) as a source of cross-border knowledge transfer and increased efficiency for Czech firms, concluding that "subcontracting between Western and Eastern firms serves as a channel for the transmission of knowledge that benefits both firms and, as a result of this transmission, workers in the Eastern firms acquire characteristics that make them more productive, not only in the firms that receive the technology but also on the broader market of the Eastern country." (Deardorff, Djankov (2000)

5. Multinationals and industrial upgrading of host-countries

The benefits of subcontracting are but a particular case of a more general process by which trade between industrialized and developing countries generates R&D spillovers in favour of the latter by "providing channels of communication that stimulate cross-border learning of production methods, product design, organizational methods and market conditions". (Coe, Helpman, Hoffmaister, 1991) If international trade fosters the transfer of technical knowledge in favour of developing countries, FDI by multinational firms headquartered in developed countries seems to be an even more effective conveyor, although the circumstances under which a multinational company would be tempted to switch from subcontracting to production through its own subsidiary, located in the foreign country are still up to discussion. Considering US multinationals' practice for example, one can see that both formulas are being used. Certain companies, especially branded marketers (e.g. Liz Claiborne) rely heavily on subcontracting; they possess well-known brands but they carry no production; others (e.g. Levi Strauss & Co.) prefer vertical FDI or joint ventures, in order to ensure better access to the foreign market and of course, to better control production. (UNIDO, 2003) The difference between the two options may seem minor from the multinational's point of view but it is noteworthy as regards the technological perspectives for the developing country. The case of Levi Strauss & Co., depicted by Rodriguez-Clare (1996) highlights the strict separation of functions between the parent-company and the foreign subsidiaries, which seems to be the general characteristic of American FDI in the apparel chain: the parent-company, which is located in San Francisco, is responsible for the higher added-value functions such as strategy, marketing, design, inputs procurement etc., while most of the production process is carried out by affiliated companies located in low-wage countries. The manufacturers "will

combine imported inputs (furnished by the parent) with labour and additional intermediate goods bought locally such as thread, cloth (lining) and some producer services".

Early studies from the 1970s addressed important questions as regards the role of multinationals in international trade, such as whether and to what degree vertical and horizontal FDI can generate spillover benefits for the host-countries (Caves,1971) and how costly these transfers really are (Teece, 1977). Globerman (1979) identified a number of indirect benefits, which "may also be realized from non-specific human capital investments made by foreigners". A more comprehensive analysis by Lull (1978) is focused on export-orientated multinationals (TNCs), which are classified into four categories according to the amount of linkages they create in the host-economy. According to Lull's hypothesis, the apparel industry ranks among the sectors that are likely to create the most linkages. This process nevertheless depends upon "the stage of development of indigenous industry, the availability of local skills and technology, institutions and government policies, changes in demand and technology in world markets and their political attractiveness to TNCs". More recently, Rodriguez-Clare (1996), relying on newly-formulated theories by Helpman, Ethier, Markusen and others attempted to build a model intended to help quantify the impact of multinationals on developing countries through the generation of backward and forward linkages.

6. Technology transfer within the global apparel chain

The main characteristic of the above-mentioned studies (to which many others might be added) is perhaps, their relatively high degree of generality, i.e. the attempt to encompass the effects of FDI upon host-countries' industries, no matter when and where they take place. Research nevertheless went much deeper into the matter, trying to identify country- as well as industry-specific features. Conclusions nevertheless do not always converge. According to a study by Blomström (1986) on Mexican manufacturing, the foreign firms enter into the "modern" sector, increasing structural efficiency therein, and leaving the "traditional" sectors as they were. As regards technology transfer via FDI, Blomström' s analysis "does not support the hypothesis that foreign investment speeds up the transfer of any technology to Mexico, not available also to domestic competitors". A similar conclusion is reached by Aitken and Harrison (1999), using evidence from Venezuelan firms. Subsequently, Görg and Strobl (2000), followed by Görg, Strobl and Barrios (2005), using data from Irish manufacturing between 1972 and 2000 reveal "two likely effects of FDI upon host-countries' economies: a competition effect which deters entry of domestic firms and positive market externalities which foster the development of local industry". In conclusion, multinational companies do exert positive effects on the development of indigenous suppliers through the creation of linkages, both upstream (on indigenous final good producers which may be in the same sector as multinationals) and downstream (on the development of indigenous suppliers).

Other research studies are more focused, delving even deeper into the matter. Such a piece of work, containing a pertinent analysis regarding technology transfer via FDI in the apparel industry was carried out by Thompson (2003); it deals with the extensive vertical integration of Hong Kong garment-manufacturing firms into mainland China after the tiny province's sovereignty was transferred back to Beijing. According to statistics, Hong Kong firms employ more than 11 million people in the region of Pearl River Delta, one of the three main economic regions of China, and have provided some two-thirds of the foreign direct investment there.[22] Having relied on several previous studies regarding the impact of FDI on China's economy, Thompson's analysis sets out from the basic question on whether and to what extent Hong Kong apparel FDI in China "provides any worthwhile, still less an optimum degree of spillover", keeping account of the notorious fact that "most of the manufacturing industries in Hong Kong had been built by the use of cheap labour, and in the garment industry, at first glance, this has remained the case". To answer this question, a clear-cut distinction is made between two basic types of technology multinationals can transmit to host-countries: 'hard' technology, which is generally embodied in capital assets, and 'soft' technology, consisting of "advanced managerial practices" that spill over into the host-countries business environment. Since the soft technology – which materializes in a wide range of relatively high-value-added activities such as management (orders transmission and processing, production coordination, inventory movement control, product development etc.), merchandising (storing, retailing, packaging etc.), finance, information technology etc. – is usually controlled by lead firms such as fashion designers or branded retailers that are located at the upper end of the apparel chain, it could be best conveyed to overseas manufacturers through vertical FDI. These spillovers will take place either horizontally, flowing along intra-industry linkages, or vertically, resulting from ties among firms in different industries (mostly the collaborative ones such as

[22] "The Resilience of Freedom" (special report on Hong Kong), *The Economist*, June 30th, 2007

suppliers and buyers). The conclusion of the aforesaid study is that "Hong Kong garment firm FDI in mainland China brings with it a high degree of cutting-edge, world-class, soft business know-how that is as much required in China as any hard technology".

7. Industrial relocation throughout Europe

Both equity (FDI-based) and non-equity (subcontracting-based) dealings between Western firms and manufacturers located in CEE countries are part of the broader process of industrial relocation. As a rule, subject to relocation in low-wage countries are either labour-intensive operations or products designed for the lower end of the market. However, this tendency has changed noticeably in the last years, at least in Europe. In Italy for example, "many mid-market brands have already moved almost all of their production abroad…Most of the Navigare's garments are made in the firm's own factory in Bulgaria or elsewhere in eastern Europe."[23]

Why industrial relocation to Eastern Europe is still a good business for Western firms in general, and for those in the apparel chain in particular? According to a research paper by Graziani (1998), the special attraction of Eastern Europe as a redeployment-zone derives not only from its lower labour costs, which are below EU average but also from other factors such as geographical and cultural proximity (merchandise can be shipped in a few days, as compared to months if shipped from Asia), as well as the quality of its labour force, resulting from the existence in the area of a long tradition in textiles and clothing production. "For time-insensitive goods and long production runs, China is still the clear winner for global factory relocation. But when businesses need products finely tailored and delivered quickly and flexibly, then eastern Europe scores highly."[24]

Consequently, outsourcing in Eastern Europe is now in full swing, the apparel industry retaining a substantial share thereof. Large amounts of subcontracting dealings and FDI from Western firms are heading toward nations in the area.[25] For Western firms, outsourcing in Eastern Europe can yield, among other benefits, a strengthening of their competitive advantage over China and other non-European rivals such as the NIEs. A study by Giuli (1998), based on Porter's competitiveness principles shows that the EU textile industry is less competitive in terms of factor cost but better positioned in terms of other factors, notably composition of demand, local supported industries and local rivalry.

8. Possibilities for technology transfer within the European apparel chain

As previously shown, industrial upgrading in the apparel chain is primarily associated with the shift from assembly to full package production. (UNIDO, 2003) Obviously, from this point of view, the prospects for East European firms will depend upon two paramount trends: (1) *the intensification of intra-EU trade in apparel vs. the trade between the EU and countries from outside* is expected to tighten outsourcing connections between Western retailers and branded manufacturers on the one hand, and manufacturers from CEE countries on the other hand. This tendency is backed by Brussels' trade policy: if non-EU fabrics are used in OPT arrangements, a 14 per cent tariff is levied on re-imports, which offsets the advantage of lower production costs. (UNIDO, 2003)

Trade statistics clearly exhibit a growing share of trade in apparel in total intra-EU trade. As regards the imports from outside, EU is the world's largest importer of clothing, its total value of clothing imports amounting to €103.7 billion ($128.7 billion) in 2005, followed by the United States, with €64.5 billion ($80.0 billion). (If one takes into account only the extra-EU trade, then EU is the second-largest importer of clothing, with €51.7 billion, behind the United States.)[26] Statistical data indicate an ascending trend in the value of imports of clothing from outside the Union. However, in the first four months of the year 2006, total imports of textile and clothing items into the EU from the world diminished by 4% compared to the first four months of 2005. The main overall result of the MFA demise is that China, taking advantage of its natural competitive advantages has doubled its EU market share mainly at the expense of other EU traditional sourcing countries.[27]

[23] *The Economist*, Feb 23rd, 2006
[24] *The Economist*, Dec 1st , 2005
[25] „Clothing imports from the east European countries into the existing EU in 2004 were 2 billion pieces, with a value of €22.3 billion ($25 billion), representing a 19% share of the EU's clothing imports. (*The Economist*, Dec 1st , 2005)
[26] WTO – *World Trade Statistics*, 2006
[27] European Commission – "EU and the World, External Trade"

(2) *The speed of the integration process developing within the EU* is important from two points of view: firstly, it is expected to bring about increased volumes of FDI in the new member-countries. While the amount of FDI flows is undoubtedly important, the goal and structure of these flows are more relevant from the perspectives of this paper. In other words, the quality of FDI may vary according to their origin. Typically, Japanese FDI has been considered to contribute more to the host-country growth than American FDI. (Dunning, 1973) Although generally, US-based multinationals tend to transfer their newest technology overseas through subsidiaries rather than licensing or joint ventures (Mansfield, Romeo, 1980), their overseas investments seem to be driven by company-specific competitive advantages (Caves, 1971), requiring protection from potential foreign rivals. This involves a heavier stress being laid on confidentiality (in respect of production and management techniques used) rather than on symbioses with the host-country counterparts. Obviously, technology can hardly be transmitted through this type of FDI, be it vertical or horizontal.

One question must then be answered in the first instance: what category does FDI from Western European firms fall into? Relying on Dunning's eclectic theory, Graziani (1998) contends the basic motivation behind Italian FDI in Eastern Europe has been resource seeking, not necessarily scarce natural resources, but chiefly "low cost labour plus in some case skilled labour. Most of the time, the products obtained in the process are meant for reexport". The other two objectives underlying FDI decisions by multinationals, market seeking and support seeking, seem to be much less represented. These findings are definitely encouraging for apparel exporters from CEE countries because they point to a likeness between FDI from Western European firms and the ones by Japanese firms.

Secondly, regional integration is important because at this level, "upgrading involves shifting from bilateral, asymmetrical, inter-regional trade flows to a more fully developed intra-regional division of labour incorporating all phases of the commodity chain from raw material supply, through production, distribution, and consumption". (Gereffi, 1999) This means that once OPT arrangements will be put an end to, firms from CEE countries must be able to withstand international competition on their own. Yet there is little evidence supporting this change so far. According to Graziani (1998), very few East European firms managed to switch from OPT to autonomous production and sales under their own brand. Under these circumstances, FDI looks like being the best alternative for all the firms in the region, including those located in fringe countries like Romania and Bulgaria. Apparently, these "are rapidly upgrading the ability of their working force in clothing production, also thanks to foreign investment and technical advice." (Graziani, 1998)

Conclusions

Textiles and clothing rank among economic sectors that have scored poorest technological headway combined with most intensive protectionism over time. Despite these drawbacks, they were often used as a jumping board for further industrial development, by both industrialized countries and more recently, by the NICs. Due to its relatively high labour-intensiveness, apparel manufacturing (mainly assembly operations like sewing) has been delocalized and transferred into lower labour-cost countries of the world. Today's world trade in clothing is therefore highly polarized: high-value added activities such as design, management, branding, retailing etc. are concentrated in developed countries while the low value-added ones are being carried out by enterprises located in poorer countries.

However, this status quo is being gradually altered by globalization. Easiness of communication and cheaper transportation costs have paved the way for the development of multi-layered outsourcing networks, aimed at supplanting traditional subcontracting formulas. Firms in developing countries can improve their position within the global commodity chain by shifting from low value-added activities such as mere assembly of imported inputs to more complex forms of exporting such as full-package, aimed to secure better use of home resources and higher value-added. This process – in which vertical FDI can play a decisive role – is expected to engender transfers of technical and managerial knowledge as well as other valuable technological spillovers in favour of the former.

Since clothing still holds a sizable share in most of the east-European countries' exports, finding ways and means by which their position within the global apparel value chain might be improved is of utmost importance for these nations. However, as shown by the Asian experience, industrial upgrading usually develops unevenly across one region, with certain countries always leading the way and others, much slower to adapt, lagging behind. There aren't any strong reasons to believe that Europe could be an exception from this rule. Only the circumstances are somewhat different in that the European process is basically

(www.ec.europa.eu/trade/issues/sectoral/industry/textile/index_en.htm)

influenced by two major factors: on the one hand, the deepening of European integration will be likely to bring western and eastern European firms closer to one another; on the other hand, increasing competition from China, India and other suppliers released from under the constraints of the demised Multi-fibre Arrangement will, most probably, speed things up.

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TOPICALITY OF SCIENTIFIC RESEARCH AND INNOVATION IN ROMANIAN ECONOMICS

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Abstract: *Scientific research and economic innovation represents a fundamental process, meant to contribute to boosting dialectic development of our economy. The main Idea we follow constitutes the relation between accumulating science and the manner of use in present economy. World today accumulated science, though reached a dead end, in the meaning of not knowing to use it efficiently for people are more pressed by the present interest. Immediacy, the short time, exaggerate preoccupation on wealth and power influence negatively the evolution of society on long term and very long term on the basis of powerfully developed science.*

We live in an agitated world, in which economic development through science, as an ideal on long term and present reality, direct, immediate and harsh enters in a relation obviously tensed.

Key words: economic scientific research; creativity and intelligence, economic innovation; economic phenomenon; economic process; integrative approach; heuristic function

JEL classification*: I2*

I. Research and innovation essentiality

Scientific research and innovation are involved organically in conceiving, following, evaluating and use of results of all documents, facts, phenomena and economic processes, understood as fundamental expression of social/human action in all evolution levels.

Our steps pursue two concepts: the filiation of ideas and classical situation. The filiation of ideas reveals the efforts for understanding economic phenomena, for creating, perfecting and reconsideration of economical theory, in an endless process. The classical situation means consolidating, correlating and synthesizing scientific acquisitions to the certain moment, including appreciating present status in the direction of future development in economic science.

In every era, people were preoccupied to understand internal relations of their action for material existence, starting from observing the limitation and rarity of economic resources. The totality of reflections which refer to economic activities in society (ideas, theories, doctrines, ideologies) forms an **economic thinking,** which has an emphasized historical feature.

Economic reflections can be common and specialized. Common economic knowledge stands in reflections which are possible to be made by all people, as participants to ordinary economic life, without them handling knowledge and necessary instruments to thoroughly understand economic reality. Specialized economic knowledge is the scientific knowledge, consisting in people's reflections who participate to economic life on the grounds of prior professional training, specialized and having corresponding research instruments for economic problems and showing results of their research and discoveries. Thus, scientific knowledge exists science a long time, science, in economy, in has been made the passage from manufacturing to industrial capitalism. Therefore, we do not consider entirely justified the expression according to which, nowadays, economic life passes to scientific knowledge. Though, actually meaning, the passage to a new stage of scientific knowledge, that of elevated, wise scientific knowledge, which contributes to solving tension shown above.

In such circumstances we emphasize the importance which scientific research and economic innovation have, point out in four dimensions. First dimension considers that scientific research and innovation form an organic logical and historical unity. The second dimension considers that economic phenomena are, in their essence, social phenomena conceived and established always with a precise human finality. The third dimension is in the tension between unlimited human needs, permanent, and limited economic resources, rare, expensive and more difficult to obtain. Thus, the access to natural resources and economic-financial, national and global, is ensured by the context of consolidation tendency on long term of foreign resources dependency. The fourth dimension considers demand of growth and diversification of scientific-innovation exchange of Romania with all countries in the communitarian European area and in extra communitarian.

Economic scientific research means the action of examining thoroughly, of studying, of analysing rationally, at system level, phenomena and economic processes, thus to obtain new elements materialized in novel variants of understanding their essence, of their internal causality and new possibilities of improvement.

Economic innovation represents the action of change, of introducing in a process or o system, an already known novelty which to solve the economic problem, to ensure dynamic optimization of rare and limited resources use.

Understood as such, research and innovation are harmonized in an objective manner, are mutually conditioned, determining the growth of productivity, of systemic economic efficiency. As a consequence, these two concepts exist and function in their unity, ensuring obtaining from a unity of resources spent an economic effect more socially useful.

The distinction between these two notions is realised, especially, by the social need of boosting relational dynamics between research and innovation. Such a dynamics must lead to a new specific human behaviour, of researching by innovation and innovating by research, especially in the conditions of economic-financial resources are rarer, more expensive and more difficult to obtain.

As a consequence, economic scientific research and innovation prove to be an authentic axis of economic development, an anatomic and functional ensemble, which maintains the elements of economic system, defined by own content and permanent dialectic movement. In the presentation of our paper we use with priority the expression of scientific research, understanding, though, its intimate unity with innovation.

Scientific research is materialized nowadays in change tensions, being an expression of rational perceptibility of economic evolution by those who have a creative gift, of inventing and innovating, and, also, have the motivation of being involved in such matters. Research and innovation actors think to their interest, correlated with public agenda inherited from a revolution which, like all the others in history, imply an ensemble of quality transformation from an entire system or from its components, holding an instant and leaving a century.

Scientific economic research implies essential change in the behaviour, in science and technology, in education or in family, in religion and so on. All these hold in an essential proportion of economic creativity. Creativity means, above all, creation of new, then reception and consumption. In the conditions of very fast technical-scientific progress, with low creativity degree, in economy could not be solved efficiently the complex problems of resent development. As a perspective, heroes of a country will be the authors of most daring and important accomplishments in science, techniques, economy and culture, moving the competition between countries from military environment to in great values human creativity environment. New and original ideas will become decisive, though not by they. It must be known that in their way, multiple blockings appear, determined especially by the system of training and education, as well as the psycho-social climate. Any participant to economic life can be creative, though for this reason multiple conditions are imposed, which are related to the specific person, to creativity levels, to individual structures and creativity group, to identification instruments, to creativity evaluation and so on.

Creativity contents are in its novelty and originality, thus an economic good, as impossible to imitate and with further effects, as harshly judged by contemporaries, being appreciated as fantasy, useless. Though, such a situation does not discourage geniuses to exist and manifest, opening new tracks to technical-economical efficiency.

Specialists appreciate that creative minds always imply: imagination (capacity of accomplishing infinity of new associations, by composition and decomposition of ideas), judgement (combining imagined ideas, reuniting in the same class of those homogenous and rejecting the inappropriate), taste (the internal sense of delimitating aesthetic by unaesthetic, decent by insignificant).

Creativity as a composite element of scientific research, as a psychological formation of great complexity is materialized in many and diverse effects such as: productivity, value, quality, utility and so on. These are not limitative, though they must be connected with many others such as: ingenuity, novelty, originality, dare and so on.

Creativity is, as a matter of fact, a **social need**, which must ensure economy development, though its accomplishment depends on removing inappropriate mentalities.

We point out, for this matter, that presently in Romania, although in other more developed countries as well, some negative cultural-educational phenomena manifest, such as: preference for a more complete education than stimulating the development of an original and creative thinking (conformist specialists, with diverse stereotypes); passive character, non-creative of some actions from free time; priority appreciation of scholars towards those with original ideas, who are somehow tolerated; many people frustration of creativity effort; tendency towards multiplication of same modalities of superficial behaviour, inefficient in personal life and so on.

Profound understanding of essence and scientific research functions and economic innovation presumes also capturing main tendencies of economic science, as organic part of science in its totality and coherence, which influences quality development of economy on grounds of an adequate scientific research.

In the frame of science system and, economic science evolutes permanently related to other sciences, and, especially, with sciences of nature. Revolution in natural sciences, starting with physics, brings back to exegetes' attention the concept of **perfect prediction,** as an object of economic science. For this matter, an elitist trend of economic thinking accepts the **transformation of economic science into an exact science,** as any natural science. Therefore, notions, theories and economic science methodology should be profoundly restructured. For example, the theory of economic equilibrium, having as a genesis the progress of mechanical physics of Newton, is about to give way nowadays, on grounds of modern physics revolution, to disequilibrium, to chaos. Appeal to chaos theory made by various economists is an eloquent proof.

Another tendency of economic science is represented by movement towards interdisciplinarity and multidisciplinarity. Causes are found in> complexity of analysed object; science insight in every section of economic life; technicization and instrumentalization of scientific knowledge action; realisation of a tighter link between raw science and applied science, between fundamental theoretical disciplines and those experimentally-applied; accentuating historical dimension of science; transition to theories with a high degree of structural organization, open to natural environment and human created environment and so on.

In such frame emphasizing the importance of social signification which economic phenomenon holds, social by its essence, is imposed. Therefore, when taking decisions of economic politics, one must consider the dimension and social impact these are having, thus, generates earlier or later, heavy costs, economic, social and ecologic imbalance, hard or impossible to manage. Economic science holds, before all, a **powerful social determination**. As a consequence, must act in whole society for a rational economy, grounded on free market mechanisms specific to pluralism of property forms, on honest competition, fair, legal and allowed, on precise rules and with exhaustive equality, for an economy which does not waste resources and does not destroy natural environment, an economy which ensures equal chances for all concerning access to information, culture, markets, technologies, credits and so on. Thus, facts and acts of economy can satisfy every man's needs, giving him the dignity and allowing him to fully take advantage of right and own liberties of human essence.

II . Features of scientific economic research and innovation

A primary feature of research and innovation results from the fact that along with some elements of "civil global society" brings back the social problem, as opposed to forces behind the globalization process.

In such circumstances, economic science enters more in direct contact with natural sciences, with juridical sciences, with technical sciences and so on. It must approach the more complex human, in his quality of consumer, of labour resource, of governor, which opens new tracks of investigation and offers more refined measurement instruments, of perfecting and capitalization of proper economic analysis. Experience of totalitarian systems in past century shows us that only in democracy are possible economic development and plenary affirmation of human aspiration, regarding rights and fundamental liberties of human being. For such reason, reducing citizen only to his dimension of consumer generates premises of new type o totalitarianism, overly dangerous.

Thus, economic science includes in research domain also the present role of state. Though, it concerns the state as an organizer of social cohesion, the regulating state, the judge state and not primarily state as an economic actor. Such vision above state in actuality rehabilitates the public service and its social utility, meaning population demands broad and quality public services to international standards and performances, of health, education, social protection. Health, culture, personal safety can not and must not be transformed into goods only for market's sake.

Another feature of economic science, implicitly of economical research, represents the growth of mathematics application in researching economic phenomena and processes. Mathematics proves to be an essential and indispensible instrument for elaboration of models, for analyse and explanation of profound sides of economic processes and phenomena, for their provisioning, for discovering relative truth elements in economy.

Using mathematics in growing proportions in economic research derives from Alexander Rosenburg's appreciation, renowned specialist, who states that "economic science is not a discipline, though a particular theory, of extreme character and, thus, by its nature, mathematical"[28]. Although economy is not in absolute supremacy domain of mathematical instrument. For this reason Anghel Rugina underlined that "in reality, roots of nowadays problems could be expressed only in quantity"[29]. By extension, the relation between economic science and mathematics must be understood and applied correctly, as to other science,

[28] Mark, Blaug, "Economic Theory in Retrospective", Didactic and Pedagogic Edition, Bucharest, 1992
[29] Anghel, Rugina, "Principia Oeconomica", Romanian Academy Edition, Bucharest, 1993

ensuring necessary unity, implicitly, on communication of rational systems, conceptual, by creative efforts form both ways.

An obvious feature of economic scientific research and innovation regards integrative approach of economic phenomena. This means the transition form classical, analytical model, to the synthetic-integrative of economic thinking model. Thus, integrative disciplines are constituted such as: cybernetics, communication theory, system theory, semiotics and so on, which favour transfer of methods, principles and concepts in science branches.

A movement of science and economic research is established as such, towards logics competence domain, blending with common, empirical, scientific, systematized knowledge. Different logical model are built with the help of generalization of essential aspects, common to a mass of homogenous phenomena. Thus, economic science fulfils more systemic functions such as: methodological function by which critique analysis and methodical evaluations of real facts are accomplished, passing beyond their immediate appearance and manifest, thoroughly, in their essence, which favours the arrangement and systematization of empirical material; heuristic functions, meaning the discovery of new facts and regulations; explicative function, like understanding known facts; prospective or predictive function, which allows anticipating relations between facts, establishing new prediction referring to manner of prefiguration of economic reality in the future.

We reveal, as well, the fact that ideas of causality, of probability and so on, gains space in economic science and research, using, also, insistently, logical methods such as: axiomatization, formalisation, modelling.

From the epistemological standpoint, the most difficult problem facing economic scientific research is testability or verification of results, which means extending experimentation as a modality of verification accepted assumptions. Unlike natural and technical sciences where there are relatively wide testing possibilities, in economic science these are more limited because of the specificity of economic phenomenon, which directly implicates human being, with own system of need and interests, as well as due to study object's dynamics, risen social cost of experiment and so on. Practically, economists exclude the possibility of laboratory experiment, on people and groups of people. Paul Samuelson, Nobel Prize laureate for economy, reveals that "We can not accomplish controlled experiences of chemist or biologist. Like astronomer or meteorologist, we must, in great measure, be satisfied with observation"[30]. Also, Britannica encyclopedia records: "There are no laboratories in which economists to test their hypothesis. Economy is in an essential manner, a moral science."[31]

We underline other form of experiment such as econometric testing, inqueries and surveys, simulation, scripts, have an important part in investigation and evaluation of economic phenomenon. For such matter, Maurice Allais, another renowned Nobel Prize laureate for economy reveals that "Contemporary literature offers numerous examples of aberration which can appear even from neglecting essential principle that a theory is valuable only in when it agrees observed facts and the only source of truth is experience. The submission of data to experimentation is the golden rule which governs any scientific discipline."[32] Therefore, experiment, despite its critique, is the main procedure of verifying assumptions and fundament scientific conclusions. Absolute and relative progress is exemplified, on one hand, by growth without precedent of possibilities of electronic calculus and modeling techniques of economic phenomena, and on the other hand, by strong diversifying the experiment meets.

It results the essence of scientific research and economic innovation is directly connected to methodology of achievement, contributing to discovering new knowledge and new facts, as an authentic art for discovering truth in economy. Thus, research and innovation favours directly the accomplishment of Romanian economy joint with community economy, in the post-adherence of Romania to European Union.

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AN ECONOMETRIC ANALYSIS CONCERNING THE INFLUENCE OF THE INVESTMENT CLIMATE ON THE INVESTMENT DECISIONS

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Abstract: *The aim of the paper is to investigate whether it is the investment climate that contributes in attracting FDI inflows. The quantitative analysis takes into consideration explanatory variables such as the: quality of the institutional framework, economic performance of the host country, efficiency of the monetary policy, degree of the economic freedom, political rigths and civil liberties, technological infrastructure, access to finance and openess to trade. Using a pool data regression, a Two Stage Least Squares method and having as sample 30 European countries, the authors reach to the conclusion that the investment climate does matter for attracting FDI.*

Key words: investment climate, investment decisions, econometric analysis

JEL classification: F20, F21, F23

1. Introduction

It is widely accepted that foreign direct investment (FDI) plays a significant role in the competitiveness of every economy, since it fosters the production, encourages the technological transfer, the import of know-how, increase the employment opportunities, access to foreign finance, in general brings significant benefits for the recipient countries in terms of economic growth. Making a brief analysis of the FDI patterns among 30 European countries (the 27 countries members of the European Union and also Iceland, Norway and Switzerland), we can notice that not all the countries have the capacity of attracting the same amount of FDI flows. Therefore arise the natural question: what makes some countries more succesful in attracting FDI than others? Beside giving a review of the literature body in this respect (both theoretical and empirical papers), the authors' aim in this paper is to investigate whether it is the investment climate that contributes in attracting the FDI inflows at the level of the considered sample. In order to offer a response to this question, first of all there are identified those factors which, in the authors opinion, form the investment climate and that may exercise a certain influence, either favourably or adversely, upon the attracted volume of foreign direct investment. The quantitative analysis takes into consideration explanatory variables such as the quality of the institutional framework, the economic performance of the host country, the efficiency of the monetary policy, the degree of economic freedom, political rigths, civil liberties, technological infrastructure, access to finance and the openess to trade. Using an econometrical methodology based on a pool data regression, on a Two Stage Least Squares method and having as sample 30 European countries, the authors reach to the conclusion that investment climate does matter for attracting foreign direct investment in European Union.

2. Theoretical background

Although there is nowadays a large body of literature that focused on the determinants of foreign direct investment inflows, there is no universal acknowledged "recipe" for attracting larger amounts of FDI. In the economic literature, there have been made some attempts in order to identify those determinants that create a friendly investment climate.

The investment climate, such as it is defined by World Development Report (2005), is "the set of location-specific factors shaping the opportunities and incentives for firms to invest productively, create jobs and expand". Nowadays, it is accepted and proven (both in a theoretical and empirical way) that the business environment, respectively the investment environment can generate a significant influence on the productivity, the economic growth and on the economic activity in general (Bosworth and Collins, 2003;

Rodrik and Subramanian, 2004; Loayza, Oviedo and Serven, 2004; Djankov et al., 2002; Haltiwanger, 2002). When a company decides to expand its activity on foreign markets, through a foreign direct investment, the first step consists in acquiring all the relevant information it needs for developing future activities in the host-country. A long-term foreign direct investment will try to diminish or even eliminate the risk associated with the realized investment (risk that can be related to the political or to the macroeconomical stability), and will look for an economic system with transparent legal regulations concerning foreign ownership and profit repatriation (Resmini, 2000). This could easily explain why most of the times, foreign direct investment flows locate finally in developed and not in less developed countries, where they could easily obtain lower production costs.

Lall (1997) describes, in a conceptual manner, the main determinants that form the investment climate of a host country.

Table 1: Investment climate components of a host country

Economic conditions	• Markets	• Size • Income levels • Urbanization • Stability and growth prospects • Access to regional markets • Distribution and demand patterns
	• Resources	• Natural resources • Location
	• Competitiveness	• - Labour availability • Cost • Skills, trainability, managerial and technical skills • Access to inputs, physical infrastructure • Supplier base • Technology support
Host country policies	• Macro policies	• Management of crucial macro variables, ease of remittance • Access to foreign exchange
	• Private sector	• Promotion of private ownership • Clear and stable policies • Easy entry/exit policies • Efficient financial markets • Other support
	• Trade and industry	• Trade strategy • Regional integration and access to markets • Ownership controls • Competition policies • Support for SMEs
	• FDI policies	• Ease of entry • Ownership, incentives • Transparent and stable policies

Source: Lall, 1997

Once defined the foster determinants for FDI, there have appeared numerous studies that have focused, in a quantitative manner, on the validation of the importance of these factors through the application of some econometrical models, having as sample different European or non-European countries, taken individually, or grouped according to a geographical area. Moreover, a special attention was paid to the identification of other factors with an adverse or favourable effect on FDI.

There is a growing body of literature that states that the new wave of globalization has been changing the way in which the multinational firms pursue their investment strategies and altered the reasons for investing abroad. Dunning (2002) states that FDI in developing countries shifted from market and resource-seeking investments to more efficiency-seeking investments. Other authors argue upon the

importance of some traditional elements such as infrastructure, wages, sustaining the fact that the importance of these factors diminished lately, while the importance of other factors (such as the quality of institutional framework or the degree of economic freedom) has grown over the time, at the moment of taking the investment decision (Becchetti and Hassan, 2004). The connection between the institutional framework, political risk and FDI has been empirically analysed by Busse and Carsten (2005), on a sample of 83 developing states for the period 1984-2003. They found these variables extremely relevant for attracting FDI. Other more recently empirical studies realized on different samples of countries have found relevant for the investment decision variables like taxation, transparency, lack of corruption, property rights, different incentives for start-ups (Dumludag et al., Benassy-Quere et al. 2007).

A few studies brought into attention the influence of the economic freedom of the host country upon the FDI inflows from the developing countries, especially addressing to some aspects as the international trade policy, quality of the financial and banking services, protection of the property rights (Globerman şi Shapiro, 2003). The importance of the degree of economic freedom is also mentioned by Gwartney et al. (2003).

From the most recent empirical studies that have approached the proposed theme, that of quantifying the effects of the investment climate upon the FDI we can mention the one realized by Sekkat and Veganzoses - Varoudakis (2007), having in their sample developing economies from Southern Asia, Africa and Middle East. Their results show the significant relevance of some variables like openess of the economy, available infrastructure, economic and political conditions upon the attracted volume of FDI. Likewise, these authors propose some measures meant to be taken by public authorities in the direction of improving the investment climate, for reaching a positive effect upon the attracted volume of FDI.

Another study is the one realized by Quazi (2007), on nine countries from Latin America (Mexico, Argentina, Bolivia, Brazilia, Costa Rica, Ecuador, Nicaragua, Panama and Peru), their results suggesting a postive correlation between FDI and variables like the available infrastructure, investment returns, the degree of openess of an economy, as well as economic freedom. Moreover, the results point at finding a negative correlation between the same dependent variable and tax burden, barriers for trade, limited access to finance, public control on prices and wages.

Through other factors identified in the recent economic literature as being part of the investment climate and having a direct connection with the FDI we can count:

- civil liberties and political rights (Adam and Filippaios, 2007; Tuman, J., 2006, Biglaiser and Derouen's, 2006);
- degree of development of the technological capability of the host country (Palitt and Nawani, 2007);
- market capitalization (Nonnenberg and Mendonca, 2005, Claessens et al., 2001);
- inflation, exchange rate regime, openess to international trade, natural resources, barriers for investments, bureaucracy (Garibaldi et al., 2001, Nunnenkamp and Spatz, 2002).

There are numerous recent empirical studies realized on the theme of cuantifying the influence of the investment climate upon the investment decision, having as sample different groups of countries from European Union (Caetano and Galego, 2009; Delauney et al., 2008; Skuflic and Botric, 2006; Wunawa and Janincki, 2004). Still, there are just a few empirical studies that have included in their sample all the 27 states members of the European Union (Dabic and Bach, 2008), the present paper bringing new empirical evidence in this respect.

3. Methodological framework

In order to asses the impact of various variables potentially able to discriminate between countries in terms of attracting FDI performances, a formal model can be specified as:

$$ISD_{i_t} = \alpha_g + \alpha_i + h\begin{pmatrix} HICP_{it}, GDP_{it}, EFI_{it}, KOF_{it}, HT_{it}, MK_{it}, \\ MT_{it}, INT_{it}, PR_{it}, CL_{it} \end{pmatrix} + \varepsilon_{it} \qquad (1)$$

$$\frac{\partial h}{HICP} < 0; \frac{\partial h}{GDP} > 0; \frac{\partial h}{EFI} > 0; \frac{\partial h}{KOF} > 0; \frac{\partial h}{HT} > 0; \frac{\partial h}{MK} > 0;$$

$$\frac{\partial h}{MT} > 0; \frac{\partial h}{INT} > 0; \frac{\partial h}{PR} < 0; \frac{\partial h}{CL} < 0;$$

Here:

ISD- (natural logarithm) stocks of ISD for country *i* in current period *t*;
HICP- is the Harmonized Index of Consumer Prices;
GDP- (natural logarithm) Gross National Income / capita (purchasing power parity estimation);
EFI- Index of Economic Freedom as a proxy for institutional framework of economic processes;
KOF- overall KOF Globalization Index as reflecting the degree of globalization;
MT- merchandise trade (% of GDP);
HT- high-technology exports (% manufactured exports);
INT-internet users (per 100 peoples);
MK- market capitalization of listed companies (% of GDP);
PR- Political Rights Index;
CL- Civil Liberties Index;
α_g, α_i -the overall and, respectively, country-specific constants and ε_{it} are the error terms for $i=1,2,\ldots M$ cross-sectional units observed for $t=1,2,\ldots T$ dated periods.

The Harmonized Index of Consumer Prices is involved as a measure of the some potential unbalances of real sectors and as an expression of an inefficient monetary policy.

Despite some limitations, the real per capita incomes can be seen as a "reasonable way to measure economic performance"- Rousseau & Sylla (2003:392) since it provide a synthetically picture of the macroeconomic context.

Now there exist two widely accepted indexes of economic freedom: the one developed by the Fraser Institute (Economic Freedom of the World Index, EFW index), and another constructed by the Heritage Foundation jointly with the Wall Street Journal (Index of Economic Freedom). These two indexes are quite similar in terms of what they consider as a plus and as a minus when measuring economic freedom. We are employing the usage of the Index of Economic Freedom which is in a certain way more sensitive to both functional and institutional aspects of different components of economic freedom. This index includes all liberties and rights of production, distribution, or consumption of goods and services. The index is constructed using 10 specific composite indexes regarding business freedom, trade freedom, fiscal freedom, government size, monetary freedom, investment freedom, financial freedom, property rights, freedom from corruption, and labour freedom.

INT and HT designed to reflect the advances in the development of a country's technological capabilities. The merchandise trade and the KOF index are used as proxies for the degree of societal openness.

KOF Index of Globalization is computed based on Dreher (2006) methodology - updated in Dreher et al. (2008) and reported by Swiss Federal Institute of Technology in Zurich (http://globalization.kof.ethz.ch/). The KOF Index of Globalization measures the three main dimensions of globalization: (a) economic, (b) social and (c) political.

The market capitalization of the listed companies is considered according to the availability of financing resources in the host countries: the inflows of foreign direct investments will increase with an easier access to the opportunities to locally finance them at lower costs.

The Political Rights Index, developed by Freedom House, promotes a view according to which such rights enable people to participate freely in the political process, compete for public office, join political parties and organizations, and elect representatives which are involved in public policy making and are accountable to the electorate.

The Civil Liberties Index combines a set of quantitative measures for the freedoms of expression and belief, associational and organizational rights, rule of law, and personal autonomy without interference from the state. Each country and territory covered in the survey is assigned two numerical ratings- one for political rights and one for civil liberties-on a scale of 1 to7; a rating of 1 indicates the highest degree of freedom and 7 the least amount of freedom. These political rights and civil liberties ratings are combined and averaged to determine an overall "freedom status" for each country and territory. Countries and territories with a combined average rating of 1.0 to 2.5 are considered "Free"; 3.0 to 5.0, "Partly Free"; and 5.5 to 7.0 "Not Free". Thus the expected sign for these variables is negative and it should be understood as reflecting a favourable impact on foreign direct investments.

3. Data and results

All the data represents annual values between 1999 and 2008 for 30 European countries. The ISD, GDP, HT, MK, MT, INT values are from World Bank *World Development Indicators*

(www.worldbank.org/). EFI is provided by Heritage Foundation (www.heritage.org) while KOF is from Swiss Federal Institute of Technology (http://globalization.kof.ethz.ch/). PR and CL are reported by Freedom House (http://freedomhouse.org/).

The main characteristics of the foreign direct investments data are displayed in Table 2. This table suggests that there are some important disparities both in terms of investments stocks as well as in terms of their distributions among the considered countries.

Table 2: Main statistical characteristics of European FDI stocks

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Jarque-Bera
AUSTRIA	11.38	11.32	12.00	10.71	0.47	-0.01	1.71	0.49
BELGIUM	12.94	13.05	13.29	12.34	0.32	-0.86	2.78	0.87
BULGARIA	9.60	9.54	10.74	8.31	0.91	-0.07	1.67	0.52
CYPRUS	9.24	9.07	9.94	8.50	0.53	0.02	1.69	0.50
CZECH REPUBLIC	11.12	11.01	11.65	10.56	0.42	0.12	1.63	0.56
DENMARK	11.42	11.45	11.92	10.88	0.36	-0.18	1.99	0.34
ESTONIA	9.23	9.33	9.73	8.35	0.49	-0.79	2.50	0.81
FINLAND	11.02	10.96	11.43	10.43	0.35	-0.35	2.23	0.31
FRANCE	13.41	13.37	13.81	12.86	0.33	-0.34	2.15	0.35
GERMANY	13.13	13.15	13.46	12.60	0.31	-0.56	2.20	0.55
GREECE	10.32	10.28	10.88	9.65	0.41	-0.29	2.26	0.25
HUNGARY	11.04	11.04	11.52	10.50	0.33	-0.20	2.35	0.17
ICELAND	8.06	8.16	9.45	6.68	0.99	-0.03	1.79	0.43
IRELAND	12.13	12.12	12.31	11.96	0.13	0.18	1.79	0.46
ITALY	12.38	12.32	12.81	11.78	0.37	-0.36	2.02	0.43
LATVIA	8.64	8.50	9.35	7.92	0.56	0.09	1.57	0.61
LITHUANIA	8.99	9.01	9.62	8.29	0.50	-0.15	1.62	0.58
LUXEMBOURG	11.09	11.18	11.35	10.53	0.30	-0.96	2.79	1.10
MALTA	8.50	8.37	9.12	7.76	0.50	-0.07	1.72	0.48
NETHERLANDS	13.12	13.08	13.49	12.77	0.25	0.22	2.08	0.31
NORWAY	11.27	11.28	11.71	10.66	0.41	-0.37	1.76	0.61
POLAND	11.48	11.42	12.08	10.79	0.49	-0.15	1.67	0.54
PORTUGAL	11.21	11.11	11.66	10.71	0.33	-0.06	1.92	0.35
ROMANIA	10.20	10.16	11.18	8.97	0.83	-0.22	1.70	0.55
SLOVAKIA	10.08	10.07	10.73	9.05	0.61	-0.50	2.12	0.52
SLOVENIA	9.03	8.94	9.67	8.33	0.46	0.03	2.09	0.24
SPAIN	12.95	12.92	13.36	12.46	0.32	-0.12	2.04	0.28
SWEDEN	12.18	12.19	12.58	11.69	0.30	-0.29	2.09	0.33
SWITZERLAND	12.29	12.19	12.83	11.73	0.41	0.12	1.66	0.54
UNITED KINGDOM	13.63	13.64	14.05	13.17	0.33	-0.08	1.64	0.55

A preliminary cross-section *F*-test with its statistic values and associated *p*-values strongly reject the null that the fixed effects are redundant thus such effects will be incorporated in the model.

Table 3: Redundant fixed effects test

Test cross-section fixed effects

Effects Test	Statistic	Degree of freedom	Prob.
Cross-section F	227.266	(29,141)	0.000
Cross-section Chi-square	695.848	29	0.000

In the specification of the pool data model, a potential problem is represented by the issue of possible multicollinearity (for instance between politic and economic freedom). We test this by Hausman's test for endogeniety and by re-estimating the models using 2SLS. The endogeniety of the involved variables can be

generally rejected. Estimation of the involved equations by *Two-Stages Least Squares* procedure yields results similar to those obtained using OLS. This last estimation is reported in Table 4 with the lagged values of the explanatory variables as instruments.

The fixed effects portions of specifications are handled using orthogonal projections. In the balanced two-way fixed specification, these projections involve the approach of removing cross-section or period specific means from the dependent variable and exogenous regressors, and then performing the specified regression on the demean (see, for example Baltagi, 2001). The model estimators are reported in Table 4. It appears that all the explanatory variables are statistical significant and with the "correct" corresponding signs.

Table 4: Pooled IV/Two-stage Least Squares Regression Model

Sample (adjusted): 2002 2007
Included observations: 6 after adjustments
Cross-sections included: 30
Total pool (balanced) observations: 180
Instrument list: Constant, Lag 1 and Lag 2 of explanatory variables

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	-1.245	0.865	-1.439	0.152
GDP	1.207	0.216	5.599	0.000
EFI	0.050	0.012	4.075	0.000
KOF	0.021	0.008	2.480	0.014
HT	0.030	0.003	11.321	0.000
MK	0.005	0.001	4.452	0.000
MT	0.006	0.002	2.263	0.025
INT	0.015	0.003	4.409	0.000
PR	-0.090	0.071	-1.271	0.206
CL	-0.209	0.069	-3.019	0.003
Effects Specification				
Cross-section fixed (dummy variables)				

R-squared	0.988902	**Mean dependent variable**	10.96340
Adjusted R-squared	0.985911	**S.D. dependent variable**	1.656453
S.E. of regression	0.196614	**Sum squared residuals**	5.450644
F-statistic	330.6376	**Durbin-Watson stat**	1.372072
Probability(F-statistic)	0.000000	**Second-Stage SSR**	5.450644
Instrument rank	180.000000		

Taking into account the unit root tests in the residuals from Table 5 it can be concluded that despite some possible autocorrelations in these, the model is generally robust.

Table 5: Unit root tests for residuals

Newey-West bandwidth selection using Bartlett kernel
Balanced observations for each test

Method	Statistic	Prob.**		Observations
Null: *Unit root (assumes common unit root process)*				
Levin, Lin & Chu t*	-10.4817	0.0000	30	150
Null: *Unit root (assumes individual unit root process)*				
ADF - Fisher Chi-square	158.139	0.0000	30	150
PP - Fisher Chi-square	165.995	0.0000	30	150

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

4. Conclusions

Fostering FDI is not an easy task, given the extremely competitive international context and the awareness of every government of the necessity of implementing some macro policies meant to create a friendly environment for FDI, considering its positive influence on economic growth. This is the main reason why, identifying those precise relevant determinants of FDI should represent an extremely important issue for every economy, including the European Union countries.

The empirical analysis realized in this paper has highlighted the importance of some variables, considered as determinants in attracting FDI, variables that are part, in our opinion, of the investment climate of the host country (price stability, macro context, degree of economic freedom, technological capabilities, availability of financial resources, degree of openess of the economy, civil liberties, political rights). We have empirically proved the positive correlation between all these variables and FDI.

The results of the study can complete the similar results obtained by other international empirical studies realized on this theme, but on different samples of countries. Of course, the analysis can be improved, adding new explanatory variables to the proposed model or enlarging the time period, in such a manner it could offer more significant statistical results.

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PUBLIC-PRIVATE PARTNERSHIP UNDER GLOBAL ECONOMIC CRISIS

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Abstract: *The Public Private Partnership (PPP) is a proven instrument for effectively delivering infrastructure projects, being at the same time an interesting vehicle for the long-term structural development of infrastructures and services, bringing together distinct advantages of the private sector and the public sector, respectively.*

The PPP is gaining more and more importance at European Union level and is becoming part of its development strategy. Romania, one of the member states with a poor infrastructure quality, could close the quality gap to the developed countries by implementing the PPP vehicle.

However, just as the use of PPP was starting to show its benefits, herewith also gaining more and more popularity at international level, the crisis has made the conditions for this instrument more difficult. In order to learn how to use the PPP under current circumstances we have to understand how is the crisis affecting it.

The paper investigates the impact of the economic crisis on PPP projects on international level and Romania as well. as well as the crisis transmission mechanisms. The evidence shows that the cost of and access to capital are the main channels of transmission of the financial crisis, affecting especially the pipeline PPP projects. Some possible measures to help PPP overcome the crisis effects will be presented.

Key words: public-private partnership, crisis, infrastructure, finance, risk, European Union

JEL classification: E22

1. Introduction on Public Private Partnership under crisis

The recent global economic and financial crisis has generated challenges at all levels of economic policy decisions. Governments need to act simultaneously on different fronts: sensitive activity sectors need to be bailed out, the general downfall in economic activity has to be counteracted and vulnerable population groups has to be protected from declining incomes. At the same time the government revenues are falling, the domestic and foreign financing is shrinking, with medium to long-term consequences for budgets and debt.

In many countries, anti-crisis public measures focus on higher public investment or investment in public objectives, like investment in infrastructure projects as an important mean to maintain economic activity during the crisis and support a rapid return to sustained economic growth. An instrument to realize these investments is the Public-Private Partnership (hereafter PPP).

Under a PPP a local authority or a central-government agency enters a long-term contractual arrangement with a private supplier for the delivery of some services. The supplier takes responsibility for building infrastructure, financing the investment and then managing and maintaining this facility (Iossa Martimort, 2008).

While the principal focus of PPP's should be on promoting efficiency in public services through risk sharing and making use of private sector expertise, they can also relieve the immediate pressure on public finances by providing an additional source of capital. In turn, public sector participation in a project may offer important safeguards for private investors, in particular the stability of long-term cash-flows from public finances, and can incorporate important social benefits into a project.

There is growing interest regarding the role of PPP as a counter-cyclical fiscal policy tool, as long as it can be used to support private sector recovery and generate employment. However, the growing number of PPP's in previous years as well as their contractual structures can bring fiscal risks for public authorities that can be aggravated by the financial crisis.

Nevertheless, PPP's are vulnerable to the economic impact of the crisis. Although the final consequences and duration of the crisis are not yet known, the effects on PPP's can already be identified and estimated. The crisis has made the conditions for this instrument more difficult. Despite some signs of recovery, the volumes and values of the PPP projects currently closing is still significantly below the level reached before the crisis (The EC Communication 2009)

Following up the Introduction, Section 2 of this work defines the PPP and presents the underlying rationale and benefits of the concept, Section 3 introduces the variable impact of the crisis on the PPP projects, while Section 4 presents the crisis transmission mechanisms on PPP's. In Section 5 evidence of the crisis impact on PPP at international level and in Romania is being presented, ending up with the final

remarks regarding potential solutions and further challenge within the Conclusions of this work.

2. Definition, benefits and role of PPP

Without having a general consensus on a precise definition of PPP in the literature by now, we shall define the PPP as being characterized by following features according to an IMF definition (Burger et al., 2009):

1) An agreement between a government and one or more private partners whereby the private partner undertakes to deliver an agreed upon quantity and quality of service;

2) In return for the delivery of the agreed upon quantity and quality the private partner receives either a unitary charge paid by government or a user charge (e.g., a toll) levied by the private partner on the direct recipients of the service;

3) An emphasis on a whole-of-life approach. The private partner is usually responsible for both the construction and operational phases of the project;

4) Some degree of risk sharing between the public and private sector that in theory should be determined on the basis of which party is best able to manage each risk, thus ensuring that the PPP optimizes the Value for Money.

The underlying rationale for choosing PPP over traditional procurement or private-sector provision is improved Value for Money (VfM). VfM is maximized when the project maximizes the net present value of social benefits—benefits less costs—of a project over its entire life cycle. VfM tests can vary, but typically involve a risk-adjusted comparison of the PPP and public procurement alternatives. In practice, PPPs have also been used to circumvent government accounting rules by moving borrowing off the public sector balance sheets, under the misconception that doing so creates fiscal space for other activities.

At international level and especially at EU-level, there is now considerable evidence that PPP's can improve delivery of projects, bring better value for money from infrastructure, spread the cost of financing the infrastructure over the lifetime of the asset, improve risk sharing between public and private parties, stimulate sustainability, innovation and research and development efforts, give the private sector a central role in developing and implementing long-term strategies for different economic sectors. At the same time, the PPP can contribute at the enlargement of the EU companies' market shares in the field of government procurement on less developed country markets.

In addition, PPP's enable the leverage of private funds by pooling them with public resources. All these benefits are highly important under present economic conditions as governments seek to accelerate investments in response to the crisis, considering at the same time the budgetary discipline.

3. The impact of the crisis on PPP

The challenge facing PPP's lies in securing their economic benefits while at the same time containing fiscal risks. Whenever possible, the Value-for-Money (VfM) of existing projects should be maintained by aligning government interventions in selected projects/contracts with broader fiscal policy objectives, and ensuring interventions are temporary, transparent, correctly dimensioned and budgeted.

There are various channels that might affect the PPP pipeline projects, both existing or planned: the availability and cost of credit, exchange rate fluctuations, lower economic growth. Depending on the contractual arrangement between the parties, the changed distribution of risks can shift the cost burden between the parties, weakening the attractiveness of PPP's.

The impact of the financial crisis causing economic fall on PPP's varies depending on the different projects' phase of development (IMF, 2009):

Projects in the operational phase: The PPP is negotiated, the construction phase is completed and services are being provided by the private partner.

Projects in the construction phase: The PPP is negotiated, but the construction phase is still ongoing and service provision has not started yet.

Projects in the pipeline phase: The PPP is planned, may be in the tender phase. However, the public and private partners have not closed the contract and physical works have not started.

4. Crisis transmission mechanisms: threats, vulnerabilities and risk

In order to assess the impact of the global financial crisis on PPP's, this section identifies three main crisis transmission mechanisms- threats, vulnerabilities and risks- whereas the risk represents a compound of threat and vulnerability (Burger et al., 2009): Risk realization = f(threat, vulnerability),

with the *threat* representing the probability of a negative event to occur in the future, and the

vulnerability being linked to PPP-specific or country-specific factors that harden the prevention of threats by the involved parties.

A vulnerability may be regarded as the incapacity of the involved parties to ensure as close as possible a conformity between the actual outcome and the expected outcome through risk management. The *risk realization* is the potential impact on the PPP coming from the interaction of threats and vulnerabilities. For instance, in the case of toll-road PPP's, a drop in traffic volumes would be a *threat*. However, in this case, *risk* is only present if there is a corresponding *vulnerability*, such as the lack of a minimum revenue or traffic guarantee that allows the private partner to cope with the impact.

The financial crisis, the associated increase in risk aversion and the resulting economic recession bring various *threats* to the PPP programs and affect them depending on their development phase. The main channels associated with the financial crisis and threatening the development of PPP projects are the upward pressure on interest rates, the decrease in the availability of credit, the real effects of the economic slowdown on revenue cash flows and the unforeseen exchange rate movements.

As instruments of project financing with private money, the PPP programs are affected by the crisis specific increase in the cost of borrowing. Especially projects in the pipeline phase and existing projects with refinancing needs (most likely those in the construction phase) and variable interest payments are most affected by the *upward pressure on interest rates*.

Liquidity constraints caused by the *decrease in the availability of credit* under financial crisis are affecting not only the price of credit, but also the volumes of credits available. In this case, the most affected PPP's are once again, the ones in the pipeline phase. Existing PPP's, both in the construction and in the operational phase, will already have secured credit through signed agreements with financial institutions. There might be a situation for residual refinancing needs in the case of existing PPP's, the need and financing risks would be however on a relatively low level.

The economic slowdown, translated into lower demand for services, will impact *the revenue cash flows* and will affect the debt servicing capacity and the overall profitability of mainly operational and pipeline phase PPP's. Examples include lower revenues from landing fees in airports and lower toll-road revenues. The projects in the operational phase are affected by the reduced cash flow, especially where the private partner relies on direct user charges and not on service payments from the government. The PPP's in the pipeline phase may suffer under economic downturn due to lower estimates of future profitability and herewith the viability of the project.

Having a broad structure and private partners with different international background, the PPP's involve often a significant volume of foreign capital. When the private partner have sizeable and unhedged external debt**,** *the exchange rate variations* under economic crisis could have an impact on the balance sheet and debt servicing capacity of the PPP projects. Projects may also be affected by the increased cost of imported capital goods (if the PPP is still under construction) and imported operational inputs. The most affected PPP's are those in the operational or construction phase that have unhedged external debt.

The PPP vulnerabilities to the crisis can be project specific or extend more widely to the partnership framework. Project specific vulnerabilities are those that can be managed within the project's structure, such as a high, unhedged level of external debt or projects based on too optimistic revenue forecasts without a corresponding guarantee. Partnership vulnerabilities are more complicated and involve the interaction of project specific vulnerabilities, contract structure, and the institutional framework for PPP's.

The key to managing PPP's so as to secure their benefits under risk situations is the institutional context. The key measures against the partnership vulnerabilities refer to a robust public investment planning, a balanced risk distribution between the public and the private sector, a sound legal framework, the regulations limiting public exposure, the good institutions and the transparency in PPP finances.

A systematic approach of the *public sector to investment planning*, project selection and prioritization, a framework to consider future implications of projects for the budget, as well as correct identification of suitable PPP sectors and type of projects are crucial to overcome the vulnerabilities.

A balanced risk distribution between the involved parties drives the better realization of the VfM, as the party that has better control over a feature of the project that drives the VfM, also bears the risk associated with it.

The legal framework sets the parameters for handling PPP's and also provide the security to the private sector that the contracts will be honored. The stronger, more reasonably detailed, more transparent and credible the enabling environment, the more attractive and less riskier are the PPP's for private investors. An institutional framework with *regulations limiting public exposure* might include flow limits on annual total PPP-related payments and contingent commitments, stock limits on the overall size of the PPP or total project liabilities, as part of a wider debt management strategy. All the rules should be consistent with the

wider fiscal framework available.

Institutions can build the reputation of the public sector as a good partner, and lower political and regulatory risk for private partners. This requires an allocation of responsibilities that ensures that the capacity for managing PPP's is appropriate and that the involvement of all public agencies in PPP's is properly aligned and supervised. The Ministry of Finance may have the leading role in this context and be empowered to recognize and assess unaffordable or wasteful projects.

Transparency in PPP finances as opposed to the absence of specific accounting and disclosure rules for PPP's prevents from understatement of fiscal risks and other long-term commitments. Comprehensive disclosure of PPP-related risks and liabilities in fiscal accounts mitigates the risk of PPP's by-passing expenditure controls, either to move costly public investment off budget and debt off the government balance sheet, or to hide the high cost of contractual agreements, such as guarantees, to secure private financing.

As stated at the beginning of this section, the compound of the threats and the vulnerabilities are *the risks* as third crisis transmission mechanisms to PPP's. We can distinguish within PPP's, as in the most commercial ventures, between commercial, macroeconomic and political risk. At the same time, there should be also made a distinction between endogenous risk (risks that can be actively managed by changing behavior) and exogenous risks (where active behavioral steps cannot be taken).

The VfM rationale of the PPP requires that risk should be allocated to the party most able to carry or manage it. That is, the party best suited to ensure the conformity between the actual outcome and the expected outcome. At the same time this party does it so at least cost. This type of risk allocation provides incentives for each party and leads to the improvements of the overall PPP project efficiency.

The financial crisis may exacerbate some of the risks facing the various parties of a PPP. Different parties carry different types and amounts of risk, and not all will be affected in the same way. This may alter the attractiveness of PPP's for the parties most affected and reduce their interest in participating in PPPs unless they are compensated. As such they may not want to enter into new PPP agreements, refinance debt in existing PPP's or continue operating under an existing agreement.

According to OECD (2008), risk can be managed in several ways, including through *risk avoidance* **(**the risky activity is not undertaken as, for example, when a public body opts for public procurement), *risk prevention* (action is taken to reduce vulnerabilities, for example, when a PPP consortium borrows in domestic currency to avoid exchange rate risk), *risk transfer* (when risk is transferred to another party through a contractual arrangement, such as minimum traffic guarantees, but can remain within the partnership), *risk retention* (when risk is retained by a specific party who, in theory, should have the incentive to reduce its cost implications), *risk insurance* (financial coverage for the loss from a negative outcome).

Transferring the exogenous risks to the private partner can not increase the VfM, as the private partner cannot do anything to manage the risk responsibly. This doesn't mean that the private partner should not carry any exogenous risk, as he is normally expected to carry some of the macroeconomic under normal business cycle movements. While some risks are either endogenous or exogenous to all parties, there are also risks that might be exogenous to the private partner, but endogenous to the government (e.g. the risk of expropriation). Where a risk is exogenous to both the private partner and the government, the private partner will only carry the risk if it can translate it into an expected cost that can be returned by the project.

Risks that under normal circumstances are endogenous (and are transferred to the private partner) might become exogenous in a global crisis. For example, in a credit crunch where liquidity dries up and long-term risk premiums increase significantly, private partners may become unable to manage credit risk. A global recession may have a large impact on demand, beyond what could be adequately managed by a private partner within normal operations, and consequently extend beyond the project to the partnership. It is the transmission of risk to the partnership that is most likely to entail fiscal costs.

5. The evidence of the crisis impact at international level and in Romania

As described in the previous section, a significant effect of the crisis is the increased difficulty in accessing finance. The evidence for that is found in the shifting preferences of financial institutions. A survey of PricewaterhouseCoopers (PwC) involving more than 20 important banks on the PPP market in UK, shows that the financial crisis caused a shift in the preference of banks, moving away from long-term loans and towards shorter term loans. (Davies, 2009).

The same study (PwC) concludes that the willingness of the banks for the long-term lending depends either on strong client relationships and/or strong refinancing incentives. Nevertheless, there are at the same time also banks that cannot offer long-term financing due to limited capital.

The immediate negative effect is on longer term PPP's (e.g. over 20 years), that cannot secure their

long-term financing and will be forced to live from shorter-term loans, which subsequently leads to higher exposure of the private operators. These will be facing more refinancing risk in terms of credit availability and future interest rate volatility.

Another PPP survey completed in 2008-2009 by the World Bank under its Public-Private Infrastructure Advisory Facility (PPIAF), 316 projects were surveyed, out of which 95 were in delay, especially due to the crisis. Finally, the survey concluded that the financial crisis affected mostly new projects in emerging market countries (World Bank PPIAF, 2009)

In Romania, even if the PPP is not so well established, the crisis has an negative impact by the fact that is has come in a moment of intensive debates at high political and economic levels, of increasing popularity of the concept and of first signs of PPP activity in Romania. The financing reluctance of the banks affects the few PPP prospect projects stopping its long expected launch on the Romanian market. And when the banks show willingness to finance, the budgets of the local authorities cannot afford engaging long term commitments.

The financial crisis is affecting also the first motorway PPP contract in Romania – the Comarnic-Brasov section of the Bucharest-Brasov motorway, as the winning bidder – the French-greek consortium Vinci-Aktor – has difficulties in finding the finance under the same conditions agreed at the beginning of the tender process in 2008. Another important motorway in Romania, namely Sibiu-Pitesti, has an estimated investment cost of more than 4,5 billion Euro, according to its feasibility study, and the only possible way to build it under such a large investment volume would be under PPP. On the other hand, the only possibility for a private investor to get a return from such an investment would be the involvement of the public sector, which under current crisis conditions seems very difficult.

6. Conclusions

Especially under the current economic conditions, the combination of public and private capacities and money within PPP's can help the process of recovery and the development of markets. However, just at the time when the more systematic use of PPP's would bring considerable benefits, the crisis has made the conditions for these instruments more difficult. Although there is now some evidence of recovery, the volume and value of projects currently closing is still significantly below pre-crisis level. It is therefore all the more urgent and important to look at new ways to support the development of PPP's.

EU can bring a significant contribution for overcoming the present context, ss the crisis is placing renewed pressure on public finances throughout the member states and, at the same time, makes it more difficult to secure long term private investment in large scale projects. EU financing through the Structural Funds, the European Investment Bank or TEN- T instruments can help to mobilize PPP solutions for the investment in projects even at a time of reduced availability of national public or private resources. Another EU contribution can be the influence on the environment in which PPP's operate through its regulatory framework.

The Commissions intentions to build an effective and enabling co-operation framework between public and private sector should be translated into actions as soon as possible, in order to release the full potential of PPP's, as a tool for facilitating economic recovery and building sustainability, competitiveness and high quality public services for the future.

Developing PPP remains the challenge for the time to come. PPP can become a critical instrument as the financial and economic crisis is limiting the ability of the public sector to raise sufficient financial resources and allocate them to important policies and specific projects. The interest of the public sector in innovative financing instruments has increased and so has the political openness to create conditions for more efficient ways of delivering infrastructure projects, regardless of their sector. At the same time, the private sector's interest in pursuing PPP's could be limited by the prevailing regulatory framework and new economic constraints, as well as other longer established underlying factors such as limitations in the public sector's capacity to deliver PPP programs in many parts of Europe.

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ROMANIA AND THE ECONOMIC CRISIS – AN EVOLUTION FILLED WITH PROMISES AND INCONCLUSIVE RESULTS

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Abstract: *The way in which the state authorities have understood and dealt with Romania's complex social and economic phenomena, both internal and external, phenomena which contained several unknown elements has not always influenced favourably the transition to the market economy, the functionality of market economy mechanisms and the constitution of the state of right. The consequences of this situation can be found, on the one hand, in the costs which have significantly exceeded all expectations and in the ability to bear them, and on the other hand in the results, much below what was necessary and expected.*

The economic and financial crisis following many years of economic growth has been the most difficult challenge our country has been faced with since the moment an option was made for a new social and economic system.

How has this crisis been managed, what good and bad solutions have been put forth, what are the successes and especially the failures of this period, constitute both isolated and as a whole the object of this material.

Key words: economic and financial crisis, management, commitment, anti-crisis program, results

JEL classification: F15

The recent history of our country has shown that, more or less rightfully so, **Romania has stopped being merely an insignificant part of a significant** economic and social reality for the evolution of humankind. **Romania,** albeit with a certain hesitation, **has begun to generate hopes, actions and possible accomplishments.** The last two decades of sometimes not so successful attempts to establish a connection with the realities of other countries which have represented and still represent the true engines of technical and scientific progress and of durable social and economic constructions, have revealed a truth beyond doubt regarding both the present and the future of humankind. **The great truth beyond this period** in the evolution of nations **is that, achieving real values in economy and society,** values which until not so long ago were only desiderata for our country, and too little or not at all accessible or achieved, **is not possible without true initiative, effective involvement, responsible commitment, entrepreneurial realism, political will and as little populism as possible.**

One of the important gains of those countries which 20 years ago abandoned a mainly anachronistic socio-economic system is an awareness of the fact that there is a coherent and dynamic system of written and unwritten rules which guide the present-day performance of the democratic and economically developed world. **The economic and social performance of these countries also shows that economic, social and political decisions are determinative for any nation.** The immediate or long-term effectiveness of these decisions is possible only if their level of importance is the same, a high one, even if their adoption has to be done and is actually done differentially.

As a result, **an adequate analysis of the current situation in the economically developed world, with established democracies on the one hand, and of the emerging economies of the other countries on the other,** suggests that:

- regardless of a country's level of development and progress, **the two components of the economy must be correctly and reciprocally related: microeconomics and macroeconomics.** At the same time, one must take account of the fact that *„any attempt to reconcile microeconomics and macroeconomics must be treated with caution"*[33]. And this because, although any macroeconomic approach should take into account possible compatibilities with microeconomics, situations in which *„certain microeconomic models of corporate behaviour supply completely different macroeconomic implications from others"*[34] are not necessarily exceptions;
- the compliance of a competitive economy with the necessary parameters of existence and performance **forces a country's legislative and executive authorities to promote, develop and exercise**

[33] Munday, S.C.R. (1999), *Idei de avangardă în economie*, Bucureşti: CODECS, p.62.
[34] Munday, S.C.R. (1999), idem p. 62.

an institutional system that encourages and supports free economic initiative, this representing the main element of real and competitive economic development;

➢ **that which is important, sustainable and enduring in economy and society must be managed through concrete, coherent and well-timed actions that should meet the demands of the present.** Equally important is the realistic and responsible evaluation of the short- and long-term evolution of economic and social phenomena;

➢ even in the conditions of an inherent economic cyclicity resulting into smaller or larger involutions, **an economy's viability, strength and consistency can be ensured if measures are found and applied that are based firstly on economic and financial resorts** and only secondly and exceptionally on administrative measures of the state;

➢ **solutions should be put forth and applied not only with acumen but also with determination,** so as to ensure a maximally efficient management of resources that are available or can be attracted by society. Depending on the circumstances, this management should be equally efficient both for situations of economic growth and of recovery from crises, crises whose emergence and impact are theoretically demonstrated and confirmed by the economic reality;

➢ the current trend in science, technical and technological evolution, **which generates an interest in moving production out of developed countries to countries where labour costs are low or very low, can begin to be considered from the perspective of emergent countries, too.** This statement remains true even if it is unlikely that some countries' dramatic economic growth of 2008 will be repeated soon;

➢ **the increase in budget deficit and public debt becomes a growing problem for economically developed countries** (USA, Japan, Great Britain[35]), too. In this situation, in countries representing the first and the third world economies (USA and Japan) or the second European economy (Great Britain), solutions are sought to reduce the effects of the economic crisis, the most recent and serious of these being a rise in budget expenses and a decrease in budget revenues;

➢ **in the conditions of the current economic crisis,** whose intensity has exceeded the most numerous and authorised forecasts, and in the situation in which possible W recessions* **are beginning to appear in some countries, protectionist intentions on the part of large economies are not totally excluded.** This is taken into consideration even though in the recent past a rise in protectionism has been largely prevented. In its weak form, protectionism can still represent an option. If we take into account the fact that solving the unemployment situation in developed countries can remain at the level of a desideratum, resorting to protectionism can be a possible, though unlikely solution;

➢ **the sharp and fast increase in the GDP of emerging countries such as China, India or Brazil will lead to their increased role** not only at an economic level, as these countries will be able to claim that „they deserve a more important role in the IMF"[36] or in other economic, commercial or financial organisms having a regional or global representation;

➢ **the avoidance of the economic crisis, a correct evaluation of its causes or a good management of its effects are no longer privileges of countries with a tradition in the market economy and with well-established democracies.** In this respect, an example is Poland, which although went, or better said, came back to the market economy only 20 years ago and has been a member of the European Union for only six years (1 May 2004), being faced for the first time with an extensive economic and financial crisis and recording an economic growth of 1.7% in 2009, has shown that it possesses the decisional capacity to manage its resources and actions so as to avoid recession in a year when in most countries this was at a high or very high level[37]. As Wojciech Zajaczkowski, Poland's ambassador at Bucharest stated, the country's economy grew in 2009 *„due to the strength of the domestic market, strict regulation of the banking sector, non-intervention of the state on the market, exports support by zloty devaluation, EU funds and investments made for hosting the 2012 European Football Cup."*[38] Even if, obviously, **the effects of the financial crisis**

[35] **A**ccording to „financiarul" of 8 march 2010 (the article „greece is being pointed at, but the planet's heavy weights have bigger problems" by emilian m. Dobrescu), in 2011 the usa's federal debt will exceed 14,000 billion dollars, japan will have a public debt twice the size of its economy and this year britain's budget deficit is forecast to reach 13.3% of its gdp.

* A W recession is characterized by the fact that after a sharp decrease, the economy may record a series of contractions and expandions

[36] Dominique Strauss-Kahn, Standard.ro, 30.03.2010.

[37] By comparison, in the same year, 2009, Romania's 491.27 million lei GDP saw a 7.1% fall as compared to 2008. This cannot be due only to electoral causes (the elections for the European Parliament in June and the presidential elections in November and December), the lack of any strategy for crisis management being a reality (Financiarul newspaper, 22.03.2010 and ECONOMIE 2010, 03.03.2010).

[38] *„Financiarul"* newspaper, 22.03.2010.

have been felt in Poland, too, their impact has been greatly attenuated by keeping consumption at a high level. To these, one can add the fact that the Polish government did not intervene in the business sector, not granting any assistance neither at the corporate level not at that of economic branches;

➢ **a possible end of the free market model does not represent a totally negligible scenario.** Such a supposition can be taken into consideration if we accept the theory put forth by the American billionaire George Soros, who according to the famous economic news portal Bloomberg said that *„the current economic crisis is rooted in the 80s, in the period of the liberalization of the financial system, and represents the end of the free market model, which had dominated capitalist states until then"* and that *„the world financial system has literally disintegrated"*, this meaning that *„there is no solution to the crisis in the near future";*

➢ **the intervention of the International Monetary Fund, the World Bank, the European Union or of other regional or international organisms is meant to support emerging states** showing increased vulnerability in front of economic difficulties to manage economic and financial crises more efficiently and correctly. Although this kind of intervention is necessary, welcome and with positive results, the scenario put forth by Mojmir Hampl, the vice-governor of the Czech Republic's central bank and presented in the Austrian newspaper Der Standard, should not be altogether rejected. Referring to central and east European countries, the Czech official stated that *„ what is ridiculous is that it was the IMF which accelerated the whole crisis. Apparently, it was an attempt to save the entire region. Before the crisis, the IMF had actually no clients. With the crisis and Dominique Strauss-Kahn's appointment, the fund found a new job and attracted more money."*[39]

Starting from the above-presented evaluations, evaluations which took into account the general social and economic context in which the economic and financial crisis appeared and spread in the last period of time, **it is natural to be interested in the way in which our country has dealt with the crisis,** the way in which the authorities have taken responsibility for their actions, what was wanted and necessary to be done, what the obtained results are, what else should be obtained and the extent to which these results meet the requirements, obligations and commitments.

Because there is a science of the well-done thing, and because what was going to be done was not only difficult to accomplish, but it was also difficult to be in the position from where to do it, **the actions undertaken by the state authorities had to contain a certain awareness of the country's crisis situation,** an accurate and correct definition of the character and dimensions of this crisis and especially the setting up of a coherent and proactive system of economic and political decisions which should lead to a necessary and efficient way to manage the economic and social processes and phenomena generated by the crisis.

All these **had to take into account the novel character of the situation, the fact that this was the first time our country has been and still is faced with a financial and economic crisis** of global extent and recurrence. It is a crisis whose solution has not been and is not possible in a context requiring only internal actions, but also has to take into consideration many external requirements.

The attempt to manage the crisis has become the more complex and difficult as it has to be taken into account that our country's previous performance was characterized by several years' economic growth (2000-2008) and that, in the last period Romania's economy had overheated. As a consequence, there was an increase in gross GDP which exceeded the economy's real and normal capacity to produce goods and services.

To these one should add a significant idiosyncrasy which has increased the complexity and difficulty of Romania's general situation. This is the electoral campaign, which largely dominated the year 2009 and was accompanied by a governmental crisis that was superimposed onto the acute stage of the economic and financial crisis.

Faced with new challenges which were not only imperative but also vital for the present and future development of our country, **the executive had to prove it had the ability to manage Romania's economic and social situation differentially.** Thus, the state authorities had to prove that, if in a period of normal economic activity *„the main goal set by every government is to handle the economy so as to work at the highest parameters"*[40], in a period of crisis, the government had to prove that it could ensure *„the movement of the economy beyond the recession point"*[41] in the conditions in which *„national economies have become extremely interdependent, from the point of view of reciprocal commercial exchanges."*[42]

[39] *„Evenimentul zilei"* newspaper, 06.04.2010.
[40] Munday, S.C.R. (1999), idem p. 340.
[41] Munday, S.C.R. (1999), idem p. 81
[42] Munday, S.C.R. (1999), idem p. 81

Through all its actions, **the executive has to ensure a certain level of performance for the national economy,** a level that should allow *„a certain economic improvement"*[43] with a view to economic growth in the nearest future. This should happen in the conditions of an increased level of *„interdependence at a European level"*[44] and a large part of the European Union countries may *„return to economic growth."*[45]

In this context of largely general opinions, **an analysis of the way in which the economic and social situation was approached in our country before and after 2008** could show that:

- the economic and social realities of the past decades have shown **that the whole of a nation's true values can be achieved and perpetuated in time only if, besides the existence of favourable conditions of expression, most efficient means are found to ensure a healthy economic development,** based in its turn on those structural changes that can allow resource orientation and allocation to those fields of activity having a high productive potential and high productivity;
- of great importance from the perspective of Romania's future performance, **the option for a new type of society,** in which, on the one hand it is possible, necessary and compulsory to promote established democratic values, and on the other hand it is stringently necessary to create and develop an economic system based on the working mechanisms of the market economy, **has made it necessary to find new interpretations and approaches to the phenomena, processes, events and situations that appear, exist, develop, progress or disappear** at all levels of a nation's existence, that is macroeconomic and microeconomic, of society as a whole, of regional and local communities;
- **the both voluntary and indispensable connecting to a world,** even though not entirely unknown, **surely subjectively and wrongly perceived, has proven to be not only difficult but also lengthy, engaging big and very big efforts and costs which are not going** to be borne entirely by the present generation;
- of the many new elements the Romanian society has been faced with, through their existence and expression, one is standing out as regards the implications is has had and still has. This is competition, true competition which is most often tough and very tough notwithstanding the environment in which it takes place, economic, financial, banking or monetary, as it represents one of the main characteristics of the market economy;
- **the emergence and consolidation of certain social, economic and leadership structures has involved a complex process which took** place mainly against the clock, **a process in which changes, be they important, radical, less significant, implicative or less implicative, had to be correctly and efficiently managed** in a period in which the economy with all its positive or negative aspects was increasingly acquiring the distinctive marks of internationalization and globalization;
- in the competitive environment Romania has become part of, **economic and social phenomena are characterized not only by complexity, variety and varying degrees of intensity, but also by the uncertainty of their occurrence.** Among these more or less extensive and intense phenomena of the market economy, a special place is held by the economic and financial crisis;
- **the difficulty, accompanied by a series of errors, in the management of the current economic and financial crisis** has old causes that have deepened, or new causes not well enough identified, understood and considered. Among the elements that have made Romania not only economically weak in the confrontation with the economic and financial crisis but also politically confused, the most representative are the following:
  - **the privatisation process,** even if not coherent enough and incomplete, should have been free of administrative interference from the state. In reality, even after privatisation businesses remained largely dependent on the economic and power structures of the state;
  - t**he parasitization phenomenon in companies where the state holds a majority interest has increased,** reaching such a level of expression that the economic and managerial vulnerability of state-owned companies has become obvious and alarmingly damaging for the national economy;
  - **the privatisation of state-owned companies** which despite constant aids from the state budget and in the absence of social and economic causes have **not managed to become performant and profitable, does no longer represent a priority for the government.** Their expansion and possible reorganization are considered to be more necessary and suitable courses of action, although they have only been successfully finalized in a small number of cases;

[43] Munday, S.C.R. (1999), idem p. 81
[44] Munday, S.C.R. (1999), idem p. 81
[45] Munday, S.C.R. (1999), idem p. 81

- **the dimensions of the 2009 economic crisis** are revealed by the 20% decline in the level of businesses listed at the BVB Bucharest as compared to 2008, through an average 45% fall in profit. *„Corporate profitability has been affected to some extent by the reevaluation of foreign currency debts, as a result of the euro-leu evolution, highly geared companies being most affected."*[46]*;*
- with all the difficulties generated by the crisis there **have been companies that have succeeded in achieving either increases in the level of their business or a certain profitability, or even gains on the two objectives;**
- **the banking sector crisis** is mainly a result of the sharp increase in provisions for non-performing credits. The decline in bank profit has been within a broad range, its values standing both below 10% and close to 75-80%;
- **the governmental anti-crisis programs** that have been or at least are said to have been designed and applied, have not had the expected effects in recovering from the crisis. The causes are, on the one hand, the incoherence and inconsistency of these programs and probably a certain lack of professionalism, both practical and conceptual, and on the other hand, the often cited and persistent lack of financial resources. The punctual and general inefficiency of the measures adopted by the executive concretely means *„almost 1,000 job losses a day, over 500 firms going out of business every day, financial blockage- most often induced by the government- or the dramatic rise in the number of those who cannot make their monthly payments to the banks"*[47]. In the context of these opinions, there is the belief that the only true anti-crisis program is the one resulting from the agreement with international financial institutions;
- **the deficient management of IMF and EU credits** has led to their not being used for the settlement of public debts to the private sector, having been directed to the payment of public sector salaries and pensions. This approach has had as an effect the fact that, on the one hand, private businesses did not have the necessary support in order to survive in the conditions of economic crisis, could not keep or continue their main activities, and on the other hand, it has shown that the much cited process of public sector restructuring and cost cuts has not reached its objective. Moreover, the errors, incoherence and inconsistency in „Legea unică de salarizare" (The single salary law) adopted in November 2009 and applied since January 2010 have strained the relations between the government and trade unions, leading to an increase in industrial actions, both in terms of number and extent;
- **even if there have been successes in fighting the effects of the crisis** such as the attempted stimulation of activity in the field of constructions („Prima casa" programs in their two variants) or the attempted stimulation of consumption by rethinking the old car scrapping scheme, the maintenance of the leu-euro exchange rate, of inflation and interest rates at around the estimated level, **the merits should be divided between the government and the Romanian National Bank, with a higher contribution of the latter;**
- **although investment stimulation should represent one of the main points in any anti-crisis program, Romania has not found the best ways to increase the attractiveness of the Romanian economy for foreign investors.** In the conditions in which Bulgaria, for example, uses a flat 10% taxation rate for companies, Hungary has the same 10% tax up to a certain ceiling (an income of 200,000 euros) and Poland is granting considerable state aid to foreign investors, the 16% flat tax rate in our country no longer represents that element which used to be deemed attractive and stimulating for investors;
- since February 2009, **the government's intention of launching as apart of its anti-crisis program a concrete, 13 billion euros package** meant to boost the economy and out of which 10 billion euros should have gone to infrastructure investments, **has not yet been materialized.** Although the causes for not activating this stimulus package are not known with any certainty, most likely lack of financial resources or the inability to efficiently manage them might be the main or even the determining cause.

In all this array of causes, of idea and solution proposal and withdrawal, **of arguments and counter-arguments, the opinion expressed by a World Bank official is significant, as it could represent part of the solutions** necessary for recovering from the recession the country is still in, **and which in future might represent the necessary and true resorts of healthy economic growth.**

Present in Romania in the period 17-21 March 2010, Peter Harrold, the country manager of the World Bank for Eastern Europe and the Baltic countries, showed that *„these countries were the most affected*

[46] *„Financiarul"*newspaper, 12.03.2010.
[47] *„Financiarul"*newspaper, 18.03.2010.

in the world"[48], suggesting among other things that in order to ensure economic growth **the Romanians should work more and better, that it is industrial and agricultural production that should lead to domestic growth not consumption** as it has happened until now, **that exports of goods and services will have to rise sharply.**

All these things will be possible only if the still excessively bureaucratic Romanian administration becomes a truly functional one.

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THE ROLE OF THE GROUP OF TWENTY- G20 IN RESHAPING THE GLOBAL ECONOMIC AND FINANCIAL SYSTEM

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Abstract: *The scope of this paper is to emphasis the great changes in the economic and political balance among countries, global threats and an antiquated global governance system that confront the world community today. With the economic crisis as an high priority, the G-20 summit format has the potential to make a real transformation in the global economic order in which a new set of values underline the way countries and people cooperate across borders. All the actions initiated in this direction accentuate common interests in a global society, the need for multilateral action and for alternative approaches to achieve development.*

Key words: the G20, the G-8, International Monetary Fund, reform**.**

JEL classification: F53

1. Introduction

The leaders of five members of the G-20 Steering Group advised G-20 member nations to accomplish the agreements reached at the last meeting in Pittsburgh (on 24th - 25th September 2009) in order to reform quickly the global financial regulatory framework and create post-crisis actions. In a letter, signed by the authorities representing South Korea, Canada, United States of America, United Kingdom of Great Britain and French, the steering (or the guiding) group called for stronger policy coordination among G-20 countries to strengthen the status of the this summit as the most important global economic forum. It is necessary a strong political commitment to put the accords made in Pittsburgh -such as financial reform, free trade and job creation-into action in front of the planned meetings in Toronto on 26th - 27th June 2010 and Seoul on 11th-12th November 2010. This letter emphasizes the need to implement the commitments assumed to ensure strong macroeconomic policy cooperation and to continue the regulatory reform**.** The leaders of G-20 Steering Group considered that the emerging recovery of the world economy remains fragile. In this letter elaborated at Pittsburgh G-20 Summit is mentioned that current tensions illustrate the continuing risks to global economic financial stability. For the G-20 member nations, it is vital that these countries will continue to work together to achieve their mutual objectives in addressing new risks, safeguarding stability and supporting a robust return to growth and job creation in all economies of G-20.

The G20 is an informal group of 19 countries and the European Union, with representatives of the International Monetary Fund and the World Bank. The finance ministers and central bank governors began meeting in 1999, at the suggestion of the G8 finance ministers in response to the global financial crisis of 1997-99. The new Group of Twenty (G20) forum of finance ministers and central bank governors was formally created at the September 25, 1999, meeting of the G8 Finance Ministers.

It was created as a new mechanism for informal dialogue in the framework of the Bretton Woods institutional system, to broaden the dialogue on key economic and financial policy issues among systemically significant economies and to promote cooperation to achieve stable and sustainable world growth that benefits all. To launch the G20 at its first ministerial meeting in Berlin in December 1999, the G8 finance ministers were to invite counterparts from a number of systemically important countries from regions around the world, as well as representative of the European Union, International Monetary Fund and World Bank. The formal birth of the G20 can be traced to the leaders' G8 Statement at their Cologne Summit on June 18, 1999. There they declared, following passages welcoming the creation of the Financial Stability Forum and the IMF's International Financial and Monetary Committee (IFMC), the commitment to work together to establish an informal mechanism for dialogue among systemically important countries, within the framework of the Bretton Woods institutional system. The G20, from this initial formulation as the "GX" to its September 1999 birth, was the product of different approaches among G8 members. These will determine in part how the new body evolves.

The French, supported by the Italians, were opposed to the very creation of the G20, for fear that it would undermine the authority of the IMF, which their compatriot Michel Camdessus headed, and the new International and Monetary Financial Committee (IMFC) which they preferred. The USA and Japan were very much in approval of the new body. Britain, while supportive, was somewhat reserved, for fear that the G20 might undercut

in practice the prominence of the new IFMC, which Britain's finance minister Gordon Brown was chosen to initially chair. Their early emphasis was on restricting the discussions to be held within the new body.

The G20 fulfills the commitment by G8 leaders to establish an informal mechanism for dialogue among systemically important countries within the framework of the Bretton Woods institutional system. Its mandate is to promote discussion and study and review policy issues among industrialized countries and emerging markets with a view to promoting international financial stability. Its initial 18 country members consisted, in addition to the G8, of Argentina, Australia, Brazil, China, India, Mexico, Saudi Arabia, South Africa, South Korea and Turkey.

- 2. **Origins, Options and Obstacles for the G-20 Meetings**

Origins. The G-20 summit had its origins in the annual meetings of the G7 - the leaders of a group of seven major Western industrial countries who gathered annually starting in the 1970s, initially to establish economic and financial policy coordination in reaction to a major financial crisis. After the break-up of the Soviet Union, the G8 was formed by the addition of the Russian Federation. The G8 increasingly became preoccupied with global economic and political issues - in effect assuming the role of a global steering group.

The G8 summits were seen as ritualistic in process, ineffective in impact and increasingly unrepresentative in the face of global population and economic problems and lacking in legitimacy as a global steering group. The ministerial-level G-20 was first created in the aftermath of the 1997-98 East Asia financial crisis. By convening representatives from 10 industrialized economies and 10 emerging market economies, the G-20 presented a much more geographically and culturally diverse group than the G8. With about 90 percent of the world's economy and two thirds of the world's population, the G-20 is also much more representative than the G8. Emerging market economies have been fully engaged in managing the proceedings of the meetings of G-20 finance ministers and central bank governors. It is therefore not surprising that there had been persistent calls by some experts and politicians for using the G-20 as a platform to replace the G8. While moving from G8 to G-20 summit might not create an optimal global steering group, it is a pragmatic and effective step, especially in response to crisis.

Options. Will the G-20 be a short-lived experiment or will it prove an effective tool of global governance? Various options are under debate among experts and practitioners. One possibility is to return to the G8 summits. There is a concern that the G-20 format is too unwieldy for effective exchanges among the key players. There will be continuing debates about reducing the size of the summit to somewhere between thirteen and sixteen members, as reflected in a proposal of French to create a G14. However, there are pressures to expand the number of participants to include more countries and to expand regional representation. Then there are proposals to develop a constituency-based approach to membership, with universal participation as in the case of the international financial institutions.

None of these options will likely materialize in the predictable future. Instead there are two probable results: The first is the continuation of the G-20 summit with a gradually expanding mandate beyond the current crisis. For this to be successful, it is critical that the G-20 format proves its effectiveness in the future. This result has three requirements: that the number of participants does not expand; that participants focus on a limited number of action items; and that a small but effective secretariat is established to support and monitor the G-20 summit with logistics and technical expertise.

The most likely alternative to the G-20 summit is what is frequently referred to as "variable geometry." Under this scenario, selected world leaders would discuss about specific topics in various constellations, with participation of the most important actors decided separately for each topic. For example, the G-20 might continue to meet on global financial and economic matters, while different groups would debate about actions on climate change, nuclear proliferation or other topics.

Obstacles. There are different challenges for the evolution of global summits beyond the G8, whether toward an effective G-20 or some alternative, especially summits of variable geometry. These challenges emanate from the diverging interests of four sets of players: the United States of America, Europe, the new emerging powers and the rest of the world. For the predictable future, active U.S. leadership is needed to triumph over inertia and collective action problems in addressing global challenges and to achieve global governance reform.

Europe is a key player and has proven a major obstacle to global governance reform as it continues to claim far too many chairs at the G-20 (and in other global forums and institutions) for its economic and demographic significance. In effect, Europeans can either retain their over-representation, which gives them a fragmented voice and weakens their influence while also weakening the global institutions; or they can t assembly heir votes, chairs and voice for greater impact and to ensure more effective international organizations. Unfortunately, the current impasse on internal European Union governance reform blocks any new European approach to global governance reform.

The new emerging powers, especially China, India and Brazil, will face the challenge of moving beyond their traditional role of the "excluded" and "representatives of the South." They will need to accept co-responsibility for solving global problems and creating effective global governance institutions. They will have to look beyond issue-specific South-South coalitions to North-South coalitions where it is in their and the global interest (e.g., the impulse for international financial institution reform, for European Union consolidation, for the conclusion of the Doha Round, etc.). There are hopeful signs that this is beginning to happen. South Korea's leadership of this year's G-20 represents a critical test of whether the new powers are ready to participate and conduct a G-20 forum at the leaders' level, not only ministerial.

Finally, there is the challenge of how to include the "excluded states." The G-20 is much more inclusive than the G8, but it still leaves out a majority of countries with a third of the world's population. Options for associating the rest of the world with the summit include ad hoc meetings (as the G8 has done), expanding regional representation (as already practiced with the EU), introducing a constituency approach (as for the International Financial Institutions- IFIs) and seeking a closer alignment with the United Nations (perhaps through an Economic Security Council). With the exception of the first two-which risk further expanding the number of participants at G-20 summits-none of the other options are likely to materialize soon. However, G-20 leaders will have to be sensitive to the needs of the "excluded states" and ensure that the interests of the poorest countries are not neglected.

3. Transforming the Global Economic and Financial System

The financial system is complex in structure and function throughout the world. (Mishkin, 2001, p.181).The impact of financial crisis on the developing world is devastating: an additional 46 million people are living on less than $1.25 per day; export growth has slowed, exacerbated by lack of available trade financing and a fall in commodity prices; and foreign direct investment has retreated, forcing both the devaluation of local currency and a rise in the price of imports. Further, the IMF estimates that 28 countries already have external debts in excess of 60% of GDP, putting them at risk of default.

The World Bank estimates that external financing needs (in the form of private capital flows) of 59 countries would not be met in 2009, leaving a gap of US$352 billion. Devaluation, perhaps more than inflation, is a concern. Declining remittances from workers in recession-affected countries mean that families in the developing world, who depend on remittances to supplement their income, are no longer able to support their households. The G-20 has begun to address the short-term impact of the crisis. But of the $1.1 trillion in funding announced by the G-20 in 2009, only $50 billion is expected to go to the world's poorest countries.

Although the IMF and the World Bank have introduced new forms of social protection and have reduced the number of conditions attached to new loans, many of the remaining conditions (including public sector wage freezes or cuts, pension freezes, utility price hikes and rising interest rates) will undermine these attempts to increase social protection. In 2010, G20 leaders have the opportunity to begin transforming the global economy-both its systems and institutions-so that it can deliver decent work and sustainable development to all parts of the globe.

Through fairer international rules and policies for trade and finance and the reform of the international financial institutions (IFIs), the G20 can address the structural flaws that have exacerbated the financial crisis and help build a strong public sector that can support measures to moderate its most adverse affects. To do this, it is critical to have a leader's forum that addresses the needs and interests of a diverse range of countries, as well as the broader public interests of the global community.

G8 and G20 leaders must commit to transition to a more representative forum; one that adheres to principles of transparency, responsibility and taking into consideration the difficulties that affect world' poorest nations. Such a transition must be done within the extensive context of strengthening multilateralism more generally, and the role and place of the United Nations in the international system in particular. The Toronto G20 Summit (on June 2010) should build on the conclusions of the United Nations Commission of Experts on Reforms of the International Monetary and Financial System and the resulting document of the United Nations Conference on the World Financial and Economic Crisis and its Impact on Development, by announcing specific G20 initiatives aimed at a sustainable global economic recovery that serves as a transition towards a low-carbon green economy. There are some opportunities that must be aimed:

- ensuring global economic recovery for all

Provide emergency grants for developing countries to follow their own counter-cyclical policies, including introducing social safety nets, measures to protect incomes of the poor, and to strengthen the public provision of essential services. Such grants should be without the harmful policy conditions that limit democratic ownership of country-led development priorities. Provide 100% debt cancellation for all indebted poor countries, taking account of the impact of the triple crises of finance, food security and climatic change. A renewed G8 debt initiative should support the establishment of a sovereign debt workout mechanism that is fair, transparent and

independent. Such a mechanism should help ensure the responsible nature of future lending and advance the debate on odious and illegitimate debts.

- making global rules and institutions fair

Initiate a process with other countries to transform the current structure of the G20 into a forum that kick-starts a new era of multilateral cooperation – one that models democratic principles of inclusion, representation, transparency and responsibility. Lead efforts to transform and democratize the World Bank and International Monetary Fund through meaningful accountability to the United Nations and to internationally agreed standards for human rights, labour and the environment. The G20 should respect the development of regional monetary and financial initiatives that promote sustainable human and economic development. Commit to full civil society involvement in decision making at the national level and in the world's workplaces. Basic freedoms and rights to participate should be a hallmark of G20 summit decisions, including for workers and trade unions to engage employers for needed production changes and for the poor and vulnerable groups to shape a future that addresses their concerns.

- the implementation of new rules for trade and finance

Create new rules for regulating both the mechanisms and the flows of global finance, including for hedge funds, tax havens and speculative capital flows. Such rules should ensure that financial institutions, markets and financial products are transparent and publicly accountable. Commit to a new multilateral trade deal that prioritizes development. This should include new mechanisms to regulate the volatility of commodity prices, tools to support infant industry and small farmers in developing countries, and the rapid elimination of harmful agricultural subsidies. Such a deal should allow for more space for poor countries to protect jobs and public health and to control the pace and extent of liberalization, particularly in financial and other services.

-a transition to a sustainable economy:

Promote a coordinated international recovery strategy that emphasizes green and decent job creation and public investments. Measures should be introduced to reduce the risk of unemployment and wage losses, and to support the purchasing power of low-income earners, including single earner households that are overwhelmingly female-headed and households with a parent with a disability. Support innovative financial mechanisms to meet urgent financial requirements for climate change, development and achievement of Millennium Development Goals.

Its relationship with other bodies also suggested a robust role for its members. It would operate within the framework of the Bretton Woods institutions, involve their representatives and the European Union completely in its substantive discussions, in order to ensure that its work was well integrated. It would help co-ordinate the activities of other international groups and organizations, such as the Financial Stability Forum, facilitate deliberations in the new International and Monetary Financial Committee, and potentially develop common positions on complex issues to accelerate decision-making in other international institutions. Its potential importance was supplementary suggested by its institutional characteristics. These included the solid control of the management by the G8, the two year rotational cycle, the linkage of its meetings to those of the G8 meetings at the start of each year, the presence of a deputies process to prepare for and support the meetings, its ability to call on the resources of the IMF, World Bank and outside experts, and its ability to form working parties to examine and make recommendations on issues related to its mandate.

Great changes in the economic and political balance among countries, global threats and an antiquated global governance system confront the world community today. With the economic crisis as a high priority, the G-20 summit format has the potential to make a real transformation in the global economic order in which a new set of values underline the way countries and people cooperate across borders. All the actions initiated in this direction accentuate common interests in a global society, the need for multilateral action and understanding for alternative approaches to economic and political development. This is very hopeful.

The success of the G-20 in addressing the global economic crisis could lay the foundation for a new global order and provide the impulse for the many other necessary global governance reforms. However, Europe, China and India are also essential for progress. We may see a long period of transition with only gradual improvement in current institutions. In the meantime, pressures for increased regionalism, bilateral deals among the big players, geopolitical competition among power blocs and growing instability and threats from the "excluded countries" will undermine international cooperation and the whole idea of a global order.

Globalization will liberalize the world economy from unnecessary bureaucracy and trade barriers; when nation states remove all barriers to global competition, the movement of goods and services, capital, multinational operations and financial institutions will bring greater efficiency to and better utilization of the resources at international level (Lee, K., Carter, S., 2005, p.12).The G-20 summit forum represents a great opportunity for world leaders to begin to put into action the principles of a new global order. It will allow them to address the instantaneous global financial and economic crisis in a collaborative spirit. And in suitable course the G-20

summit can also serve as a platform for addressing other pressing global issues, including trade, climate change, energy and food security and reform of global institutions. Many people believe that International Monetary Fund, World Trade Organization and other international institutions must be reformed in response to the changed nature of global economy. (Gilpin R, 2001, p.389).

4. Conclusions

The G20 was created as a deliberative rather than decisional body, but one designed to encourage the formation of consensus on international issues. However it was one with a policy focus, a mandate to promote international financial stability. It will focus on translating the benefits of globalization into higher incomes and better opportunities everywhere, including working people around the world. Although concentrating on longer term rather than immediate policy issues, for the G20 there is virtually no major aspect of the global economy or international financial system that will be outside of the group's attention.

Substantively, the central objective was to avoid having the body generate the traditional north-south divide. The members of G20 wanted to keep the Group focused on sharing (distribution) experiences, and open discussion, rather than the statement of hard positions. Their emphasis was increased by the views of some, such as another newly included finance minister, who saw the new Group as an excellent opportunity for the "South" to press its issues against the "North."

There are thus concerns about whether this new Group constitutes a sufficient degree and form of institutionalized association with the G8. One doubt arises from the view of some who see the G20 as part of the "G8-ization" of the world. In this view, the G20 was born to legitimate G8 initiatives to the wider world, by securing a broader consensus for G7-generated ideas. The G20's eleven non-G8 members are thus destined to affect issues merely on the margin, to be informed of G8 initiatives, and to be given some semblance of participation. The G20 underscores the fact that the G8 does not want to leave the reform of the international financial system to the IMF or World Bank, where developing countries have an institutionalized role.

Driven by its role in addressing the impact of the global economic crisis, the G-20 organization - finance ministers and central bank governors from the world's top 20 economies - is being viewed by some as the dominant power bloc in a new era of global governance. The G-8 has served in various forms as the world's leading economic forum since 1975 but at its summit in Pittsburgh in September 2009, the G-20 announced that its leaders had endorsed the G-20 as the premier forum for their international economic cooperation.

While the G-8 focuses more on issues such as security and climate change and leaves its economic and financial policy to the G-7 - essentially the finance ministers of the G-8 minus Russia - the rise of the G-20 and the expansion of its powers has some experts wondering how long the G-8 and G-7 can survive in the face of an increasingly influential, more inclusive global decision-making body.

The G-8 - if it survives at all - will be a much less powerful gathering and for a very good reason. In the wake of the financial crisis everybody could witness the level of interdependence in the world. And it became clear that a political structure that excludes important rising countries such as India, China and Brazil simply does not have the scope to deal with those global issues. As with other institutions of global governance, like the United Nations, it became clear that the structure of the G-8 does not reflect global realities enough. If global problems of the magnitude of the financial crisis persist, which is very likely, and then the real power of the G-8 will permanently shift to the G-20 or some other form of broader political structure.

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SYSTEMIC INTERDEPENDENCIES: UNEMPLOYMENT - PURCHASING AND CONSUMPTION BEHAVIOUR. AN EUROPEAN APPROACH

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Abstract: *The profound transformations in global economic system over the past 2 years, marked by crisis occurred at the level of all social and economic entities; the economic difficulties incurred by companies impacted severely on the consumer and have resulted in substance changes of the purchasing and consumption decision behaviour. This paper aimed to reflect the evolution of the unemployment in the EU system, before and during the economic crisis, the systemic interdependencies on macroeconomic level that involves and determines unemploymennt - aggregate demand variables, consumption expenditure analysis of the European consumers, highlighting the consumption correlation unemployment-expenditure in the European countries.*

Key words: crisis, unemployment, purchasing behavior, consumer expenditure, systemic correlations

JEL classification: E21, E24, J64, R21, R23

1. Introduction

Economic and financial crisis that marked the evolution of global economic system since 2008 has left deep scars in all macro and micro components and variables; among them, unemployment, macro-societal risk, manifested in all its dimensions – quantitative, structural, qualitative. Affecting a consistent proportion of the population, particularly in the case of economies entered in the domino effect of the crisis, rising unemployment triggered, among other things, significant changes in consumer and purchasing behaviour decisions of individuals. Special dynamics of European business environment in the last 20 years has again been shaken by the crisis wave, a crisis in which unemployment has monopolised not just economies freed from communism, but whole highly interdependent societal system.

2. The European unemployment - before and during crisis

After what, during in 2005-2008, sustained economic growth on the European continent led to the creation of approx. 9,7 million new job places, global economic crisis has eliminated from the business landscape - companies and jobs, forecast for the year 2009-2010 being the most pessimistic - loss of approx. 8,5 million jobs, even if the economic recession is nearly over (http://ec.europa.eu/social/, Employment in Europe 2009, European Commission, p. 11).

During 2000-2008 period at the EU level the situation of employment population, respective the size of unemployment may be presented as follows (Tab.1):

Table 1: Population, employment, unemployment rate in 2000-2008 period (thousand pers.)

Indicator	2000	2001	2002	2003	2004	2005	2006	2007	2008
Population – total	474.647	477.983	479.214	480.395	482.081	484.303	486.302	488.328	490.446
Population 15-64 years	319.598	320.968	322.184	323.183	324.209	326.311	327.846	329.164	330.375
Employed population - total	209.443	211.487	212.262	213.049	214.506	216.557	220.108	224.072	226.330
Employed population 15-64 years	198.900	200.792	200.901	202.299	204.104	207.403	211.410	215.354	217.843
Number unempl.	19.508	19.201	20.211	20.517	20.907	20.759	19.241	16.943	16.768
Unemployment rate (%)	8,7	8,5	8,9	9,0	9.0	8,9	8,2	7,1	7,0

Source: Employment in Europe 2009, European Commission, p.155

It notes that over this period, the unemployment rate had a trend of relative stability, beginning to decline significantly in 2007. Period of decline lasted only 2 years during which the global financial and economic crisis occurred. In terms of distribution by sex, in 2008 unemployment rate was 6,6% for male

population and 7,5% for women highlighting social, psychological discrepancies and employment discrimination. Instead, because of economic problems faced by companies in the construction, automotive, transportation, storage, global economic crisis has had noticeable effects on men employment and to a lesser extent over women (Employment in Europe 2009, European Commission, p.17). Given the unemployment situation in different countries, we present it as follows (tab.2):

Table 2: Unemployment rate in EU countries during 2000-2009 (%)

Unemployment rate	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Belgium	6,9	6,6	7,5	8,2	8,4	8,5	8,3	7,5	7,0	7,9
Bulgaria	16,4	19,5	18,2	13,7	12,1	10,1	9,0	6,9	5,6	6,7
Czech Republic	8,7	8,0	7,3	7,8	8,3	7,9	7,2	5,3	4,4	6,8
Denmark	4,3	4,5	4,6	5,4	5,5	4,8	3,9	3,8	3,3	6,0
Germany	7,5	7,6	8,4	9,3	9,8	10,7	9,8	8,4	7,3	7,5
Estonia	12,8	12,4	10,3	10,0	9,7	7,9	5,9	4,7	5,5	14,0
Ireland	4,3	4,0	4,5	4,7	4,5	4,4	4,5	4,6	6,3	11,8
Greece	11,2	10,7	10,3	9,7	10,5	9,9	8,9	8,3	7,7	…
Spain	11,1	10,3	11,1	11,1	10,6	9,2	8,5	8,3	11,3	18,0
France	9,0	8,3	8,6	9,0	9,3	9,2	9,2	8,3	7,8	9,4
Italy	10,1	9,1	8,6	8,5	8,1	7,7	6,8	6,1	6,8	…
Cyprus	4,9	3,8	3,6	4,1	4,7	5,3	4,6	4,0	3,7	5,3
Latvia	13,7	12,9	12,2	10,5	10,4	8,9	6,8	6,0	7,5	17,6
Lithuania	16,4	16,5	13,5	12,5	11,4	8,3	5,6	4,3	5,8	14,0
Luxembourg	2,2	1,9	2,6	3,8	5,0	4,6	4,6	4,2	4,9	5,7
Hungary	6,4	5,7	5,8	5,9	6,1	7,2	7,5	7,4	7,8	10.0
Malta	6,7	7,6	7,5	7,6	7,4	7,2	7,1	6,4	6,0	7,0
Netherlands	2,8	2,2	2,8	3,7	4,6	4,7	3,9	3,2	2,8	3,5
Austria	3,6	3,6	4,2	4,3	4,9	5,2	4,8	4,4	3,8	5,0
Poland	16,1	18,3	20,0	19,7	19,0	17,8	13,9	9,6	7,1	8,2
Portugal	4,0	4,1	5,1	6,4	6,7	7,7	7,8	8,1	7,7	9,6
Romania	7,3	6,8	8,6	7,0	8,1	7,2	7,3	6,4	5,8	…
Slovenia	6,7	6,2	6,3	6,7	6,3	6,5	6,0	4,9	4,4	6,0
Slovakia	18,8	19,3	18,7	17,6	18,2	16,3	13,4	11,1	9,5	11,9
Finland	9,8	9,1	9,1	9,0	8,8	8,4	7,7	6,9	6,4	8,2
Sweden	5,6	4,9	4,9	5,6	6,3	7,4	7,0	6,1	6,2	8,3
United Kingdom	5,4	5,0	5,1	5,0	4,7	4,8	5,4	5,3	5,6	…
UE average	**8,7**	**8,5**	**8,9**	**9,0**	**9,0**	**8,9**	**8,2**	**7,1**	**7,0**	**8,9**

Source: Employment in Europe 2009, European Commission, p.155-183 and http://epp.eurostat.ec.europa.eu/

The data present clear differences from one country to another:

- EU countries prior to 2004 had in 2000 an unemployment rate between 2,2% in Luxembourg and 2,8% in the Netherlands and 11,2% in Greece respectively 11,1% in Spain;
- countries that entered in EU in 2004 and 2007 registered in 2000, values ranging from 4,9% unemployment rate in Cyprus and 18,8% Slovakia, 16,4% in Lithuania and Bulgaria - countries at that time in the transition to a market economy;
- compared with 2000, in 2008 decreases in unemployment rate were registered, most in: Bulgaria - from 16,4% to 5,6% and Lithuania - from 16,4% to 5,8%; decreases of unemployment rate in almost all EU countries, however, developments over the period was a sinusoidal one; few instances of increases in unemployment - the most in Luxembourg, from 2,2% to 4,9% and Portugal from 4% to 7,7%.
- compared with 2008, the year 2009 marks an increase in unemployment rate in all 27 EU countries heavily affected by global economic crisis but differently depending upon crisis' installation, the existing economic and financial situation on crisis' onset and of the economic policies implemented to diminish its effects on business environment and population.

The year 2009 and projections for 2010 show strong increases in unemployment rate amid prolonged economic downturn as follows (http://epp.eurostat.ec.europa.eu):

- if the EU average is at the end of 2009, 9,6%, the forecast for March 2010 indicates an unemployment rate of 10%;
- for December 2009, with values above average fall 10 of the 27 EU countries: Estonia 15,5% Ireland 13%, Greece 10,2%, Spain 18,9%, France 10%, Latvia 20,5 %, Lithuania 15,8%, Hungary 10,6%, Portugal 10,1%, Slovakia 14,2%.

- in December 2009, the lowest values of the unemployment rate recorded for the Netherlands and Austria, both under 5%.

A serious situation is recorded for the younger population segment in which case, the average unemployment union's rate population, between 15 and 24 years is 20,3%, double, comparative with EU average; moreover, at the level of several countries, unemployment figures are alarming: Estonian 32,1%, Spain 39,3%, Latvia 41,3%, Lithuania 30,4%, Slovakia 32,2%.

At the level of EU countries, the negative long-term unemployment evolution may have serious effects on: economic development and growth, aggregate demand, the country's human capital, quality of life of individuals etc. Among EU unemployed population, in 2008, 2,6% were in such a position for more than 1 year and among these, 50% are unemployed for over 2 years. The situation varies depending on individual qualification; most affected are people with secondary education – 9,8% in 2008 compared with those with higher education – 3,4%. All this information reflect the status of integrated European nations in recent years and their many consequences, converted to potential or actual risks, on the community, individuals and, not least, on the environment.

3. Unemployment – determinative for purchasing and consumer behaviour

The impact of unemployment is both economically - as a "waste of precious resources" and social "issue of deep suffering" (Samuelson, 2000, p.666). From an economic point of view, P. Samuelson considered that losses in periods of high unemployment are several times higher than those produced by monopolies or customs duties and quotas for goods. From a social perspective, the effects are humane and psychological, materialized as physical and mental health damage both for the one directly affected and for the family to which it belongs.

In the "General Theory of Employment, Interest and Money" J.M.Keynes observed that "consumption will depend on aggregate income level and, consequently, on the level of employment ..., unless there are changes with regard to propensity towards consumption" (Keynes, p.88); also workload which entrepreneurs decide to employ depends on the amount between the expected consumption and new investment, therefore, in Keynes' conception, on actual demand; because effective demand is a function of aggregate offer, Keynes concluded in his theory of employment that, in balance, labour volume depends on: the aggregate offer function, propensity for consumption and investment volume. Given the fundamental psychological law of consumption, the growth of employed labour (and therefore of income) involves the growth of consumption volume but not to the same extent; therefore, Keynes concludes that difference between the price of the aggregate supply of production and consumption of households, that reached entrepreneurs in the form of income, is directly proportional to the employed volume of labour. If the investment is increasing, it stimulates growth of aggregate offer, of the employed labour, aggregate offer and aggregate demand balance and thus stimulating consumption. If the investment does not increase, aggregate offer is balanced with aggregate demand at the level where is not trained and the growth of employment so as Keynes showed, at a level of under-use of labour force (Keynes, p. 89). This level of under-use of labour force involves an "underuse" level in demand, therefore in consumption. Therefore, we infer that, in terms of aggregate supply and demand balance a certain level of unemployment is possible, level involving changes in purchase and consumption behaviour, but if that level is mastered and the propensity to consume does not change radically, balance is restored without excessive costs to society. If employment level falls very much, the lowering of income may even lead to a situation where consumption exceeds income - both for individuals and institutions that will use the use of reserves but also in the case of government that will have to ensure social protection of population and, possible, resorting to loans. However, even in circumstances where employment degree decreased greatly, equilibrium is restored due to the decrease in consumption on lower extent than income decrees (Keynes, p.160).

A side of unemployment's impact, apparently on economic nature, is its decisive action on consumption and purchasing behaviour. This problem must be defined on two levels:

- determine the purchasing behaviour of the unemployed person and his family, reflected in the purchase and consumption decisions different from the previous situation of unemployment;
- psychological impact on other employees of the company, industry, activity sector and even the overall economy, reflected in changes in the propensity for consumption due to the subjective choice of individuals to "create a reserve for unforeseen situations" (Keynes, 2009, p.170).

The economic recession determines reduces in revenues and expenditures in the national economy. The potential customers reduce their total expenditure, but, in particular, those that provide higher order needs; they are mainly limited to the purchase of goods strictly necessary for subsistence, the motivation being unemployment itself or just "the fear of job loss". The demand for the durable goods, leisure services,

entertainment etc., decreases much. The psychological variables specific to individuals - the fear, resistance/refrain from buying certain goods to potential customers should be analyzed and managed properly by the decision-persons of firms to attract, convince and trigger the buying decision (E. Hill, T. O'Sullivan, p. 36). Also, the managers should consider that, although consumers' income prevails in purchase and consumption decision, many individual motivations are neither rational nor conscious and the company can intervene by activating the needs and desires (Blythe J., p. 33).

In the present context of economic globalization, but globalization and consumption behaviour too, macrosocietal and global interdependencies, the increasing role of information in decision-making process of purchasing and consumption, and, not least, the technical, biological revolutions etc., outlining new dimensions or new valences of dimensions existing in consumer's behaviour of goods and services. On the European continent, the integrated system creates gradually conditions for convergence of consumption values of countries that have entered in the system after 2004 with those of developed and experienced countries in terms of values market economy (Miron M., p.IX, X). At this point, however, the ex-communist economies recently entered in the EU system are facing, as the whole global economic system, with global financial and economic crisis, have lost the march in force that it already started falling again, and even deeper, into economic decline. The prove are the statistics showing substantial differences from the developed countries, including, perhaps primarily, differences in terms of quality of life of individuals. Unemployment rates increase in all European countries but especially in the ones yet fragile has impacted heavily on the budget of households and their options in a bid to meet their needs.

To highlight the changes in buying behaviour of individuals from European Union on average and on countries, I have selected some of the countries facing high unemployment rate increases, specifying the index of consumer expenditure growth, 2000 year being considered the base year. We took into consideration that such a dynamic is determined by the evolution of prices of goods and services that form the individuals' consumption (Tab.3):

Tab.3: Household expenditure per habitant (volume index, 2000=100)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU	100,0	101,3	102,0	102,8	104,7	106,0	107,3	108,4	107,9	…
Denmark	100,0	99,7	101,1	101,7	106,3	110,1	113,7	116,0	114,9	108,9
Estonia	100,0	116,9	116,4	126,0	140,0	153,9	171,3	183,9	174,6	144,1
Latvia	100,0	105,1	118,4	128,6	141,7	156,8	192,5	223,7	212,2	162,5
Lithuania	100,0	106,0	113,2	125,4	138,9	156,6	172,9	190,4	197,4	167,6
Nederland	100,0	100,9	101,2	100,6	101,7	102,5	102,4	104,2	105,1	101,4
Hungary	100,0	106,1	112,8	120,7	122,8	127,1	130,7	129,7	129,0	120,4

Source: http://epp.eurostat.ec.europa.eu / Household expenditure per habitant (volume index, 2000=100)

All presented cases illustrate the decrease in consumer expenditure amid the economic crisis, population incomes decrease and a sharp increase in unemployment. In Latvia, like other ex-communist countries, over the analyzed period, consumption expenditure increased with 112,2%, following that in 2009, as compared to 2008, to decrease with 23,43%. For the 6 analyzed countries the rates of unemployment and consumption expenditure in 2008-2009 period looks as following (Tab.4):

Tab.4: Evolution of the unemployment and consumption expenditure in 2008-2009 period

Country	Unemployment rate (%)			Evolution of consumption expenditure (year 2000=100)		
	2008	2009	Unemployment rate (%)	2008	2009	Expenditure decrease (%) 2008=100
Denmark	3,3	6,0	81,81	114,9	108,9	5,22
Estonia	5,5	14,0	154,54	174,6	144,1	17,46
Latvia	7,5	17,6	134,66	212,2	162,5	23,42
Lithuania	5,8	14,0	141,37	197,4	167,6	15,09
Nederland	2,8	3,5	25,00	105,1	101,4	3,80
Hungary	7,8	10,0	28,20	129,0	120,4	6,66

Source: http://epp.eurostat.ec.europa.eu

- with the unemployment increasing decreased the consumption expenditure but not to the same extent;
- in Denmark and the Netherlands the unemployment rate increase is high but, the levels reached in 2008 and 2009 are considered normal rates of unemployment, therefore, not-dangerous;

- increased the consumption expenditure in the Baltic countries, during 2000-2008, highlights the dynamics of consumption prices and inflation but also changes in the structure of household consumption;
- lowered expenditure in 2009 compared with 2008, in high proportion with Baltic countries is dictated by the overall state of the economy in these countries, declining revenue, increased employee vulnerability situation and, not least, the risk of unemployment and installed unemployment.

Analyzing the absolute expenditure, afferent to households consumption in 2000-2008 (2009 is not yet reported by all EU countries) the continuous upward trend in the period 2000-2008 is observed after which a consumption decrease comes as follows: Denmark increase the consumption volume from 81.409,6 million Euros (unit. volume based in chain, ref. year 2000) in 2000 to 96.269,7 million Euros in 2008, following that, in 2009, to decrease to 91,726,8 million Euros; Lithuania - from 8118,8 million Euros increased to 15.378,6 million Euros then decreased to 12.987,8 million Euros in 2009 (Tab.5).

Tab.5: Final consumption expenditure of household (million €, chain volumes, ref. 2000)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Denmark	81409,6	81463	82778	83585,2	87629,5	90957,6	94319,1	96570,7	96269,4	91726,8
Italy	727204,7	730818,5	730038,6	734494,1	741027,1	748256	758594,6	765907,9	758445,9	743931,9
Netherlands	205578	209035	210906	210704	213642	216043	215961	220416	223178	216301
Lithuania	8118,8	8561,7	9111	10050,3	11068,6	12404,9	13613,1	14914	15378,6	12987,8
Hungary	28945,1	30633,7	32470,3	34661	35172,5	36334,8	37319,8	36960,6	36699	34203,4

Source: http://epp.eurostat.ec.europa.eu/ Final consumption expenditure of household (mil.€, chain-volumes, ref. 2000)

In figures 1 and 2 we represented the evolution of final consumption expenditure of households for four EU countries before 2004 (Fig. 1) and after 2004 (Fig. 2). The biggest reductions were suffered by the economies that recently exit the phase transition to a market economy, still vulnerable to external shocks.

Fig.1 - Final consumption expenditure of household, in EU, before 2004 year members

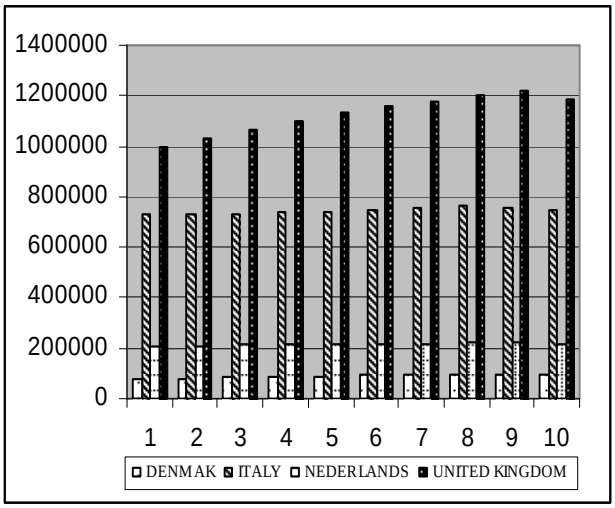
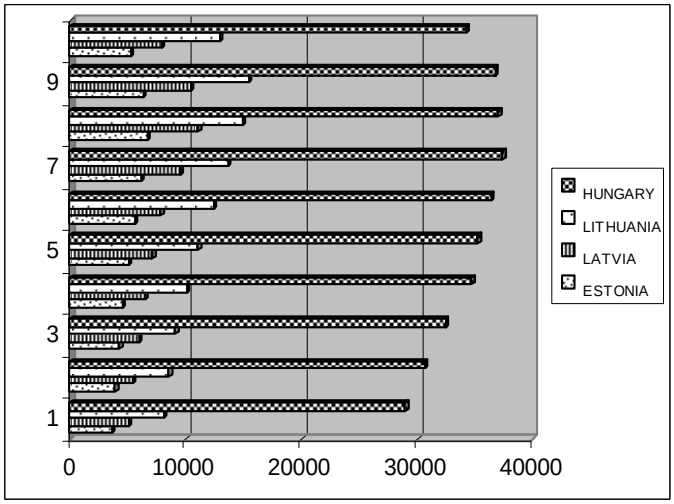


Fig.2 - Final consumption expenditure of household, in EU, after 2004 year members



Source: http://epp.eurostat.ec.europa.eu/ Final consumption expenditure of household (mil.€, chain-volumes, ref. 2000)

The correlation between the unemployment level and the consumption expenditure of households in the European Union can be determined, inter alia, by the Spearman rank correlation coefficient using the formula:

$$r_s = 1 - \frac{6\sum d^2}{n(n^2-1)} \qquad (1)$$

We separately analyzed the two groups of countries respective developed countries, integrated until 2004 + Cyprus and Malta and ex-communist countries, which joined the EU in 2004 and 2007 (tab.6 and tab.7) taking into account 2008.

Using data from Table 6, based on formula (1), we calculated Spearman rank correlation coefficient for developed countries in the European Union, EU member before 2004 + Malta and Cyprus, giving a value

of – 0.49 meaning that, between analyzed indicators - the unemployment rate and consumption expenditure per capita is an inverse relationship, of medium intensity.

Tab.6: Correlation unemployment – consumption expenditure for developed EU countries (2008)

Country	Unemployment rate	Rank (x)	Cons. expend. (mil.euro)	Inhabitants (mil.)	Cons.exp/ inh. (euro)	Rank (y)	d=x-y	d^2
Belgium	7,0	6	143186.2	10.7	13381.89	11	-5	25
Denmark	3,3	16	96269.4	5.5	17503.53	3	13	169
Germany	7,3	5	1183031.0	82	14427.21	9	-4	16
Ireland	6,3	9	66472.6	4.5	14771.69	7	2	4
Greece	7,7	3	139754.0	11.2	12478.04	14	-11	121
Spain	11,3	1	491038.6	45.8	10721.37	15	-14	196
France	7,8	2	941379.0	64.3	14640.42	8	-6	36
Italy	6,8	7	758445.9	60	12640.77	13	-6	36
Cyprus	3,7	15	10530.4	0.8	13163	12	3	9
Luxemburg	4,9	13	11768.8	0.5	23537.6	1	12	144
Malta	6,0	11	3657.2	0.4	9143	16	-5	25
Netherland	2,8	17	223178.0	16.4	13608.41	10	7	49
Austria	3,8	14	130070.7	8.3	15671.17	5	9	81
Portugal	7,7	4	85400.1	10.6	8056.613	17	-13	169
Finland	6,4	8	81260.0	5.3	15332.08	6	2	4
Sweden	6,2	10	150521.4	9.2	16361.02	4	6	36
Great Britain	5,6	12	1216526.0	61.7	19716.79	2	10	100

Source: http://europa.eu.com/

Applying the formula (1) to data of Table 7 it resides a Spearman rank correlation coefficient of -0,41 with significance between the two analyzed indicators, respectively, the unemployment rate and the consumer expenditure per capita, in the case of the countries recently entered in the EU system, there is an inverse relationship, of medium intensity. The lower value intensity of Spearman coefficient for ex-communist countries compared to the developed countries is sustained by households' consumption profile in these countries, namely the large share of food expenditure, relatively stiff to the price increases, changes of the incomes or other conditions of demands.

Tab.7: Correlation unemployment – consumption expenditure for the ex-communist EU countries (2008)

Country	Unemployment rate	Rank (x)	Cons. expend. (mil.euro)	Inhabitants (mil.)	Cons.exp/ inh. (euro)	Rank (y)	d=x-y	d^2
Bulgaria	5,6	7	15485.6	7.6	2037.58	10	-3	9
Czech Republic	4,4	9	43696.7	10.5	4161.59	5	4	16
Estonia	5,5	8	6304.1	1.3	4849.31	2	6	36
Latvia	7,5	3	10450.6	2.3	4543.74	4	-1	1
Lithuania	5,8	5	15378.6	3.3	4660.18	3	2	4
Hungary	7,8	2	36699.0	10	3669.90	7	-5	25
Poland	7,1	4	157929.6	38.1	4145.13	6	-2	4
Romania	5,8	6	55238.7	21.5	2569.24	9	-3	9
Slovenia	4,4	10	16576.3	2	8288.15	1	9	81
Slovakia	9,5	1	18512.1	5.4	3428.17	8	-7	49

Source: http://europa.eu.com/

Regarding the distribution of consumption expenditure by type of expenditure items is concerned, in 2005 (latest year for which Eurostat gave relevant information to this problem), on the EU level is presented as follows (Eurostat hbs_exp_t121): 14,57% food expenditure and non-alcoholic beverages; 2,27% expenditure with alcoholic beverages, tobacco; 5,73% clothing and footwear costs; 28,12% of housing costs, water, electricity, gas, other fuels; 5,74% furniture costs, household items, maintenance; 3,22% health costs;

12,48% transport costs; 3% communication expenditure; 8,87% for recreation and culture expenditure; 0,96% expenditure on education; 5,75 % expenditure on restaurants and hotels; 9,29% other expenditure. The situation is different in the member countries due to the economic development level and the cultural environment variables, mainly. In Romania, from the total expenditure incurred, 44,22% is allocated to the food expenditure and non-alcoholic drinks and 15.62% of housing costs, water, electricity, gas, etc., while in the Great Britain 29,59 % is consumed for housing, water, electricity, gas etc. and only 9.88% for food and non-alcoholic beverages etc.

Given the socio-occupational status, the consumption expenditure made by the unemployed occupied, on average, in 2005, on EU level, 70,62% of the expenditure incurred by workers in industry and services, 55,69% of the expenditure incurred by other employees in industry and services, 55,08% of the expenditure incurred by employees on their own; the motivations - the low quality of life of those in such position, even if their number did not rise concern for society. At the level of the various countries of the Union the qualitative state of unemployed life is highlighted with higher discrepancies than the European average - the average unemployed consumption expenditure in Malta was in 2005 50,18% of consumption expenditure made by the industrial and services workers and 38,61% of consumption expenditure made by the other employees in industry and services, while in Cyprus the average consumption expenditure of unemployed were 95,96% from consumer expenditure made by workers in industry and services and of 69,48% of consumption expenditure made by other employees in industry and services. The differences are given by the relative number of unemployed (the unemployment rate in Malta in 2005 was 7,2% and 5,3% in Cyprus) and social protection systems of the disadvantaged.

Significant is that, on the macro-societal level, risk of unemployment, major social risk, interrelated with other types of risks in the risk system, being costs generator in the consumer-business-environment triad (Danu, MC (2001), p. 87-88), as follows:

- the negative implications on unemployment on individual materialize into: loss of the income, impoverished, the minimize of the consumption, quality of life damage, the psychosocial risk of individual, alienation, marginalization etc. The unemployment affects the consumption and purchasing behaviour by reducing consumer expenditure and their structural change undesirable by society and individual;
- the negative implications of unemployment on the economy, society as a whole, embodied in economic and social costs (Popescu, C., Gavrilă, I., Ciucur, D., Popescu, Gh. (2008), p.621), including: the labour resources wastage, reduced of the intensity of economic development, increasing the spread between real GDP and potential GDP, profit loss, minimizing of the consumption, decrease state revenues and expenditure, increased government expenditure to manage unemployment and unemployment benefits, social protection of unemployed etc.;
- the negative implications of unemployment on macro-societal level, by inter-conditioning and perpetuating effects, on economic and financial possibilities of the economy affected by this major risk, to properly and permanently manage the relationship with the environment.

4. Conclusions

Global Economic Crisis brutally interrupted sustained economic growth on the European continent in 2005-2008 period, after a long route of the adjustment and harmonization of the interests those aimed at integration. The consequences were negative for companies, individuals and society. The tempered unemployment and controlled by the outbreak of the crisis has made its presence felt in all the integrated economies in different levels and forms. Having as premise the problems recorded in sectors' level – construction, automotive, transportation, etc., unemployment was felt with more force on the male population and young Europeans.

The uncertainty on business environment and on the possibility of providing a decent living has seized the purchasing and consumption decision of individuals. There were shifts in decision-making, in many cases, on the first place, being lower order needs and delaying the covering of those on higher ranks. It might seem paradoxical that the effects of high unemployment developed in most EU countries and on average, involve both economic and social costs growth on macroeconomic level and decrease consumer expenditure. If the former should be reduced as much as possible, however, the need to promote an optimal and balanced use for individuals and their economic and social welfare needs no longer to be proven. Even though the impact was negative on the whole population and its option on consumption directly affected individuals, the unemployed have suffered the most profound changes on economic and personal, social and relational level. The statistics and research methodology illustrates at a time the relationship between income and consumption, unemployment and consumption, GDP and consumption etc. but, on long term, the effects,

specially psychological ones, are difficult to quantify. Therefore, the support of macroeconomic decision for reducing unemployment, and, generally, on the whole suite of issues generated by crisis, is information.

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THE FOREIGN DIRECT INVESTMENTS IN EUROPE AND THE GLOBAL FINANCIAL CRISIS

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Abstract: *The positive trend of the FDI inflows in Europe, registered until 2007, was stopped by the global financial crisis. The aims of this paper are to identify and analyze the reasons why the economic downturn has influenced, in 2008, mainly the FDI into the developed Western states and, starting with 2009, also the developing countries. Moreover, we want to explain how the crisis has changed the FDI landscape in Europe. Using the available statistical information and the qualitative analysis, we try to prove that, on medium term, Western, Central and Eastern Europe will start to attract again the foreign investors.*

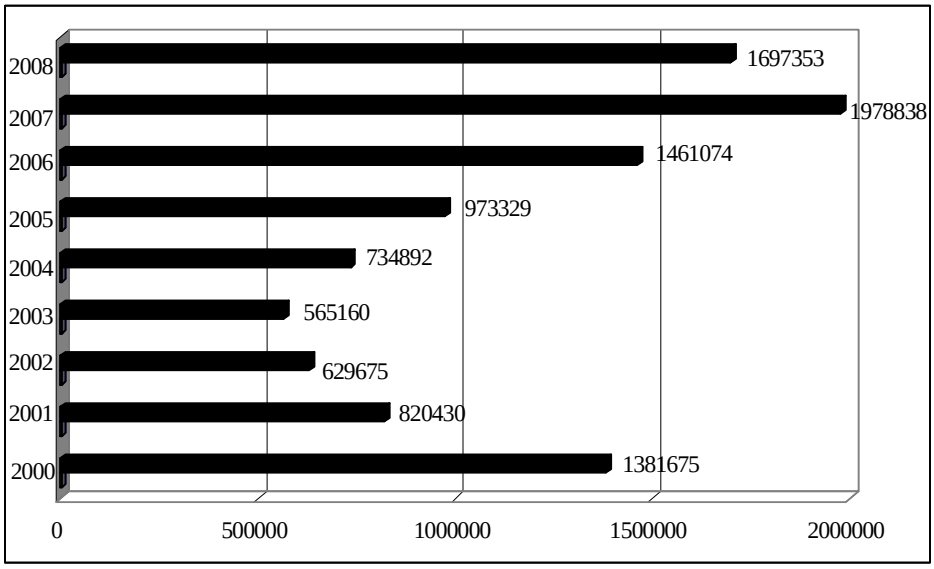
Key words: foreign direct investments, financial crisis, developing countries, developed states

JEL classification: F21, F23, F40

1. Introduction

The first decade of the XXth century was characterized by sinuous evolutions of the global foreign direct investments (FDI) flows. From a maximum level reached up in 2000, during 2001-2004 the total volume of the FDI flows decreased, reaching the lowest level in 2002. In 2006, the ascending trend of FDI was regained, even surpassing the level of the year 2000; this trend continued during 2007, when it was reached a historic maximum level. The global crisis has temporary stopped this trend, but it will be definitely regained on medium term. If the crisis is surpassed, the global economic order will be changed, fact that will have a positive influence on the role of the FDI in the global economic circuit.

Figure 1 The inflows of FDI between 2000 and 2008 (in million USD, at current prices)



Source: UNCTAD, *Major FDI Indicators*, WIR, 2009, http://stats.unctad.org/FDI/TableViewer/tableView.aspx?ReportId=3084, accessed in March 2010

As we can see, in 2007, the FDI inflows have surpassed the record gain in 2000 with almost 600 billion USD, despite the global financial crisis that started at the middle of 2007. Yet, the slowing down of the global economic growth determined the reduction of the FDI in 2008.

In 2007, the FDI inflows in the developed states reached up 1358 billion USD. The United States remained the major FDI receiver, followed by United Kingdom, France, Canada and Holland. Being the epicenter of the crisis, the developed states have suffered a contraction of the global amount of the FDI inflows in 2008, fact that was not noticed in the case of the developing economies, which started to feel later the crisis' effects (see Table 1).

Table 1 The FDI inflows in different types of economies between 2000 and 2008
(million USD, at current prices)

	2005	2006	2007	2008
Developing economies	329292	433764	529344	620733
Transition economies	30948	54548	90866	114361
Developed economies	613089	972762	1358628	962259
UE	498440	590305	842311	503453

Source: UNCTAD, *Major FDI Indicators*, WIR, 2009, http://stats.unctad.org/FDI/TableViewer/tableView.aspx?ReportId=3084, accessed in March 2010

In the developing countries, the FDI inflows in 2008 have reached the highest level ever since – of 620733 million USD – which represented an increase of 21% compared to the level of 2006. South, East and South-East Asia are responsible for half of this amount of the FDI inflows in the developing states.

According to some official data released by financial and banking authorities from Central and Eastern Europe, most of the investments made by multinational companies on the low cost markets of this region were the greenfield (establishing a subsidiary on an "empty land"), because they allow the Western companies to use the latest technology and thus to obtain high quality products that correspond to the standards of the Western customers. This justifies the fact that in 2006 the value of FDI in Central and Eastern Europe reached up 112 billion USD, increasing by 45% over the previous year, when they amounted only 77 billions (*The Economist*, 2007). This situated the region on the second ranking position in the receiving areas of FDI, after East and South-East Asia, in 2007.

Starting with the second half of 2008, this positive trend of the FDI in Central and Eastern Europe was suddenly interrupted by the global financial crisis. Although in other past recessions, there was a lag of one or two years before being affected the foreign direct investment flows, "this time the decline was almost instantaneous" (Brownell, 2010). According to UNCTAD's World Investment Prospects Survey (WIPS) 2009–2011, at a global level, the FDI plans of the multinational corporations have been affected by the crisis on the short term. In contrast to the previous survey from 2008, when only 40 per cent of companies reported being affected by the crisis, in 2009 as many as 85 per cent of the worldwide multinationals blamed the global economic downturn for influencing cutbacks in their investment plans. From these companies, 79% pointed out directly on the financial crisis. So, the global economic and financial situation determined the companies be more careful when choosing a location for their investments. Analyzing the criteria used by the international executives in selecting these locations, we notice that in 2008 their decisions were mainly based on four sets of factors (Ernst&Young, 2009, p.7):

- Getting to the market: the main reason the companies have changed some locations was related to a change in the scale, place, nature or diversity of the market. An important aspect in taking their decision was played by the rivals' actions.
- Labor and productivity: companies have arbitrated between different labor profiles, according to their needs of physical assets and workers. Skills, labor availability and costs are therefore measured against productivity for the best mix.
- Taxes and laws: these have shaped, directly or indirectly, the flexibility and profitability of an investment.
- Environment and region: for the multinationals, a key role was played by the extent to which the operating environment offered them the means to develop. Therefore, they weighed up the financial markets, the development stage of innovation and research, the availability of human and physical capital and even the quality of life.

A comparative analysis between these factors and those that influenced the multinationals' FDI five years ago, for example, points out that the foreign investors are reviewing their location strategies as they adapt to the present situation of market uncertainty. Under these circumstances, stability, predictability and quality criteria are, more than ever, at the top of investors' immediate concerns.

2. The Impact of the Crisis on the FDI Inflows into the Developing and Developed European Countries

2.1 The Crisis' Effects on FDI into the European Economies during 2008

The financial and economic crisis has led to a massive fall in the number of jobs created through FDI around the globe. According to the estimates made by the United Nations Conference on Trade and

Development (UNCTAD), in 2008, the global FDI inflows fell by 384.2 billion US $, meaning a 21% fall compared to 2007. This significant percentage is largely attributed to the decrease of the FDI inflows in the developed economies.

Indeed, the global crisis has changed the FDI landscape at least from two points of view. First of all, in 2008, the investments in developing and transition economies continued to grow, but a much slower pace than in previous years (at a rate of just 3.6% in 2008 - compared with more than 20% in 2007), increasing their share in the global FDI flows (*Transnational Corporations*, 2009, p. 116), while the developed countries were confronted with a strong decrease of the foreign investments. Due to the decline of the FDI inflows in the developed economies, in 2008 Europe was the region where these investments decreased most. One of the reasons for which, especially in the first half of 2008, the developing countries faced the global crisis better than the developed states was given by the fact that their financial systems were less closely interlinked with the banking systems of the United States.

It is noticeable that, in 2008, the FDI inflows into the South and East Europe increased for the eighth consecutive year, despite the global financial situation and the conflicts from certain parts of the region. The inflows were still driven by the privatization of the remaining state-owned assets.

The situation of the FDI in the Central and Eastern Europe (CEE) varies from one country to another. While in Romania and Slovenia the foreign direct investments were increasing during 2008, Poland and Bulgaria were marked by a decrease in the FDI inflows. Some of these changes were the result of the normal fluctuations caused by the large individual investment projects. In the Czech Republic, Hungary and Slovakia the FDI' level was the same as in 2007 (even if the number of the investments may have decreased in some cases), the investments being directed towards projects focused on exports. Actually, despite the global economic downturn, the Czech Republic remains among the world's twenty most attractive investments' destinations. However, in an overall ranking according to the number of implemented foreign projects, the Czech Republic fell from ninth to fourteenth place, even though it received 5% more FDI projects in 2008 than in 2007. Looking to the past, we will find that the Czech Republic actually profited from the downturns that took place in the global economy. At the beginning of the XXIst century, the complicated economic situation motivated individual companies to look for more favorable locations. Thanks to its sophisticated system of supporting the investors, the Czech Republic was prepared to welcome new companies and to create suitable conditions for them. Even though the Czech economy has changed significantly since then, business costs are still lower here than in Germany or United Kingdom, for example.

Yet, the Czech Republic has registered in 2008 a 63% decline in the number of newly created jobs. A similar trend can be seen in other European countries where the recession's impact on employment is substantial. Apart from the Czech Republic, some other popular destinations for FDI, such as, for example, Slovakia or Turkey saw a significant decline in the number of the created jobs, particularly in the automotive and electrical-engineering sectors. As the CEO of the CzechInvest (the investment and business development agency of the Czech Republic, established by the Ministry of Industry and Trade) has noticed, "whereas in the 1990s the Czech Republic was attractive for large projects on greenfield sites that required massive investment in buildings, machinery and equipment, today the Czech Republic is being chosen to an even greater extent by companies that do not need expensive equipment but that are investing mainly in training and education of their employees – programmers, designers, researchers and so on" (*CzechInvest Report*, 2009).

Regarded as a whole, the FDI inflows in the Eastern European countries and those in the Western ones, we may say that while this last group of states broadly maintained the same number of FDI projects in 2008 as in 2007, the Eastern economies saw the number of inward FDI projects fall by 5%. The contrast in job creation was still more visible: the foreign investments created 26,491 fewer jobs in CEE, but only 1,727 fewer in the West. A possible explanation for this situation can be the fact that flexible social regulations, resistance in West European countries to downsizing at large industrial plants, and a scarcity of major investors have clearly had a knock-on effect on the more fragile economies of the Eastern Europe. Moreover, the German manufacturers, US IT outsourcers, and French carmakers have all shown greater loyalty to their countries of origin and historical markets.

The global map of the European 2008 FDI' points out three groups of countries (Ernst&Young, 2009, p. 17):

- *Contracting ones*: the states that faced with a declining market trend. For example, the Western countries including the UK (still the number one destination for FDI), France, Belgium and Spain saw a decrease both in FDI' projects and employment. In some CEE countries such as, for example, in Poland, even if the number of FDI significantly decreased, the foreign investors remained interested in expanding food

or automotive operations. In Hungary, there were fewer but larger projects, a sign that foreign investors remain confident in the long-term prospects.

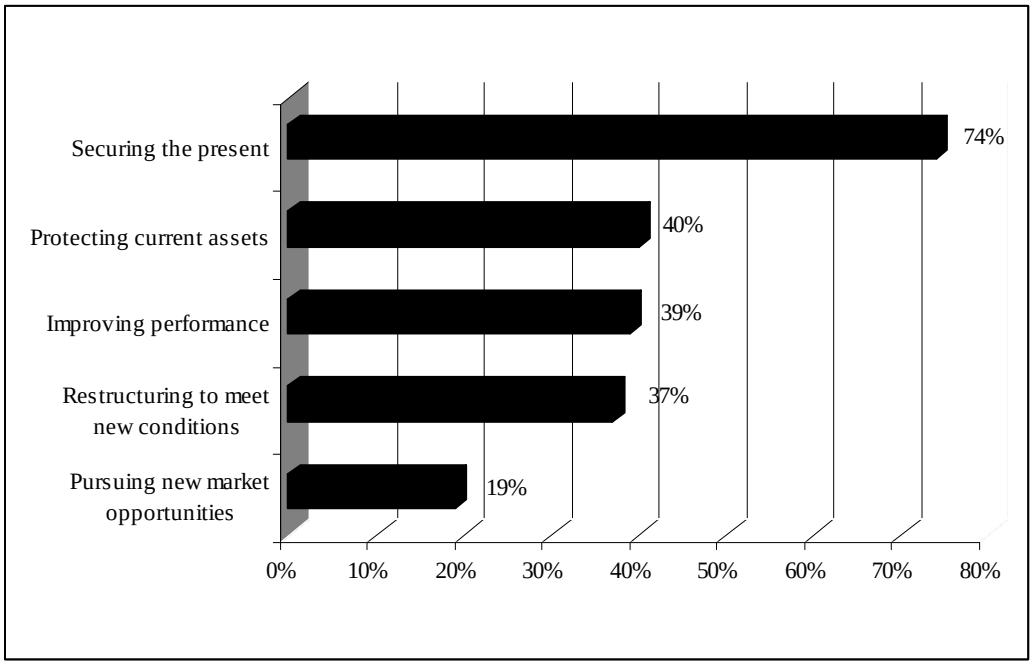
- *Dynamic states*: there were positive or relatively stable trends in Germany, Switzerland, Sweden, Italy and Ireland.
- *Vulnerable countries*: the former FDI hotspots such as Poland or Slovakia saw the number of FDI fall, especially in automotive and electronics.

The second way in which the global crisis has modified the FDI landscape is related to the fact that the year 2008 brought a substantial change in the composition of the new investments. "For the first time ever, services – including research and development – comprised the majority of the new projects. Most investments were undertaken by firms engaged in software development – whereas a few years ago new investment projects in the automotive industry predominated. Now, sectors involving services rather than manufacturing are of comparable importance" (*CzechInvest Report*, 2009). On contrary, some sectors have managed to withstand the crisis better than others. For example, foreign direct investments in the mechanical-engineering industry increased by 19% in Europe. With nearly 6,000 newly created jobs, one of the most successful sectors of 2008 was given by the renewable sources of energy.

2.2 The Crisis' Impact on the FDI into the European Economies between 2009 and 2010

The impact of the economic crisis on foreign direct investments was more perceptible in 2009. The data for the first quarter of 2009 indicate that the number of the announced projects declined in Europe by 8% compared to the same period of 2008 (*CzechInvest Report*, 2009). During 2009, it seems that the global economic downturn influenced not only the FDI inflows in the developed countries, but also those towards the developing states. Actually, according to the statistics, the regions of Europe worst affected by the FDI decline during 2009 were the Central and Eastern parts. In these regions, the FDI saw a drop from more than 2 billion USD in the first three quarters of 2008 to about 1.3 billion USD in the same period of 2009 (Brownell, 2010). According to the data of the statistics that compare the performances between November 2008 and November 2009, the biggest losers in terms of a decrease in inbound greenfield projects during this period were Serbia (with 52% decrease), Romania (50% decline), Belgium (-46% decline) and Poland (-42% decrease). In the Transition Report, issued at the beginning of November 2009, the European Bank for Reconstruction and Development has examined the reasons why Central and Eastern Europe has been hit particularly hard by the crisis. One of the main problems identified by the EBRD was the manner in which economies in the region had been financed in those years when they experienced sustained growth. It was concluded that the growth was made possible almost entirely by foreign direct investments. As a result, many economies from Eastern Europe faced many problems when the foreign direct investments began to stop, following the eruption of the global financial crisis (starting with the end of 2008) (EBRD, 2009).

Figure 2 Companies' emphasis in the context of the nowadays crisis*



Source: Ernst & Young, "Opportunities in Adversity: Accelerating the Change", 2009, http://www.ey.com/GL/en/Issues/Business-environment/Opportunities-in-adversity
*The respondents: 337 board executives – Total > 100% many possible answers

A similar trend was experienced by the transition economies from the South-Eastern Europe: the inflows of FDI rose by 26% (to 114 billion USD) in 2008 and went down by 47% in the first quarter of 2009 (*Transnational Corporations*, p. 117). A report conducted by UNCTAD shows that, in this part of the Europe, the "near exhaustion" of major privatizations' projects and intrinsic weaknesses of national economies – along with the recession – were the main contributing factors to the decline of the FDI inflows (UNCTAD, 2009).

Through the third quarter of 2009, the impact of the recession was very industry specific so, while there were declines of investments in construction (55%), chemicals (45%) and manufacturing (35%), resilient areas included the retail trade, energy, life sciences and renewable industries. In Central and Eastern European countries, FDI in manufacturing and logistics provided 26491 fewer jobs in 2009 than in 2008. Moreover, the foreign investors in automotive, electronics, electrical and computer industries made many fewer commitments. The investment shortfall in these top sectors hit countries that had made great efforts to build infrastructure, invest in technical training and provide incentives to Western manufacturers.

The main reason why the multinationals have diminished the number of FDI is that, in the context of the nowadays financial crisis, the expansion is less a priority than securing the company's existing base. On a survey conducted in 2009 by Ernst&Young, more than half of the respondents (53%) had no plans for 2009 to expand their activities in Europe or anywhere else, being focused on survival and maximizing the returns on existing assets. According to the survey "Opportunities in Adversity: Accelerating the Change" (Ernst & Young, 2009), in 2009, 74% of the 337 companies interviewed were focused on securing the present and almost 37% on restructuring to meet the new conditions (Figure 2).

Another study conducted by Ernst & Young - "European Attractiveness Survey"- shows that the proportion of the companies "definitely not" planning an expansion in Europe has raised every year since 2004 (when the percentage was 18%), reaching 31% in 2009. Yet, those companies that were still going to invest abroad were looking for more traditional markets, such as Western Europe or Central and Eastern Europe (see Figure 3). Actually, these two regions, were equally assessed as "the safest" regions, being considered the most attractive for establishing a subsidiary or for further expansion of a subsidiary's operations. So, 52% of the surveyed investors (probably the risk-averse ones) were convinced that the most attractive region for FDI in the subsequent three years will be Central and Eastern Europe, while the interest in countries such as Brazil, India or China would gradually decline.

As we can see from Figure 3, the uncertain climate of 2009 has resulted in a return to favoring more familiar markets. If in the 2008 survey China was in the pole position as the most attractive region in which to establish operations, it has lost its crown in 2009, leaving room for Western, Central and Eastern Europe. Actually, according to the same study mentioned above (Ernst&Young, "European Attractiveness Survey", 2009), China has lost 14 points in its attractiveness score in 2009, being cited by only 33% of the respondents. In this context, China seems to be seen more as a trading partner, with an increasingly affluent population, attractive for its purchasing power, rather than as a business location, with low cost of labor. India's rating has also suffered, but it fell only 10 points: it was the location preferred by 20% of the respondents.

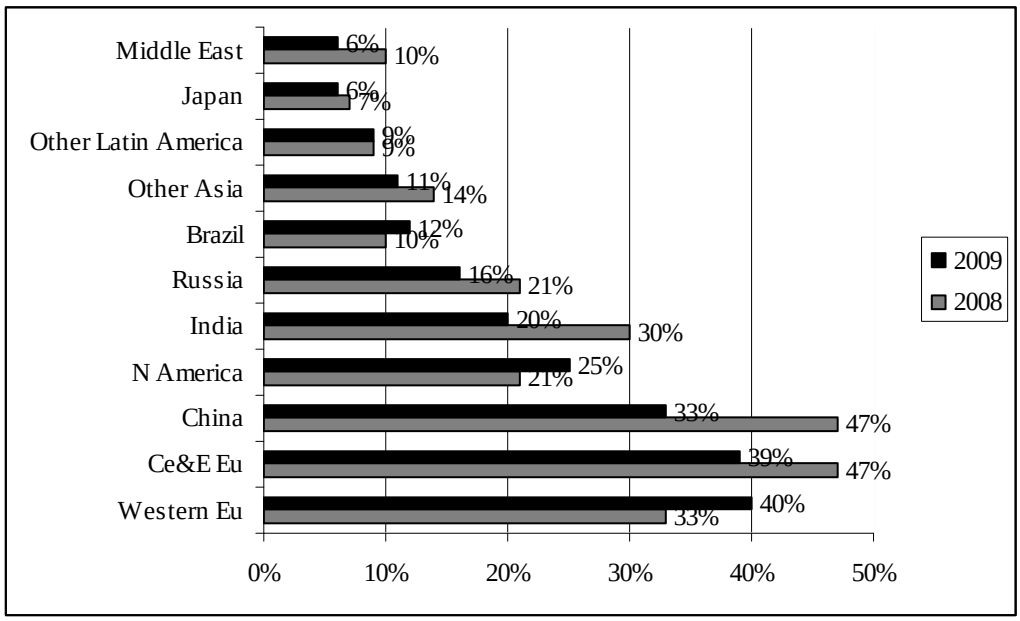
The overall policy trends during the crisis have been mostly favorable to FDI, both nationally and internationally. However, in some developed countries from European Union, a more restrictive FDI approach has emerged. Some Western states, United Kingdom being among the worst offenders, have made greedy corporate tax grabs during the recession and several companies, such as Regus or Informa, have moved their headquarters out of UK in order to avoid a tax rate of up to 50% (Brownell, 2010). This is another reason for which the forecasts suggest that the general climate for foreign direct investments in Central and Eastern Europe is slowly regaining momentum.

It is assumed that the three economies from the Eastern Europe that, up to now, weathered the best the global financial crisis are Poland, the Czech Republic and Slovakia. However, Juraj Kotian, a specialist in Central and East European macroeconomics at Erste Group Research in Vienna, noticed that seasonally adjusted data for gross domestic product showed that, on a quarterly basis, the three economies were growing, but well below their potential, mainly because of the fall in foreign direct investments (Dempsey, 2009). He concluded that the key to recovery was an increase in investments.

Some Eastern European countries have already implemented measures to stimulate the investors. It is the case, for example, of Lithuania, which decided to reduce the tax burden for firms investing in R&D and innovation, to offer the investors a package of measures consisting in low-cost loans, venture capital funding, export assistance or help with patent applications (Ministry of Economy of the Republic of

Lithuania, 2010). Moreover, a broadband Internet access program will cover four-fifths of the country by the end of 2010.

Figure 3 The regions considered the most attractive for FDI projects in 2008 and 2009*



Source: Ernst & Young, "European Attractiveness Survey", 2009, p. 24, http://www.eyeim.com/pdf/Attractivite%202009%20Web.pdf

* The respondents: 809 international leader companies – Total > 100% many possible answers

3.Conclusions

If in 2008 the effects of the crisis were felt more in the developed contries of the European Union and less in the developing states from the Central and Eastern Europe, in 2009 the FDI inflows towards all the states have significantly diminished. Knowing the fact that the Western European companies are the main investors in the Central and Eastern economies (having a share of 51%), we may say that these last group of countries can make a big step forward, in order to surpass the nowadays crisis, if the investments of the developed states of European Union regain their positive trend. The evidence from earlier recessions has shown that the majority of the companies respond with 'sensible' caution. So, a deep split may occur in Europe over the extent to which Europe's richer Western countries should help their poorer Eastern neighbors. Yet, the Central and Eastern Europe proved to be one of the safeties and attractive regions during the crisis, being preferred by the risk-averse investors. This is why the business decision-makers are convinced that the post-crisis world will see the eastward shift of the investments. The companies from the developed economies will continue to expand their operations in EU's emerging markets, in order to grow their business, improve their cost structure and tap skilled labor force.

In conclusion, a prolonged recession or a slow recovery of the developed economies will accelerate the eastward shift of the multinationals' investments and, consequently, of the economic power.

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INTERNATIONAL TRADE IN THE MIDST OF GLOBAL CRISIS

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Abstract: *Towards the end of 2008 the global crisis initiated to manifest itself in international trade. In this paper we show that the slump in global demand and the slowing-down in economic growth translated into a substantial reduction in international trade that has affected the cross-border trade of virtually all countries and economic sectors. We find that trade in manufacturing - automotive products, office and telecommunications equipment, electronics - has contracted at a much sharper rate than trade in agricultural products. Adittionally, we focus on the reasons why trade declined so steeply, with 12% in 2009. Finally, we observ that after a challenging two years in which the global economy endured the worst recession since the Second World War, recovery is now unambiguously underway.*

Key words: trade, global crisis, export compositions, economic growth

JEL classification: F1, F13, O14

1. Introduction

The pre-crisis global economy enjoyed golden conditions. The quarter-century up to the crisis saw the fastest increase in economic growth, globalisation and prosperity in history. International trade increased sevenfold between 1980 and 2008, outpacing the increase in world GDP in the same period.

The begin of the present crisis can be traced back to July 2007, with the liquidity crisis due to the loss of confidence in the mortgage credit markets in the United States. The expectation was that the crisis would be restricted to financial markets, with few repercussions on the real economy and the rest of the world. This expectation was shattered in September 2008 as the crisis entered an acute phase, with strong downward fluctuations in the stock markets, substantially reduced rates of economic growth, volatile exchange rates, and squeezes in demand and consumption, leading to falls in industrial production and decreasing flows of international trade and FDI, and producing impacts on related areas such as transfer of technology. The crisis has also been accompanied by increases in unemployment, with concomitant declining incomes and demand.

The G20 Leaders meeting in Pittsburgh last year agreed on a Framework for Strong, Sustainable and Balanced Growth where they vowed to "work together as we manage a transition to a more balanced pattern of global growth" (G20 Leaders' Statement, 2009). However, changing the patterns that led to the global imbalances is easier said than done. It requires profound changes to the way that trade links with production and consumption patterns in all countries. Such changes, to be fair, cannot happen overnight.

2. Declines of global trade between 2008-2010

International merchandise trade continued to increase rapidly during the first half of 2008. It was not until October 2008 that the impact of the financial crisis became evident. In the last three months of 2008, an increasing number of countries started to report absolute declines in trade. Merchandise trade flows have been rapidly contracting since then, affecting an increasing number of countries and sectors.

In October 2008, of 41 countries reporting monthly data (the EU countries counted as one), about 18 countries reported a decrease in exports compared with the same month in 2007. The limited downturn in October became more widespread in November, and deteriorated further in December and in January 2009. In January, all but two countries related decreases in exports, and about half of the countries with data available reported substantial export declines of over 30 per cent. These numbers denote the gravity and the global scale of the economic crisis, with virtually no country being unaffected. In January 2009 a substantial number of countries, including Chile, Hungary, the Philippines, the Russian Federation, Singapore and Sweden, recorded export declines of more than 40 per cent relative to January 2008.

The volume of global trade in 2009 has declined for the first time since 1982 (World Bank, 2010).

Last year, all regions and countries have experienced declines in the volume of their merchandise exports. The United States (—13.9%), European Union (—14.8%) and Japan (—24.9%) all registered declines larger than the world average of —12.2%, while the smallest declines were recorded by the oil exporting regions of Middle East (—4.9%). Asia (—11.1%) and China (—10.5%) also saw their exports decline, but by slightly less than the world average. (WTO, 2010)

On the import side, the two largest declining regions were oil exporters — the Commonwealth of Independent States (CIS) (—20.2%) and South and Central America (—16.5%). Among the remaining countries, the United States (—16.5%) and the European Union (—14.5%) had declines greater than the world average. (Table 1)

Table 1: Merchandise trade by region and GDP, 2008-2009
(Annual % change at constant prices - 2005)

	Exports		**Imports**	
	2008	**2009**	**2008**	**2009**
World	2,1	-12,2	2,2	-12,9
North America	2,1	-14,4	-2,4	-16,3
United States	5,8	-13,9	-3,7	-16,5
South and Central America	0,8	-5,7	13,3	-16,3
Europe	0,0	-14,4	-0,6	-14,5
Europe Union (27)	**-0,1**	**-14,8**	**-0,8**	**-14,5**
CIS	2,2	-9,5	16,3	-20,2
Africa	0,7	-5,6	14,1	-5,6
Middle East	2,3	-4,9	14,6	-10,6
Asia	5,5	-11,1	4,7	-7,9
China	8,6	-10,5	3,8	2,8
Japan	2,3	-24,9	-1,3	-12,8
India	14,4	-6,2	17,3	-4,4

Source: WTO Secretariat

EU 27 trade flows with all of its major partners fell in 2009, except for exports to China (+4% in 2009 compared with 2008). The largest decreases were recorded for exports to Russia (-37%), Turkey (-19%), the USA and Brazil (both -18%), and for imports from Russia (-35%), Brazil (-29%), Norway (-28%), Japan (-26%) and Turkey (-22%). The smallest falls were observed for trade with Switzerland, for both exports (-10%) and imports (-8%) (Eurostat, 2010). In table 2 we observe declines in all member states' total trade.

Despite a growth rate of 7.1% in 2008, in 2009 the Romanian economy was heavily affected by the global financial downturn and contracted by some -7.2%. Romania' exports fell with 14% in 2009 compared with 2008 and imports declined with 32%.

Tabel 2: Member States' total trade (intra-EU + extra-EU) bn euro

	Total exports			Total imports		
	Jan-Dec 08	**Jan-Dec 09**	**Growth**	**Jan-Dec 08**	**Jan-Dec 09**	**Growth**
Belgium	320.8	265.2	-17%	317.0	252.3	-20%
Bulgaria	15.2	11.8	-22%	25.1	16.7	-33%
Czech Republic	99.8	81.2	-19%	96.6	75.3	-22%
Denmark	79.3	66.9	-16%	74.8	59.4	-21%
Germany	983.3	803.9	-18%	805.7	668.1	-17%
Estonia	8.5	6.5	-24%	10.9	7.3	-33%
Ireland	85.5	82.1	-4%	57.1	44.6	-22%
Greece	17.4	14.4	-18%	61.0	42.9	-30%
Spain	191.4	156.6	-18%	286.1	206.2	-28%
France	408.8	341.6	-16%	478.3	396.1	-17%
Italy	369.0	290.1	-21%	382.1	294.2	-23%
Cyprus	1.1	0.9	-19%	7.2	5.6	-23%
Latvia	6.9	5.5	-21%	11.0	6.9	-37%
Lithuania	16.1	11.8	-27%	21.1	13.1	-38%
Luxembourg	17.2	14.9	-13%	21.5	17.5	-19%
Hungary	73.8	60.0	-19%	74.1	56.0	-24%
Malta	2.0	1.5	-25%	3.3	2.6	-20%
Netherlands	433.7	357.3	-18%	395.0	319.5	-19%
Austria	123.3	98.6	-20%	125.3	102.8	-18%
Poland	115.9	96.4	-17%	142.0	105.1	-26%
Portugal	37.9	31.1	-18%	61.2	50.1	-18%
Romania	**33.7**	**29.1**	**-14%**	**57.1**	**38.9**	**-32%**
Slovenia	23.2	18.8	-19%	25.2	19.0	-25%
Slovakia	48.4	40.1	-17%	50.3	39.6	-21%
Finland	65.6	44.9	-32%	62.4	43.3	-31%
Sweden	124.7	94.0	-25%	113.6	85.4	-25%
United Kingdom	312.5	252.3	-19%	430.4	344.9	-20%

Source: Eurostat, 2010, News release euroindicators, *Euro area external trade deficit 8.9 bn euro*

3. Drop in the volume of world trade was more than most economists had predicted

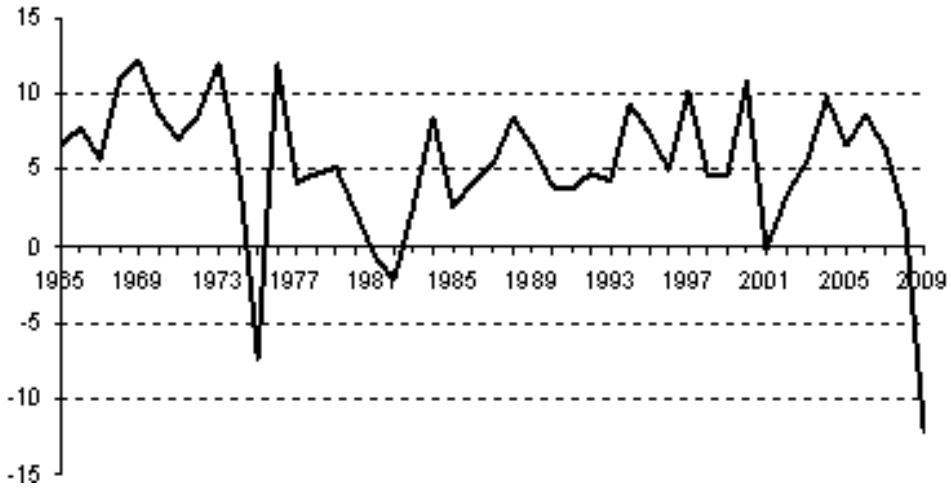
These declines are quite high, however the numbers should be expounded carefully. International trade is generally expressed in United States dollars, and thus is heavily influenced by exchange rate fluctuations. More, commodity prices were very tall in the first half of 2008, inflating the overall value of international trade. The sharp drop in commodity prices towards the end of 2008 (the UNCTAD commodity price index fell by about 20 per cent between January 2008 and January 2009) similarly deflated the value of trade.

In the same time, for many countries, the diminish in international trade has been considerably smaller in volume terms, as well as in local currency terms. For example, Mexican pesos depreciated about 20 per cent vis-à-vis the United States dollar in 2008, while Mexican exports in dollar terms fell about 30 per cent. That results in a smaller decline in peso terms. Other countries, such as the Republic of Korea, Brazil, and Chile, have seen their currency fall in value by about the same extent as the fall in exports (UNCTAD, 2009).

The 12,2% drop in the volume of world trade in 2009 was more than most economists had predicted. This distortion also exceeded the WTO's earlier forecast of a 10% decline. World trade volumes fell on three other occasions after 1965 (—0.2% in 2001, —2% in 1982, and —7% in 1975), but none of these episodes approached the magnitude of last year's economic slide (Chart 1). Trade in current US dollar terms slumped even further than trade in volume terms (—23%), thanks in large part to falling prices of oil and other primary commodities.

Economists have indicated a number of reasons why trade declined so steeply, including the imposition of some of protectionist measures (Baldwin R. 2009). But the consensus that has emerged centres on a sharp contraction in global demand as the primary cause. This was increased by the product composition of the fall in demand, by the presence of global supply chains, and by the fact that the decline in trade was synchronized across countries and regions. The weakness in private sector demand was related to the global recession triggered by the sub-prime mortgage crisis in the United States. What began in the US financial sector soon spread to the real economy, with global repercussions. Limited availability of trade finance also played a role.

Chart 1: Volume of world merchandise exports, 1965-2009 (Annual % change)



Source: WTO, 2010 PRESS RELEASES, *Trade to expand by 9.5% in 2010 after a dismal 2009*

Sharp falls in wealth during the recession caused households and firms to cut their spending on all types of goods, especially consumer durables (automobiles) and investment goods such as industrial machinery. Purchases of these items could be delayed easily in response to heightened economic uncertainty, and they may also have been more sensitive to credit conditions than other types of goods.

Trade within regional trade agreements (RTAs) seems to have declined at a similar pace to trade outside RTAs. Trade levels demaged most in Europe, falling by nearly 16 per cent in the fourth quarter of 2008 compared with the same period of 2007. Asia's exports declined by 5 per cent and North America's by 7 per cent. Trade within regions seemed to contract faster than trade between regions: trade within Europe – the most closely integrated economic area – droped 18 per cent. Insted, trade within Asia collapse at half this rate, while trade within North America fell 10 per cent (WTO, 2009, a).

Regarding RTAs among developing countries, preliminary data from Brazil indicate that trade within the South American Common Market (MERCOSUR) has followed a similar pattern of decline. This gives a further indication of the widespread effect of the economic crisis on trade flows. It also provides preliminary evidence that RTAs are not immune from the effects of the global crisis, and intra-RTA trade could face even larger falls than extra-RTA trade. The potential of RTAs of developing countries to act as a buffer against inclement international trading conditions needs to be strengthened.

Commonly, trade in manufacturing (including non-agricultural commodities) has contracted at a much sharper rate than trade in agricultural products. This is due to the relatively more stable agricultural prices and to a more inelastic demand for agricultural products.

Among the most affected sectors are automotive products, office and telecommunications equipment, and electronics. Automotive products were the hardest hit of all industries by the credit crunch and the recession. World exports in value terms tumbled 24 per cent in the last quarter of 2008 and 49 per cent in the first quarter of 2009. (Canada's exports were the most affected, falling by a further 54 per cent in the first quarter of 2009 and Mexico witnessed a decline of over 40) (WTO, 2009 b).

The crisis principally affected services closely linked to trade in goods, such as transportation. Air cargo traffic globally was down 23 percent in December 2009 compared to a year ago – led by a 26 percent fall in the Asia-Pacific region (Stoler A.L., 2009). Although some sectors have proved more resilient than merchandise trade during the initial phase of the crisis, trade in business services and travel might be particularly vulnerable to the secondary effects of the global crisis if private investment and household consumption levels continue to be sluggish (WTO, 2009 a).

In Romania, according to The COMPASS Consulting research, the most affected sectors by the crisis, related to internationl trade, were commerce, transport and distribution sectors, as they very much depend on the import-export sector of the economy, with exchange rate fluctuations affecting directly their financial results (research was conducted online, on a dedicated platform, based on a 15-question standard questionnaire, with more than 182 Romanian companies filling it).

4. Developing countries are more sensitive to the global crisis

Most developing countries are now closely linked with the global economy by trade and foreign direct investment flows, and their economies are more sensitive to the collapse of international demand (and conversely to expanding demand). In this countries, international trade (exports and imports) serves an engine of growth and helps in a substantial way to fight poverty and raise living standards.

The collapse in merchandise trade appears to be affecting all developing regions and most types of goods. South–South trade, which has been the most dynamic component of world trade for over a decade, is declining too, especially intra-Asian trade. The visible contraction of developing countries' manufacturing trade is largely due to today's highly globalized production and marketing schemes.

The extent to which developing countries' trade performance is affected by the current economic crisis is based on their export compositions, their dependence on international markets and exchange rate fluctuations. Commonly, the more an economy is based on exports to drive its economic development, the more problems it is likely to face in the current economic crisis.

Developing countries' exports on average accounted for more than half of their gross domestic product (GDP) in 2007, up from about a quarter of GDP in 1995 (UNCTAD, 2009). The reverse is also true, as was seen up until the time of the crisis, the greater the integration into and dependence on international trade, the greater the opportunities to benefit when global trade prospers. States exporting commodities may face further difficulties, as commodities prices have been falling. Finally, states with currencies appreciating or pegged vis-à-vis the United States dollar, may find their exports disadvantaged compared to countries where currencies depreciated.

Over the 2000-2008 period, total exports of goods and commercial services (on Balance-of-Payments terms) from LDCs increased at a high average rate of more than 20 per cent, thanks to a succession of double-digit annual growth rates since 2003. Therefore, the LDCs out-performed the global trends in world trade (12 per cent growth), even though their share in total trade of goods and services remained under one percentage point (0.9 per cent) (WTO, 2009a).

The current crisis lowered commodity prices and demand for tourism services, which affected the LDCs during a particularly strong phase of export growth. The exporters, particularly those in West Asia, Africa, and countries with economies in transition that benefited from the commodity price boom with considerable terms-of-trade gains, are now facing the downside of their commodity dependence, observed in a visibile shrinking of export revenues. More than 90 developing countries earn at least 50 per cent of their exports from commodities (47 of them being non-fuel commodity exporters).

5. Prospects for 2010

Without any further upheavals in the global economy, world merchandise trade should resume its normal upward trajectory through the end of 2010, although some deviation from its previous trend line will persist indefinitely (Keck, A., Raubold, A. and Truppia, A. 2009).

The prospects are more terrible for export-oriented developing countries, mainly those with a small domestic economy, where the decrease in international demand is more likely to grow unemployment. Farther, in some developing countries, workers are shifting out of dynamic export-oriented sectors into lower-productivity activities. These effects could bring millions of people back into poverty.

According to World Bank, given the expected weak recovery and weak base effects, trade is projected to expand by only 4.3 percent in 2010 and by 6.2 percent in 2011. As a result even two years into the

recovery, the overall volume of goods and services traded is forecast to be 5 percent lower than its 2008 peak (World Bank, 2010).

A more favorable projection belong to World Trade Organization: exports from developed economies are expected to increase by 7.5% in volume terms over the course of the year 2010 while shipments from the rest of the world (including developing economies and the Commonwealth of Independent States) should rise by around 11% as the world emerges from recession. This strong expansion will help recover some, but by no means all, of the ground lost in 2009 when the global economic crisis sparked a 12.2% contraction in the volume of global trade — the largest such decline since World War II (WTO, 2010).

In Romania, in the first two months of 2010, exports rose 21.8% on the year to EUR4.8 billion, while imports were up 6.2% to EUR5.9 billion, according National Statistics Institute. Additionaly, vehicles made up for the bulk of exports and imports in January-February 2010, amounting to 42.9% of overall exports and 34.5% of the imports, the data showed.

6. Conclusion

At this time, international trade is not booming, but it has at least stopped declining. In order to sustain trade and development, there are many challenges to be addressed, but there are also policy areas which countries can develop (nationally and globally). As economies attempt to recover from the crisis, keeping international markets open is vital.

One challenge is to analyse specific development effects of the crisis, and offer policy proposals to cope with its detrimental impacts in the short term and rethink development policy for the medium-to-long term. Visibly, signs are emerging of fundamental shifts in the role of governments in economic activities and in the way market economies operate. The crisis affecting development may require rethinking of the whole economic and social paradigm that has prevailed over the last decades and has powered the process of liberalization and globalization. Whether international trade picks up strongly in the near future and whether growth in trade can be sustained will depend upon an avoidance of "high intensity" protectionist measures. Additionally, it may involve the articulation of ideas on trade and trade-related policies and sectors that have shown some resilience to the crises and can serve as a bulwark on which to restore confidence, build recovery and foster inclusive development.

How do companies on the trade chain face the situation under such an economic environment? After each crisis, there are cheap shares and assets everywhere. It is perfect time for companies to reconstruct, merge and acquire. Those companies with abundant cash flow will expand and develop themselves at this time through the measures mentioned above. Exporters shall seize opportunities to cooperate with international brand companies. Strength of low cost will play a more important role in future trade.

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ADAPTATION TO CLIMATE CHANGE

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Abstract: *Climate change (CC) is the most debated environmental issue nowadays. Large companies invest a lot in exposing their environmental efforts in a variety of disclosure types. Over the next years climate change is likely to have deeply effects on all sectors, Earth's average surface temperature has risen by 0.76° C since 1850. Research indicate that the impacts of climate change will be more severe and will have varying regional implications, the paper analyses the impact in different sector and adaptation measures will need to be taken to deal with the impacts.*

Key words: climate change, impact, adaptation, measures, cost

JEL classification: Q54

1.Introduction

Climate change is a strongly debated subject. But the debate was not always the focused on the same issue. Firstly, the focus was on the process itself – does or does not happening, then it shifted to the human agency, and now it is about the consequences and actions needed. Thus, (Crist, 2007) suggests that since climate change is now a fact, it is worth focusing more on consequences where uncertainty is legion.

Climate change is beyond its physical dimension an invitation for action. Firstly, by assuming that humans are the causes, and not a natural process beyond their power and will, it results that they has to be the ones who do something to prevent the process. Secondly, if a change takes place in the environment humans will need to adapt to it. These also could be considered as reaction stages. Thus, (Huq, 2006) argue that two and a half decades ago the focus was on preventing CC through mitigating emissions, while now adaptation has to be twined with mitigation, because some effects of climate are inevitable.

According to Intergovernmental Panel on Climate Change - IPCC, without action to reduce these emissions, the global average temperature is likely to rise by a further 1.8-4.0°C this century, and by up to 6.4°C in the worst case scenario. Even the lower end of this range would take the temperature increase since pre-industrial times above 2°C - the threshold beyond which many scientists believe irreversible and possibly catastrophic changes would become more likely.

2.Climate change governance

For the past decade the European Union has tackled climate change through international agreements *The Kyoto Protocol* requires the 15 countries that were EU members at the time to reduce their collective emissions in the 2008-2012 period to 8% below 1990 levels. On 2009, the EC released a position paper, "*Towards a comprehensive climate agreement in Copenhagen*." According of this to stay below the 2°C threshold, global GHG emissions need to be reduced to less than 50% of 1990 levels by 2050. In addition, global GHG emissions, excluding emissions from land use, land-use change and forestry, will have to peak before 2020.

Copenhagen Climate change Conference negotiated the successor to the Kyoto Protocol, the aim was to into a binding global climate agreement to reduce the amount of greenhouse gases that have a negative effect on the earth's climate system. The EU has offered to increase its emissions reduction to 30% by 2020. The implementation of the Copenhagen Accord will be reviewed by 2015. This will take place about a year-and-a-half after the next scientific assessment of the global climate by the Intergovernmental Panel on Climate Change (IPCC). According with the opinion of specialists if, in 2015, delegates wanted to adopt a new, lower target on global average temperature, such as 1.5C rather than 2C, it would be too late.

3.Sector impact of climate change

In **agriculture** projected climatic changes will affect crop yields, livestock management and the location of production. The increasing likelihood and severity of extreme weather events will considerably increase the risk of crop failure. Climate change will also affect soil by depleting organic matter – a major contributor to soil fertility.

The effects of climate change on **forests** are likely to include changes in forest health and productivity and changes to the geographic range of certain tree species. Climate change will be an added stress for the **fisheries and aquaculture sectors. Effects will also be severe on coasts and marine ecosystems.** Coastal erosion rates will increase and existing defences may provide insufficient protection. In this context, islands and outermost regions deserve special consideration.

In the **energy** sector, climate change will have a direct effect on both the supply and demand of energy. The projected impact of climate change on precipitation and glacier melt indicate that hydropower production could increase by 5% or more in northern Europe and decrease by 25% or more in southern Europe. Decreased precipitation and heat waves are also expected to influence negatively the cooling process of thermal power plants. On the demand side, increasing summer peaks for cooling and impacts from extreme weather events will affect in particular electricity distribution.

Infrastructure is also affected, posing a specific threat to densely populated areas. The situation could be exacerbated by the rise in sea level.

Tourism is likely to suffer from decreasing snow cover in Alpine areas and from increasing temperatures in Mediterranean regions. Unsustainable forms of tourism can exacerbate the negative effects of climate change.

Changing weather conditions will also have profound effects on **human health** and on **animal and plant health**. As extreme events become more frequent, weather-related deaths and diseases could rise.

Climate change will cause significant changes in the quality and availability of **water resources**, affecting many sectors including food production, where water plays a crucial role. More than 80% of agricultural land is rain-fed. Food production also depends on available water resources for irrigation. Limited water availability already poses a problem in many parts of Europe and the situation is likely to deteriorate further due to climate change.

Climate change will increasingly drive **ecosystem including marine ecosystems** and **biodiversity** loss, affecting individual species and significantly impacting ecosystems and their related services, on which society depends. Other ecosystem services will also be affected such as the provision of drinking water, food production and building materials and oceans can deteriorate through acidification.

4.Climate change – the need for adaptation

However, even if the world succeeds in limiting and then reducing GHG emissions, our planet will take time to recover from the greenhouse gases already in the atmosphere. Thus we will be faced with the impact of climate change for at least the next 50 years, therefore is necessary to take measures to adapt.

Addressing climate change requires two types of response

- reduce our greenhouse gas emissions (GHG)
- adaptation action to deal with the unavoidable impacts.

Adaptation to climate change is defined by the IPCC as *"Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. Various types of adaptation can be distinguished, including anticipatory, autonomous and planned adaptation*" (IPCC, 2007).

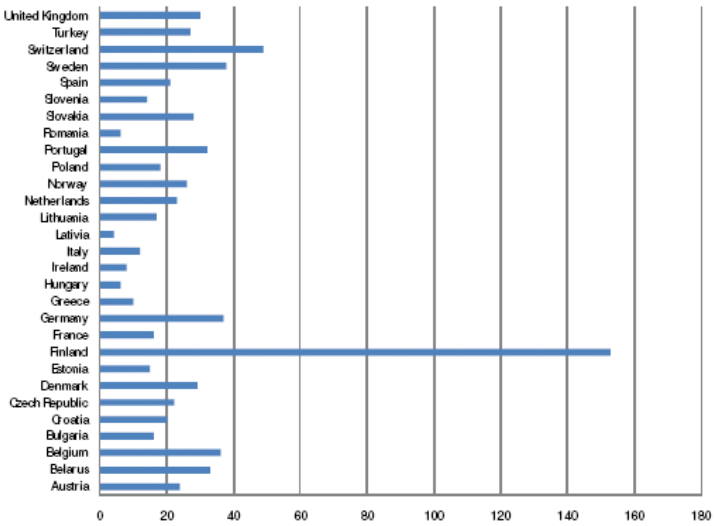
According to EEA Report (2008) the costs of adaptation are estimated to be significant, the range of estimated global costs for adaptation is 30–90 billion USD/year , and this is calculated as additional to Official Development Assistance (ODA), which averaged 80 billion USD/year over recent years.

Integration of adaptation into sectoral policies at European and national levels is important in order to reduce, in the long term, the vulnerability of ecosystems, economic sectors, landscapes, health and communities to climate change impacts.

At the level of European Union has been taken diffrent mesures but according to an study published by Institute for environmental studies, there is considerable variety in the adaptation level, measured by the number of adaptation measures, across nations ranging from the lowest number, 4 in Latvia, to some 150 in Finland. (IES, 2009) On average about half the countries have between 20 and 40 activities while the other

half has between 4 and 20. Figure 1 provides a general overview of how European countries compare with each other in terms of overall adaptation activities from policies in place to policy recommendations.

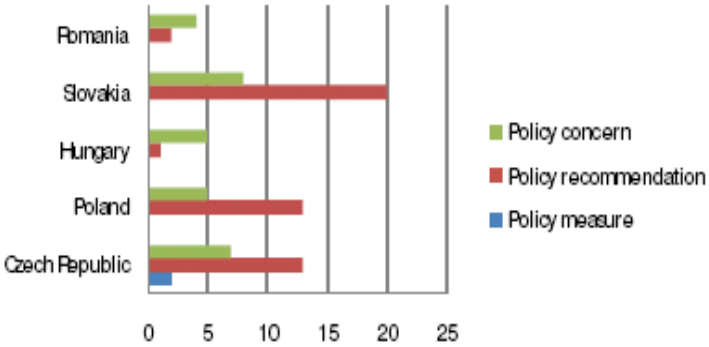
Figure 1: Adaptation activities in European countries



Source: Institute for environmental studies, 2008

In terms of the overall number adaptation actions Slovakia can be seen as the leader, followed by the Czech Republic. Both Hungary and Romania appear to the most limited portfolio.

Figure 2: Portfolio of adaptation measures in Central and East European Countries



Source: Institute for environmental studies, 2008

6. Conclusions

The challenge for policy-makers is to understand these climate change impacts and to develop and implement policies to ensure an optimal level of adaptation. Strategies focused on managing and conserving water, land and biological resources to maintain and restore healthy, effectively functioning and climate change-resilient ecosystems are one way to deal with the impact and can also contribute to the prevention of disaster.

Preventive action brings clear economic, environmental and social benefits by anticipating potential impacts and minimizing threats to ecosystems, human health, economy and infrastructure. Several sources already indicate that the costs of taking action to address climate change will be much lower than the costs of inaction over the medium to long term.

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SOURCES FOR DIMINISHING THE CLIMATE CHANGES

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Abstract: *The USA and the Western Europe are responsible for 2/3 of the CO2 emissions accumulated until today. On the other hand, Africa has produced but 3% of polluting emission since 1900 until today, burning mineral fuels. Since 1992, the most industrialized countries have promised to help "the most vulnerable nations face the adverse consequences of climate changes" by supporting the costs of adaptation. The commitment was included in the convention frame that gave birth to the Kyoto Treaty, which was rejected by the George W. Bush administration, even though the initial document, issued in 1992, had been signed by George Bush. The industrialized countries that signed the Kyoto Treaty have decided to create a special fund for "climate adaptation". Hundred of millions of dollars had to be used in order to diminish the impact of the global warming in the most exposed areas.*

Lately, maybe because the CO2 emissions increase due to human activities, the planet climate has changed in worse. 2007 was a key year in evaluating the reply the planet would give to the global overheating, mainly caused by the green-house effect and worsen by El Nino oceanic stream. This superposition of climate factors made 2007 to be one of the warmest years ever registered.

Key-words: *diminution of polluting emissions, climate changes.*

JEL classification: *O13, Q00, Q27, Q54, Q57*

Introduction

After 2000 years from Christ, in the specific conditions of the XXI century (globalization, deep economic crisys, need of strong measures for reshaping the economic, financial and monetary systems that had been the bases of the actual order after the Second World War), Humanity faces a new challange: the industrial activities, great consumers of irrecoverable resources – especially petroleum and coal – have led to increase of polluting emissions and, further, to profond climate changes, incarnated in the rise of average temperature of the Earth with about 2 degrees Celsius. This average temperature will still rise if people will not adopt urgent measures to reduce the polluting emissions in the atmosphere, emissions considered to be the main responsible for the global warming on Earth.

Thus for more then 15 years, by means of thoroughnes studies, the specialists are trying to draw attention upon the issue on reducing the polluting emissions as the main factor in reducing the climate changes, and the policy makers are working hard to traspose in global agreements, mutual and multilateral respected, the conclusions of the researchers, there is still a lot to do in this respect. According to our oppinion, the last three years, 2007–2009, are critical in terms of reducing the polluting emissions as the main factor in reducing the climate changes.

Let's see how the oppinions of the specialistes and decision makers, in our country and in the world, have evolved during these three years.

2007 Events. The Bali Agreement

There were two key events that marked 2007 regarding the matter of diminishing the polluting emissions as an important issue in decreasing the climate changes. Therefore, at the beginning of 2007 the European Commission have drawn the foundations of an European Energy Policy, with instruments that are stimulating the competition and the reduction of energetic dependency of EU, on a background of existing tensions with Russia in this matter. The European Executive considers that the developed countries, starting with the 27 EU states, should define as objective the diminution of the green-house effect gas emissions with 30%, within an international agreement that would follow the Kyoto Protocol which ends in 2012.

The European Commission has insisted that its plans would depend upon similar actions from USA part and has expressed the hope that Washington would become more active about fighting the global warming. Eco movements have welcome the Commission's plan, though some of them have pointed out that it wasn't going to far and would not have the desired effect. On the 15th of November 2007, the European Parliament has requested the gas emissions to be limited by the industrialized countries, and a decrease of 50% in green-house effect gas emissions until the middle of this century. The adopted resolution contains the European Parliament's objectives regarding the post Kyoto agreement, among which, besides the above mentioned objectives, there were: the financial support for climate protection efforts; new mechanisms in

order to transfer some technologies as less harmful as possible to the environment; measures to stop the deforestation.

The second event of 2007 was the UN conference regarding climate changes starting on December the 3rd in Bali (Indonesia) and has represented the starting point of a new process that would lead to a global agreement on climate changes within UN, with compulsory objectives. The end of 2007 was marked at international level by the prospect of a new agreement regarding the climate changes. The UN conference on this matter took place on Bali island and the participants reached an agreement on a "travel paper " for the negotiations of a new protocol that would replace the Kyoto treaty from 2012.

The new agreement would be negotiated within the following two years and would replace the Kyoto treaty that was signed in 1997; the text of this agreement had no clear references regarding the reduction of CO2 emissions. Mr. Yvo de Boer, in charge of environment matters at UN has displayed uneasiness regarding the possibility that the negotiations on global climate treaty project could fail: "We find ourselves in a situation where is all or nothing. If we fail in doing our work on time in the future, everything will collapse as a castle of cards" Bali's agreement has represented an important step towards reducing the rate of the global warming, which UN considers to be caused by human activities. The American delegation has given up the opposition to the plan meant to revive the talks, at the last moment. Until that moment, it would seem as if the USA would also reject the document which was finally signed in Bali. Paula Dobriansky, the chef of the USA delegation returned to the conference announcing that the USA had changed it's mind: "The USA are very determined to engage in this global effort but need to ensure that we will all action upon it together. Therefore, Mister President, allow me to say that we will proceed forward and, regarding this matter, we are today in consensus". After that, the UN General Secretary, Ban Ki-moon thanked USA for agreeing at the end upon the declaration's text. The UN's delegate has appreciated the "flexibility" the American delegation had shown despite the differences between the participant countries.

The new agreement which negotiations have begun in Bali is designed to replace the Kyoto Protocol which had never been signed by USA and China. The EU's main objective is to obtain a steady commitment in order to begin the negotiations regarding the fight against the climate changes after the end of Kyoto Protocol in 2012. The European Commission wants a consensus and a common vision upon limiting the global warming at 2 degrees Celsius over pre-industrial levels. EU's commitments are clear: the developed countries have to commit themselves to reduce their emissions more by improving the technology and by creating a new global coal market. It is necessary to find the equitable but efficient means the developing countries could use to give their contribution to the diminution of gas emissions. It is to be considered the matter of polluting emissions produced by air and sea transport and the deforestation, as well. It is, also, necessary to talk more seriously about increasing the investments for technology research programs that could decrease the carbon emissions

The European commissioner on environment matters, Stavros Dimas, declared before leaving for Bali: "I have the feeling that the odds for extensive negotiations are good and also, for establishing a clear date. As always, the details are problematical when it's necessary to establish the coordinates for a plan of action that would follow Bali's conference. I am sure the negotiations will be not easy. There is a chance for a compromise solution and the international community have to rally, or otherwise the dangerous global warming could not be stopped any longer.". "Real solutions are to be established otherwise the mankind's future is in danger" said the Indonesian State Secretary for environment, Rachmet Witoelar. "I want to appeal to all sides to take real steps towards stopping the global warming, a highly present matter", he was saying during the conference.

In an interview taken to the vice-chairman of European Parliament, Alejo Vidal-Quadras, he expressed his hope that this conference would serve as forum where the international officials would establish a political consensus for a post Kyoto agreement. He also declared that 2012 was near and we needed to find a solution that would include the industrialized countries and would offer support to the economies intending to participate in technology transfer programs. The chairman of the Commission for climate changes, Guido Sacconi, declared that this meeting would be an opportunity for Europe to prove it's commitments already taken and to achieve a common agreement regarding the reduction of gas emissions, favorable to developing countries, as well.

Lena Ek (official of the Liberals and Democrats Aliance Group for Europe) declared that the discussions would focus on developing countries at first and on their need to combine the economic development with technologies less and less harmful for the environment; She also said that these countries would need help especially financial help in putting these new technologies into practice. She continued by saying that part of the solution were the woods, many of them being cut and these woods were needed to reduce the carbon emissions on Earth. The same opinion was expressed by the deputy Liam Aylward, the

Vice-Chairman of the Committee' for Climate Changes: "We spend too much time searching for solutions to decrease the carbon in the atmosphere and spite, we continue cutting the woods that absorb the carbon, harming the species and the biodiversity."

2008 Events. Tokyo Agreement

The program Climate Savers is based upon a partnership between the WWF and the business environment, through which the company joining this initiative commit themselves to apply solutions aimed to fight the climate changes. The established objectives by WWF and by each company must be more ambitious than the objectives previously planned by the company. The companies already in the Climate Savers program are: Johnson & Johnson, IBM, Nike, Polaroid, Collins, Xanterra, Hewlett Packard, Nokia, Sagawa, Sony, Lafarge, Catalyst, Tetra Pak, Spitsbergen, Travel and Novo Nordisk.

On the occasion of the Climate Savers Summit, that took place in February 2008[49], a new agreement has been achieved, the Tokyo Statement, designed to answer the urgent matter represented by the climate changes. The Climate Savers Summit was organized by the World Wild Found (WWF) International and Sony, at company's headquarters in Tokyo. The signers were 12 top companies; among them, Tetra Pak, Nokia or Sony, which underlined the need to decrease the global green-house gas emissions with more then 50% by 2050 and to act so that they would decrease in the next 10-15 years, making possible to maintain the global temperature's growth under the critical threshold by 2 degrees. The Tokyo statement was presented by Howard Stringer, Sony's chairman and CEO, and it represented the most important initiative of global business community regarding the fight against climate changes. "We from Sony think that it's impossible to make a business grow in a deteriorated environment. That's why we feel compelled to use our technological experience and know-how in order to diminish its impact on the planet and to help our clients diminish theirs in a day to day life", Howard Stringer declared. "We always considered having an obligation to act with responsibility in every aspect of our activities, in order to decrease the impact on environment and, concurrently, to use our unique talent to resolve, together with our colleague and business partners, the environment's problems" Stringer added.

The signatories companies of Tokyo Statement are Allianz, Catalyst, Collins, Hewlett Packard, Nike, Nokia, Novo Nordisk, Sagawa, Sony, Spitsbergen Travel, Tetra Pak and Xanterra. The most important measures for reaching the objective of gas emissions reduction aim to ensure the transparency of their own emissions quota and to promote among the clients, a lifestyle which would produce less co2 emissions possible.

The statement release took place in occasion of Climate Savers Summit organized by World Wide Fund for Nature International and Sony. Considering the need to stop the global growth of the temperature by more than 2 degrees Celsius above the pre-industrial era's level, the 12 companies commit themselves to decrease the co2 emission by establishing 4 measures to be applied. The first one consists in expanding the action range of activities of emissions reduction by collaboration with the business partners. To that effect, the signatories companies have established actions to be taken so the Climate Savers program expands towards other regions and business areas. These 12 companies also promote among their clients and consumers a lifestyle that requires less co2 emissions. At the same time, the statement requires information's transparency regarding each company's emissions quota.

Many of the companies signing the Tokyo Statement and also other companies participating to the Climate Savers program have outrun their ambitious objectives – objectives established after joining the program. By signing this agreement the companies went forward, promising to convince their business partners to take efficient measures in order to reduce the impact on climate. At the same time, the companies assumed responsibility to promote a less co2 emissions lifestyle

The Climate Savers program, released by the WWF and Tokyo agreement have shown how important was the role of business sector in starting successful actions to fight against climate changes. Companies could have big impacts on environment but can also be a part of the solution with technological innovation, initiative and collaboration with business partners, authorities and civil society. We hope that the international actions would also find an echo inside the Romanian business community, where the consequences of climate changes are more and more visible. The identification of realistic and efficient solutions for durable businesses and their setting up in order to decrease impact over environment should become a priority for all companies, because what is good for the environment, is good for business also. By signing the Tokyo statement the companies attending Climate Savers program have restated the imperativeness and benefits of innovating actions in fighting the climate changes.

[49] see SMART financial, on site www.SMARTfinancial.ro, visited on the 20th of march 2008

At the middle of June 2008 the managers of the biggest 99 world concerns – among which was the chief of Deutsche Bank's and British Airways – requested the powerful industrialized countries to take initiative regarding global warming and to decide an extreme reduction of green-house effect gas emissions. The amendments made on Tokyo's Agreement had to take into consideration the performances of sales markets to be solid, efficient and designed on a long term basis, they all said

EU and the diminution of polluting gas emissions

EU is considered to be the world leader in fighting the climate changes. An UN report from 2007 showed that EU's countries have registered limited progresses in fighting climate changes. (- 1,5 % for EU 15 and – 11 % for EU 27). Only in 2008 the results of measures took during 2044-2005 were displayed. Most important was inserting the climate change and energy matters first on the working agenda by taking into consideration the integration of all expectations. The objectives of increasing the energy efficiency by 20 %, increasing the contribution of the renewable sources of energy by 20%, and decreasing the green-house effect gas emissions by 20% have shown our commitment to fulfill the existent objectives but also, to continue the fulfillment of medium term objectives. Even more, The European Strategic Plan for Energetic Technology presented in November 2007, has intended to accelerate technology innovation with low carbon emissions by focusing on a common planning.

Some EU countries and big energy consumer industries are putting pressure upon achieving a "change in frontier tax " on goods imported from the countries not signing of the Kyoto Protocol. As long as there is no international agreement to create a common regulation frame, it is important to consider the fact that relocating the big energy consumer industries out of Europe and continuing the gas emissions would not be either a good eco policy or a viable one by an economic point of view. EU specialists have studied different options to approach these matters as follows: to continue giving financial support based upon technological parameters of energy efficiency; signing additional international agreements and including the importation of energy efficient goods. In planning these options EU have to consider them to be achievable and compatible with OMC stipulations.

Carbon Credits

Trade instruments through which EU is trying to diminish the dangerous gas emissions – the so called carbon emission credits – will not have the expected results, the World Wildlife Fund (WWF) says. These instruments classified in the European Trading Scheme (ETS), were initiated in 2005, still their success during 2005-2006 was relatively small as a result of light limitations imposed to the green-house effect gas emissions. The WWF officials feared that the next ETS stage would not succeed in reducing significantly the emissions. Therefore, the incapacity to reduce the level of CO2 emissions will lead to irreversible climate changes. "While the mechanism of dealing with polluting gas emission certificates is ok, the first faze of EU's plan has been seriously undermined by some political decisions." WWF declared. The first ETS stage has been criticized because the proposed limits for CO2 emissions weren't severe enough. The great pollution producers have received free carbon credits and the companies which decreased their polluting emission had remained with additional credits ready to be sold. EU have established new limits for the next ETS stage for several countries among them being UK, Germany and Luxemburg. WWF report called "Emission Impossible", shows that the second ETS stage, unfolding between 2008 and 2012, could fail because the big polluters have the possibility to buy carbon credits. In the opinion of WWF, ETS could become just a dealing market for these credits and the winners would be only the carbon credit dealers.

At the end of 2006, Finland signed agreements with Romania and Bulgaria, regarding the acquisition of some Co2 emissions rights, called carbon credits, through a special mechanism of Kyoto's Protocol. The transaction was made in accordance with the common setting up mechanism which stipulates that the states which outrun the limits of gas emissions valid until the 2012, could finance the state in possess of extra carbon credits, like ex communist countries, and the polluting emissions' reduction would be put on the acquiring country's account. Finland intends to develop projects in Romania and Bulgaria, mainly in renewable energy field and natural gas. Ex communist countries could be the main suppliers for carbon credits, considering that the inefficient industries with high level of pollution allow the reduction of polluting emissions level with little costs. Finland also intends to acquire, during 2008-2012 period, the equivalent of 10 millions tons of carbon, as carbon credit after acquired 2 million tons in 1999.

It is known that EU countries are leaders in low CO2 emissions technologies. The EU answer to climate changes' challenge is not only a problem of finance; only with limited investments, EU cannot create the necessary incentives for researchers and investors. The investors are increasing the investments on long terms base and assume bigger risks only if they are sure that the applied policies are durable. It is also very

important that EU gets involved in industry and ensure to the companies and investors the best policies and the frame to encourage the development and extension of technologies producing low carbon emissions. The research ought to be better coordinated in order to stimulate the development of innovative technologies with low carbon emissions. At the beginning of 2008, the European Commission created a Directory Group, in order to start the Strategic Plan for Energy Technology (SET plan), to coordinate the policies and programs, to ensure the resources, to observe and analyze with regularity the achieved progress. Within the SET plan were started various initiatives, called European Industrial Initiatives, for research and innovation development. European Committee has also suggested creating a European Alliance for Energy Research so a better co-operation and planning could be achieved between researchers. More money would be given to this area and new idea should be presented to finance low carbon emissions technologies.

At the middle of January 2008, the European Commission's chairman presented to the European Parliament a legislative plan regarding energy and climate changes. The Commission thought the costs of these new efforts would reach 3 euros/week for each citizen, 10 times less than the cost estimated if no action would have been taken. European representatives have upheld these ambitious proposals regarding the energy and climate changes, calling them "an economic chance for the Union ". Some of them though, have expressed concern about the Commission's initial objectives for bio-fuels and feared that many jobs could be transferred to areas were there are no compulsory limits for green-house effect gas emissions.

The European Commission's chairman, José Manuel Barroso presented to the European Parliament the Commission's plans to fight the climate changes and to ensure that Europe would benefit of more secure energy sources. The proposed legislation is based upon principle "20/20/20 by 2020" (increase by 20% in energy efficiency, decrease of 20% of green-house effect gas emissions, and use of 20% of the bio-fuels, all by 2020). The measures would determine a spectacular increase in bio-fuels' use in each country and would establish compulsory legal objectives that the governments would have to achieve. All big CO2 emissions' producers will be encouraged to develop ecologic production technologies within a radical reform of the European Diagram regarding the transactions with emissions certificates (ETS) which impose a maximum level of emissions for entire EU. The package of measures announced by the European Commission contains 5 essential legislative proposals which were adopted by the co-decision procedure: to improve and broaden the European system of emissions shares (EU ETS); diminution with 20% by 2020 of CO2 emissions (considering the 1990 level); obtaining 20% of renewable energies by 2020 (10% bio-fuels by 2020); to promote the capture and preservation of CO2; new regulations for public assistance.

It is required that these actions are taken right now in order to diminish by 50% the green-house effect gas emissions by 2050. Talking about measures to fight the climate changes, Mr. Barroso stated that the measures taken into consideration would cost less than the lack of action. "The extra efforts put into accomplishing the foreseen objectives will represent expenses of less than 0,5 % of PIB by 2020 as, meaning 3 euro/week for each EU citizen (…). The no action costs could be 10 times higher than the one's of foreseen actions. We should think of EU gain instead of expenses" he said. Mr Barroso also said that the legislative package would be a chance for Europe: "This kind of policy proves why now, more than ever, we need a strong European Union".

Carbon credits Operating System

Electricity sector responsible for most part of EU emissions will submit entirely to an auction system once the new form will be launched in 2013. In other industrial sectors as well as in aviation sector, the transition towards the auction system will occur gradually, although an exception could be made for the more vulnerable sectors to competition, by producers coming from countries where there are no similar restriction regarding the CO2. Besides the auction will be open, any EU operator will be able to purchase certificates in any member state. The incomes obtained from the community diagram for commercialization of emission's certificates belong to the member states and ought to be used for helping EU to adapt to an economy that respect the environment, by sustaining innovation in areas as: sources of renewable energy; capture and preservation of CO2; research and development. A part of those incomes should also be destined to help the developing countries on their struggle to adapt to climate changes. The Commission value that the incomes from the auctions could reach the amount of 50 billions of euro each year by 2020.

The EU Diagram regarding the commercialization of emissions, valid until 2008, in its forth operational year proved to be and efficient instrument in finding a market solution that would offer incentives to reduce the green-house effect gas emissions. In areas like constructions, transportation, agriculture and waste products, not regulated by the scheme, EU would decrease the emissions with 10 % by 2020, below the 2005 levels. For each state member, the European Commission have proposed a specific objective to reduce emissions which would have to be accomplished by 2020, and in the case of new state

members, like Romania and Bulgaria, these objectives foresee an increasing emissions possibility. These variations are contained around – 20% and + 20%.

Besides an efficient operating pollution market, all state members are to start changing their energy consumption structure urgently. In 2008, the renewable energy's quota inside EU final energy consumption was of 8,5 %, which means an average increase of 11,5 % is necessary to achieve the 20%'s objective by 2020. The proposal refers also to the objective that refers to use, for the transportation inside EU, combustibles that contain 10 % bio-fuels, percentage to be achieved by 2020.

During 2013-2020 period, the package of measures grants Romania and Bulgaria the permission to increase the green-house effect gas emissions up to 20% but only in some sectors because the two countries need to recover the delays in their economic development. All enthusiasm due to these facilities aside, today the Romanian economy is suffering due to the little quota received for the 2008-2012 period. A calculation should be made to see whether the penalties coming form exceeding this quota would be lower than the possible impact, on Romanian economy, resulted from observing them. Political decisions in Romania should be taken in accordance with the national companies' interests, as we see happening in important EU countries like Germany.

This new package of measures regarding the energy and the environment proposed by the European Commission is a favorable one for Romania and these measures bring a proper answer to the double challenge represented by the climate changes and the energy dependency. This package favors Romania because the state members with developing economies are allowed a 20% emissions increase in comparison with the 2005 level, increase calculated upon PIB. The countries with low PIB level are increasing the present emissions quota confronted by the one in 2005, and the EU state members with high PIB level are decreasing the polluting level by 20 % by comparison to the 2005 one. This way the EU pauper countries can reach the developed economy countries.

The European Commission decided that Romania has to decrease its gas emissions, by 20,7 %. in 2008-2012 period. By doing so, Romania would not be able to sell emissions certificates as it was its initial intention. The difference, of 15 million certificates/ year, between the one the Romanian Government proposed and the one settled by the European Commission, would have brought us 225 millions of euro which could have been spent for environment technologies. A diminution of emissions quota is expected for 2013-2020 period also, but the reduced PIB and the project for economic development could bring additional quotas. A certificate, now equivalent to 1 ton of gas, is sold with 15-16 euro on the market. But we are talking about a stock exchange for these certificates, which have cost even 26 euro/tone. Romania has lost over 15 million certificates of green-house effect gas emissions, certificates which could be gained only by lawsuit.

The energy producing companies in five EU member states could reach, between 2009 and 2012, profits up to 1 billion euros as a result of selling green-house effect gas emissions[50] shares. Therefore, the energy sector from Spain, Italy, Germany, UK and Poland will obtain profits from dealing with carbon certificates, in the second phase – which is now occurring - of the ETS. In keeping with the ETS, the companies have to pay penalties in case they would utter CO2 above maximum allowed.

They can avoid these penalties only by acquiring gas emissions certificates, which would increase the cost of the energy they produce. Therefore, the sources of renewable energy which produce no CO2 and need no emissions certificates are obviously cheaper. The report requested by the WWF was published at the beginning of April 2008, following the warnings launched by James Hansen, the director of Goddard Research Institute, by NASA, who has assessed that EU target for reducing the green-house effect gas emission was not ambitious enough: the maximum level of 550 parts per million (PPM) for CO2 emissions should be diminished to 350 ppm.; at a 550 ppm, the global average temperature would rise by 6 degrees Celsius. While at 350 ppm would only rise by 3 degrees Celsius.

Green certificates market

The energy producers in possess of green certificates, generated in 2007 46.299 MWh of energy, double the amount generated in 2006, amount consisting in 83,7 % hydrological sources and 16,3% aeolian sources, was stated in a 2007 ANRE's report regarding the green certificate operating market. Green energy producers receive 1 certificate for each MWh of energy delivered to the network, certificate they could sell on the united green certificate market within OPCOM. The energy supplier are compelled to acquire a certain number of certificates equal to the product between the compulsory quota value and the quantity of energy delivered to the final customers, quota established for 2007 at 3,74% of the energy's qta' delivered to

[50] cf. a report released by Point Carbon company for World Wild Fund (WWF), raport mentioned by newspaper Economistul, 10 april 2008, p. 8

the final customers; for 2008 the established quota was of 5,26 % and for the 2010-1012 period will be of 8,3 %

Considering the number of green certificate released in 2007, the 2008 compulsory quota had decreased at 2,62 % covered by 57 suppliers. From the 33 rd producers of energy using renewable sources in our country, only 19 of them have benefited of green certificate plan, the rest having hydro-stations with a power over 10 MWh or less then 10MWh operating from 2004. The installed power of the suppliers benefiting from the diagram was of 52,36 MW consisting of 84,7 % hydro stations and 15,3 % aeolian stations (8 MW).

The energy producers in possess of green certificates, generated in 2007, 46.299 MWh of energy, double the amount generated in 2006, amount consisting in 83,7 % hydrological sources and 16,3% aeolian sources. A number of 46.299 green certificates have been issued, 81,7 % of them were sold and the rest were carried forward on 2008. Taking into consideration the average annual selling price of green certificate of 142,72 MWh resulted that in 2007 the support granted to the green energy producers had been around 6,608 million lei involving a 0,144 lei/MWh rise in energy price towards the final consumer. At the same time, the selling price of a MWh green energy had got an average value of 304,1 leu, ANRE stated. A number of 25 suppliers didn't fulfill, partially or totally, their green certificate compulsory quota. For 2007, the value of an unsold green certificate was of 63 euro, meaning 214,08 lei. The amount resulted from the non-fulfillment of the compulsory quota was collected by Transelectrica company, the transport and system operator and redistributed to the green energy producers, in accordance with the nr. of certificates sold. The ANRE officials have also stated that by producing green energy, a 26.205 tons emission of CO2 had been avoided!

From among the new states that have joined the EU, Hungary was leading the battle to reduce the compulsory quota settled on community level. The authorities form Budapest argued that to take into account the 2005 calculations in establishing the compulsory quotas was wrong, because in doing so it was not taken into consideration the progress achieved by the central European countries. The Hungarian authorities for environment requested Brussels to use the data supplied in 1990 in calculating the new upper limits. The main reason was the fact that Kyoto Protocol came into action in 1990 and will be valid until 2012; the protocol stipulates that 30 industrialized countries have to decrease the green house effect gas emission in comparison to 1990 level.

The position of Hungarian government is sustained also by Bulgaria, Estonia, Latvia, Romania and Slovakia. The efforts these countries make for protecting the environment are not entirely acknowledged, reduction of noxious emissions are to be attributed to the economic decline of new state members also: The CO2 emissions have decreased dramatically inside the European space during the years of transition to the market economy, due to the closing of many inefficient factories in the ex communists countries

The European Commission's package of measures intend to strengthen the emissions certificate system in order to decrease the financial selling quota that can be sold each year, so the emissions in the relative sectors will diminish with 20% by 2020. Hungary and the countries which have taking these steps have nothing against global diminution as long as the calculation base is 1990 level. In June 2008 the spokesman of the European Commissioner for environment refused to comment the proposals and said that the European Executive was taking into consideration the reform the certificate system by 2012, in order to be equitable and non-discriminating.

The legislation proposed by the European Commission is based on the principle "20/20/20, before 2020" (increasing by 20% the energetic efficiency, reducing by 20% the green-house effect gas and use 20% of the renewable energy resources, everything before 2020). According to the Commission, the measures will lead to a spectacular increase of the renewable energy resources in every country and will establish compulsory objectives from the legal point of view that governments should achieve.

As a member of the European Union, our country has to adopt, to respect and put in practice this legislation package aimed to reduce the polluting emmissions as a main source of diminising the climate changes.

Conclusions

The Copenhagen Treaty – that should be set up during the UN Conference on environment, on December 7-18, 2009, hosted by the capital of Denmark – proposes global objectives in terms of reducing the polluting emmissions in the atmosphere and, according to the negotiations precursory the opening of the conference, establishes the bases of the strengthening of the accommodation capacity of the world countries to the climate changes. The treaty establishes the limits of the green-house effect gas, replacing the Kyoto Treaty (also known as the Kyoto Protocol).

The Global Union on Environment – proposed now by the European Union, as the institution in charge with the reduce of the polluting emmissions as a main source of diminising the climate changes – is a parable, whose relevance does not need any demonstration. The ample phenomenon of the globalization is already hapening under the influence of this parable. Our country is also participating in this planetary process of the reduce of the polluting emmissions as a main source of diminising the climate changes Romania has to prove its active presence on the carbon certificate market that already allow a new kind of trading – the atmosphere emissions trade, according to the economic development of each country.

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ASPECTS REGARDING THE IMPORTANCE OF NATIONAL COMPETITIVENESS FOR IMPROVING THE INTEGRATION'S DEGREE

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Abstract: *The work paper highlights and put into discussion the concept of optimum level of integration. For this reason, are considered matters of integration steps and the international competitiveness and also the competitiveness-integration – second best relationship. There is taken into attention the EU case, being underlining some of the benefits and costs of integration in different stages of EU enlargement. In the same time, was pointed out the importance of combining national resources for competitive performance and the dynamics of performances' size.*

Key words: integration**,** the optimum of integration, international competitiveness, second best

JEL classification: O10, F15

1.Introduction - Steps of economic integration and the international competitiveness

Economists agreed that economic integration is both a process and a state of fact determined through a concatenation of transformations. The consensus regards of at least three aspects:

- "economic integration" refers, in particular, the division of labor and specialization enter and international;
- "economic integration" implies freedom and mobility, the movement of goods, services and factors of production or all;
- is in close correlation with differential or discriminatory trade treatment to the origin or destination of goods, services and factors of production. This consensus does not mean that one unit integrates views about the definition of the concept.

The phenomenon of integration is a complex phenomenon that involves:

- Establishment of free trade areas in order to optimize resource's allocation, increasing efficiency of the productive mechanism and boosting the economic life;
- Formation of a new competitive space, large and favorable for the economy of scale and specialization according to comparative costs theory.

At the same time, has manifested the process of adjustment and structural convergence of the economies of member countries to a new uniform and homogeneous space, the old equilibrium is replaced by a new network of links that generate a relatively stable balance in the Community space. The starting point is the liberalization of mutual trade by creating a free trade area. The reallocation of resources due to liberalization of mutual trade and Common Customs Tariff to the outside in a customs union is explained by J. Viner in terms of: trade creation and trade diversion.

As we observed, originally the integration covered only the product markets, markets for production factors, then extending to various areas of economic policy. However, the complexity of forms of integration achieved brought the need of institutional redefinition. However, the transition from one form of integration to the next and from one state to another is extremely flexible and can't usually be well defined. The first integrationist stages - free trade area and customs union - seem to relate solely to market integration, according to classic laissez-faire theories, while more advanced stages - economic union, monetary union and economic and monetary union - involving a greater macroeconomic coordination.

Stages of integration are two common characteristics. They remove discrimination between partner countries (domestic purposes). Furthermore, in various forms maintain or introduce certain forms of discrimination on operators in third countries (external view).

2.Competitiveness – Integration – Second Best

Competitiveness remain an ambiguous concept in the literature, first because of the many ways to define and measure it and secondly because of insufficient theoretical substantiation, being taken from the business and showing a pregnant applicative character.

Macroeconomic competitiveness is analyzed at the country level and describes the "economic capacity of a nation to produce a rapid and sustained improvement of living conditions".

(Global Competitiveness Report, 1996). This conceptualization of competitiveness is a shared vision of the World Economic Forum and the European Commission (2000-2004), but still adds the wording according to which competitiveness is the "*ability of economies to ensure a high standard of living of the population and an occupancy rate on sustainable basis*".

As is clear from the definitions of competitiveness listed below, the objective of competitiveness lies in maintaining or increasing standards of living of the population (particularly through increased income and employment), while simultaneously increasing the participation of a country's share in international markets.

- "Competitiveness is the degree to which a nation can produce, under conditions of free market and fair competition, goods and services able to pass the test of international markets, achieving simultaneously maintain or increase real income of citizens"(WEF, 2007);
- „...a country's ability to achieve its core objectives of economic policy, especially income growth and employment, without putting the balance of payments difficulties"(Fagerberg. J., 1988) o maintains and increase market share which is in international markets, while improving the living standard of population.

The microeconomic perspective considers that individual performance of companies or branches of the economy (business strategy, the ways of behaviour towards competitors, differentiation, specialization, innovation, technology, etc.) represents the main factors of the competitiveness. Under the macroeconomic perspective, competitiveness translates into ensuring internal and external balance national and focuses on the effect on competition factors. It highlights the links between changes the balance of payments balances, the real exchange rate developments, reallocating resources among different economic activities and changes in competitiveness and its ultimate purpose is to increase real income of citizens. The level of competitiveness can be seen as a macroeconomic aggregate export performance of companies of a nation (Porter, M.E.,1998).

Since the Lisbon Strategy, set out to make Europe the most competitive and dynamic world economy, competitiveness has become one of the priorities of EU policy. The need for a competitive European industry a competitive market generally comes from the desire to achieve the objectives of economic and social, environment and ensure a level of social welfare, increasing. Need to adapt the European economy to structural changes, redistribution of resources and jobs to new industries, relocation of industrial activity by emerging economies and the risk of de-industrialization process can be addressed through promotion of competitiveness of the European Union. Competitiveness in the European Union's vision is to excel in terms of research and innovation, information and communication technologies, entrepreneurship, competition, education and training, and depends on the capacity, the outlook and behaviour "branches of economic activity of European countries to achieve structural adjustment towards achieving performance in those areas.

Each country sets its priorities according to what can most contribute to increasing competitiveness and productivity in the state where they are. He puts activities / elements inconsistent with the country's economic conditions could mean the first one failed in reaching that goal (more competitive), and secondly a waste of resources. Obviously, there is a logical sequence of these stages, and a logical links between competitive conditions. What must be present in all cases and at all stages is to maintain economic macro stability.

Since the Lisbon Strategy, which made the goal of making Europe the most competitive and dynamic world economy, competitiveness has become one of the priorities of EU economic policies.

The need for a competitive European industry generally comes from the desire to achieve the objectives of economic and social, environment and ensure an increasing level of social welfare. Need to adapt the European economy to structural changes, redistribution of resources and jobs to new industries, relocation of industrial activity by emerging economies and the risk of de-industrialization process can be addressed through promotion of competitiveness of the European Union (Wziątek-Kubiak, A., 2006).

Regarding the European integration *in terms of economic equilibrium theory, we can say that it fits better on the details of economic equilibrium in dynamic vision*, that economic balance is a phase of

economic change (if the integration is intended as a step to positive as long), changes caused by some disturbance factors/elements (international environment), state that the system may return after having been adopted and implemented appropriate adjustment measures (European policy response). We can talk even about achieving *a high or low "economic integration", and hence the problem of establishing the optimal level of "economic integration".*

However, the idea of degree or factor of integration makes us think of the possibility of its quantification, measurement or estimate, which is very difficult still.

The theory of Second Best or the Optimum of Second Range owns to suboptimal statements. Suboptimal cases are explained by the effect of unmetting some conditions in sense of paretan optimum. A sub-optimal situation, which meet all the best paretan, with only one exception, is not better than another situation that also satisfies all conditions except one. Also, *the rule of Second Best, if are applied to forms of integration, allows drawing conclusions according to which, if all steps of integration are sub-optimal, in terms of competitiveness, they give the same results.*

The rule of paretan optimum applied to integration formulas allows the following conclusions:

- Customs Union fall within the criterion of Second Best, compared with the global free trade;
- Optimal situation should not be reduced to static effects.

European experience in particular, but also that of other regional unions, highlights *the dynamic effects such as*:

- Economies of scale are achieved as a result of market growth;
- Renewal of the structure and quality of supply, following competitive challenge of opening markets;
- Increased domestic and foreign firms increases from the integrated space.

The presence of dynamic effects and especially the economies of scale recommended the creation of regional unions (free trade areas, customs unions, common markets), especially between countries with similar specialized structures.

3.Benefits and costs of EU enlargement

In economic terms, extending brings benefits for both new and old members and the Union as a whole. Trade between the old and new Member States have nearly tripled in less than 10 years (from € 175 billion in 1999 to around € 500 billion in 2007). These aspects are showed more clearly by the increase for five times of the volume of merchandise trade between the new Member States, from less than € 15 billion to € 77 billion in the same period.

This was a key factor that contributed to a steady annual increase of 1.5% in employment in the new Member States in the period between their accession in 2004 and the start of the financial crisis.

The economic crisis has shown that the expansion is not a problem; it is the solution that can revitalize the economy. We have a common destiny.

Regarding the influence of citizens should be underling that higher stability and peaceful development, contributed by successive EU enlargements over the years, is a benefit for all Europeans. And not only that! By including the European internal market of over 100 million consumers with growing purchasing power, demand for products from companies in the old Member States has intensified. This has led both to preserve and create jobs at home. As German citizens take advantage of each machine produced and sold by a German company in Poland, so each transaction of Dutch bank in the new Member States make benefit for the entire Dutch economy. Conversely it is equally valid.

The most important points in the last accession negotiations were food safety and animal health. EU has taken strict measures to bring new members to EU standards. Food processing plants, dairies and slaughterhouses that do not meet standards were closed before accession, and only those meeting the conditions were able to sell their products on the European internal market.

Implementation of specific directives on water led to improved drinking water quality and water together.

Also, nuclear safety has improved as a result of enlargement. In the obligations of membership, more nuclear power stations pose a security risk was closed. European nuclear safety has improved through the initiative of the new Member States to integrate into the European rapid exchange of information provided in case of radiological emergency situations.

Following enlargement, more countries joined the Schengen Treaty, which provides facilities for movement of all citizens. Integration of new Member States in domestic air traffic in the EU has resulted in

safer flight services and better value. EU citizens can benefit from expansion by improving business opportunities and the possibilities for study and work abroad.

Regarding *the costs of EU enlargement*, should be stressed that EU financial assistance for new Member States is about 0.2% of gross domestic product of the old Member States and will grow by 2013 to 0.3%. The economic benefits for EU far outweigh this expense. Money from these percentages are used throughout the EU so take advantage. Construction of roads and other infrastructure projects in new Member States is often taken by companies from the old Member States. Stability of the laws guaranteed by the state, reducing corruption and improving infrastructure are beneficial to companies throughout the Union. The funds used for the development of national economies in the new Member States also create business opportunities for both the old Member States and for new ones (Miron, D., (2005)).

However, it should be emphasized that the EU includes two internal spaces: the space of internal "periphery" and space "central" internally; among the most prosperous regions and the least favored EU the gap is between 57% and 278% of average GDP and GNP/capita established on regions are between 33 and 278% of EU average

Considered in terms of eligibility for structural funds, 60 EU regions are below the threshold of 75% of the Community average, of which 24 are located in the old Member States (Greece, Italy, France, Germany, Portugal and Spain) and 36 in the new Member States, without Slovenia and Cyprus.

All 36 regions are almost the entire 8 new Member States, except for three regions-Capital (Prague, Budapest and Bratislava). Internal "periphery" of economic integrated space has increased in terms of enlargement of 2004-2007:

a) In case of the EU15, the peripheral regions occupied between 57% -75% of EU average

b) In case of the EU25:

• 6 of the poorest regions of the EU 25 are between 33-37% of average (Polish, one Slovak region and 3 regions of eastern Hungary are in this category). The regions from Romania and Hungary are between 31-34% of the EU 25.

• "Internal periphery" of the EU shall be divided into 2 areas: an "traditional" area characterized by a GDP/capita between 50-75% of EU and another new area characterized by a GDP/capita between 30% and 50% of the EU average. The latter is characterized by a particularly low level of employees, infrastructure, investment and employment.

c) In the EU 27:

• 11 regions are located in the category 50-77% of EU average • 25 regions (the majority) are in a new area, between 30-50%. (these areas represent a level of development that the EU did not know until the expansion of 2004-2007).

Integration theory shows that an integrated system works effectively if there is uniformity of structure. EU does not fall into such a system if we consider structural segmentation, respectively the two segments: “international periphery” and “national center”.

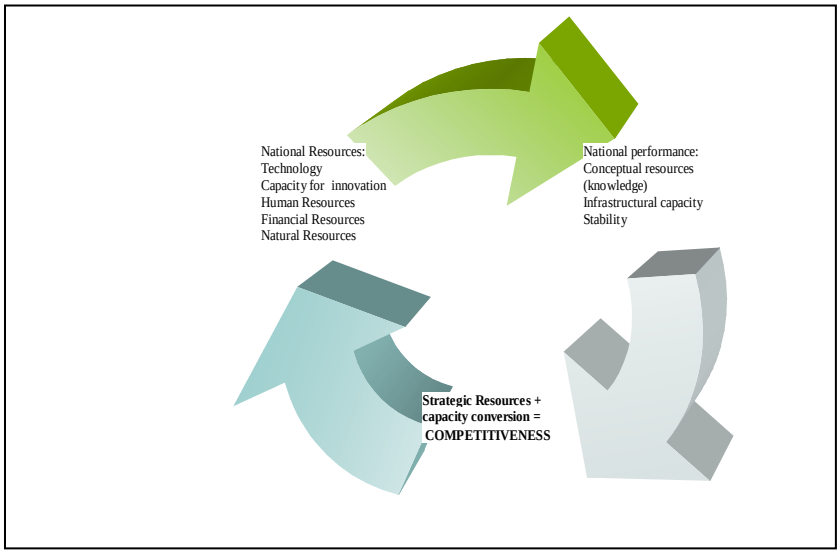
4. Combining national resources for competitive performance and the dynamics of performances’ size or "cup rule"

Beginning with accession from 2004 and 2007 there has been great progress in justice, freedom and security. Recently, the focus of attention is on economic competitiveness. Certainly the way the EU works can always be improved. Internal reforms must be driven and also to intensify the efforts for peace and welfare, as they serve the fundamental interests of the EU and its inhabitants.

Also, special attention should be given to the significant link between the available national resources, national performance and competitiveness achieved as shown in Figure 1.

National internal environment contains all the elements on which industry or sector has a decisive influence and, theoretically, have full control. The study of internal environment should establish which are the resources available for different sectors and if it’s able to follow the strategy chosen. Understanding the internal environment is the first necessary step in formulating a strategy. Studies on resources generated a conceptual framework of analysis - the study or industry sector based on resources, used to explain the elements that create competitive advantages. The performance of an industry or sector is associated with a configuration of its resources whose value is fixed by comparison in a foreign context.

Figure 1. Method of combining the national resources and performances for competitiveness



Source: Baldwin, Richard; Wyplosz, Charles (2006)

In the literature, the term resources are associated with other concepts: skills or capabilities. Thus, the essential basic skills and collective experience of the industry are manifested particularly in combining the various skills associated with the production and integration of multiple technology streams.

Any management strategy requires two sub-systems:

1. Strategy Formulation:
- Strategic planning;
- Long-term plans;

2. Implementation and evaluation strategy:
- Operational annual budgets;
- Periodic reports and statistics;
- Performance evaluation;
- Policies and procedures.

From the implementation process of the strategy should not miss the double loop control as shown schematically in Figure 2.

But there are barriers that may prevent a control strategy:

1. *Systemic barriers* - deficiencies in the design and management control system;

2. *Behavioral barriers* - conventional thinking, organizational culture, cognitive limitations, resistance to change;

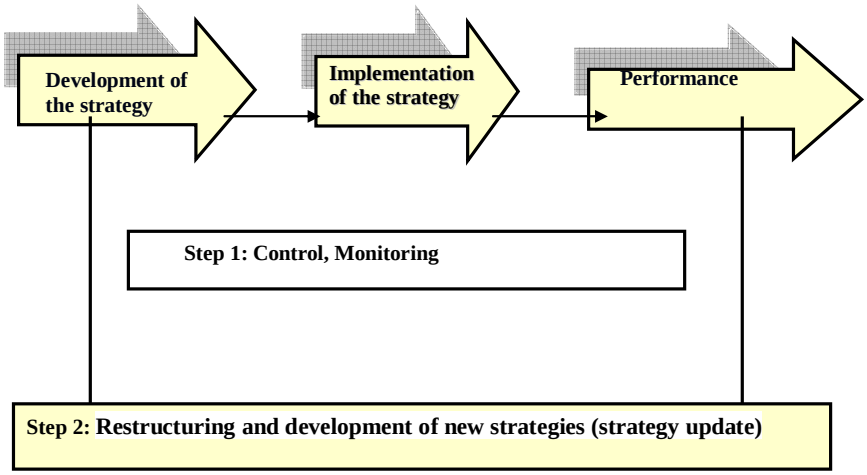
3. *Other barriers* - inability to agree a strategy and to allocate resources, its non-acceptance by those involved or affected, hiding bad results.

The strategy will increase the competitive advantage of EU Member States:

a) Economy of scale -> lower costs and thus prices;
b) Savings learning -> same good solution can be extended;
c) The effective use of existing capacity;
d) Management and organizational efficiency;
e) Increase of solidarity by the construction of more transparent, bringing citizens closer to the public and their elected representatives, by developing new tools for education field, by facilitation of finding jobs and dissemination of administrative initiatives.

It is considered that from a certain stage, scale's performances are exhausted. Thus, if the quantity of factors continues to grow and the amount of products increases less than proportionately with that quantity of factors of scale, it's estimated that performances are decreasing. In these conditions of production, unit costs begin to rise. From now called diseconomies of scale occurs. Economic theory explains this phenomenon based on the combination of a fixed factor and a variable factor which necessarily lead to decreasing performances.

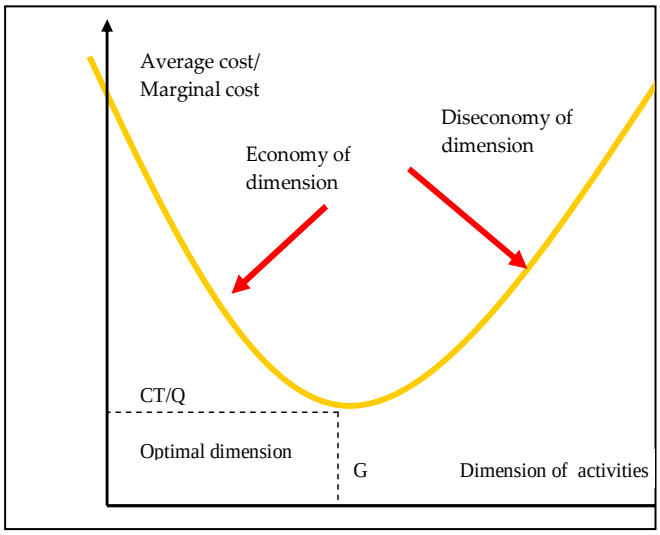
Figure 2: Steps of control process for the strategy of sustainable economic development in the context of country competitiveness



Source:

Graphically, cost curve, called *long-term cost curve*, reflects the evolution of unit costs of production depending to the quantities of factors used. The „U" shape of the curve shows the successive emergence of economies and diseconomies of scale in relation to the evolution of the performance (ascending or descending). The „G" point represents the optimal level of activity, separating the advantages and the disadvantages resulted by the dimension of the activities/work. Each activity is represented by companies whose size can be considered optimal.

Figure 3: Long-term cost curve and the optimal size of activities



Source: Silasi,G.; Rollet, Ph. ; Trandafir, N.; Vadasan, I.(2007)

5.Conclusions

Economics of European integration shows that meet, following the integration process, three types of economic effects: a) effects of allocation, sometimes called static effects; b) effects of accumulation known as the growth effects (determine the impact of integration on the accumulation of economic resources, particularly capital) and c) effects of location, at European level - are geographical reallocation of resources, but in terms of regional effects appear like effects of accumulation.

Once the integration of future benefits exceed costs, will be released at a higher integration (coordination or unification). Each successive stage of loss of autonomy will make harder for a state to adopt those economic strategies, aimed at specific targets. The progress towards the future integration depends on the speed with which they occur and are seized with as many interest groups gains and losses will be

minimized. Gains derived from a common better allocation of production factors, by the stabilization policies of economic growth and equitable redistribution of income.

The costs will result from the inability to give national preferences of some strategies, through a reduction in decision-making autonomy.

Thus, by the coordination or unification of decisions will diminish:

• The ability to balance revenue with expenditure from budget, according to internal costs;

The possibility of inflationary financing of budget deficit;

• Possibility to use currency depreciation as a means of stimulating exports and imports braking;

• Possibility to use a sequential consumer protection, national health policies, income redistribution and foreign policy.

As movement occurs from one stage of integration to other, more national powers will be transferred to the group. The first will be those from economic domain, followed by non-economic one (cultural, social, foreign policy, defense).

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THE PERSPECTIVE OF ROMANIAN EUROPEAN INTEGRATION IN TERMS OF INTERNATIONAL COMMERCIAL RELATIONS

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Abstract: *The article analysis the evolution of the main macroeconomic indicators which characterize Romania's international commercial relations. Romania's perspectives of integration in the European Union are viewed through an economic and statistical analysis of the external trade, as a significant mean through which is reflected the state and evolution of the commercial and economic relations among countries. The results of the analysis point out that Romania's external trade is still in an unfavorable imbalance situation, but there are also signs of commercial deficit recovery, from the standpoint of some indicators which are specific to a steady market economy. Even so, Romania's external trade's deficit, persistent and of vast proportions, continues to represent a source of worry for its macroeconomic stabilization on long term. The causes of this deficit and the possible sources of its coverage are presented in this paper.*

Key words: European integration, international economic relations, trade policy, trade balance, commercial deficit

JEL classification: F10, F15, F40

1. Introduction

In the context of European Union's integration process and the commercial simulative` policies, Romanian external trade is in an ascending phase evolution, necessary for a country which established the target of a full integration in the European Union. It is thus obvious that Romania's commercial relations with the European Union became the main component and its the general trade` „engine".

Romania's external trade has been and will be an important activity of the national economy with a decisive influence upon the economic development, growth and modernization of both the production and services and, in general, the economic efficiency and incomes' increase.

Therefore, the purpose of the dynamic analysis of the factors that influence Romania's recent international commercial relations is to reveal its economic evolution and also to highlight its possible trajectory.

2. European Union's trade policy – a global player's policy

The European Union is the world's biggest trader, accounting for 20% of global imports and exports. Free trade among its members underpinned the successful launch nearly 50 years ago of the EU. The Union is therefore a leading player in efforts to liberalize world trade for the mutual benefit of rich and poor countries alike.

Increased trade boosts world growth to everybody's advantage. It brings consumers a wider range of products to choose from. Competition between imports and local products lowers prices and raises quality. Liberalized trade enables the most efficient producers to compete fairly with rivals in other countries, whose governments have to cut import duties used to protect national firms.

The EU's *basic philosophy* is that it will open its market to imports from outside provided its trading partners do likewise. It is also keen to liberalize trade in services. But it is ready to make allowances for developing countries by allowing them to open their markets more slowly than industrialized countries and is helping them integrate into the world trading system.

The removal of barriers to free trade within the EU has made a significant contribution to its prosperity and this has reinforced its commitment to global liberalization. As the EU member states removed tariffs on trade between them, they also unified their tariffs on goods imported from outside. This meant that products paid the same tariff whether they entered the EU via the ports of Athens, Hamburg or Constance.

The harmonization of its *common external tariff* (CET), as it was known, meant that EU countries had to participate as a single group in international trade negotiations. External trade thus became one of the first instruments of European integration requiring member states to pool their sovereignty.

As a result of the *firm commitment*, the EU has been a key player along with its trading partners in the successive international rounds of trade liberalization negotiations. These include the Kennedy Round of the 1960s, the Tokyo Round of the 1980s, the Uruguay Round which was completed in 1994, and the ongoing Doha Development Round which began in 2001. The aim of these rounds, which are held in the framework of the World Trade Organization (and its predecessor, the General Agreement on Tariffs and Trade or GATT), is to reduce tariffs and remove other barriers to world trade. Following earlier rounds, the EU's average tariff on industrial imports has now fallen to 4%, one of the lowest in the world.

On a *rules-based system*, the European Union has invested heavily in trying to make a success of the Doha Round. It is also a firm believer in the rules-based system of the WTO which provides a degree of legal certainty and transparency in the conduct of international trade. The WTO sets conditions under which its members can defend themselves against unfair practices like dumping (selling at below cost) by which exporters compete against local rivals. It provides a dispute settlements procedure when direct disputes arise between two or more trading partners.

Therefore, it was created a large *network of agreements*. Trade rules are multilateral, but trade itself is bilateral - between buyers and sellers, exporters and importers. This is why the EU, in addition to its participation in Doha and previous WTO rounds, has also developed a network of bilateral trade agreements with individual countries and regions across the world. When it expanded from 25 to 27 members, the EU declared its intention to develop closer trade and partnership agreements with other neighbours. The creation of such a large EU-centered trade grouping will have an impact on relations with other trading partners.

The EU's trade policy is closely linked to its *development policy*. The Union has granted duty-free or cut-rate preferential access to its market for most of the imports from developing countries and economies in transition under its *general system of preferences* (GSP). It goes even further for the 49 poorest countries in the world, all of whose exports - with the sole exception of arms - are to enjoy duty free entry to the EU market under a programme launched in 2001.

3. Statistical analysis of Romania's external trade and the economic interpretation of its results

The analysis focuses on the external trade in goods, mainly, because its` value significantly exceeds that of services. This is an important issue reflecting, among other things that in most cases goods are by their nature commodities which can be traded and transported across borders, whereas many services are non-transportable items for which it is not possible to separate the place of consumption from the place of production.

In the first stage of the analysis we will determine *the absolute significance of the external trade's imbalance*, based on the following relations (where X is the total income or export and M is the total payments or import):

$$S = X - M \qquad \text{Equation (1)}$$

We can notice (*Figure 1*, from above) that during the ten years analyzed, imports exceeded the growth rate of exports, resulting in the negative commercial imbalance and implicitly, in the negative imbalance of the EU`s external trade.

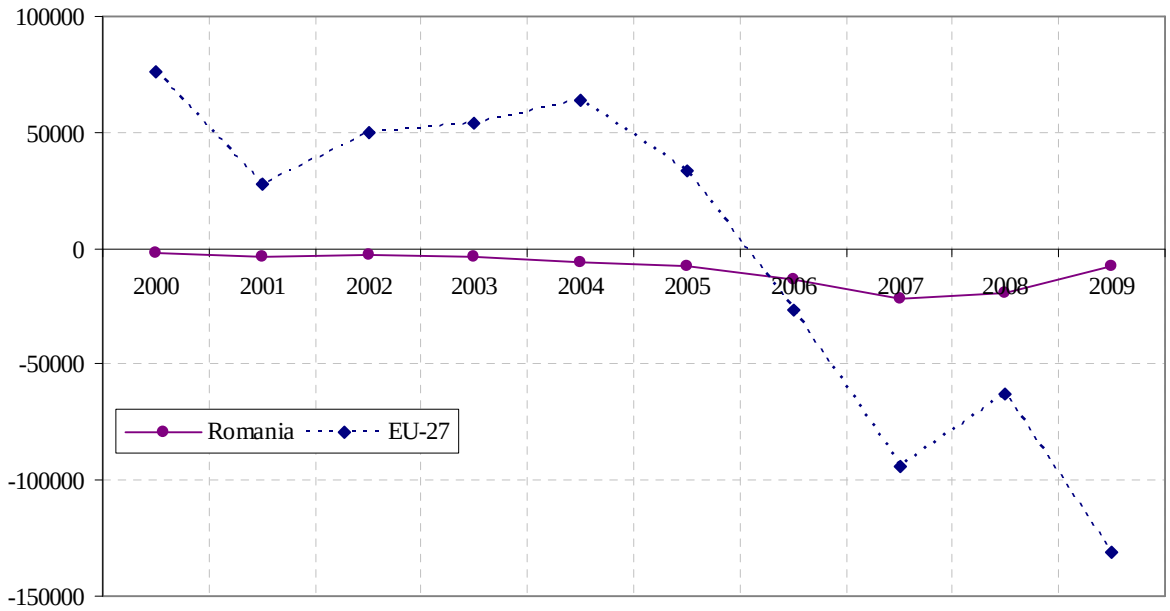
The commercial deficit is Romania's most delicate problem, especially if taking into account the influence of this macroeconomic imbalance upon the integration in the European Union in the next period.

The external trade's deficit continually increased after 2002 and maintained its positive evolution as a share in the GDP, but its values became worrying beginning with 2006, when it surpassed 10% of the GDP. At the end of 2007, the deficit was approximately 14% of the GDP (BNR Press Release, January 2008).

The accumulation of the external debt, due to internal or external deficits, beginning from a certain share of the GDP, can affect a country's economic stability on a medium and long term. Moreover, if the international context evolves unfavorably (which was the case at the beginning of 2008), a high commercial deficit may become a hardly sustainable one even in the short run.

The analysis of this indicator obviously shows that the creation and maintaining of these worrying values have been primarily due to the *negative and continually increasing imbalance of the trade balance*. Its values were 21.5 billion Euros in 2007, followed by a slightly diminishing value in 2008 (18.9 billion Euros) and 2009 (7.6 billion Euros); these values being determined by the broad discrepancies in the evolutions of exports and imports. Although both flows significantly increased over time, their evolutions were not similar. Thus, total exports increased by 16.2%, and imports by 25.1 %, in 2006. In 2007, the discrepancy grew deeper: exports increased by only 13.7% and imports by 25%. The difference in the dynamics of the two flows might have risen also due to the change of the method of registration for imports, as the *general trade system* for intra-comunitary trade was introduced.

Figure 1. The absolute significance of the external trade's imbalance



Preliminary data source: *Eurostat* - "*National Accounts*"

In 2007 and 2008, the significant economic growth was mainly determined by the increase in the domestic demand based on investments and consumption; both tendencies leading to imports slightly increase. In this case, we can also note that the *national currency appreciation* is the main cause for the lower dynamics of the exports compared to the imports, in both years, but, at the same time, *exporters' difficulties to adapt to external markets exigencies* also influence the external trade's deficit.

Although, after a period characterized by a serious commercial deficit, in 2009 - in the context of an international financial crisis -, imports registered an important degression (dropped almost 8% compared to the imports from the previous year) and exports maintained their slowly growth, increasing with 1.06% compared to the year 2008. It appears that *the exports to the European Union have partially compensated the expenditure generated by the imports from extra-communitary countries*.

As a remark, according to some studies, *in most member countries imports and trade deficits* (National Prognosis Commision, November 2007) *with European partners tended to increase*. Having considered these evolutions, it is most likely that Romania will register a high increase of the imports from the European Union. Thus, European Union's contribution to Romania's trade deficit might increase in the following years.

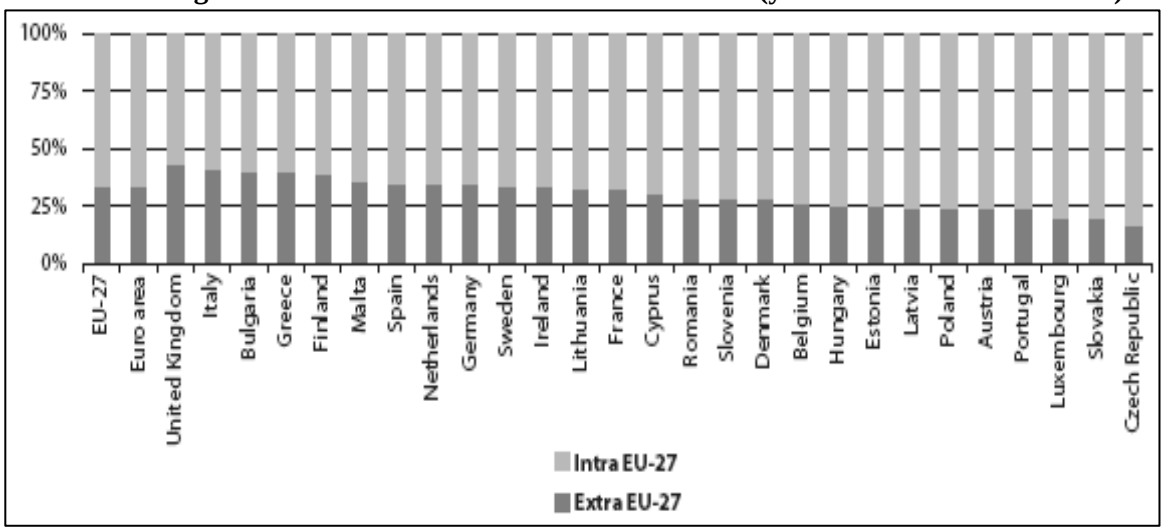
Exports` evolution in the near future will be mostly influenced by 3 factors: the evolution of the national currency rate of exchange, the changes in the dynamics of the production for exports and exports` structural changes; and the changes in the trade policy due to the adhesion to the European Union in 2007.

Concerning the dynamics of the Romania's exports, the exports for those items which previously faced commercial barriers at the entry to the European Union (in the context of an incomplete free trade area), like agricultural products, might increase, which was also the case of the countries that adhered to the European Union in 2004.

In a reverse of the situation, taking into account EU`s commercial analysis, we can note that since 2000, the *EU-27 has recorded consecutive annual trade deficits* for goods as a whole, although the level of these *deficits* has *fluctuated strongly*. The EU-27 trade deficits have tended to reduce strongly during periods of stagnant or falling economic activity, whilst growing during periods of economic expansion. The EU-27's trade deficit for goods in 2009 knew an important reduction compared with years 2007 and 2008, higher than any other year for which data are available.

The trade between member countries - the EU's internal market - was by far the most important market for goods produced within the EU-27; intra-EU dispatches of goods were worth more than double the value of exports to non-member countries. Indeed, in each of the Member States the majority of the trade in 2009 was with other member countries (*intra-EU trade*) as opposed to with non-member countries (*extra-EU trade*).

Figure 2. Intra and extra EU-27 external trade (year 2009 - % of total trade)



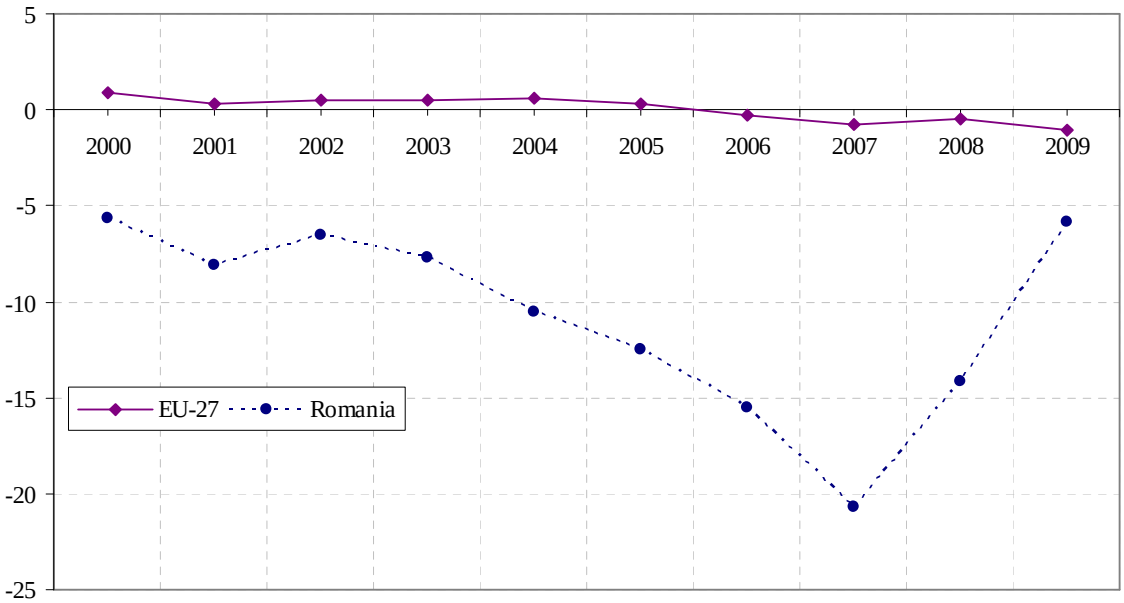
Data source: *Eurostat* - "*Europe in figure. Yearbook 2009*"; *European Commission of Trade*

The proportion of the total external trade accounted by these two flows (*Figure 2*) varied considerably among the member countries, reflecting - to some degree – the *historical ties* and *geographical location*. The highest levels of trade integration within the EU were recorded for the Czech Republic, Slovakia and Luxembourg; each of these countries reported that intra-EU trade accounted for about 80% or more of their total trade. In contrast, about 60% or less of the external trade in goods of the United Kingdom, Italy, Bulgaria, Greece and Finland were accounted by intra-EU trade. *Romania* registered a *higher level of trade integration within the EU* (above 70%) compared to Bulgaria (almost 62%).

Alongside Romania's analysis, by comparing the commercial imbalance to the Gross Domestic Product (GDP), we obtain another important indicator which reveals the economic status at a certain time, *the relative significance of trade's imbalance* (*STI*):

$$STI = \frac{X - M}{GDP} \cdot 100 \qquad \text{Equation (2)}$$

Figure 3. The relative significance of the external trade's imbalance compared to the GDP



Preliminary data source: *Eurostat* - "*National Accounts*"; *National Institute of Statistics*

It should be noticed that every year (*Figure 3*), the indicator surpasses 5%, which should be considered an alert signal for the national` decision factors in order to correct these imbalances. However, we can allege that there has also been a slight recovery of the economy in the last two years, as shown by the small increasing of the indicators` values, after the highest drop registered by the indicator in 2007. Hence,

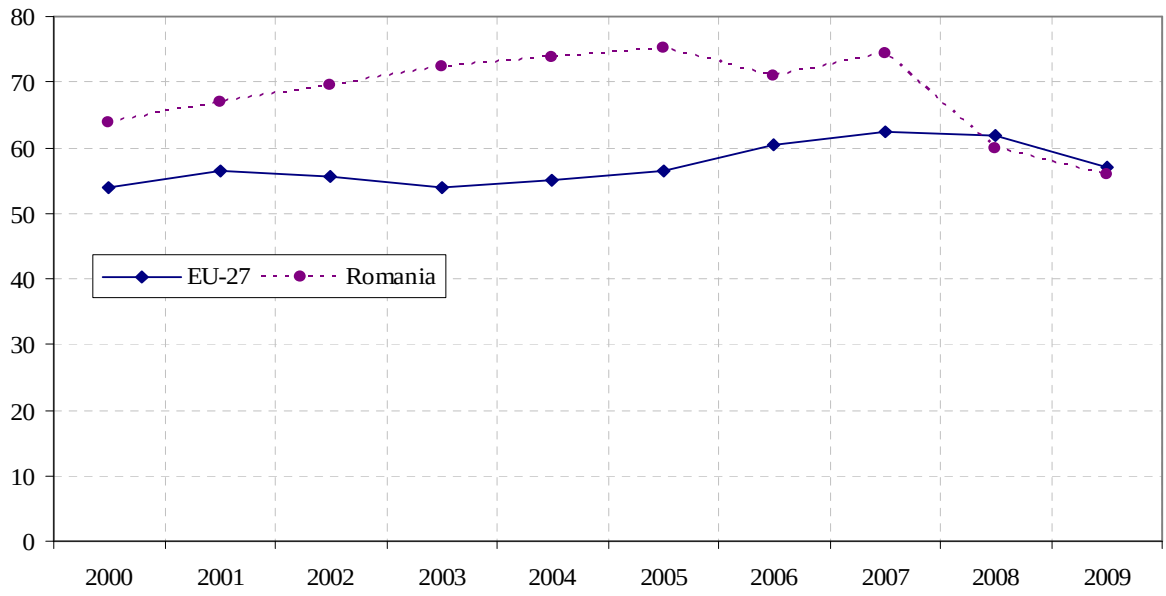
the indicator registered an absolute decrease in the last two years, which can reveal an improvement for the Romanian economy.

The commercial imbalance related to the GDP registered an absolute increase in the last years. It relative value in year 2009 (5.8%) could be almost regarded as acceptable for the economy, meaning that there are no serious problems in this sense.

If instead of subtracting the above mentioned indicators, we sum them, we obtain *the relative significance of the external trade* (*GDE*) for an economy, or that economy's *international "ventilation" of the GDP*:

$$GDE = \frac{X + M}{GDP} \cdot 100 \qquad \text{Equation (3)}$$

Figure 4. The international "ventilation" of the GDP



Preliminary data source: *Eurostat* - "*National Accounts*"; *National Institute of Statistics*

In Romania's case, the indicator has high values, which is a positive fact for the country, bearing in mind that it shows the measure in which the external trade contributes to the GDP. External trade makes its most important contribution to GDP in 2005 (75.2%), followed by year 2007 (74.3%). But, considering that this significant rise of almost 11% in 2007 compared to year 2000 is due to the faster evolution of the imports than that of the exports, we can conclude that, per ensemble, the economy's evolution was an unfavorable one.

In the context of the international financial crisis, beginning with year 2007, the indicator registered the most important drop in values, with 18.3% in 2009 compared to 2007. This considerable degression, which characterizes the last two years of the period, revels, once more, that Romanian economic evolution and development changed for the worse.

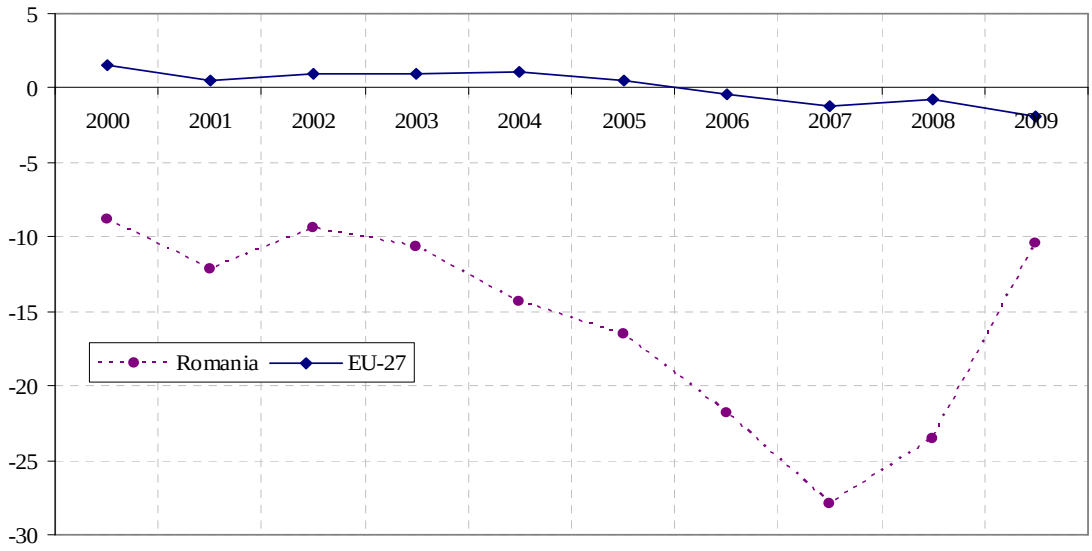
However, we should take note of the fact that the main benefits resulting from Romania's integration in the European Union are related to the maximization of the Romanian economy's international "ventilation", or the weight of the exports and imports of goods and services in the GDP.

On the other hand, regarding the EU-27`s indicator evolution, we can note that it knew fluctuations in values, periods of decrease were followed by periods of slowly increase. After the last EU`s enlargement in 2007 (when the indicator registered the highest value of 62.4%), EU`s international GDP` "ventilation" indicates a slight decreasing of its values.

The relative significance of external trade's imbalance in total transactions (*MRS*) registered in the commercial balance is another indicator which expresses the importance of an imbalance:

$$MRS_j = \frac{x_j - m_j}{x_j + m_j} \cdot 100 \qquad \text{Equation (4)}$$

Figure 5. The relative significance of international trade in total transactions



Preliminary data source: *Eurostat* - "*National Accounts*"; *National Institute of Statistics*

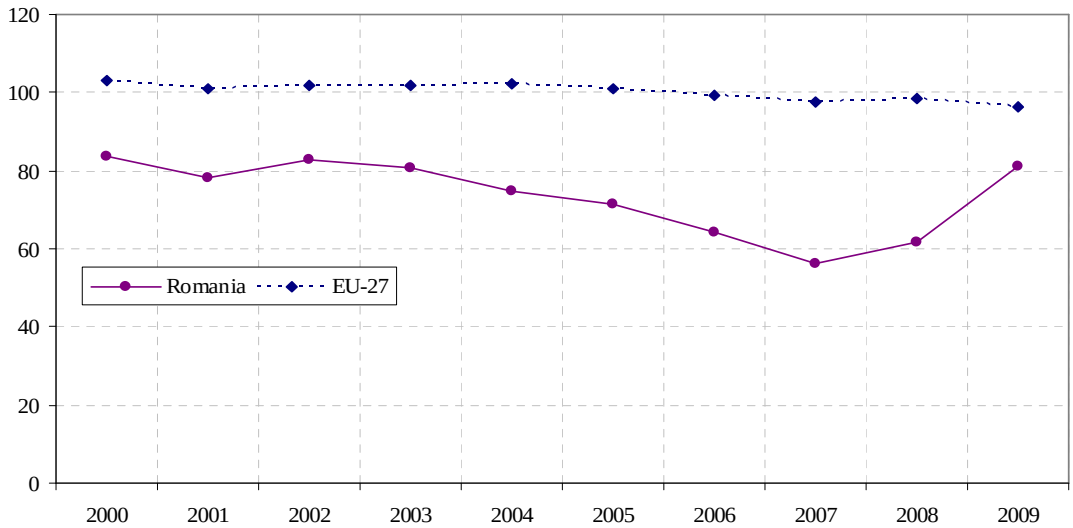
The Romanian indicators` results display the fact that in 2001 and, especially, in the period 2004-2008, the imports are insufficient to cover up the exports, which might determine either the external debt increase or the foreign currency reserves decrease. Moreover, we can notice a serious deficit of the balance of goods in 2007, lower than -25%; this being also the indicators` highest value obtained in the analyzed period. In the years 2000 and 2002, the values of this indicator are under the threshold of 10% and, therefore, are considered acceptable for the economy. In 2009, after an important drop in percent, the indicator evinced a significant increasing to 10.4%, a value approachable to the admissible one of 10%.

In the whole period, EU-27`s indicator reflected a slight fluctuating trend, with values above -5%. These values are considered to be favorable for EU-27`s economic evolution.

Another indicator which reflects the importance of an imbalance is *the degree of payments` coverage by incomes* (*GA*):

$$GA = \frac{X}{M} \cdot 100 \qquad \text{Equation (5)}$$

Figure 6. The degree of payments` coverage by incomes



Preliminary data source: *Eurostat* - "*National Accounts*"; *National Institute of Statistics*

It can be observed (*Figure 6*) that, for Romania, in all ten years analyzed, the degree of coverage in the case of goods is less than 100%, meaning that imports are not sufficient paid by exports. The indicator's lowest value, 56.3%, recorded in 2007, highlights once again the serious external trade balance deficit. In the last two years and, especially, in 2009, the indicator registered an increasing trend; hence, its

values mark a greater coverage of payments by revenue from exports, as a result of lower growth in imports related to exports.

Considering the EU-27`s analysis, it results show a favourable trade` evolution in the period's first six years, when the indicator evinced values above 100%. Although, beginning with year 2006, its values continued to decrease (in 2009, approximately 96.2%), indicating a lower coverage of imports by exports and also a significant commercial imbalance.

The dynamic evolution of the ratio between the returns and the payments is reflected by *the index of percentage coverage of payments by incomes (IGA):*

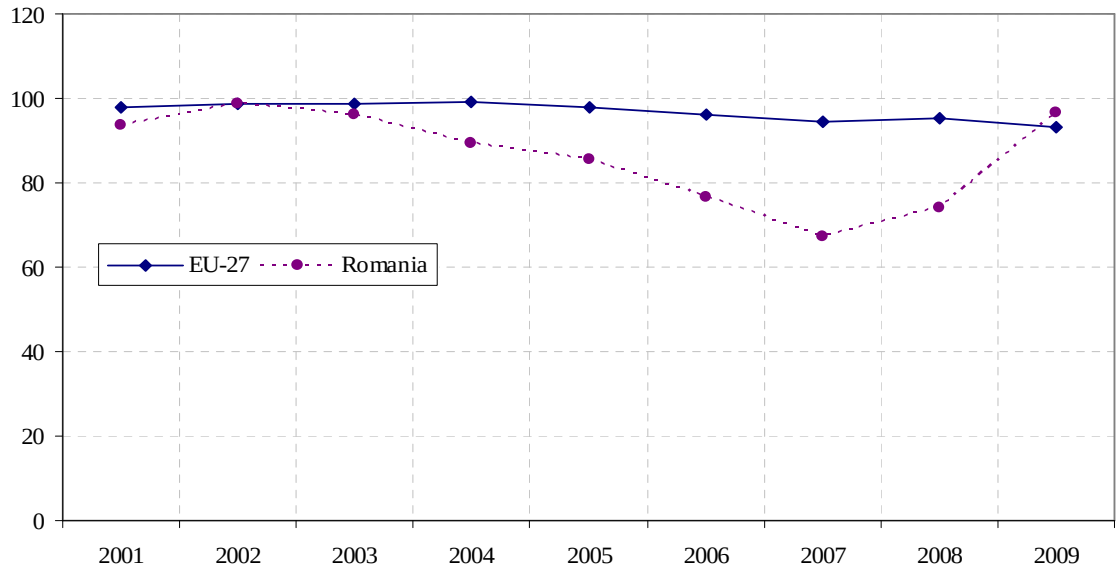
$$IGA = \frac{I^{v}_{(X)}}{I^{v}_{(M)}} \cdot 100 = \frac{X_1}{X_0} \cdot \frac{M_0}{M_1} \cdot 100 \qquad \text{Equation (6)}$$

From the below data-figure (*Figure 7*), we can note that Romanian deficit of the trade balance was in decline in the analyzed period. This is due to *the index of percentage coverage*, indicating that the deficit increased as compared to the reference period (the year 2000). The most important increase of the external trade's deficit was noticed in the year 2007 (when the indicator's value dropped in percent as compared to year 2000), but the unfavorable evolution of the indicator slowed in the following two years.

Therefore, in the year 2009, in contrast to the previous period, Romanian deficit of the trade balance disclosed a lower value than in the reference year. This can be explained by the fact that the index of percentage coverage (96.7%) was closely to 100% and raised as compared to year 2000.

Examining the EU-27`s situation, it can be established that, in the first five years of the period, the indicator followed an almost linear trend, with values closely under 100%; consequently, pointing out a positive evolution for the commercial imbalance due to the fact that imports were covered by exports` incomes in a higher measure. Still, beginning with year 2006, the indicator's evolution marked a continually degression in percent, reaching the highest point of drop in 2009, 93.2%.

Figure 7. The index of percentage coverage of payments by incomes



Preliminary data source: *Eurostat* - "*National Accounts*"; *National Institute of Statistics*
(*Remark*: The year 2000 is considered the reference year for the analyzed period)

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The results of the analysis show that Romanian economic performance of some indicators substantially improved, especially, in the last two years, permitting the EU to consider Romania as a functional integrated market economy. Nevertheless, Romania's international commercial relations could be better; still, there are some aspects at a macroeconomic level which for the time being hinder a stable growth of the international economic relations.

4. Predictions of the main external trade indicators for the period 2010 - 2014

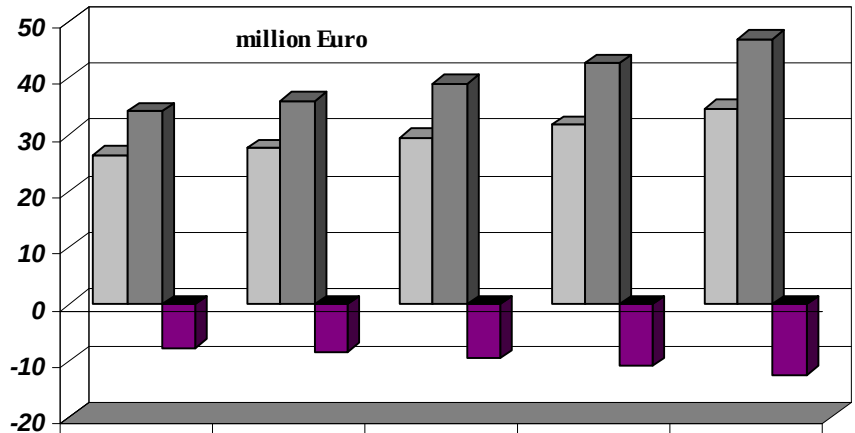
The external trade's predictions for Romania in the period 2010 - 2014 are based on the hypothesis that the economic environment will remain relatively stable and the macroeconomic evolution of Romania's main commercial partners won't be descendent. Also, the predictions are based on the well known fact that

the adhesion to the European Union will accelerate, in a relative large extent, Romania's economic and social development.

According to the *National Prognosis Commission*'s macroeconomic predictions (*Figure 8*), external trade will continue to experience a sustainable growth which will surpass the trend of the GDP. It is also expected that, in the context of Romania's integration to the European Union, *trade flows geographical orientation* will lead to the *consolidation of the European Union countries*' positions as its main trade partners. The exports of both goods and services will increase slower compared to imports, which will continue to negatively affect the trade balance.

Generally, *the enlargement of the European Union determined a trade increase* in the enlarged Union without affecting trade flows with extra-comunitary countries. European agreements signed by each member country have allowed *free trade* between the European Union and its new members on the basis of reciprocity, but have been put into operation in an asymmetrical manner, with a faster liberalization on the side of the European Union and holding some restrictions in a few sectors. Thus, these countries have rapidly become important trade partners for the European countries.

Figure 8. The evolution of Romania's external trade for the period 2010 – 2014



	2010	2011	2012	2013	2014
Export of goods	26.45	27.66	29.5	31.65	34.55
Import of goods	34.04	36.01	39.01	42.55	46.92
External trade`s imbalance	-7.59	-8.35	-9.51	-10.9	-12.37

Data source: *National Prognosis Commission* (fall prognosis, 2009)

Taking into account the national investments made for stimulating exports, we can expect an acceleration of Romanian exports' increase, yet will not surpass the imports' and will not stop the incremental increase of the trade deficit as a share in the GDP, at a negative share of 8.4% in 2010, with a drop to 9.1% in 2014 (National Prognosis Commission, 2009).

The extra-comunitary exports' increase will outrun the increase of the exports to the member countries due to the new outlets and also due to the consolidation of the exports to the actual commercial partners, since Romanian products' competitiveness has many chances to increase. At the same time, it is estimated a continually decrease of the Romanian imports from the European Union, together with an increase in the percent of imports from the extra-comunitary countries. Intra-comunitary exports and imports of goods will increase on average. Meanwhile, the trade deficit` average annual increase will slowly diminish, as compared to the previous period.

As compared to 2009, between the years 2010-2014, the imports' increase will be slower, and the share of the trade deficit in the GDP will diminish to 9.1% in 2014 (National Prognosis Commission, fall 2009`s prognosis). However, the deficit of the commercial balance will maintain its high contribution to the current account deficit and, per ensemble, to the balance of payments deficit.

5. Conclusions

Romania's external trade has known, for a long period of time, a cyclic evolution with a general tendency of growth. A general characteristic for the external trade's activity is its faster growth compared to the growth of the GDP and other macroeconomic indicators; reflecting, in a more pronounced way, Romania's *gradual openness to the international economic system*. Although, in recent years, the rapid growth of the imports generated a permanent trade deficit, oscillating from a year to another, with an acceleration tendency in its chronic state.

Whilst the causes for the important deficits in the analyzed period tend mostly to maintain after Romania's adhesion to the European Union, the *coverage sources* until present seem to become more *fragile*. It seems more likely that the adhesion to the European Union, at least in the short run, will even deepen the intra-comunitary trade deficit, which will increase the share of the European Union deficit ratio in Romania's total deficit.

Accordingly, we can assert that the *commercial deficit is likely to maintain* at high levels which calls for the attention of the Romanian authorities, as it is a significant source of economic and financial instability. The supervision of the commercial deficit's evolution is highly necessary also due to the fact it represents, among other indicators, *a warning signal concerning the country's vulnerability to the present state of the international economic crisis*. Undoubtedly, the current economic and financial crisis can and should be considered also as an opportunity, which facilitates development and promotes investments in emerging niche industries in order to reduce the gaps of development within the Romanian economy (Bălănescu C.M. et all., 2009). Whereof, in present, Romania is vulnerable according to three of the warning indicators for such a crisis (Copaciu M., Răcaru I., 2006): the supra-appreciation of the real effective rate of exchange, the share of the current account deficit in the GDP and the exports growth rate.

Notwithstanding this, Romania's European integration also implies an improvement of its image in the international economic relations and, in general, on the international scene. This may allow an easier access to European sources of financing for the serious external trade's deficit.

In conclusion, one of the "musts" for maintaining Romania's macroeconomic stability, on medium and long term, is the external trade's deficit decrease, as soon as possible.

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PEOPLE OF INDONESIA AGONY: A LENGTHY FOREST DESTRUCTION CONSEQUENCE

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Abstract: *Forest destruction would deteriorate the society's quality of living, many disasters possibly occurred as climate change, critical idle land, floods, lack of foods lead to famine society suffer loss and hard to earn a living. The forest function shift from forestry to agriculture and recidential lead to fast forest trees cutting, forest destruction due to temporary economical lucrative activities some other society's have done neglecting quality of living of others and natural resource quality. It has all happened due to stupidity, lack of law enforcement, lack of natural and others human living concern. It maybe good when all parties as business, society, individual and the Government have high concern to preserve natural resources unlead to disasters due to individualist faults.*

Key words: *destruction, land function shift, environmental degradation, natural disaster, famine.*

JEL Classification: I30, J10, Q00

1. Forest Destruction, Housing Development and New Industrial Area

The forest destruction is the main cause of environmental deterioration. The environmnental destruction of river upper end to downstream and changing field structural utilization is the main cause of river flood due to society neglect of economical behavior. Now upperstream environment has already devastated, no water pervading is now in the downstream due forests have already changed to be farms, industrial area and housing. Indonesia is world number one in rain forest damage. Year 1997-2000 rain forest data using Lansat Citra satellite monitoring shows 2,83 million hectare per year and 59,6 million hectare totally rain forest had been damage. The forest fast degrade process is mainly because of industry cut down intentionally, illegal loging, the changing of regular to extreme rainy season is also having high contribution to flood disaster across Indonesia archipelago. How can the rest of fine environment to be protected to avoid degradation, meanwhile the destroyed environment restored simultaneously fast. The corporate social responsibility and government abligation should be act solidly optimize to save and keep green environment. The poor society's suffering expensive material and psychologically due to river flood, thousands of small, medium up to corporation have stopped their production. Tools, other production devices and business offices raze watered, billion and uncounted financial loss is a real experience, additionally uncalculated financial loss due to uncertain situations.

The Citarum river flood has increasingly alarmed due to river upper end up to downstream and irrigation simultaneously damage has threatened West Java foods tenacity one amongst national rice barn of Indonesia. The land low price lucrative reasons housing and industrial region development along river upper end up to downstream river flow area in Indonesia has already destroyed. As an example, the society inhabit Citarum river upper end should be more vigilant because the 718.268,5 hectare river flow area along 269 kilometers away across eight regency severely devastated potentive to yearly flood occurrence destructive to society's economic and welfare activity mainly the poor. Such flood occurred due to changing land structural use from forestry to agriculture, industry and housing. Mountain forest has already thinned because of high industrial, agriculture exploitation. The massive forest changing function has caused heavy flood when the dike is over flooded by forest hold less water or overflowed perforated dike often happening in Indonesia.

2. Foods Supply Interference

Floods have destroyed national foods of society of Indonesia especially the poor villager. Thousand kilometers of destroyed irrigation have unable distributing water hampering foods production of poor villagers. The forest destruction change development progress of society's residential, industry have cause irrigation dysfunction lead to high flood occurrence yearly. Furthermore starting from year 1990 has no more irrigation development instead of partial reparation, the forest function shift has predicted 80.000-100.000 per year approximately.

According to BPS National Statistic Office prediction the West Java province rice production would decrease 3,1 percent from 11,1 million ton in 2009 to be 10,92 million ton. It is because of rice field destroyed due to floods. Hence, the West Java possibility contribution to national rice formation would possibly decrease. During the year 2000 West Java province is a major contributor to national rice formation 22 percent approximately rice contribution is coming from West Java province, but now only 18 percent approximately.

3. River Flows Areas Suffering

Field surveillance reveals Citarum river as an example with 12 sub areas of river flows has already destroyed for the sake of business and has predicted violating the principles of forest and river flow conservation. From the total of Citarum river flow area only 158.174 hectare or 22 percent has status as national forest as the rest approximately 560.094 hectare occupied by inhabitant people or companies. Nowadays at least 30 percent from 166.611 hectare in Citarum river flow has already aggravated furthermore around 160 million hectare river flow has already deteriorate due to changing function as commercial and residential area.

Most of mountain areas have densed by housing and one season farms deteriorating forest functions. In surrounding of Jatiluhur dike exists sand mining with it's facilitates as excavators and trucks. Ceremai mountain area, Kuningan, West Java bold wiped out. Majority mountain areas in Indonesia have forest cleaned down for farming, industry or residential areas. The heavy deteriorating forest function in river flow areas continuously happening since year 1983, as an example the Citarum river flow areas, forest function change in Saguling and Cirata dam upper end, in the border between Citarum and Cimanuk river flow in Garut have already destroyed.

4. Floods Violently Wipe Off Belongings

Many river flow heavy suffering flood when rainy season comes. Heavy flooded areas experience in many cities as in Pasuruan East Java, Karawang, Bandung, Gunung Guntur mountain area Garut , Cianjur West Java, Aceh, Musi Palembang river flow East OKU South Sumatera, Lampung Sumatra, Ciliwung river flow West Java Province seriously heavy flooded Depok, Bekasi and surrounding areas including Jakarta the National Capital City. The water level in many dikes mainly in Jatiluhur dam are fluctuate, such condition lead to heavy water flow to variety areas of river flows in Indonesia consequently rising. Downstream flood areas are increasing as in West Karawang, East Karawang, East and West Teluk Jambe, Ciampel, Batujaya, Pakisjaya, Rengasdengklok, Klari, and Jayakerta. The heavy increasing inhabitants flee continuously to happen. The National Social Office in some areas has shown hundred thousand of families flee to reach higher safer areas avoiding flood, hence some new flee areas occurring. The rice field areas flooded has also increasing in number from 817 million hectare to 859 million hectare with padi 1-100 day of age. Such rice fields are spreading in variety regency in Indonesia archipelago making its inhabitant suffer more.

5. Shift of Forest Function to Industry and Agricultural Sectors

Because of forest function and river flows area changing to industry, rice field and housing areas, as an example there are land as wide as 19.055,10 hectare in Karawang Regency, West Java have changed its function by the Government of Karawang to be industrial land, more over there are many changing land function as what happened in Karawang whole spread across Indonesia archipelago. From such industrial land according Industry, Trade and Mining Office of Karawang

Government 5.837,50 hectare have functioned as industrial location, 8.100,00 hectare functions as special industrial area and 5.117,60 hectares for industrial zone or industrial area outside of the industrial area. Today the heavy industry exist in Karawang reaching 578 units, consist of 295 units foreign investment industry, 187 units local investment industry and 96 units non facility industry. Meanwhile the small scale industry in Karawang is reaching 8.800 units approximately. In the end of 2009 more than 9.000 units industry, consist of big and small industry. Karawang also known as a city of industrial zone in accordance to Presidential Act Number 53 year 1989 regarding the Development of Industrial Zone. The investment expansion in Karawang is massive, in other area according to Regency Industrial, Trade and Mining Office data have increasing yearly. In the year 2008 total investment reaching Rp86.449 trillion fast increasing compare to 2007 total investment reaching Rp63, 783 trillion approximately. The investment increase has reflected the year 2005 to 2006, reaching Rp63,559 trillion investments in 2006. Meanwhile in the year 2005 the amount of investment only reaching Rp60,119 trillion. So as well as investment the forest function changing and river flow to be land of rice field and industry in Cikarang several year ago and similar to Tangerang a decade ago, and now it has already densed with industrial sectors. All are potentive to destroy the forest and river flow area decreasing the potential of food reserve formation and potentive to flood disaster. The massive forest changing function to agricultural, industry and housing had happened continuously every year mainly due to the big bang of birth rather than the industrial development a bad consequent to increase flood disaster. Official data from Agricultural and Forestry Office of Karawang Regency 2009 shows the number of agriculture fields is increasing and number of forest decreasing, as an example Karawang agricultural area has increased up to 94.311 hectare, consist of 81.595 hectare rice fields technical irrigation, 5.107 hectare rice fields half technical, rice field simple irrigation system reaching 4.391 hectare and rain rice fields reaching 3.218 hectare approximately. Yearly data of Agriculture and Forestry Office of Karawang regency shows from first January up to the end of January 2008 has already rice fields function changing 78,4494 hectare use as in various needs as well as residential development, private hospitals, workshop, warehouse, school, gas station, offices and other industrial development. Karawang along the year 2008 has experienced agricultural functional change to industry in 17 regency, from total 30 regency, namely East Karawang regency, West Karawang, West Telukjambe, East Telukjambe, Klari, Rengasdengklok, Pakisjaya, Telagasari, Jayakerta, Pedes, Cilebar, Tirtajaya, Ciampel, Cilamaya Wetan, Cilamaya Kulon, Kota baru, and Purwasari regency. In the year 2009 development of Karawang bypass outer ring high way as long as 11,4 kilometer connecting Tanjungpura Karawang Barat high way to Warung Bambu East Karawang has tapered Karawang area of technical rice fields. The existence of new high way dividing rice fields' areas from Tanjungpura to Warung Bambu seems to be an interesting entry point to occupy other new rice fields change function area to be business or residential areas. It can be seen by many fill up and rice field dredging activities along the highway to erect new business establishment as stores, cesspool warehouse or housing expansions in both left and right side of the Karawang outer ring highway. Another rice fields dredging activities has also happened along the highway directing West Karawang toll way. These activities are reflecting heavy function change of agriculture land to be non agriculture continuously to happen yearly. Such activities should be reduced because there are more rice fields' scarifies to be industrial activities bad for national food formation, forest and agricultural function disappear and minimizing water absorption, natural disaster and floods great loss to wide spread of society hampering national economic growth.

6. Insecurity and Poverty

Many Indonesian are living in poverty, rice sky rocketing price forcing people to change their rice consumption to "nasi aking" or spoiled rice and even did not eat anything for days because have no money to buy foods. The difficult to find foods condition is really experienced of seaside villagers' in Cirebon and Indramayu, West Java. High difficult to buy foods, rice price Rp6.000 per kilogram too expensive to buy by poor society. The poor could not afford to buy rice for their children; they change to buy cassava, tuber or stale rice for foods. In Cirebon residence

their low buying capacity has happened widely spread in six residences. The pedicab drivers, laborer, farmer from Weru, Plered, Jamblang residence equally poor with laborer from Kapetakan or Suranenggala residence they could not afford to buy rice, the poor inhabitant in Indramayu and Cirebon residence have started to consume stale rice. In the Krengkeng village Krangkeng residence, Indramayu residence consume cassava or consuming free rice distributed by the government, or eat stale rice they have collected from end of a party to safe their family who are living in a den without sanitation when famine season has come. Most of the family is laborer, farmer laborer, pedicab driver who have no fixed income.

Its very rare Indonesia woman worker who can earn good salary ranging from Rp 3,5 million up to Rp 3,7 million monthly depending on overtime. Most of them earn less than Rp3,5 million a month. Nevertheless the woman who has high educational degree working in a foreign private bank in Jakarta are still unmarried yet because feels unsecure with her future destiny as an outsource worker. She worries when she had married her contract would be terminated forming a new unemployment. Additionally her salary is not enough for a family consisting of husband, wife and 2 children to buy their needs monthly. Majority high education outsourcing system government big bank employees can only receive their salary Rp2 million a month, consist of fix salary Rp 1.070.000, money for foods Rp 20.000 daily for 22 working days, money for motor cycle rent Rp 500.000 daily, the worker keep worry to their future destiny, the more older their age the lesser opportunity to get the fix job they become, meanwhile their current job always threatened with job termination daily. The society with this level of income feels income insecure and difficult of living experience. In the year 2009 unemployment in Indonesia is 8,1 percent out of 113 million job generation. Worker worries of sudden job termination without any early warning due to outsourcing system. Such working system is regulated in Undang-Undang (UU) Nomor 13 Tahun 2003 or Act number 13 year 2003 regarding manpower. Teller, billing or call center are core job and permanent job but has been changed to outsourcing, hence worker fee unsecure. The outsource system has been adopted for the reason manpower market flexibility intended to attract investment and generating new employment formation. Actually, it is a duty of the Government to increase society's welfare since the private company is focusing to profit motive business only. The form of poverty could be noticed in some failure of health care, worse nutrition, lack of future working assurance. According to such data outsourcing has made worker, laborer and poor society the majority of Indonesia manpower feel uncertain and insecure of their job. Actually, it is the duty of the Government of Indonesia to increase business activities with the education. There should be a certain assurance after student finish their school can get the certain job.

7. Sago Food Possibility

The global climate changing lead to sea level increase is possibly sinking hundreds of island and thousand hectare rice fields in Indonesia in 2050. Such condition can be anticipated by researching some alternative foods aside from padi. The research would seek another species of food which will be able planted in watered land to find alternative foods with cheaper price can be afford by the poor villagers. This kind of research is important to protect the national food reserve. The annihilate rice field due to up rising sea level in Java island coastal area in 2050 would reach 200.000 hectare predictably, in Sulawesi and Kalimantan island approximately 55.000 hectare. The damage coastal rice fields, increasing level of temperature, rain drop and climate cycles changing would reduce the foods production capacity. The fast anticipation to climate changing should be vigilant executed; the green campaign should be in realization. The failure to do so would really endanger society of Indonesia as a whole. There are many food species as sago palms need to be developed and find the new sago or food storage system, new cheaper alternative food to enable society changing their daily consumption pattern to some alternative foods to avoid expensive rice consumption. The sago palms are timely to be developed to get new food alternative facing future global climate changing possibility. This may need an awareness of the Government of Indonesia and maybe the Food and Agricultural Organization (FAO) to have some research specifically on world foods alternatives.

8. Recommendations

It is necessary to inventory many complicate problems suffering village inhabitant due to low education, lack of knowledge of forest function, to lessen the possibility lack of food disaster. All parties related as businessmen, government, society should work together to repair the river flow areas protecting flood occurrence possibility. It is necessary to exert efforts of harmonizing agriculture and residential development. Prohibition of rice fields development changing to industrial area. There should be a national regulation in a form of acts to regulate function changing of forest, land and housing. Such acts regulating forest areas, agriculture prohibited from industrial activities intended to protect forestry area, agriculture decreasing land water absorption, flood restrain, padi reserve restrain, stricter housing and industrial development permit to achieve national food control. The problematic outsourcing should be solved by manpower acts revamp. Increasing control on manpower and creating new manpower acts regarding link and match between education and business. To gear up vocational school, politechnique and graduate school link and match with the manpower market to solve the high time problem of manpower and unemployment of Indonesia.

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GLOBALIZATION AND CONSUMER PROTECTION

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Abstract: *National markets, constantly expanding due to economic globalization process, places the consumer in the most diverse positions in terms of choices that he must undertake to satisfy his needs. Hence, this paper aims to highlight the main problems faced by the consumer when acting in the global environment in terms of its protection. Our research shows that although the diversity of national approaches to consumer protection can cause tensions internationally, they can be overcome through joint actions undertaken in various forms of world states to harmonize regulations in this field of common interest.*

Key words: consumer protection, globalization, regulation

JEL classification: D18, F59, P46

1.Introduction

Economic globalization, intimately associated with the process of international trade liberalization and growth, impose new challenges for all the participants in the global market, especially for the consumers. Driven by technological advances and reduced costs of transport, globalization have positive effects by promoting competition on the supply side and by widening choice in terms of quality of products and services on the demand side. As a result, consumers gain increased power over domestic suppliers because they are better informed and can compare products and services globally. They become empowered consumers and their bargaining power is enhanced through the wider menu of opportunities available to them. However, globalization mai also be associated with anti-competitive behaviour, or give rise to new forms of such behaviour and be detrimental to consumers' welfare.

In a world of borderless markets, national public authorities are faced with questions about how best to protect their consumers without inhibiting the growth of the evolving global market place. They must determine whether current rules and practices are applicable and sufficient to protect consumers and if they are not, they must develop and implement effective and practicable consumer protections. Addressing these challenges requires an understanding of the advantages and limitations of the new technology and the existing consumer protection framework, as well as determining the appropriate balance between government intervention and industry self-regulation in achieving the desired goals.

2.How Globalization Influence Consumer Protection

While information acquisition costs to consumers are falling dramatically due to information revolution through modern technologies, the sheer volume of available information and the increased choice sets are just as clearly raising information processing cost to consumers, rendering them vulnerable to the same risks as those associated with domestic transactions, as many of the traditional fraudulent commercial practices are globalized through borderless markets. In this situation, the question that is rising is who protects the consumers in the global market ?

On the national level, consumers are protected through an appropriate set of policies and laws designed to defend their economic rights and assure their safety. National consumer protection systems evolve differently, according to internal political, social and economic pressures as well as to external forces, its development being normally thought of as either „top-down" (the government acts paternalistically, taking action because consumers cannot organize effectively due to free rider and other problems) or „bottom-up" (where grass-roots activism either forces a change in behaviour by firms or becomes a populist avalanche that can not be ignored by governments). From the „bottom-up" perspective, consumer activism will arise as consumer education, information and affluence expand in a democratic, technologically and socially progressive environment that is open to trade. Globalization provides such a dynamic environment. (Round and Sporer, 2003, p. 42)

But consumer groups frequently claim that globalization in general and trade liberalization in particular exert downward pressure on national consumer protection standards and will ultimately lead to a „race-to-the-bottom" of standards at lower levels of stringency. (McKenzie and Lee, 1991, p. 1; Boaz and Crane, 1993, p. 103-114) On the contrary, free trade supporters argue that the reduction of trade barriers not only fails to undermine, but in fact promotes higher consumer protection standards, because powerful and wealthy jurisdictions can promote greater regulatory stringency across the board by driving the consumer regulations of their trading partners up. The trading partners of large and rich jurisdictions are, under specific circumstances, simply forced to meet the higher standards of these jurisdictions or risk losing access to important export markets.(Vogel, 1996, p. 16-24; Trumbull, 2000)

The result is the diversity of national approaches to consumer protection and this situation can cause tensions not only domestically, but also in global, regional and bilateral trading systems. If unresolved, such conflicts threaten to undermine international free-trade system on which consumers and producers benefits of free markets are predicted.

The examination of the sources and consequences of national regulatory diversity concerning consumer protection is possible beginning from a simple tipology as whether regulations focus on products or on the processes used to make products and the variation in the perception of health risks that motivate regulation. (Bernauer, Oye and Victor, 2000)

- International disputes over *regulations establishing product standards* seems to arise almost regularly because they are often appeciated as unnecessarily stringent, discriminatory, and scientifically unjustified. On the contrary, defenders have argued that such regulations are justified as means of protecting the public health and safety. Examples include disputes over somatotrophin (a hormone used to increase milk production on cows) or growth hormones between the E.U. and U.S.A.

As for disputes focused on the *production and process methods regulations* they do not arise as frequently as one might assume, given, especially, the great extent of domestic regulatory activity in this realm and the large differences in regulations between countries that encouraged much the harmonization of process regulations within trade partners and internationally. Also, it is argued that process regulation affect investment rather than trade, and that investment flows are driven largely by forces other than cost of consumer regulations. This makes diversity of process regulations less trade- and investment-distorting and less controversial than frequently assumed. In contrast, product regulations impact more directly and substantively on international trade flows and are thus more likely to mobilize disadvantaged industries and their governments.

- Differences in regulations across countries may also stem from *variation in the perception of health risks*. Relevant to consumer regulation and its implications for international trade are the variance in expert scientific opinion about a specific health risk and in mass public perceptions of risks. As many debates over consumer protection issues indicate, the two mentioned types of perceptions often do not covary. At the extreme, experts may unanimously agree that a particular risk is high, whereas the wider public is agnostic and vice versa, experts may agree that a particular risk is low, whereas the public in some countries perceives the risk concerned to be high. Examples include the transatlantic trade dispute over growth hormones in beef production, where European public concern about the risks is large but American opinion is hardly exercised.

For all these reasons an isolationist approach to consumer protection is unlikely to be effective in a global economy as consumer' problems are no longer confined within a country's own borders. Thus, some level of international (or at least regional) co-operation is necessary to ensure that consumers are protected, not just within their national boundaries, but also in their international dealings as sole traders. (Drezner, 2005)

In some cases, conflicts over regulatory differences can be solved through *mutual recognition*, which involves the establishment of the principle that any good or service legally produced in a state can be sold in any other state. In this method, the main motors of market integration are private citizens and firms, who take cases to courts to enforce mutual recognition rights.

Another solution can be *harmonization*, which involves the replacement of existing national rules with common rules on production, distribution, and exchange of goods and services. Harmonization consequently involves passing a large amount of new legislation.

In practice, these two solutions are mutually reinforcing, as different methods are used for integrating different economic sectors, resulting a continuum of methods. At one end, highly technical sectors (such as financial services) require a large amount of harmonization, beyond which mutual recognition can apply. At the other end, in sectors that are relatively straight-forward to integrate (such as

consumer electronics), mutual recognition can be applied once some basic safety and quality standards have been harmonized.

But making regulatory policy in a supranational context involves two strategic dilemmas. (Hix and Jun, 2005) First, deciding which set of regulatory standards to adopt is a 'coordination game' (for example between states with existing high regulatory standards and states with existing low regulatory standards), where several equilibria are possible. To resolve this problem, agenda-setting should be delegated to an independent actor (like the European Commission in the European Union's case or the International Organization for Standardization at the international level), to come up with legislative proposals that are globally optimal. Second, enforcing agreements once adopted is a 'prisoners' dilemma game', where the optimal strategy for member states is not to open up their markets to competition while waiting for others to implement the rules. To resolve this problem, enforcement of the agreement needs to be delegated to a judicial body, such as court (like the European Court of Justice in the European Union's Case), or a quasi-judicial body, such as a disputes panel (like World Trade Organization's Dispute Resolution Mechanism).

So far, European Union has been the most semnificative example in dealing with trade conflicts over regulatory diversity in consumer protection in the internal market. This success is largely due to strong judicial mechanisms of the EU, large-scale harmonization and explicit rules of mutual recognition, and also widespread use of compensation in various forms. However, European laws could not ignore the complex tapestry of national consumer laws that is likely to persist. Furthermore, the reality of commercial practice continues to throw up many more problems that law drafters did not contemplate.

The record at the global level is less impressive, as to date, true multi-lateral initiatives that are binding and effective on consumer protection issues have not been adopted. The only examples of international harmonization are two agreements that have been negotiated by the members of *World Trade Organization (WTO)*, the only global international organization dealing with the rules of trade between nations. Although these agreements are not directly dealing with consumer regulations, they are designed to reduce trade distortions caused by differences in national technical standards *(Agreement on Technical Barriers to Trade - TBT)* and sanitary and phytosanitary protection policies *(Agreement on the Application of Sanitary and Phytosanitary Measures – SPS)*, in order to indirectly create a safer action environment for consumers in the global market. Their main objective is to promote harmonization of national standards, urging the use, as benchmarks for establishing national regulations, of international standards set specialized organisms.

By adopting and harmonizing with these international standards when appropriate, national economies are able to achieve regulatory goals while minimizing unwanted impediments to international trade concerning consumer protection. These approaches can increase the similarity of regulatory environments and thus can facilitate the access and presence of consumers and producers across international markets.

3.Conclusions

Faced with increased opportunities of choice in the global market, the consumer is exposed to similar risks that he have to manage in the local market, only this time, the national protection system is no longer sufficient to cover the complexity of the situations offered by the exercise of consumption function.

Although consumers education, information and empowerment are thought to play a key role in raising their confidence and boosting cross-border transactions, for many of them the diversity of national consumer protection systems generated by economic globalization process is the main obstacle in shopping elsewhere around the world. In this context it becomes very important the joint action of world countries, at regional and global level, in order to avoid any disputes which may occur in international trade relations and related to consumer protection.

Various solutions offered by the international commercial practice in this context – each with its limitations and advantages - present as a common denominator the agreement on some common principles made by several interested parties, and which all participants in economic transactions must comply with. Although this agreement is very often difficult to achieve, it assures a safer environment for consumers to act globally.

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"NON-STATE" ACTORS IN THE GLOBALIZATION OF THE ECONOMY

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Abstract: *This Research paper wants to offer a briefly introduction to the concept of "non-stat" actors. This new concept arises in the late of '90 years, after the "civil society" was crystallized enough. The new wave of economic globalization gives the possibility to other actors, except "state" to activate on the global agenda. This paper will give some details regarding definitions, typology, evolution and role of "non-state" palyers in the world economy.*

Keywords: "Non-state" actors, multinational companies, NGOs, central banks

JEL Classification: A, E, F, H, M, P

1. Introduction. Definition of "non-state" actors

Addressing "non-state" actors in the literature became subject of analysis and debate gradually in recent years. A comparatively recent conceptualization of the various entities, other than the nation-state shows its importance in the globalization. Against the background of spatial scale and density of global interconnection, are intertwined relationships between communities, states, international institutions, NGOs and multinational companies. All these shape the so-called "world order", different from the period in which the state was pawn mainly in foreign relations.

Thus formed networks overlap and interact, defining the structure marked evolutionary constraints and power, reputation, influence in all sections: social, economic, political, cultural. This structure becomes a product of both individual actions and the cumulative interaction of many agents and institutions in the world. Few areas of social life beyond the influence of the globalization process, as reflected specific aspects of economic, financial, political and cultural globalization can be seen as a different phenomenon, with multiple facets.

Although, in present, the concept of "non-state" actors in the globalized economy, despite a vast and growing literature is one vehicle from increasingly common, we can not say that it is a solid theory, based on systematic analysis of its defining characteristics. Moreover, few studies provide a consistent study about the drive concept, in terms of the existence of a new reality, that of "non-state" actors involved in the transformation of form and perspective of the global economy.

In literature, definitions of "non-state" actors can be divided into two categories, namely: first category of definitions that includes in the above mentioned concept the trade unions, religious institutions, ethnic groups, universities or other individual actors, on the one hand, and in the second category, definitions that specify the condition obviously we associated with any form of local or national government. In this category are included only the multinational companies and NGOs.

An "officially" point of view in defining "non-state" actors was offered for the first time in the *Cotonou Treaty*, concluded in 2000 between EU and ACP Group. This Agreement relates the role of "non-state" actors (NSA) and of the local governments in global economic development. The two "entities" are considered as complementary to central government, which traditionally have been "central pawns" of cooperation between the EU and ACP countries.

Article 6 of the Agreement, offers a succinct definition of "non-state" actors: *a wide range of development actors, other than governments, which participate in the process of cooperation between EU and the ACP are included in the category of "Non-state" actors: private sector, economic and trade unions, social organizations, civil society in all its diversity and in accordance with national features*.

The definition leaves room for all categories of NSAs, such as: private sector, human rights associations, NGOs, religious organizations, trade associations, research institutes and universities, media, etc. Also in this definition are included the informal working groups such as informal private sector associations, etc.

In the report of the *National Intelligence Council*, created in 2007, "non-state" actors are defined as "non-sovereign entities that exert significant influence on the economic, political, social, both national as well as internationally".

Professor Stefan Mâşu (2009) considered "liberal revolution actors" who have translated into facts, figures and theories advanced liberal capitalism but all they have dynamited the system, the excess of freedom, exhausting the capacity of self and entering the area lack control, preferred land crisis.

Higgott, Underhill and Beiler (2000) define “non-state” actors, in conditions of globalization, as "change agents", influential, with operations in many areas of international relations.

However, attempts to define the concept of “non-state” actors have existed since before the year 2000. A definition which emphasizes the inter-relationship between global civil society, transnational associations and impact of "politics" in the context of globalization is presented by Richard Higgott. He mentions that civil societies in general, NGOs, social movements worldwide as well as other types of transnational associations, are the main actors in the reconstruction of global political authority. He believes that "transnational associations" put together cultural organizations, political, territorial and individual, in order to make progress in building a common agenda worldwide.

2. Typology of “non-state”actors

Higgott, Underhill and Bieler (2000) identify two main categories of “non-state” actors: the first category consists of private sector corporate actors, they, in their turn, are divided into transnational and multinational companies. The second category includes non-governmental organizations which play an important role at international level, in part because the use of new technologies, including Internet.

Lavinia Florea (2006) classified the other way “non state” actors - state, namely:

- International organizations: International Monetary Fund, World Bank, Organization for Economic Cooperation and Development
- Regional organizations: ASEAN, NAFTA, Mercosur, etc.
- Multinational companies
- Other actors: NGOs, unions, individuals

However, these actors present both "non-state" elements as well as influences of the state.

Mâşu (et al.) (2009) identify the following actors: Federal Reserve Bank of United States, European Central Bank, other central banks, investment banks, stock exchanges, the sovereign funds, investment funds, scoring agencies, other actors. From this list are missing two important categories of non-state actors: multinational companies and NGOs.

Analyzing classifications from literature must emphasize that there are two major categories of “non-state” actors with impact on the global economy, respectively multinational companies and NGOs, besides them we can talk about other performing actors.

From these perspectives we present some of the non-state actors with an important influence on the evolution of the global economy. Although present a heterogeneous nature, and in this regard an attempt of classification is difficult, the most represented “non-state” actors, created in the context of economic globalization are multinational companies, NGOs, central banks, other actors.

2.1 Multinational companies

In the economic globalization, multinational companies fulfill an important role. There is not a consensus in the literature in terms of a classification of multinational companies. Thus, Rugman (2005) claims that we are dealing with a small number of truly global corporations, while the rest are variations of regional corporations. Rugman (Rugman, 2005: Voinea, 2007) divides such corporations into four categories:

- *Global Corporations*: have in each of the three regions (U.S, Europe and Asia) at least 20% but not more than 50% of total sales;
- *Bi-regional Corporations*: two regions have at least 20% of total sales and in the region of origin – less than 50% of the total sales;
- *Corporate oriented to the region of origin*: are over 50% of the total sales in the region of origin
- *Corporations oriented to the host region*: are over 50% of total sales in the host of areas (other than that of origin)

From this arbitrary classification, the top 500 corporations in the world (according to Forbes magazine), Rugman identify only 9 global corporations, namely IBM, Sony, Phillips, Samsung, Intel, Canon, Coca-Cola, Flextronix and LVMH. The rest are considered bi-regional companies (including McDonald's, British Petroleum, Unilever, Roche), directed by host region and, most targeted by region of origin (including Wal-Mart, General Motors, and Ford). This approach is not fully accepted for the following reasons:

- Analyzes only one aspect of globalization that is firm and sales volume abroad

- Are not considered assets abroad volume and number of employees abroad
- Companies have a strong impact in economies where production takes

Another approach in terms of the typology of multinational belongs to Guillermo de la Dehesa (2007). Referring to modern economic theory, de la Dehesa considers two categories of multinational companies: vertical and horizontal.

- **Vertical multinational companies**: in this category are listed companies that distribute stages of production from geographically, according to intensity factors of production used, the activities use a qualified workforce and there are located where it is more abundant and cheaper (advanced countries), and less labor intensive activities qualified (developing countries). Guillermo de la Dehesa enumerates various theoretical models applied vertical multinationals, namely: the model built by Helpman (1984), Helpman and Krugman (1985), Lall (1980). Vertical multinationals operate in general in countries with different levels of development and the mother - company is located in the most developed country in economic terms.

- **Horizontal multinational companies**: there are companies with multiple work points; they multiply, essentially the same productive activity in a number of locations, taking advantage of reducing transport costs. Such models have been developed by Markusen Company (1984) and Lipsey (1984), these authors trying, in 1999 to integrate the two models into a new model "knowledge - the capital" that is based on the idea that geographic knowledge is mobile and acts as an impetus for each branch. This company operates generally, in countries similar to their operations in the country with the largest national market.

Also, depending on labor costs, de la Dehesa identifies two other types of multinational companies: a local production company destined for major national markets, and companies located to produce for export.

Depending on the location of production and labor, Ohmae and Porter (1990) made an important distinction between multinational and global companies. Multinational companies have two-thirds of production and workforce in the country of origin, while global companies owning over 50% of assets, sales and their employers abroad. Examples of global companies: Royal Dutch - Shell, Exxon - Mobil, Volkswagen - Audi, IBM, Braver, ABB, Nissan, Nestlé.

Peter Dicken (2007) does not recognize that Ohmae's classification of the “denationalize” global companies. In his opinion, all companies "belong to a specific country strongly loyal to it.”Thus, despite decades in which international transactions took place, at least on quantitative terms, transnational companies remain connected to their country of origin. "Companies are thus national companies with international transactions"

2.2 Typology of NGOs

Yaziji and Doh (2009) believe that NGOs can be divided into two main categories: first, NGOs designed to benefit from actions taken, and on the other hand, NGOs working to defense concepts or ideas considered beneficial to society as a whole.

This approach is shown in the next figure, though, believe the authors, in fact, only one NGO can handle more than one quadrant provided and may change at any time by passing objects of the actions for their own benefit, to actions aimed at community

Figure 1– Typology of NGOs

Self Beneficiary	Alcoholics Anonymous Chess clubs	Labor unions Trade associations
Others	Salvation Army CARE	WWF Amnesty International
	Service	**Advocacy**

Type of activity

Source: Yaziji, Doh (2009),NGOs and corporations. Conflict and collaboration, Cambridge University Press, p.5

The authors remind clarifies, in turn, the concepts presented in the figure above. First, they stated, is about who wants to benefit from the activities of NGOs? Non-profits have one class of shareholders, among which those who financially support the organization (sponsors), board members, directors, staff and beneficiaries of the activities organized by NGOs. Each of these categories can be divided, in turn, in numerous other private and public organizations and their structure can vary significantly. For example, the

category *sponsors* can include private individuals, foundations, governments or institutions, *staff* may be composed of employees or volunteers and *board* members are executives in the organization or not.

NGOs have primarily themselves from the activities undertaken are, in most cases, associations designed to provide a benefit to their members, generally as a result of common interests. These organizations are distinguished by the fact that sponsors and / or employees of these organizations are themselves members of the group who will benefit from NGO activities. Examples relate to unions, business associations, Christian groups, the association "Alcoholics Anonymous" or amateur athletes clubs.

Other beneficiaries of NGOs are, by contrast, organizations that invested capital or employees are not themselves members of the group of beneficiaries, beneficiaries spectrum is so broad that, for good or service provided by NGOs will have a majority of society. In this category we include the following organizations: World Wildlife Fund (WWF), Greenpeace, Amensty International, WHO, the Open Society, Medecins Sans Frontieres, etc.

Second, examining the typology of NGOs in terms of type of service offered, it should be noted that in light of socio-economic trends and current policy, the typology of NGOs tends to acquire a new dimension. If analysts until recently shared these entities in business for services or activities supporting the general interests, soon we can talk about the emergence of new dilemmas, the involvement of NGOs in the private sector: should they be partners or source pressure of the private sector?

A detailed analysis of the two subcategories of NGOs, that the service-oriented and focused activities in support of general interest may be detailed as follows:

a service-oriented NGOs are those organizations that manifests itself in the direction of delivery of services to their customers. In this situation, NGOs are "safety net" for some political issue or when global issues beyond the nation-state responsibilities. Examples of such NGOs are: the Red Cross, Doctors without Borders, World Wildlife Fund, etc.

b. *NGOs support* / support the general interests working to form an economic system, politics and society to promote a set of common interests or ideology. They are committed to support, serve, advise the experts to make decisions, to conduct research in areas of interest, to organize conferences, monitor and display the actions or inaction, to disseminate information to key constituencies, to define the agenda working to develop and promote codes of conduct.

Although non-profit typology analysis was performed by an individual manner, to fully understand the role of NGOs in the socio-economic and political, must consider these non-state actors in terms of inter-relations between various governmental entities.

2.3 Central banks

Currently, any modern economy has a Central Bank. The U.S. has the Federal Reserve Bank, the UK - Bank of England, the EU recently established European Central Bank, and in Japan - Bank of Japan. The Central Banks are among the most powerful institutions in the world economy. Their decisions can generate economic growth or recession. When there are well managed, central bank policies can lead to economic performance, and when their policies are incompatible with economic realities central bank actions can lead the economy towards recession, deflation, hyperinflation associated with economic and social collapse.

George Cooper (2008) considers that, by attention to the influence of central banks, governors have more control over their own national economy and thus the world, than politicians. In any state Central Bank governors are not elected directly by the population, and once invested in this position, distances himself from political influence.

2.4Other non-state actors in the world economy

Lavinia Florea (2007) considered as being in category *other non-state actors*, besides those we remember: international organizations, among which the International Monetary Fund, World Bank, World Trade Organization, regional organizations, MERCOSUR, NAFTA, ASEAN, etc. However, within international organizations it feels strongly influence of the U.S. government.

On the other hand, we can consider as part of the group of “non-state” actors and advisory organizations, having informal, such as: G8 and G20. These organizations discuss current economic and political problems and transfer the ideas from the forum in national legislative regulations. In the “non-state” actors category is framed the persons with a strong reputation and who, through their actions, can influence economic and social life in different parts of the world.

3. Evolution of "non-state" players in the world economy

Although the term "non-state actors" is of relatively recent date and is in terms of global economy at the beginning of XXI century, the starting point in tracing the evolutionary elements of this concept is considered by some authors, as during the Second World War (Strange, 1996). At the same time, bearing in mind the heterogeneity of the typology of "non-state" actors, is considered the end of the 19th century the starting point in the evolution of global players, referring to nongovernmental organizations.

In this work we focus on two major categories of non-state actors, that multinational companies and NGOs. From this point of view, the time of their occurrence, obviously is not the same.

3.1 Evolution of multinational companies

Since mid-twentieth century we can speak of multinational companies as major global players that influence in a high politics and international economy. Hirst and Thompson (2002) recall their precursors respectable Dutch and British East India, Muscovy Company, Royal African Company and Hudson Bay Company.

On the other hand, Susan Strange (1996) argues that the emergence of multinational companies made during the Second World War in the United States of America. Between 1941 and 1944, mentions the author, U.S. industrial production increased by 44%. This increase was due to defense industry; approximately 13 million unemployed were employed in American companies. Advantageous contracts for the defense industry have developed new administrative skills of directing and controlling the production company's headquarters located in several parts, often away from each other, as well as its own headquarters. Gradually developed appropriate methods of management decision-making process for companies spread out - means that, after the war, could be easily adapted to lead a series of foreign subsidiaries. (Melma, 1970, Strange, 1996).

U.S. companies have expanded into Canada, Europe and Latin America and have purchased local companies and made the transition from national production for national markets to international production for a world market. Their initiative was followed by hundreds of non-American enterprises, even state enterprises, convinced that this is the only way to survive in American competition. (Strange, 1996).

Extension of U.S. companies in the first half of last century was "stimulated" by the existence of "Sherman Act", approved in 1890. The antitrust law, the first in a long series, had great influence on the subsequent development of American international affairs. Joint action of the companies in order to limit competition within the United States contrary to U.S. antitrust laws, while trade shares outside the United States were the only problem companies. (Strange, 1996).

Between 1950 and 1960, corporations have crossed over multinationals. Contemporary status of "corporation" began after the Cold War, namely the early '90s, as a tendency to form a global economy, independent of static pressure, based solely on private transnational flows and on predominant role of global actors (private banks, financial institutions, transnational companies).

At the beginning of 21st century, transnational companies are regarded as some of the biggest challenges for the current economic international order. According to experts, 90% of them are placed in strategic triad developed countries: USA, Japan, and European Union - and have specialized markets such as machine building industry, research and chemical industries and oil industry. Some authors such as Martin Carnoy believe that decisions affecting transnational companies in a large measure of national economies, intending to neglect compliance with trade policies of states.

3.2. The evolution of the Non – Government Organizations

First period of the non-governmental organizations is considered, according to Carrie Meyer during the first wave of globalization from the late nineteenth century and early twentieth century. Seary (1996) dates the first NGOs in the mid-nineteenth century. The first such international organizations belonged to religious and academic circles.

Charnovitz (1997) agrees with these data and states that the first international conference of non-governmental organizations was held in European and American international space. Many of these organizations focused on controversial trade issues of the time, such as slave trade and opium. Others focused on international issues of solidarity and peace, international law, environmental protection, etc. Charnovitz recalls several events organized in the mid-nineteenth century, namely: *Anti Slavery International Conference* organized in London in 1840, *Congress for Peace*, held in Paris in 1849, *First international meeting of workers in 1864*. Seary (1996) mentions, in turn, the first *International Conference of Red Cross* held in 1863.

During the late nineteenth century, the beginning of the twentieth century is marked by an "explosion" of such international meetings on issues of global concern, such as international rail, sea, environmental protection, etc. Charnovitz wants to demonstrate in the article mentioned that the meetings of nongovernmental organizations were followed shortly, since that time, by the meetings of member of governments in the major European countries who have debated the same topics.

According to Seary (1996), simultaneous development of communications and other technologies has contributed decisively since that time, to amplify the activity of international nongovernmental organizations. Reforms in the 1840s in the postal system, together with the development of telephone and telegraph systems, facilitated communication between Europe's fastest.

Although they had a heterogeneous character, activities of NGOs in Europe, Canada and the United States have expanded into Asia, Latin America and the Middle East. Carrie Meyer mentions that in 1850 there ware a total of 66 non-governmental organizations (foundations, religious and humanitarian groups, cultural associations or labor market) in Europe, Canada and the United States, and until 1910 their number reached 344.

Another important period in terms of global development of non-governmental organizations was the period before and immediately next to the late Cold War. ‘80-‘90 years of the last century, but immediately after the end of the Cold War led to the development of increasingly strong "global civil society". How is this important when talking about non-state actors in general and NGOs in particular?

In terms of activity extending beyond the borders of sovereign states, "*global civil society*" is a similar concept of "non-state actors" with the difference that civil society activities are carried out by non-state actors.

Higgott quotes Cox (1999), which tries to define the term civil society as a comprehensive and considered ways those individuals manifesting both individually, and in the community on political, economic, and social. Civil society, mentions Higgott, should be viewed from the double perspective: on one hand is composed of individuals or groups of individuals disadvantaged by the effects of globalization on the world economy, they protest and seek alternatives, and on the other hand, is most ambitious vision, the global civil society ", within which these global social movements, together, constitute a basis for an alternative to a new world order. Higgott and his ideas come off the idea of growth impact of civil society, nongovernmental organizations default starting with the end of the Cold War, an event which has enabled the global expansion of civil society.

4. The role of “non-state” actors

Depending on various factors, namely: vocation, size, flexibility, methods of organization and action, a means of interaction with the state, etc., “non-state” actors play an important role in many areas, such as security and defense, international economic cooperation, trade, civil society, health and environment.

Despite marked heterogeneity, “non-state " actors present some common features, namely: they are more flexible than state, the size, scope of action and influence of certain “non-state" actors are similar to that of certain states, the organization of ”non-state" actors is more in keeping with the global realities than the organization of states, etc.

Role of “non-state” players is closely connected with the role of "nation state". This relationship is complex and based on international agreements that clearly define objectives and common interests of both parties. The international agreements mentioned clearly that sovereignty is abandoned to the entities that transcends national interests.

The relationship between “non-state” actors and "nation states" seen since the ancient times, but today we are closer to the example of American foundations which have had an important role in the relationship between the state and "non-state” actors.

Since the early twentieth century, when Andrew Carnegie and John Rockefeller created the first modern foundations, they had a powerful impact on American politics and beyond. In some cases, the American context, the relationship between foundations and policy has always been very close, so, in 1969, the U.S. Congress issued a law which restricted political activities in the private foundations. These activities have been partially replaced by groups of researchers who disseminate information in the international environment, groups known as the "think tanks".

In one way or another, U.S. private foundations have played an important role in disemination of the "American model”. They were in a positive light, especially during the Cold War, or a light full of contradictions, as is the case now.

Understanding the limits of state action, some foundations have become more independent from the state, and now have their own international agenda. From this point of view should remember that the role of "non-state" players in developing a regulatory role in the global economy overrides the state's role in this direction.

Within "non-state" actors, the role of multinational companies in the globalized world is about their relationship with the internationalization of trade, stimulate and spread of technology and the role of corporations in the internationalization of production and service activities. Current economic studies open the way to research the relationship between companies and state - nation, or the role of company in the host state economy, or in the state of origin. Meanwhile, current economic realities guide us to examine the relationship between multinationals and economic crises from the double perspective: on the one hand, the economic crisis impact on corporations, but also examine the role of multinationals in their onset and amplification.

Non-profit organizations have become important actors in world politics, social, economic, but also in the business world. Nonprofit organizations such as Amnesty International, CARE, Greenpeace, Oxfam, Save the Children or World Wide Fund for Nature, leading campaigns to support causes that impact the socio-economic or humanitarian. Many of these groups offer their services in order to improve economic and social issues outstanding. Recent studies indicate a rate of 400% in terms of increasing non-governmental organizations internationally. The role of NGOs in society within macroeconomic crisis of 2007-2010 and the global climate change is very important. Never collaboration between the corporate sector and civil society has been more important since the XXI century began with a concerted international approach in the dissemination of "mutual value" of capitalism not only by companies, customers, suppliers, but also to communities and the environment environment.

5. Conclusions

In recent decades, the globalization of the economy, there were significant changes in terms of nation-state's role in the sizing process of economic, political and social global. Contemporary society is an open society and inter-connected, and in doing so, the technology and free trade have a predominant role. Markets inaccessible two decades ago are included in the current global phenomenon.

Gradually, the role of the state as an independent entity, with strong global economic and political influence has diminished in favor of other actors come on the world economic. Entities such as multinational companies, NGOs, central banks, conducted both independently and closely with each other inter-state collaboration.

Heterogeneity of the notion led us to experience difficulties in creating a uniform approach, homogeneous regarging the "non-state" actors. First, we conceptualized the "non-state" actors that have proved far stronger influence in the current political and economic sphere. We refer to multinational companies, who operate activities "over" the nation-state boundaries and interests. However, there is close cooperation between state and corporation, and on the other hand, we have NGOs, "non-state" actors who have political, social and, more recently, economic influence.

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A STASTISTICAL – ECONOMETRIC APPROACH OF THE FAMILY STRUCTURE AND BEHAVIOR IN EUROPEAN COUNTRIES

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Abstract: *The authors perform a comparative analysis of the family type, structure and behavior in Romania and in other European countries, as well as family structural changes and dynamics. The way in which the family behavior depends on some of the social and economic policies is quantified using a multiple regression model on cross-sectional data (dependent variable: fertility rate; independent variables: women's wages as percentage of men's wages, employment rate for women and the usage of contraceptive methods). The model tested significant and it proves that the fertility rate significantly depends on the first two explanatory variables for 30 European countries. This might be taken into consideration in elaborating the family policies, the labor market policies under the objective of encouraging the natality.*

Key words: family, family policy, fertility rate, multiple regression model.

JEL classification: J12, J14, J16, C31.

1. Family concept in European countries. Literature review.

The familiy-policies and the welfare families issues were a major concern at the beginning of the XXth century. A lot of important researchers in history, demography, sociology, politics and philosophy debated these problems in the course of the XXth century in European societies (Seccombe, 1993; Fox Harding, 1996).

In Western Europe, the researchers agreed that the traditional or conventional family-values that once have existed – are not valid any more, as the family-structure and behavior went through a lot of changes since then. As the families are trying to face the pressure and the difficulties of the new economic and social life, the family-forms evolve according to the socio-demographic changes and reconfigure themselves, diversifying the family living arrangements.

The relationship between the public policy and family life is complex, due to the numerous ways in which different policy actors states their family-strategies. Despite all these different interpretations, the basic idea is that families do not form and develop isolated one from another, but within a wider social, economic, cultural and political environment, where policies are formulated and implemented.

2. Characteristics and changes of Romanian family revealed through statistical indicators.

The Romanian family has emerged as an institution with high stability, based on the principles of synchronicity and the complementary natures of gender roles. The political, social, and economic setting has significantly influenced the structure and the functions of the family system.

The totalitarian society imposed outside pressure on the family, making its space very constrained (Mitrea 1993). Both spouses had to work full-time since this was the most acceptable family model. Family planning was strongly restricted, couples being encouraged to have as many children as possible.

Since December 1989, when the dictatorial regime of Ceausescu was overthrown, Romania moved from a communist regime to a democratic political system, from a state-planned to a market economy, and from a state-governed and controlled family life to independently functioning family systems. The transformation into a democratic society and a market economy was not smooth. The breakdown of the economic and social infrastructure resulted in workers unemployment, underemployment, and job insecurity, all of which being translated into economic difficulties for many families and communities. Thus, between 1991 and 2006 an average of 70 percent of Romanians estimated their income as barely sufficient or insufficient to cover basic necessities. Household composition is an important indicator correlating with poverty. For example, households with five family members face an over 50 percent chance of being poor (Tesliuc, Pop 2001), and each new born child increases the poverty risk by almost 50 percent (Research

Institute for Quality of Life 2001). Poverty rate varies by region as well: in 1998, the poverty rate in rural areas was 50 percent higher than in urban areas (Research Institute for Quality of Life 1998).

Some of these pressures disappeared after 1989 with the transformation of many aspects of life in Romania. The state is no longer directly involved in family life. Contemporary family members have more choices in terms of individual interests. The family can adjust its own internal life and functions. For example, family planning has become easier and more accessible, allowing people to have more control over their lives. When family self-determination increased through modernization, however, the individual's environment became less secure. Increased liberty is paid with a growing feeling of insecurity and greater adaptation efforts to unknown social dynamics (Mitrea 1993). Employment of both spouses remains predominant after 1989, mostly because a few families can get by on a single income.

Changes in the family structure itself have also occurred. Urbanization is responsible for the transition from an extended, multigenerational family pattern to a nuclear one (parents and their children), which maintains significantly strong relationships with the origin-family. In 2007, the urban population was 55,2 percent, reflecting a trend of migration towards the cities (from 18 percent in 1912) (National Institute of Statistics 2007). Family solidarity plays an important role in family life; the "*family*" term includes parents, grandparents, aunts, uncles, cousins, and godparents. A study on OECD countries shows that at mid 2000s 57,6% of families were couples, 27,7% were single persons households (on average, at OECD countries level). In Romania the share of couples families was above the OECD average level (62,8%), while almost 20% of the households were single persons households. We should remark that the share of single parent household in Romania is above the OECD average level (9,3%, compared to 9,1%).

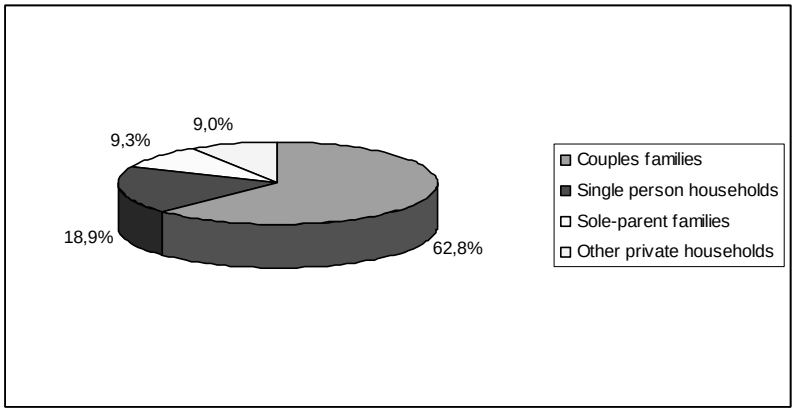

Chart 1: Types of households in Romania, mid 2000's
Source: ***www.oecd.org/els/social/family/database***

The same study on OECD countries shows that *couple families* (with or without children) are the most frequent type of household in all OECD countries. Their proportion varies considerably across the different countries, from about 50% of all households in Denmark, Finland and Slovakia to almost 70% in Portugal, where this proportion is clearly higher than the OECD average (58%).

The proportion of *single-person households* is influenced by both the propensity of young adults to leave the parental home and the tendency of elderly to live in with their children or enter a house for the elderly (or other institution). Single-person households constitute at least 35% of households in Denmark, Finland, Germany, Norway and Switzerland. By contrast, this proportion is less than 20% in Greece, Portugal or Slovenia.

At about 10% of all households, *sole-parent families* constitute a significant minority of households, with certain variability across countries (from 5,1% in Denmark to 20,3% in Latvia).

Most Romanian families are traditional, married couples with children. In 2008, the marriage rate was 6,95 marriages per 1000 inhabitants, one of the lowest levels since the 1950s, but still relatively high among the European countries (National Institute of Statistics 2007; UNDP Romania 2005). The average age at marriage was relatively young in 1998—28,4 years for men and 24,9 years for women (National Institute of Statistics 1999), but it is continuously growing since then. The proportion of first marriages was over 80 percent, and, on average, marriages lasted twenty-two years, indicating a high level of family stability (UNPD 1996). The divorce rate remained relatively steady—around 1,7 divorces per 1000 inhabitants – 2008 (in the European context, this level is below average) (National Institute of Statistics 2001).

The results of the study on OECD countries – which we mentioned before – revealed that on average, families with children account for nearly half of all households. This proportion is somewhat lower

in Denmark, Finland, Germany, the Netherlands, Switzerland, where childless households represent around two thirds of all households. Most couple families include children (72,4% in Poland, 70% in Ireland, 69% in Spain, which means that more than two thirds of couple families include children). Childless couples are most frequent in Denmark and Germany. Sole-parent families account for about one fifth of all households with children on average in the OECD, but the share is even higher in the United Kingdom (26,4%).

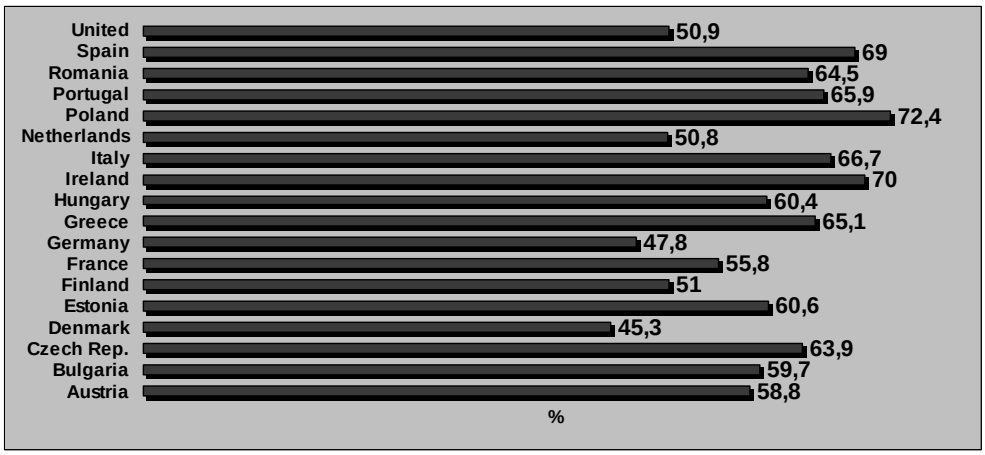

Chart 2: Share of couples with children in all couples families in European countries, 2005
Source: ***www.oecd.org/els/social/family/database***

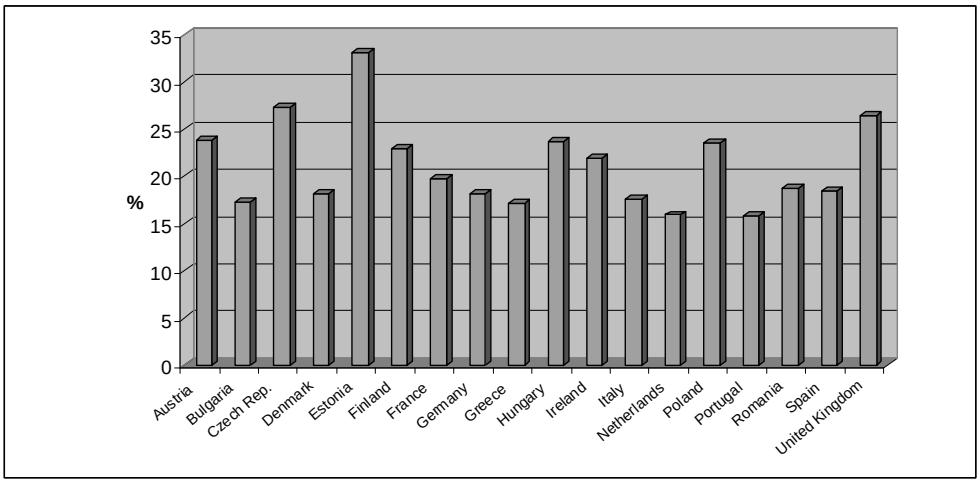

Chart 3: Share of sole parent families in all households with children
Source: ***www.oecd.org/els/social/family/database***

The number of children per family depended on educational background and region. People with higher educational levels and those living in the cities tended to have fewer children (Ilut 1995; UNDP 2000). Most of the families in the cities had one or two children. In 2008 in Romania the total fertility rate per woman was 1.35 (EUROSTAT, 2009). At OECD level, in mid 2000s 56% of households had no children, 20% of them – had one child, while 17% - had two children. In Romania only 44% of the households had no children, but the share of families with one child was significantly higher (almost 30%).

Between 2000 and 2008 the proportion of young population (under 15 years) decreased, on average, by 2,8%, while the proportion of older people (over 65 years old) raised by 1,2%. The ageing process is still developing, according to the ultimate EUROSTAT projections, the share of elderly people in Romania will grow from 14,5% in 2004 to 22% in 2025 and near 30% in 2050. In the last period, the share of children born outside the marriages were growing, too (in 2006 it was about 29%, compared to 15% in 1992 and 25,5% in 2000). Most couples decide to have only one or at most two born children. The fertility rate recorded a major decrease, after 1990. The 1,35 children born, on average, by a Romanian woman are far beyond the simple-replacement-level of the generations (which is, on average, 2,1 children per a woman). In 90's the number of abortions exploded, exceeding, at the beginning of 2000's, the number of born children. Starting with 2002, the abortion-rate decreased, so that in 2006 it reached a level equal to the 735 per 1000 born children.

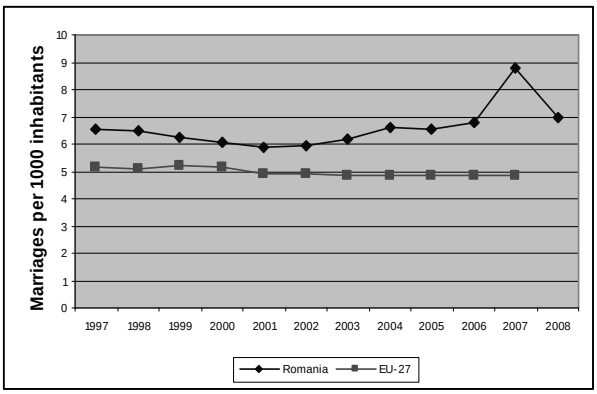

Chart 4: Marriage rate, Romania and EU-27, 1997-2008

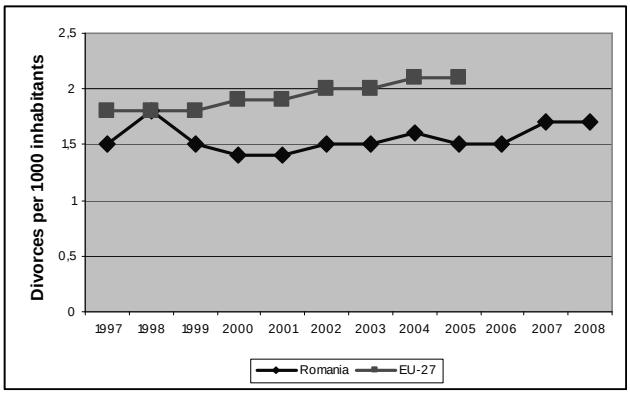

Chart 5: Divorce rate, Romania and EU-27, 1997-2008

Source: EUROSTAT Population and Social Conditions database

In Romania the fertility rate had a decreasing trend between 1995 and 2002 (from 1,41 children in 1995 to 1,26 children in 2002). Starting with 2002 the indicator value has increasing, up to 1,35 children in 2008 (Chart 6).

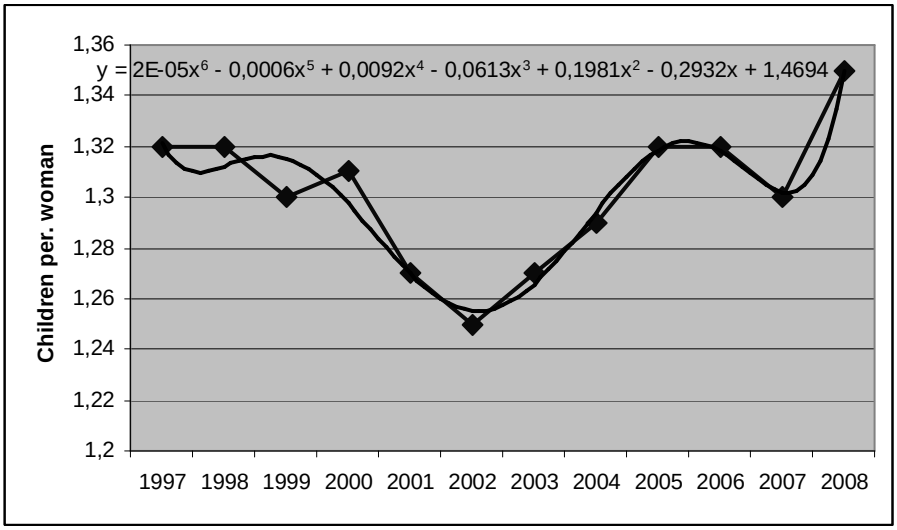

Chart 6: Fertility rate in Romania, 1997-2008

Source: EUROSTAT Population and Social Conditions database

3. Econometric model of family behavior in European countries.

One of the statistical indicators that quantifies the family-behavior is *the fertility rate*.

Total fertility rate (expressed in number of children per woman) represent the mean number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the fertility rates by age of a given year. This rate is therefore the completed fertility of a hypothetical generation, computed by adding the fertility rates by age for women in a given year (the number of women at each age is assumed to be the same). The total fertility rate is also used to indicate the replacement level fertility; in more highly developed countries, a rate of 2.1 is considered to be the replacement level. Fertility rate is influenced by a large variety of factors, as: the mean age of women at childbearing (years), dwellings and unemployment rate, the participation rate of women to economic activity, women's income and the gap between their income and men's income, cultural values, traditions etc.

The econometric model that describes the dependency of the fertility rate – as an expression of the family-behavior, on the contraceptive use (for married women %), the women's wages as percentage of men's wages (in manufacturing) and on women employment rate is:

$$\textit{Fertility\_rate} = f\,(\textit{Contraceptive\_use, Women/men\_wages\_ratio, Women\_employment\_rate}) + \varepsilon \qquad (1)$$

Considering a linear relationship between the implied variables, the model becomes:

$$\textit{Fertility\_rate} = \beta_0 + \beta_1\,\textit{Contraceptive\_use} + \beta_2\,\textit{Women/men\_wages\_ratio} + \beta_3\,\textit{Women\_employment\_rate} + \varepsilon \qquad (2)$$

The data-set consists of cross-sectional data, referring to 30 European countries - 2008; data are provided by *EUROSTAT Population and Social Condition database*, and *OECD Social/Family database*.

After running statistical-econometric program ***SAS – Enterprise Guide 4.2***., to process the data, we get the following results:

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	1.33260	0.44420	24.97	<.0001
Error	26	0.46247	0.01779		
Corrected Total	29	1.79507			

Root MSE	0.13337	R-Square	0.7424
Dependent Mean	1.60667	Adj R-Sq	0.7126
Coeff Var	8.30095		

Parameter Estimates								
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	95% Confidence Limits	
Intercept	Intercept	1	-0.14721	0.20670	-0.71	0.4827	-0.57209	0.27768
Contraceptive use, married women	Contraceptive use, married women (%)	1	0.00240	0.00236	1.02	0.3185	-0.00245	0.00725
Women's wages in manufacturing a	Women's wages in manufacturing as percentage of men's wages	1	0.01370	0.00320	4.28	0.0002	0.00712	0.02028
Employment rate, women (%) 2008		1	0.00888	0.00323	2.75	0.0107	0.00225	0.01551

After estimating the parameters of the model, it becomes:

$$\textit{Fertility\_rate} = -\,0{,}1472 + 0{,}0024\,\textit{Contraceptive\_use} + 0{,}0137\,\textit{Women/men\_wages\_ratio} + 0{,}0089\,\textit{Women\_employment\_rate} + \varepsilon \qquad (3)$$

The dependency between the four variables, described by the previous model is a strong one, as the Multiple Corelation Coefficient is 0,86 so that 74% of the total variability of the fertility rate is explained by the pooled influence of the three considered factors: the contraceptive use (for married women %), the women's wages as percentage of men's wages (in manufacturing) and the women's employment rate. The standard error has a low value (0,13), meaning that the adjusting quality of the model is relatively high.

After testing the validity of the model by running the Fisher test and the analysis of variances (ANOVA), the results were as follows: the computed F-test value was relatively high (24,97), pointing that the model is statistically significant for a maximum probability of 100-0,000008=99,999992%, which is close to certainty. Also, the coefficients of the women's wages in manufacturing as percentage of men's wages and of the women's employment rate are positive, showing that these two variables have a direct influence on the variability of the fertility rate. They also turned out to be significant. The coefficient of contraceptive use for married women did not prove significant, just like the intercept term, so there is no significant correlation between the use of contraceptive methods and fertility rate. One explanation might be that the fertility rate is not necessarily explained by the use of contraceptive methods, but by other factors – more important than this. The significance of the coefficients was tested by runnning the t-test (Student), and the results were as follows: two of four coefficients are statistically significant, for over 95% probabilities.

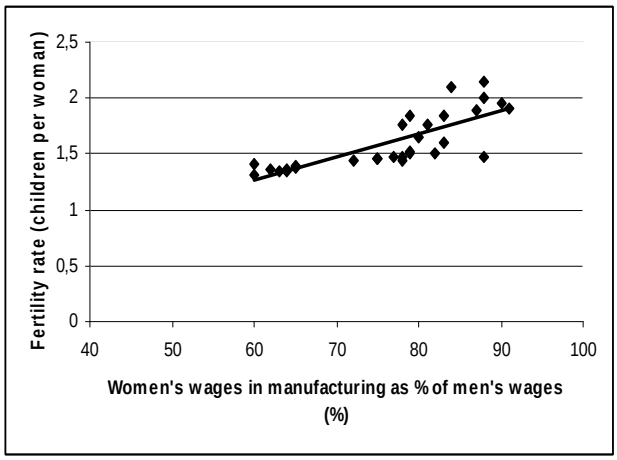

Chart 7: Correlation between women's wage in manufacturing (as percentage in men's wages) and fertility rate, in EU countries, 2008

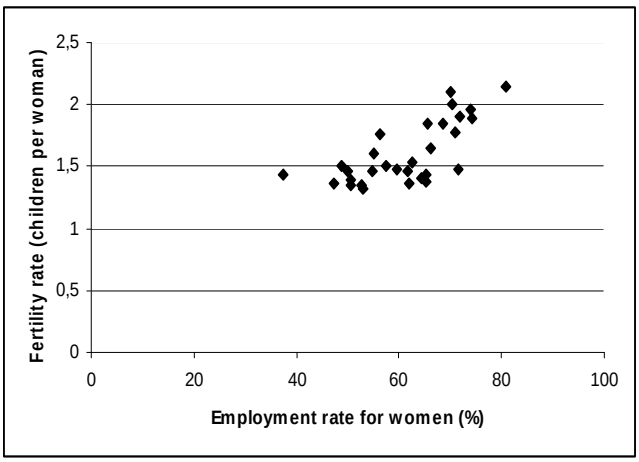

Chart 8: Correlation between women's employment rate and fertility rate, in EU countries, 2008

Source: Authors' processing, based on EUROSTAT and OECD data.

The scatter charts show that there is a positive correlation between women's wage in manufacturing (as percentage in men's wages) and fertility rate, on one hand (chart 7) and women's employment rate and fertility rate, on the other hand (chart 8). There is no significant correlation between the three explanatory variables in the model.

Romanian families place a high value on children; their protection and well-being are considered to be parents' primary responsibilities. Considerable efforts are made to provide children with what they need. Parents' hope and pride are focused on children's successes. Interdependent and reciprocal relationships are encouraged among members of the Romanian family. Parents provide care for their children and in return, children are expected to be obedient and respectful and, in later life, to care for their parents. Dedication to extended family and friends is another important value. A complex system of rules and obligations regulates each individual's relations and responsibilities within the extended family. For example, in many cases, grandparents assist parents in raising their children. During the communist regime, the social networks of friends were an important source of emotional and intellectual support. In the transition period accompanied by financial strain, this support has often become financial. In addition, in one-child families, friends often become substitute siblings.

4. Conclusion

The family must remain the main, the ground cell of the society, which helps all the generations moving to a new economic and social dimension. Due to the difficulties that families have to face after 1989 political events, family structure itself have changed. In the mid 2000s, 57,6% of families were couples, 27,7% were single persons households (on average, at OECD countries level). In Romania the share of couples families was above the OECD average level (62,8%), while almost 20% of the households were single persons households. Also, the share of single parent household in Romania is above the OECD average level (9,3%, compared to 9,1%). In Romania, in 2008, the marriage rate was 6,95 marriages per 1000 inhabitants, one of the lowest levels since the 1950s, but still relatively high among the European countries. The divorce rate remained relatively steady—around 1,7 divorces per 1000 inhabitants – 2008 (in the European context, this level is below average). The number of children per family depended on educational background and region. Most of the families in the cities had one or two children. In 2008 in Romania the total fertility rate per woman was 1,35 – under the simple replacement level. At OECD level, in mid 2000s 56% of households had no children, 20% of them – had one child, while 17% - had two children. In Romania only 44% of the households had no children, but the share of families with one child was significantly higher (almost 30%).

The econometric multiple regression model developed by the authors quantifies the dependency between the fertility rate – as an expression of family behavior (the dependent variable) and three explanatory variables: contraceptive use, women's wages as percentage of men's wages (in manufacturing) and women employment rate. The model revealed that the women/men wages ratio and women' employment rate are significant and positively correlated to the dependent variable - the fertility rate.

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ASPECTS OF PHRASAL ANGLICISMS IN THE ROMANIAN ECONOMIC LANGUAGE

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Abstract: *The Romanian language is faced today with an inflow of English borrowings of various complexity and usefulness. The factors generally taken to trigger such a linguistic phenomenon are need and prestige. In this context, the language used to discuss economic concepts and phenomena is particularly susceptible to influences from English, a language generally seen as representing a powerful and fashionable culture and civilization, the American one. The purpose of this paper is to investigate phrasal anglicisms in a corpus of journalistic texts, i.e. Capital 2005, with respect to quantitative as well as qualitative aspects.*

Key words: bilingualism, language contact, borrowing, phrasal anglicism.

JEL classification: Z 00

The contemporary period of the Romanian language, more exactly the end of the 20th century and the beginning of the 21st century is characterized by what is usually referred to as "an unprecedented English influence" which manifests itself directly, that is without the intermediacy of other languages, mainly through second language teaching and the mass media. This influence is supported by extra-linguistic factors such as fashion and prestige (Constantinescu, Popovici and Ştefănescu 2002: 171), which are probably the strongest predictors of borrowing from English into contemporary Romanian. Thus, many of the English words that have been adopted in the last two decades answer specific referential and communicative needs in various compartments of the Romanian society, e.g. economy, politics, culture, entertainment, science and technology, while the dominant place English holds in the avant-garde of scientific advancement, in business and other international relations, endows it with certain connotations of modernity, fashion and prestige, and promotes the borrowing of words not motivated by need, the so called "luxury" or "unnecessary" loans.

The two factors mentioned above combine with a third one, namely increasing levels of English/ Romanian bilingualism among younger groups of speakers. Constantinescu et. al. (2002) show that this is the product of educational programs placing a special emphasis on foreign language teaching, as well as of the specificity of the Romanian society after 1989. Bilingualism in itself cannot be separated from the classical factors of need and prestige. After all, people learn a foreign language because they need it in order to engage in personal or professional relations with other people, because they want to identify with the culture of this language, or because of both of these reasons. Moreover, the problem of the nature and role of English loanwords in Romanian must take into account the possible specific reasons that have been triggering this unprecedented influx of English borrowings in Romanian since 1989. Thus, it is generally agreed that borrowing American/British terms to describe various cultural realities, such as *fast food, pop music, management, outsourcing* is considered a sign of internationalization of the Romanian vocabulary, while rejecting them is a manifestation of self-isolation and cultural provincialism (Stoichițoiu-Ichim, 2001; Ciobanu 2004).

This increasing intensity of contact and cultural pressure from English to Romanian with the resulting linguistic manifestations, has triggered a variety of attitudes towards the phenomenon of English borrowing in Romanian. Thus, while some voices in the current public discourse- the written but also audio press- decry this influence as an invasion of Anglicisms and an Anglicization of the language, the occurrence of English elements in Romanian being most often described as an invasion and a menace to the language, other Romanian linguists (Mioara Avram, Th. Hristea, Rodica Zafiu) manifest relative tolerance towards English borrowing, maintaining that it is not different from other types of linguistic influences Romanian has undergone in history, and should therefore be regarded with more detachment and intellectual curiosity. Such linguists consequently place greater emphasis on the analysis of the Romanian-English contact in its linguistic aspects, e.g. the integration of English borrowings, than on ideological and attitudinal aspects. For example, Mioara Avram urges towards a scientific study of the phenomenon in all its complexity, drawing attention to the importance of language cultivation and ecology by effective means, not by prejudice and intolerance, or by purism and discrimination (1997: 29). Moreover, she shows that the attitudes of rejection and purism regarding the recent English borrowings in Romanian are sometimes based on incorrect evidence, many of the Anglicisms that are the topic of controversy today having actually been attested in Romanian before 1989 and therefore not being of recent date.

Answering this call for the scientific investigation of the contact between the two languages, the present paper constitutes an attempt to analyse the impact English has had on a particular area of Romanian, the economic language, and with regard to a certain type of transferred elements, multiword items or phrases, more generally referred to in the Romanian specialized literature as phrasal anglicisms. As such, the study is corpus-based, relying for data on one year of the business and financial publication Capital (2005). Previous research on this topic based on a longer period of the same corpus, i.e 1998- 2008 has shown a significant rise in the number of borrowed phrases as compared to one-word loans, both as regards the number of individual types and the token frequencies of these types in the corpus. Thus, multi-word borrowings increased from 25.16% of the total of anglicisms in 1998 to 37.30% in 2005, which means the use of phrasal anglicisms has risen by more than half in eight years. We believe that this sharp rise allows us to speak of a change being underway as regards the pattern of language mixing in Romanian/ English contact, generally interpreted in the specialized literature as testifying to an increasing level of proficiency in the source language.

The focus of the present paper will be on several quantitative and qualitative aspects regarding the use of phrasal anglicisms in the corpus of Capital 2005. Thus, using the tools of computational linguistics, the analysis starts with the identification of the multi-word borrowings most frequently used in the studied corpus as well as the individual English words most often employed to form these phrases. It then continues with a general description of these elements in terms of the semantic areas they belong to, and a discussion of the reasons that may have triggered their use.

The source of the corpus was the business magazine *Capital* on CD-Rom, consisting of Adobe PDF files. This raw data underwent a series of processing procedures, i.e. Optical Character Recognition, sentence splitting, tokenization and part-of-speech tagging and lemmatization. The texts thus obtained allowed for an efficient way of retrieving and processing anglicisms. Customized software tools designed specifically for this project were used to tap the source of Capital 2005. The first stage of this process was the generation of decontextualized word lists, which facilitated a faster identification of English words. Potential anglicisms were further filtered, the main concerns at this stage of research being the elimination of Romanian homophones (e.g. deal 'hill' as opposed to Engl. deal, brand 'cannon' as opposed to Engl. brand) and of proper names. The final stage of this filtering process consisted in the separation of simple anglicisms from phrasal ones, thus leaving us with the data discussed in this paper.

The analysis of the quantitative impact of these elements in the studied corpus of Capital 2005, has shown that there are 860 such phrases, accounting for more than a third of the total of anglicisms, although their occurrence is much more limited than that of borrowed single words. Thus, multi-word borrowings occur in a total of 2492 instances, which yields a repetition rate of less than 3. Moreover, corresponding to these 860 phrasal types are a number of 787 lemmas, their ratio indicating a very limited use of Romanian inflectional morphology on these phrases: on average, every lemma is used with only one form, which most of the times remains uninflected for Romanian morphology. A quantitative overview of multi-word English borrowings in terms of lemmas, types and tokens is presented in table 1 below.

	Lemmas	**Types**	**Tokens**	**Lemma/ type ratio**	**Frequency (token/type)**
Total nr. of Anglicisms	1723	2297	23,031	1.33	10.02
Nr. of phrasal anglicisms	787	860	2492	1.05	2.84
Percentage of phrasal angl/ total nr. of angl.	45.67%	37.44%	10.82%		

Table 1 Number of phrasal anglicisms (lemmas/ types/ tokens) in Capital 2005

The table above shows that every phrasal type in the corpus is used on average for 2.84 times. However, as many as 64% of all phrasal elements in Capital 2005 are used only once, while 21% have a token frequency of two or three. This leaves a relatively low proportion of these lexical items (15%) which appear more than four times in the studied corpus. On the other hand, an analysis of simple anglicisms in terms of their frequency of use shows a very different situation: only 32% are used once, about 20% are used twice or three times, while the remainder have a token frequency of four or more (within this last category approximately 2% are used for more than one hundred times). This discrepancy between the two classes of borrowings establishes a correlation between the social and linguistic integration of foreign words and their formal complexity and length, elements which in turn seem to impact directly on variables such as ease of learning and production.

As regards the internal complexity of the identified phrasal anglicisms in the corpus, more than 60% of the total are made up of two words, almost a third contain three words, while a relatively low proportion of less than 10% use four or more than four words. Examples of such long borrowings include *fast moving consumer goods, first in first out, front of the house, head of corporate communication, head of marketing department, Head of Program Planning and Channel Development, higher highs and lower lows, in the trading floor, marketing client service manager, public relations & communication manager, retail & system builder account manager, etc.* In detail, the figure below shows a classification of phrasal anglicisms in terms of their internal complexity.

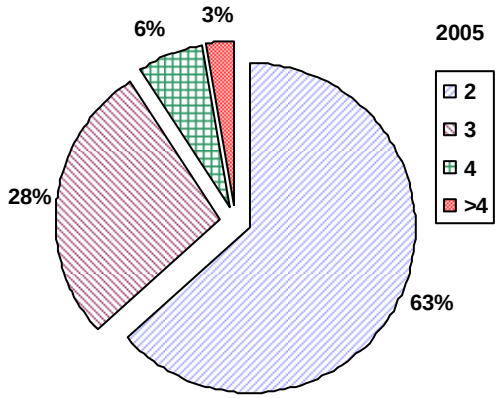

Figure 1. Classification of phrasal anglicisms according to length in Capital 2005

A special situation is constituted by those cases when two or several sequences of English words are only juxtaposed, following Romanian word order specifications, and showing no structural dependency relations with each other:

(8) … *va ocupa postul de senior vicepresident, adviser external affairs, pentru Europa Centrală şi de Est.*

(9) *Aceeaşi nemulțumire şi la Hewlett Packard, unde Irinel Ilie, Country Manager Imaging and Printing, spune …*

The most often used phrasal anglicisms in the corpus of Capital 205 are: *managing director, art director, middle management, prime time, internet banking, media planner, general manager, managing partner, senior editor, top management, product placement, private banking, cash carry, marketing manager, smart money, top management, dumb money, call center, city break, DVD player, rate card, country manager, duty free, project manager, pr manager, stop loss, real estate, retail audit, accounting office manager, big Mac, brand manager, investment grade, master of business administration, mobile banking, business intelligence, direct mail, retail banking, senior partner, car kit, chief executive officer, corporate affairs, body piercing, cd player, hedge funds, high tech, senior tax manager, baby sitter, business plan.*

A close look at the semantic areas which use phrasal anglicisms reveals the same factors taken to promote borrowing in general: need and prestige. Thus, the vast majority of the phrasal anglicisms occurring in this corpus designate job titles *e.g. managing director, art director, media planner, general manager,managing partner, senior editor, marketing manager, project manager, PR manager,* as well as novel concepts in the economic field or in other related fields *e.g. middle management, prime time, internet banking, top management, product placement, private banking, low cost, open source, call center, city break, joint venture, mobile banking, hedge funds, etc.* Since these concepts were introduced as a result of the emergence of some new types of economic entities in Romania, e.g. multinational companies, large corporations, it can be argued that they are used to describe new realities and answering a specific need in the language, being therefore akin to classical cultural borrowings. The following examples illustrate this use of multi-word borrowings to designate concepts that are relatively new importations into the Romanian economy:

(1) Începând cu 1998, el a ocupat poziția de Logistics Manager, iar apoi, de Operations Manager.

(2) (…) Potrivit afirmațiilor sale, banca îşi va dezvolta serviciile de cash management prin facilitate de direct debit şi standing order.

(3) Ultimele două lumânări japoneze formează un bullish engulfing pattern, care în această poziție constituie un element pozitiv/ bullish de schimbare de trend.

Other examples of culturally motivated transfers include three-word noun phrases, *e.g. corporate community relations, customer relations management, external affairs manager,* verbs and their objects and adverbials, *e.g. push to talk, made in China,* as well as adjectives and their modifiers, *e.g. smart casual, politically correct* or prepositions and nouns, *e.g. below the line, after school, in the trading floor.* However, sometimes the occurrence of these English expressions seems to be gratuitous, as they double already existing equivalents in Romanian:

(4) *Compania are trei asociați: (…), Daniel Micu, professor of marketing la Programul MBA Româno-Canadian, …*

(5) În Franța, şi cam în toată Europa de Vest nivelul taxelor este între 60 şi 70%, chiar dacă țara respectivă este oil producer …

In these cases, it can be argued that these English islands carry a different connotation from that of their Romanian counterparts, i.e. high social status and modernity, being used for reasons of prestige rather than out of need. Thus, according to Myers-Scotton (2002: 145) the pragmatic force of the two expressions is different, as "saying something in the Embedded Language often conveys a desired connotation- or simply has more cachet."

Sometimes it may be difficult to draw a line between necessary and gratuitous phrasal anglicisms, as the foreign expression always brings something new, a new connotation or shade of meaning in relation to its native counterpart. The following examples include such borderline cases:

(6) *O restructurare by default, adică prin forța lucrurilor.*

(7) *Sud-coreenii de la LG anunță lansarea serviciului "push to view". Există deja "push to talk", …*

(8) *Pentru sfârşitul anului 2006, ambele posturi estimează câte o cotă de piață de 2,5% pe publicul țintă vizat şi 1,5% în mediul all urban.*

Once multi-word borrowings were ranked according to their frequency of occurrence, another concern was to find the most often used individual words within these phrases. The results of this analysis show that the words most often used as heads of switched phrases are *manager,* followed by *director, management, officer, banking* and *head*. In detail, 94 nominals occurring in a total of 319 instances are headed by *manager*, showing a frequency of occurrence of slightly more than the average 2.84 displayed by phrasal anglicisms in general. The most often used combinations with this word are *general manager, marketing manager, country manager, brand manager, project manager,* and *PR manager*. A number of 28 noun phrases are headed by *director,* the most common ones being *art director* and *managing director,* while a very large proportion of the remaining switches with this word have a frequency of occurrence of less than 3.

Other frequently used words within phrases appear as modifiers. Several of these nouns relate to major institutions, especially business, media and finance, which are central concerns of news. For example:

business + plan, intelligence, development, angel, brand, consultant, management, center, start, administration, law.

marketing + officer, department, manager, coordinator, research, representative.

home + banking, bar, cinema, design, decoration, interior, entertainment, theater

Some premodifying nouns, in particular, are extremely productive in their ability to combine with multiple noun heads. Thus, *business* is used across a number of 34 separate borrowings, and in a total of 74 occurrences. The most frequent expressions with this word are *business intelligence, business plan* and *business administration*. Other well-represented modifying words showing a distribution of over 10 are *senior, marketing, senior, sales corporate, home, customer, media, account, brand, consumer, customer,*

DVD, internet and *retail*. Overall, the large number of premodifying words that are productive in combining with many heads can be explained as a characteristic of news writing, which needs to employ very dense, integrated packaging of information, as a result of the need to answer space-saving considerations. Such modifier + head sequences typically convey a complex meaning in condensed form, thus answering this need for brevity and conciseness. In addition to these content words, function words such as prepositions (*of, in, to* as in *professor of marketing, back in business, direct to consumer*) and conjunctions (*and*) are also relatively well represented in the corpus of phrasal anglicisms.

To conclude our discussion on phrasal anglicisms in the corpus of Capital 2005, it seems that the Romanian language of business and economics is faced with a discernable upward trend in the importation of multi-word English borrowings, these conveying various communication and pragmatic meanings the speaker or writer is trying to express. While the most representative of these phrases are formed around established borrowings in Romanian like *manager, management, director, marketing* or *business*, others are the vehicle of novel importations not only in the area of content words (*brand, retail, banking, marketer, broker*) but also in the area of function words, borrowed phrases being the vehicle by which English prepositions and conjunctions are used in the Romanian language. Moreover, it is possible that in the future these phrases may serve as springboards for the individual lexical items they contain, thus leading to an increase in the inventory of English words entering contemporary Romanian.

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PANEL DATA USE FOR THE ANALYSIS OF THE ECONOMIC AND SOCIAL PHENOMENA AT REGIONAL LEVEL

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Abstract: *Panel data use for the economic analysis offers a series of advantages related to their diversity and results which can be obtained after their processing. These ones can be successfully used for the development regions analysis. Using econometric techniques can be estimated the parameters of three types of panel data models. The major disadvantage of using such data is related to the large number of parameters which must to be estimated. In this paper is presented an application on the unemployment rate's case at the Romanian development regions level, using panel data models and the main conclusions which resulted.*

Key words: panel data, fixed effect model, random effect model, development regions, unemployment rate.

JEL classification: C23, C51, E24, J64.

1.Introduction

Panel data are defined in relation with two dimensions. Thus, in this representation, a variable is registered at the level of each statistical unit of the population for each time period from a given time horizon. These types of data simultaneously take into account both the temporal dimension and the territorial one. Many examples of panel data that can be used for the analysis of economic and social phenomena at regional level can be given.

An example of panel data use for the regional analysis is referring to the evaluation of some aspects concerning the investments at the development regions level. In this approach, two aspects are important: defining the list of variables used for the evaluation of some aspects concerning the investments evolution and their impact on regional economic and social development, defining the time horizon on which data series are recorded. Thus, in order to underline the factors that enabled to attract foreign investment during the last 20 years at development regions level, we mention the following categories of variables: the development region potential (number of enterprises with foreign capital participation per 100.000 inhabitants, the share of employment in the secondary sector, the share of employment in the agriculture sector, the share of employment in the services sector) foreign investment volume and fixed capital formation, labour market characteristics at the development regions level (labour market pressure, measured by unemployment rate for each development region, the efficient use of labour force, measured by the average labour productivity corresponding to the development region etc.), governmental decisions which are introduced into the model by dummy variables which are marking the apparition of a government act which is regulating the labour force activity (laws, retirement, dismissals etc.), the demand at development region level (region's population share in the total population, population density etc.), living conditions at the development region level (region's infrastructure, education system characteristics, the quality of the regional network of hospitals, facilities population durable objects, etc.) the characteristics of the privatization process at region's level (number of privatized units by region and by years and number of privatizations with foreign capital etc.).

For some variables, data series source is the National Institute of Statistics or other national and international institutions. For other variables cannot be identified available data sets and, therefore, must be used other latent variables for which are available informations.

2.Some characteristics of panel data series

Each panel data series is defined by:

$x_{it}, i = 1,...,8, t = 1,...,T$ (1)

Data series used in the analysis are usually recorded by quarters or by years. These are directly taken from the official statistics or are obtained by performing statistical calculus.

Panel data series present a number of advantages, such as:

1) Panel data include a wide range of information because inside of them are registered many values; they reveal a great variability, mainly, in the inter-statistical units dimension.

2) Due to the fact that panel data series have double indexing (an individual and a temporal one), they allow the analysis of the dynamics and homogeneity of the statistical units. At the same time, we must take into account that the heterogeneity of statistical units has two components: one observable, which is evidenced by the regression model's parameters, C_{it}, which are corresponding to the explanatory variables, and one that is unobservable, which is not controlled based on registered factors.

For example, using panel data, we can observe that the size of the informal economy at the level of a development region is determined by two sets of factors: the observable factors through data series, as: manufacturing production, agricultural production, employment in the two sectors, the number of high school and university graduates etc.; unobservable factors, as the population's cultural model corresponding to each region.

3) The organization form of panel data allows the analysis of variance on three components: on inter-individual factors, on inter-temporal factors and on intra-individual-temporal factors.

4) Generally, panel data consist in a large number of values. In these circumstances, it results an increase of the degrees of freedom, an improved quality of the parameters estimation and of the statistical tests applied in order to verify the statistical hypothesis.

The main disadvantage of panel data use is related to the effects generated by the errors that can appear inside of them. We must take into account of Huber's comment (1981) which showed that 3% errors at the level of panel data generate significant changes of the obtained estimations values. Therefore, must be developed techniques to detect and eliminate the eventual outliers from the data series. In the case of the apparition of outliers in the data it is recommended either its elimination or correction by the interpolation operation.

3.The general form of panel data models

Panel data models, used for the analysis of certain phenomena at regional level, are represented, in a general form, by the following linear relationship:

$y_{it} + a_{i1}y_{it-1} + ... + a_{ip}y_{it-m} = b_{it} + c_{1it}x_{1it} + ... + c_{mit}x_{mit} + e_{it}, i = 1,...,8, t = 1,...,T$ (2)

Where: $Y =$ the explained variable; $X_1,..., X_m =$ the explanatory variables; $a_{11},..., c_{mit} =$ the model's parameters and $e_{it} =$ the error. If the $a_{ij}, j = 1,..., p$ parameters are all equal to zero, then it results a panel data model in a static form. Otherwise, it results a model in a dynamic form. Unfortunately, the above model cannot be estimated because using $8T$ values we must estimate $8T(m+1)$ parameters.. Therefore, for the estimation of the parameters we must impose certain restrictions to the above model parameters. By defining various restrictions we built three types of panel data models:

- Models with common constant, which are defined as follows:

$y_{it} = a + c_1x_{1it} + ... + c_mx_{mit} + \varepsilon_{it}, i = 1,..., R, t = 1,...,T$ (3)

Basically, this is a classic regression model estimated using the defined data series without taking into account of the sharing of statistical units into groups. In this case, each data set includes a number of $R \cdot T$ values.

- Fixed effects models, which are defined by the following linear application:

$$y_{it} = a + a_i + c_1 x_{1it} + ... + c_m x_{mit} + u_{it}, i = 1,..., R, t = 1,..., T \quad (4)$$

The term a_i is called individual specific effect and highlights the value of the endogenous characteristic, which is determined by those factors that are acting locally.

- Random effects models, which are represented by the following linear application:

$$y_{it} = a + c_1 x_{1it} + ... + c_m x_{mit} + (v_i + u_{it}), i = 1,..., R, t = 1,..., T \quad (5)$$

where v_i is a random variable of zero mean and standard deviation σ_v.

In order to interpret the obtained estimations we must take into account that the error ε_{it} admits decomposition into three components, according to the following relationship:

$$\varepsilon_{it} = \phi_i + \varphi_t + u_{it} \quad (6)$$

where ϕ_i is the component that characterizes each statistical unit (each development region), φ_t is the component that characterizes the time dynamics and u_{it} is the residual, having a zero mean, homoskedastic and uncorrelated, both in time and from a statistical unit to another (this means a white noise realization).

4.The unemployment rate analysis using panel data in territorial profile

In order to illustrate the panel data use for the analysis of an economic phenomenon in territorial profile, we consider the annual rate of unemployment at the Romania's counties level for the period 2004-2006. By applying the ANOVA method in the case of the annual rate of unemployment at the Romania's counties level for the period 2004-2006 it resulted significant differences between counties. The obtained results by applying the F-test are presented in Table 1.

Table 1. The application of the ANOVA method in the case of unemployment rate

Method	df	Value	Probability
Anova F-statistic	(41, 84)	13.59445	0.0000
Analysis of Variance			
Source of Variation	df	Sum of Squares	Mean Squares
Between	41	573.0321	13.97639
Within	84	86.36000	1.028095
Total	125	659.3921	5.275137

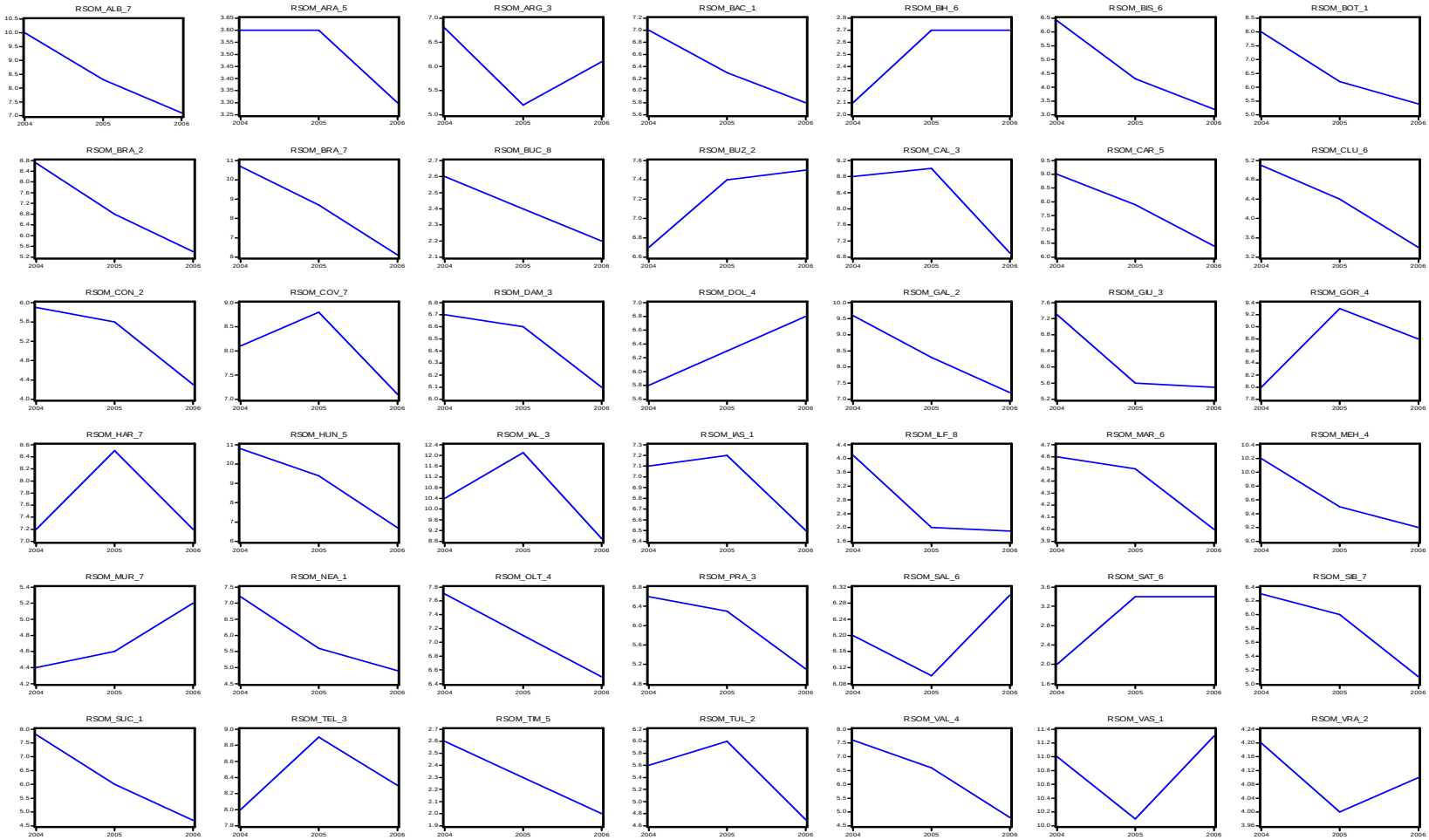
Source: Statistica teritoriala 2008, INS, Bucuresti, p. 186-194

In the graphs from Figure 1 is presented the evolution of the unemployment rate for the Romanian counties during the period 2004-2006. In order to analyze the charts we must take into account of the counties repartition from Table 2.

Table 2. Positioning graphics in Figures 1, 3 and 4 by counties

Alba	Arad	Arges	Bacau	Bihor	Bistrita-Nasaud	Botosani
Braila	Brasov	Bucuresti	Buzau	Calarasi	Caras-Severin	Cluj
Constanta	Covasna	Dambovita	Dolj	Galati	Giurgiu	Gorj
Harghita	Hunedoara	Ialomita	Iasi	Ilfov	Maramures	Mehedinti
Mures	Neamt	Olt	Prahova	Salaj	Satu Mare	Sibiu
Suceava	Teleorman	Timis	Tulcea	Valcea	Vaslui	Vrancea

Figure 1. The evolution of unemployment rate at the counties level during the period 2004-2006



Source: Statistica teritoriala 2008, INS, Bucuresti, p. 186-194

For the analysis of the unemployment rate evolution at counties level we used four models which are presented in Table 3. Parameters estimation is realised by applying the least square method in two manners:

- Fixed effects models (FEM);
- Random effects models (REM).

Using the two types of models we tried to find some explanations for the evolution of unemployment rate, both at the territorial level, but also during the analyzed period. Thus, appeared several issues as:

- To identify certain factors that influenced the unemployment rate during the analyzed period;
- To underline the differences which exist between counties related to the unemployment rate.

Table 3. Models used for the analysis of the unemployment rate at counties level

Model	The characteristics of the model	Dependent variable	Independent variables
M_1	Examines the unemployment elasticity with respect to the dynamics of active housing units from constructions and services domain. Model parameters are estimated using two types of models: • Fixed effects models (FEM) • Random effects models (REM)	LOG(SOM)	• LOG(ULAS) – Active local units from the services domain • LOG(ULAC) – Active local units from the constructions domain
M_2	Examines the evolution of the unemployment rate with respect to the dynamics of active housing units from constructions and services domain. Model parameters are estimated using two types of models: • Fixed effects models (FEM) • Random effects models (REM)	SOM	• ULAS – Active local units from the services domain • ULAC – Active local units from the constructions domain
M_3	Examines the evolution of the unemployment rate with respect to the dynamics of active housing units from the industry domain. Model parameters are estimated using two types of models: • Fixed effects models (FEM) • Random effects models (REM)	SOM	• ULAI– Active local units from the industry domain
M_4	Examines the unemployment elasticity with respect to the dynamics of active housing units from the industry domain. Model parameters are estimated using two types of models: • Fixed effects models (FEM) • Random effects models (REM)	LOG(SOM)	• LOG(ULAI)– Active local units from the industry domain

Model 1 is used for the analysis of the unemployment rate elasticity reported to the number of active local units from the services (LOG(ULAS)) and constructions (LOG(ULAS)) domain. This one is defined as follows:

$$\log SOM) = a + b\log(ULAS) + c\log(ULAC) + \varepsilon \quad (7)$$

The results obtained by applying the fixed effects model and the random effects model are presented in table 4 and 5 as follows:

Table 4. The parameters estimation using FEM

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11.72909	0.596738	19.65535	0.0000
LOG(ULAS)	0.111972	0.064413	1.738344	0.0859
LOG(ULAC)	-0.545233	0.090937	-5.995711	0.0000

Source: Statistica teritoriala 2008, INS, Bucuresti, p. 186-194, 518-583

Table 5. The parameters estimation using REM

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.452440	0.454348	20.80441	0.0000
LOG(ULAS)	0.190835	0.062192	3.068455	0.0026
LOG(ULAC)	-0.290129	0.073844	-3.928932	0.0001

Source: Statistica teritoriala 2008, INS, Bucuresti, p. 186-194, 518-583

Model 2 is used for the analysis of the unemployment rate reported to the dynamics of the number of active local units from the services and constructions domain. The general model is defined using the following relation:

$$SOM = a + bULAS + cULAC + \varepsilon \quad (8)$$

The results obtained by applying the fixed effects model and the random effects model are presented in table 6 and 7 as follows:

Table 6. The parameters estimation using FEM

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15629.99	740.3239	21.11237	0.0000
ULAS	0.593770	0.113860	5.214919	0.0000
ULAC	-11.26653	1.672139	-6.737793	0.0000

Source: Statistica teritoriala 2008, INS, Bucuresti, p. 186-194, 518-583

Table 7. The parameters estimation using REM

C	12205.50	819.4614	14.89454	0.0000
ULAS	0.529569	0.109239	4.847796	0.0000
ULAC	-5.932068	1.334241	-4.446024	0.0000
C	12205.50	819.4614	14.89454	0.0000

Source: Statistica teritoriala 2008, INS, Bucuresti, p. 186-194, 518-583

Model 3 is used for the analysis of the unemployment rate reported to dynamics of the number of active local units from the industry domain. (ULAI). The general model is defined using the following relation:

$$SOM = a + bULAI + \varepsilon \quad (9)$$

The results obtained by applying the fixed effects model and the random effects model are presented in table 8 and 9 as follows:

Table 8. The parameters estimation using FEM

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	19282.62	2604.037	7.404896	0.0000
ULAI	-4.873419	1.795848	-2.713715	0.0081

Source: Statistica teritoriala 2008, INS, Bucuresti, p. 186-194, 518-583

Table 9. The parameters estimation using REM

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10685.12	1021.146	10.46385	0.0000
ULAI	1.069978	0.503573	2.124773	0.0356

Source: Statistica teritoriala 2008, INS, Bucuresti, p. 186-194, 518-583

Modelul 4 is used for the analysis of the unemployment rate elasticity reported to the number of active local units from the industry domain (log (ULAI)). The general model is defined using the following relation:

$$\log(SOM) = a + b\log(ULAI) + \varepsilon \quad (10)$$

The results obtained by applying the fixed effects model are presented in Table 10:

Table 10. The parameters estimation using FEM

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14.59129	2.076136	7.028099	0.0000
LOG(ULAI)	-0.749408	0.294359	-2.545902	0.0127

Source: Statistica teritoriala 2008, INS, Bucuresti, p. 186-194, 518-583

8. Conclusions

The results obtained from the estimation of the four models parameters used for the analysis of the unemployment rate allow us to formulate the following comments:

• The decrease of the number of active local units from the services domain led to an increase of the unemployment rate. Thus, for a reduction with one percent of the number of active local units from the services domain it results an increase of the unemployment rate with 0.11%;

• The dynamics of the number of active local units from the constructions domain had a positive influence on the unemployment rate. In this case, the unemployment elasticity is equal to -0.55%, compared with ULAC%;

• There are significant differences between districts related to the influence of specific conditions at local level on the unemployment rate for the models defined using as explanatory variables the number of active local units from the services and constructions domain;

• Locally specific factors played an important role in the evolution of the unemployment rate.

In Table 11 is presented, on each region, in the case of the four models, the number of counties in which specific factors had a negative impact by increasing the unemployment rate (the column marked with plus) or had a positive impact, helping in its reduction (the column marked with minus). In two regions (North-East and Centre) specific factors played a negative role in increasing the number of unemployed. At the opposite pole, for the regions South-West Oltenia and Bucharest- Ilfov, local factors played a positive role in reducing the unemployment rate.

Table11. The impact of locally specific factors on unemployment rate

Development regions	M_1		M_2		M_3		M_4	
	plus	minus	plus	minus	plus	minus	plus	minus
North-East	5	1	4	2	5	1	5	1
South-East	3	3	2	4	3	3	3	3
South-Muntenia	3	4	3	4	2	5	3	4
South-West Oltenia	1	4	1	4	1	4	1	4
West	2	2	1	3	1	3	2	2
North West	2	4	1	5	1	5	2	4
Center	4	2	3	3	3	3	5	1
Bucharest Ilfov	1	1	1	1	1	1	1	1

9. Acknowledgments

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INSTITUTIONAL QUALITY, ECONOMIC FREEDOM AND SUSTAINABLE DEVELOPMENT. A COMPARATIVE ANALYSIS OF EU COUNTRIES

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Abstract: *It is often maintained that institutional quality lies at the bottom of achieving sustainability at national level. This paper analyses the relationship between economic freedom, as a measure of institutional quality, and sustainable development in EU-27 countries. We use the Heritage Foundation/Wall Street Index of Economic Freedom and Sustainable Society Index with their components as variables and principal components analysis, as statistical method. The empirical results are consistent with the theory that economic freedom, mainly property rights, business freedom and freedom from corruption are positively or negatively significantly correlated with components of sustainable development.*

Key words: institutions, economic freedom, property rights, human development, sustainable society.

JEL classification: F43, O15, P14, Q01, Q56.

1.Introduction

The relationship between institutions and economic growth in all its aspects was and still is a noteworthy subject for economists to debate on. Also, increasing attention is being paid to the relationship between institutions and sustainable development (Sharp, 2002; Veeman & Politylo, 2003; Anderson & Huggins, 2004; Morita & Zaelke, 2005).

Institutions are considered essential for the European Sustainable Development Model in order to "promote throughout the Community a harmonious and balanced development of economic activities, sustainable and non-inflationary growth respecting the environment, a high degree of convergence of economic performance, a high level of employment and of social protection, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States" (Maastricht Treaty, 1992, p. 2).

Several international organizations draw attention on role of institutions and good governance as "one of the most important ways that current generations can contribute to sustainable development over the longer term by ensuring the stable functioning of societies and economies, encouraging innovation and creativity and providing the framework within which all citizen can achieve their potential" (OECD, 2002, 4).

Moreover, sustainable development becomes not a matter of resources scarcity but one of good institutions scarcity. Taylor (1993, 10) writes that "the size of our resource pie is determined not by nature but by the social and economic institutions (…). Liberal societies, built on free markets and open inquiry, create resources and expand the possibilities of mankind" (quoted in Anderson & Huggins, 2003, 66).

Thus, it is considered that the ability of a country to follow sustainability paths largely depends on the quality of its institutions. However, one challenge arises namely, to find a way to quantify the quality of institutions. The literature uses in this direction indices of economic freedom: Economic Freedom of the World Index (Gwartney, Holcombe & Lawson, 2004; Norton, 1998a; Norton, 1998b); Index of Economic Freedom (Hayward, 2002) etc. and appreciates that the economic freedom of a country provides the premises for sustainable development.

This paper analyzes this hypothesis both from a theoretical perspective and empirically, using data describing economic freedom and sustainable development for EU-27 countries. We use the Heritage Foundation/Wall Street Index of Economic Freedom and Sustainable Society Index with their components.

The statistical method used in the paper to test the relations between economic freedom and sustainable development is principal components analysis (PCA). This multivariate method is justified by data set dimensions since using it the dimensionality of original data is reduced by creating principal components (Schott, 2006). The new variables allow a more facile interpretation of original data.

The results confirm the relations existing between several components of economic freedom, such as Business Freedom, Freedom from Corruption and components of sustainable development such as Education Opportunities, Good Governance, Unemployment, Population Growth, Public Debt, Personal Development, and Sustainable World.

Data are recorded at country level for all 27 EU Member States, the reference year being 2008. Data sources are the sites of Heritage Foundation (http://www.heritage.org/Index/Explore.aspx) and of Sustainable Society Foundation (http://www.sustainablesocietyindex.com/Datasheet_SSI_2008.xls). Statistical data processing was conducted using SPSS software.

2.Theoretical background

2.1. Economic freedom - a measure of institutional quality

The scientific literature of the last 30 years unceasingly underlines the relation between institutions and a country's level of development from different perspectives (economic, political, psycho-sociological etc.). Empirical studies found significant statistical correlations between various elements of the institutional framework and the different economic performances of countries. In other words, the presence of adequate or high-quality institutions is a necessary condition for economic growth. High quality institutions are being recognized as those consistent with free trade, limited government, secure and enforced private-property rights, a sound legal environment and a stable monetary system (Corey, 2009, p. 8). All these elements are components of an overall country's economic freedom.

In liberal tradition, since Adam Smith, economic freedom has proven to be the best path to prosperity and progress and a measure of a country's institutional structure. Consequently, there have been many attempts to quantify the degree of a countries economic freedom. The difficulty of providing an exact measure derives from the fact that freedom is rather qualitative than quantitative. That is why, nowadays, we have a heterogeneous range of indicators which aim at quantifying economic freedom. However, they share several similarities since most of them include in their methodology the core elements of economic freedom: secure private property rights, rule of law, freedom of trade, limited government.

Table 1 presents three relevant indices of economic freedom which are commonly used in empirical studies.

Table 1 Relevant Indices of Economic Freedom

Index	Publisher	Indicators/ Components
Economic Freedom of the World	Fraser Institute	- Size of Government - Legal Structure and Security of Property Rights - Access to Sound Money - Freedom to Trade Internationally - Regulation of Credit, Labour and Business
Index of Economic Freedom	Heritage Foundation / Wall Street Journal	- Business Freedom - Trade Freedom - Fiscal Freedom - Government Spending - Monetary Freedom - Financial Freedom - Property Rights - Freedom from Corruption - Labour Freedom - Investment Freedom
World Survey of Economic Freedom	Freedom House	- Political rights - Electoral Process - Political Pluralism and Participation - Functioning of Government - Civil liberties - Freedom of Expression and Belief - Associational and Organizational Rights - Rule of Law - Personal Autonomy and Individual Rights

Source: Fraser Institute, Heritage Foundation, Freedom House

Using the data provided by these indices, numerous researchers have empirically proven the benefits of economic freedom and, through it, the importance of institutional quality. For example, to mention only a few of the most recent ones, Feldman (2007) proves that economic freedom is likely to reduce unemployment. Bjornskov & Foss (2008) used Fraser Institute Economic Freedom Index to explain cross-country differences in the level of entrepreneurship (a core element of a market economy) and found out that the size of government is negatively correlated and sound money is positively correlated with entrepreneurial activity. Faria & Montesinos (2009) found a "robust association between economic freedom and prosperity".

The list of studies on this subject is much longer. Many researchers have devoted their time and efforts to the issue of economic freedom and its aspects. All in all, these studies have in common the fact that economic freedom, measured in different ways, can be a good predictor for a country's institutional framework and it certainly creates the premises for economic growth and development.

The next section of the paper addresses the issue of sustainable development which, like economic freedom, is a multifaceted concept receiving a lot of attention in academic world and in policy-making.

2.2. Sustainable development

Sustainable development has many meanings. The most commonly used and quoted definition is the one provided by the Brundtland Commission according to which sustainable development means "the ability to make development sustainable – to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987).

In the years following Brundtland Commission's report, sustainable development has become a popular term and a multifaceted concept. A wide range of definitions, numerous strategies adopted at national or international level, numerous attempts to measure it have led to a sort of "scientific fashion" when it comes to sustainable development.

Since the purpose of our paper is to analyze the relationship between economic freedom and sustainable development, we will try to review only some aspects that we consider necessary for this study.

In this direction, we adopt the views according to which sustainable development can be defined in what it specifically seeks to achieve or/and in how it is measured (Kates, Parris & Leiserowitz, 2005). Thus, achieving sustainable development means making progress in each of its three dimensions: economic growth, social development and environmental protection (OECD, 2002). This way, the idea of sustainability is "socially desirable, economically viable and ecologically sustainable" (Nath, Hens & Devuyst, 1996, p. 98).

As for the ways sustainable development can be measured, there have been developed hundreds of indicators more or less explicit, which try to assess progress towards sustainability. Table 2 presents several such initiatives.

Table 2 Several Indices of Sustainable Development

Indicator initiative	Number of indicators
Consultative Group on Sustainable Development Indicators	46
Wellbeing Index	88
Environmental Sustainability Index	68
Genuine Progress Indicator	26
Global Scenario Group	65
Boston Indicator Project	159
Sustainable Society Index	22

Source: Adapted from R.W. Kates, T.M. Parris, A.A. Leiserowitz, *What is Sustainable Development? Goals, Indicators, Values and Practice*, Environment: Science and Policy for Sustainable Development, Vol. 47, No. 3, 2005, p. 13–14; Sustainable Society Foundation.

As with the indices of economic freedom, the indicators that measure sustainable development (presented above or many others that exist), although their calculation employs different methodologies, share several similarities. Almost all of them see sustainable development as a mix of economic, social and environmental aspects, in an attempt to "detect" both its complexity and its essence.

The next section of the paper deals with the relationship between economic freedom and sustainable development by providing a brief review of theoretical and empirical studies on this issue.

2.3. From economic freedom to sustainable development

As already pointed out, economic freedom, as a measure of institutional quality, is strongly correlated with the economic performance of a country.

Also, numerous studies relate institutions with the ability of a country to achieve sustainable development in all its dimensions. For example, Veeman & Politylo (2003, p. 317) consider institutions as being "pivotal in achieving growth and improved distribution of income and wealth, in understanding environmental degradation, and in seeking improved policy". Building on Friedman's case, Anderson & Huggins (2004, p. 60) argue that "sustainable development is only possible in a legal system where property rights are well defined, enforced and transferable". On the contrary, "weak legal and judicial systems – where laws are not enforced and noncompliance and corruption are the worm – undermine respect for the

rule of law, engender environmental degradation and undermine progress towards sustainable development" (Morita & Zaelke, 2005, p. 15).

Moreover, empirical studies found significant statistical correlations between elements of economic freedom and various components of sustainable development. When analyzing the relationship between the Heritage Foundation/Wall Street Journal Index of Economic Freedom 2002 and Environmental Sustainability, Hayward concludes that "nations with freer economies have better records in improving environmental quality confirming that free markets and democracy are the best path to sustainability" (Hayward, 2002, p. 2). The Fraser Institute's Economic Freedom of the World 2003 Annual Report concludes that the more economically free a country is, the greater is the level of human development enjoyed by its citizens (Fraser Institute, 2003). Using the same economic freedom index, Norton argues that strong property rights correlate with high environmental quality (Norton, 1998a) and reduced poverty (Norton, 1998b).

All the aspects presented above confirm the fact that economic freedom, measured by various indices, brings a significant contribution to a country's sustainability.

The next section of this paper will test this hypothesis using data which describe economic freedom and sustainable development at EU-27 level.

3.Statistical analysis of the relations between economic freedom and sustainable development in EU countries in 2008

3.1. Variables and method

In this paper economic freedom is analysed using the indicators which correspond to the ten core components of the Heritage Foundation/Wall Street Journal index of Economic Freedom namely, Business Freedom, Trade Freedom, Fiscal Freedom, Government Spending, Monetary Freedom, Investment Freedom, Financial Freedom, Property Rights, Freedom from Corruption, Labour Freedom. Sustainable development is measured by the aggregate indicators of the five components of Sustainable Society Index or by the simple indicators comprised in their structure: Personal Development (Healthy Life, Sufficient Food, Sufficient to Drink, Safe sanitation, Education Opportunities), Healthy Environment (Air Quality, Water Quality, Land Quality), Well-balanced Society (Good Governance, Employment, Population Growth, Income Distribution, Public Debt), Sustainable Use of Resources (Waste Recycling, Use of Renewable Water Resources, Consumption of Renewable Energy), Sustainable World (Forest Area, Preservation of Biodiversity, Emission of Greenhouse Gases, Ecological Footprint, International Cooperation). We have also considered other two indicators to evaluate sustainable development respectively, GDP (thousand Euros) and Poverty Rate.

The statistical method used in the paper to test the relations between economic freedom and sustainable development is principal components analysis (PCA). This method justified by data set dimensions, all variables being continuous quantitative ones. Using PCA we reduce the dimensionality of data by creating principal components from the original variables. These principal components are then used to identify and describe relations between variables and also similarities and differences between statistical units, from the perspective of the analysed variables (Pintilescu, 2007).

3.2. Preliminary data analysis

The preliminary analysis aims to verify the adequacy of data for a factorial analysis. We use Barlett's test of sphericity to test the null hypothesis that the variables in the correlation matrix of the population are uncorrelated, and the indicator MSA (Measure of Sampling Adequacy) of Kaiser-Meyer-Olkin to evaluate in which degree each variable may be predicted by all the other variables.

The results obtained with SPSS, by including all initial variables in the analysis show a significant value associated to Barlett's test of sphericity, with χ^2 statistic, $Sig = 0.000$ is smaller than 0.05 (conventional value), which means the null hypothesis of variables' uncorrelation is rejected, and the considered variables are adequate for a PCA. The value of the indicator MSA of KMO (0.389), is smaller than 0.5, show that the solution obtained with PCA cannot be accepted (Richarme, 2001).

The extraction communalities, that are estimates of the variance in each variable accounted for by the components in the factor solution, may also suggest unsuitable variables. One can notice that after extracting the factors, the variances of several statistic variables have small values which show the lack of correlation between those variables with the factorial axes and, consequently, we will eliminate them from the analysis.

3.3. Results and discussions

The analysis proceeds by keeping only the significant variables. The results show a significant value both for Barlett's test of sphericity, with χ^2 statistic ($Sig = 0.000$), and for the indicator MSA of KMO (0.769), that is the solution obtained with PCA can be accepted.

Table 3 Values of KMO test and χ^2 statistic

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.769
Bartlett's Test of Sphericity	Approx. Chi-Square	319.801
	df	78
	Sig.	.000

Source: Output obtained in SPSS with PCA

After extracting the factors all the estimated variances of variables kept in the analysis have values of variances estimations greater than 0.5 and should be kept in the analysis as they all fit well with the factor solution.

Factorial solution indicates variables' grouping in 2 principal components which have an explicative power of approximately 70% of the total variance (table 4). We will analyze below the disparities of economic freedom and sustainable development in EU countries according to the positions of variables and of cases in the factorial plane determined by this first two components.

Table 4 Variables coordinates in the two first factorial axes

Component Matrix[a]

	Component	
	1	2
economic_freedom	.745	.520
Business_Freedom	.791	.082
Government Spending	-.507	.563
Freedom From Corruption	.950	.026
Property Rights	.868	.137
Education Opportunities	.662	-.282
Good Governance	.952	.091
Employment	.341	.683
Population Growth	-.595	.067
Public Debt	-.151	.831
Personal Development	.804	-.480
Sustainable World	-.768	-.076
GDP	.797	.061

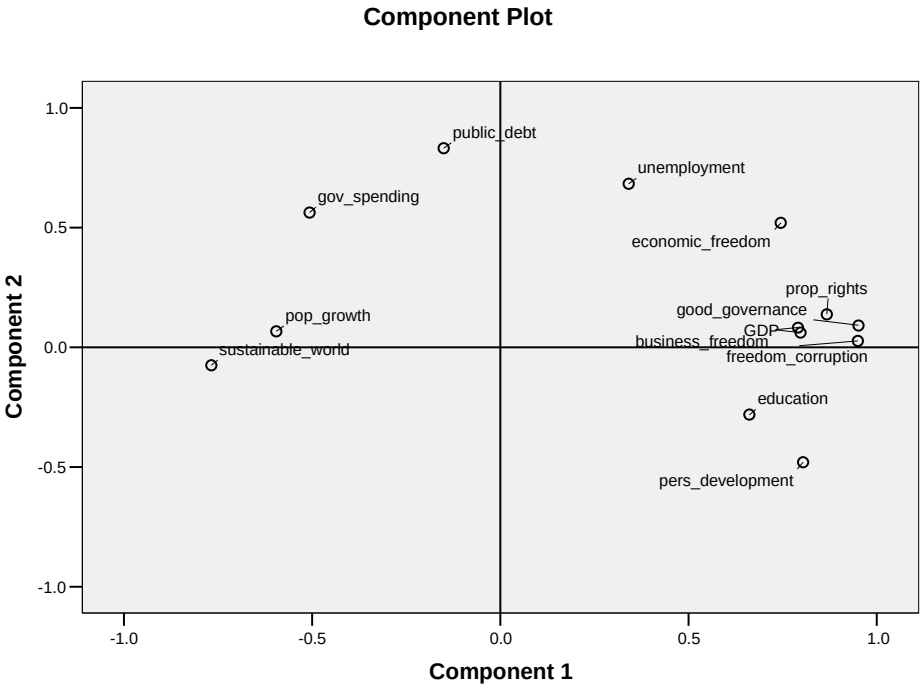
Extraction Method: Principal Component Analysis.

a. 2 components extracted.

The results obtained for the correlation coefficients between the variables and the factorial axes (table 4) and the graphical representation of variables in the two first factorial axes system (figure 1) point out that: the components of economic freedom namely, Property Rights, Business Freedom, Freedom from Corruption, positively correlated with several components of sustainable development such as Education Opportunities, Good Governance, Personal Development and GDP are situated in the positive quadrant of the first axis. The components of sustainable development, Population Growth and Sustainable World lie in the negative quadrant of the first factorial axis, negatively correlated with the variables located in the positive quadrant of the axis.

The second factorial axis is explained by Public Debt and Unemployment, components of sustainable development, and Government Spending, a component of economic freedom, all these variables being located in the positive quadrant of the axis.

Figure 1 Variables' positions on the first two factorial axes



Source: Output obtained in SPSS with PCA

Property Rights is an important explanatory variable for Personal Development, Good Governance, Education Opportunities, GDP with which it is positively correlated. As developed by Heritage Foundation, the indicator Property rights assesses the ability of individuals to accumulate private property, secured by clear laws that are fully enforced by the state. The private property is important in itself because it is an extent of individual personality and freedom. Consequently, well-specified and enforced property rights create the opportunities for development in all its dimensions, enhancing the well-being of population.

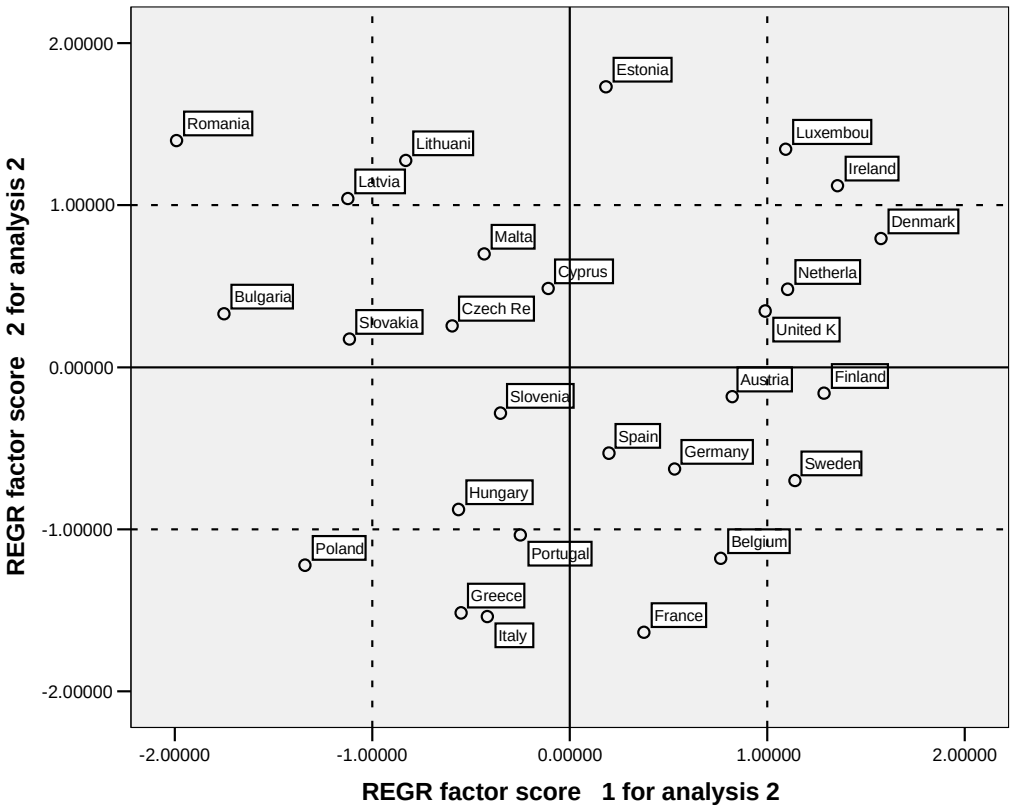
Also, higher Business Freedom means better scores for Personal Development, Good Governance, Education Opportunities, GDP. Business freedom measures how free entrepreneurs are to start businesses, how easy it is to obtain licenses, and the ease of closing a business. In other words, business freedom stands for entrepreneurship development by permitting the exploitation of resources and business opportunities and channeling human efforts towards productive activities which, furthermore, are at the core of the socio-economic performance of a society.

The same results are obtained when analysing Freedom from Corruption. Corruption is an institutional weakness, a major impediment for private sector proper development.

All three components of economic freedom discussed above are negatively correlated with Population Growth. The results are in line with Norton (2002) conclusions according to which market-enhancing economic institutions lower fertility rates and, thus, limit the population growth. Also, well-specified and enforced property rights, by enhancing economic growth, reduce fertility rates. The problem of population leads us back to history when hundreds of years ago, Thomas Malthus argued that population growth would lead to a lack of food supplies and limit the humanity standard of living. The same Malthusian pessimism is shared by more recent authors. For example, Grant (1996, p. 3) states that “Population growth is leading us to a world that we do not want. It is the most fundamental of the engines of change, and the most ignored. The poor nations face sheer hunger and the destruction of their resources. The “emerging nations,” most of them in Asia, are in varying degrees escaping those horrors to face the problems of industrialization. The old “rich” countries confront joblessness, failing social structures, growing disparities between the rich and poor, ethnic conflict, the loss of a shared vision, environmental degradation and the huge reality that they are changing the climate we all live in. Bringing population growth under control will not necessarily solve those problems, but it is the condition precedent—a necessary condition for their solution” (quoted in Norton, 2002, p.2).

Overlapping of graphical representation of countries on the factorial map (figure 2) and variables map obtained with PCA (figure 1) permits us to identify some characteristics of economic freedom and sustainable development in EU countries.

Figure 2 Countries' positions on the first two factorial axes



Source: Output obtained in SPSS

Thus, it can be noticed that countries that were integrated in the latest two waves lay on the left side of the plane, respectively Romania, Bulgaria, Latvia, Slovakia and Poland, being characterized through low values of the variables which lie in the positive quadrant of the first factorial axis (Freedom from Corruption, Business Freedom, Property Rights, Education Opportunities, Good Governance, GDP) and high values for the variables in the negative quadrant of this axis (Government Spending and Sustainable World).

Situated in the opposing part of this axis, Finland, Sweden, Netherlands, United Kingdom, Denmark, Ireland, Luxembourg register the highest values for the variables in the positive quadrant of the first axis, which represent positive aspects for socio-economic and political situation of a country, and small values for the variables located in the negative quadrant (which show negative aspects for a country's situation).

Countries location compared to the second factorial axis shows a positive situation for Belgium, France, Italy, Greece which are characterized by low unemployment, low public debt and low government spending. On the contrary, Estonia and Lithuania's position toward these variables indicates a less advantageous situation.

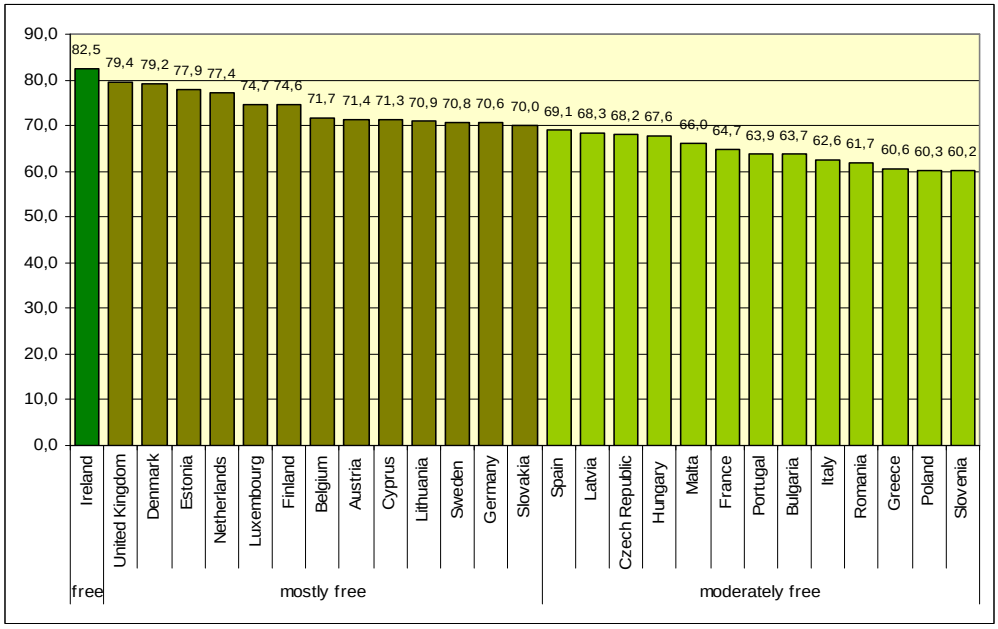
Thus, it can be noticed that countries the countries that formed EU15 (Belgium, Germany, France, Italy, Luxembourg, Netherlands, Denmark, Ireland, United Kingdom, Greece, Spain, Portugal, Austria, Finland, Sweden), integrated in 1951 are located in the scatterplot defined by the first two factorial axes in the quadrants which show positive aspects of the analysed variables.

On the contrary, the countries that were integrated in the EU in the latest two waves namely in 2004 (Cyprus, Estonia, Latvia, Lithuania, Malta, Poland, Czech Republic, Slovakia, Slovenia, Hungary) and 2007 (Romania, Bulgaria) are located in those quadrants of the axes which present negative aspects of the analysed variables.

Moreover, from the point of view of the European distribution of economic freedom (figure 3), one can notice that the countries which are included in the upper categories ("free" or "mostly free") such as Ireland, United Kingdom, Denmark, Netherlands, Luxembourg, Belgium, Sweden etc. are the ones which score better at all socio-economic variables. On the contrary, the countries included in "moderately free" category have a less advantageous socio-economic situation (Spain, Czech Republic, Hungary, Italy,

Bulgaria, Romania etc.). The positive relationship between economic freedom and prosperity is once again confirmed.

Figure 3 The 2008 Index of economic freedom across EU countries



Source: Heritage Foundation/Wall Street, Index of Economic Freedom, 2008.

4.Conclusions

Starting from the fact that literature maintains a relationship between the degree of a country's economic freedom and its ability to achieve sustainability, this paper empirically investigated the correlations between economic freedom, measured by the Heritage Foundation/Wall Street Journal Index of Economic Freedom 2008 and its components, and Sustainable Society Index 2008 and its components, released by Sustainable Society Foundation for the EU-27 countries.

The empirical results are consistent with the theory that economic freedom, mainly Property rights, Business Freedom and Freedom from Corruption are significantly correlated with components of sustainable development. There is a positive correlation between Business Freedom and Freedom from Corruption with Personal Development, Good Governance, Education Opportunities, and GDP and a negative one between the three components of economic freedom and Population Growth and Sustainable World.

The findings of this study also indicate that those countries with a higher degree of economic freedom have a better socio-economic situation. Also, the countries that were integrated in EU in the latest two waves, respectively Romania, Bulgaria, Latvia, Slovakia and Poland, are characterized through low values of Freedom from Corruption, Business Freedom, Property Rights, Education Opportunities, Good Governance, GDP and high values for Government Spending and Sustainable World.

Based on the existing literature and on the results of our study and if we were to accept the fact that "sustainable development can be defined as a call to maximize human welfare over time" (Anderson & Huggins, 2004, p. 59), then free market in all its dimensions seems the best path to sustainability.

This last conclusion may have implications at the level of decision-making since it suggests that efforts should be directed to the establishment of the rule of law. This means that the world needs "simple, transparent, non-discriminatory, negative and general rules of conduct, applying equally to all" (Sally, 2002, p.16). Achieving sustainable development does not necessary lie in strategies or standards. It mostly consists in developing and protecting those institutions which create incentives for human cooperation and which have proven to be a sure path to welfare and progress.

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STATE AID AND STRUCTURAL FUNDS IN THE EUROPEAN UNION. CONNECTION WITH MEMBER'S TRADE FLOWS

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Abstract[1]

This article presents an analysis of the connection between state aid, structural funding and trade flows in the European Union during three years 2006-2008. The purpose of this research was to determine the link between the members' trade flows and the protection they received whether this came from their governments or from the EU itself.

Our main conclusion is that the higher the trade dynamics, the more intervention is required. Free trade is not entirely the solution for the countries when they deal with extreme conditions such as financial and economic crisis or high competitive environment.

Key words: state aid, competition, trade flows, structural funds

JEL classification: F14, F43

1. Introduction

Since the beginning of the current financial crisis, European Commission faces new challenges regarding State Aid control. Most of the member states have announced unprecedented support measures for the financial sector, ranging from increased deposit guarantees, interbank credit guarantees, direct capital injections and partial nationalization through to individual rescue packages. The large number of notifications continues to provide a significant challenge for DG Competition.

In 2009 the European Commission has been very proactive regarding state aid and it seemed that in the context of the economic crisis a more flexible framework has been set up for examining state aids, in particular in the banking and finance sector. The economic crisis revealed the limits of the state aid system and highlighted the crucial need for decision to be adopted within extremely short deadlines. At the same time, the economic crisis also proved that such goals could be achieved. (Morgan and Sanfourche, 2010) Also, we should take into consideration the fact that in December 2009, The Lisbon Treaty entered into force. The Lisbon Treaty has not modified the key substantive provisions governing EU competition law. It has only changed the numbering of these Articles: former Articles 81 (prohibition of cartels), 82 (abuse of dominance), 86 (public bodies and services of general economic interest), 87 and 88 (State Aids) are now, respectively, Articles 101, 102, 106, 107 and 108 of the new Treaty. These provisions have actually remained unchanged since the signing of the original Treaty of Rome in 1957. According to Lisbon Treaty, Article 107 (ex Article 87 EC Treaty), any aid granted by a member state or through state resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods shall, in so far as it affects trade between member states, are incompatible with the internal market (Lemaire and Naudin, 2010).

Garcia and Neven (2005) analyzed how state aids affects and distort competition and trade within and across jurisdictions and their main conclusions were that the magnitude of the distortion depends on the type of state intervention and that the impact of selective state aid on market prices and competitors depend mostly on the particular characteristics of the market. Taking into consideration the characteristic of the European market, as an integrated market and the types of state aid intervention used during the last decade, we might find some connections between those and trade dynamics, especially in the period of the recent economic end financial crisis.

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Ehlerman and Goyette (2006) focused on the connection between the EU State Aid control and the WTO discipline on subsidies. They examined a number of scenarios of specific types of subsidies that are or could be granted by the EU and the issues that they raise under WTO law. The authors consider that the internal subsidies regime of the EU is more constraining than the one of the WTO. The authors consider appropriate, in this context, to examine what external constraints or opportunities the EU needs to take into consideration as part of the State aid reform exercise and therefore they explore the limits imposed on

EU State aid rules by the WTO disciplines on subsidies. One conclusion they reach is that the EU should fight more actively than in the past against subsidies granted by third countries in using the instruments which international agreements to which it is a party put at its disposal.

Philip Lowe, the former Director General DG Competition (2009), pointed out that for the European Union, relaxing or suspending the state aid rules for the duration of the financial and economic crisis should never be an option. The effect would be that some companies which have enjoyed state subsidies would also get a competitive advantage over their competitors. The most important thing is to realize that public intervention has to be decided at national level but in the same time it needs to be implemented within a coordinated framework and on the basis of common principles to the whole EU.

On December 17, 2008 the Commission adopted a Temporary State Aid Framework which provides additional possibilities for member state to grant state aid until the end of 2010. Under this Temporary Framework member states may give 500,000 EUR per undertaking to cover investments and/or working capital over a period of two years, offer state guarantees for loans at a reduced premium, offer aid in the form of subsidized interest rate applicable to all types of loans, offer subsidized loans for the production of green product.

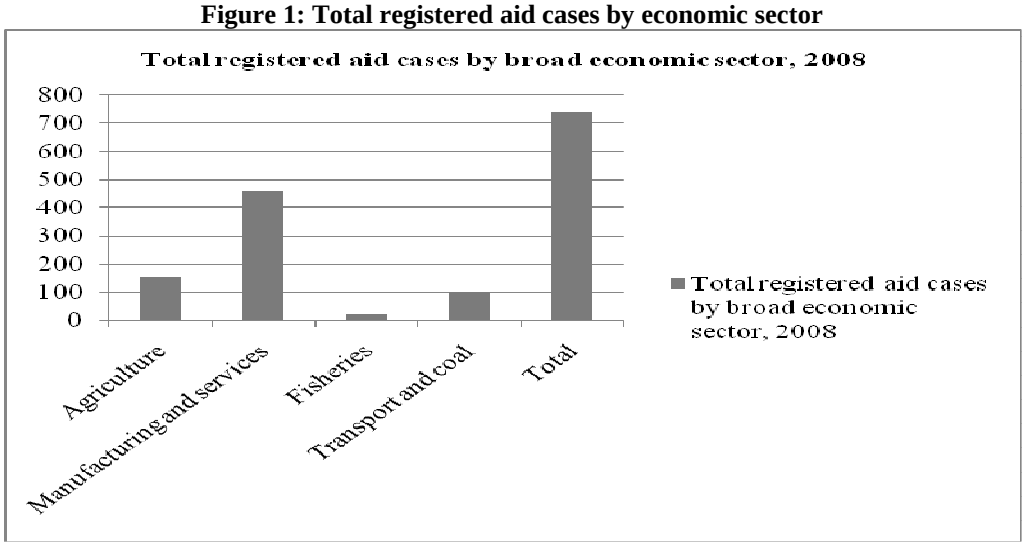
Bruce Lyons (2009) suggested that the most familiar problem to the European debates on state aid is that subsidies create international distortion to competition because inefficient firms receive subsidies and then take market share from more efficient foreign suppliers. In that case not only competition is affected, but also the trade between the member states, and this fact we intend to focus on this article. Also, comparing the type of state intervention within the EU, it may offer some guidelines about the coordination of the intervention during the financial and economic crisis and the correlation of those types of interventions with the intra-European trade.

2. Key facts about state aid in the EU

In spring 2009, politicians across the globe were thinking about subsidizing specific firms, particularly in the car industry. The U.S. administration offered major subsidies to Chrysler and General Motor, but in the end it seemed not enough to stop this companies filing for bankruptcy protection (Lyons, 2009). In France, the government offered 6 billion EUR to Renault and Peugeot-Citroen, but in that case with two conditions: no factories located in France would be closed and reassurance regarding jobs in France. Italy and Spain also produced major car subsidies plans. After the European Commission intervention, those kinds of subsidies were switched to apparently more neutral car scheme support to stimulate demand.

But, not only had the car industry received government support during the economic and financial crisis. Looking at the total registered aid cases in the EU by economic sector in 2008 (figure1), we can point out that after the manufacturing and services sector, which received one of the biggest supports, the agriculture is on the second place. The countries that registered the highest aid level for agriculture were in 2008, Bulgaria, Finland, Romania, Latvia and Hungary. The other countries focused their support for industry and services. In absolute terms, the United Kingdom showed the highest aid level (72.5 billion EUR), followed by Germany (66.8 billion EUR), Ireland (37.5 billion EUR), France (26.8 billion EUR) and Belgium (19.4 billion EUR). In relative terms, state aid amounted to 2.2% of EU 27 GDP in 2008, with significant disparities between member states. The share of total aid to GDP amounts to less than 1% of GDP in ten countries and exceeds the average in eight countries, for the latter group, the sharp increase on state aid was due to the crisis measures.

Figure 1: Total registered aid cases by economic sector

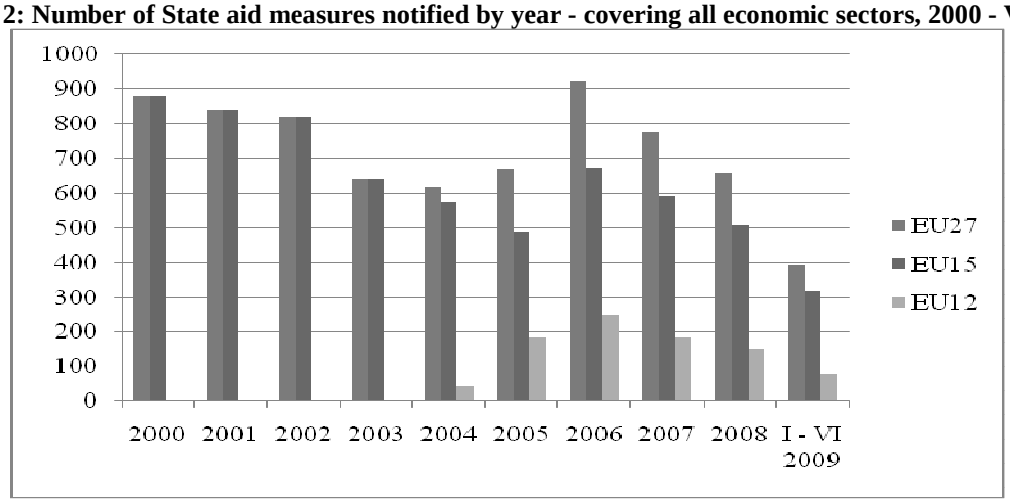


Source: Eurostat data processed by the authors

As the European Commission reported, crisis measure implemented and reported by member states in 2008 amounted approximately to 212.2 billion EUR, which means around 1.7% of EU 27 GDP. The big increase of Sate aid to industry and services at EU27 level can be attributed to the thirteen member states which granted aid to financial institution in response to the crisis. Many of the EU 12 countries didn't support their banking sector and their aids levels remained unaffected by crisis measures.

Looking in the past and comparing the number of the state aid measures notified by year covering all economic sectors, from 2000 to 2008, we see that in 2008 the number of state aid measures decreased on EU 27 level, comparing with 2007 (Figure 2). Although the number of state aid measures decreased, in terms of the amount aid level, crisis- related aid contributed to a five times higher level of total state aid to industry and services in 2008 compared to 2007.

Figure 2: Number of State aid measures notified by year - covering all economic sectors, 2000 - VI 2009



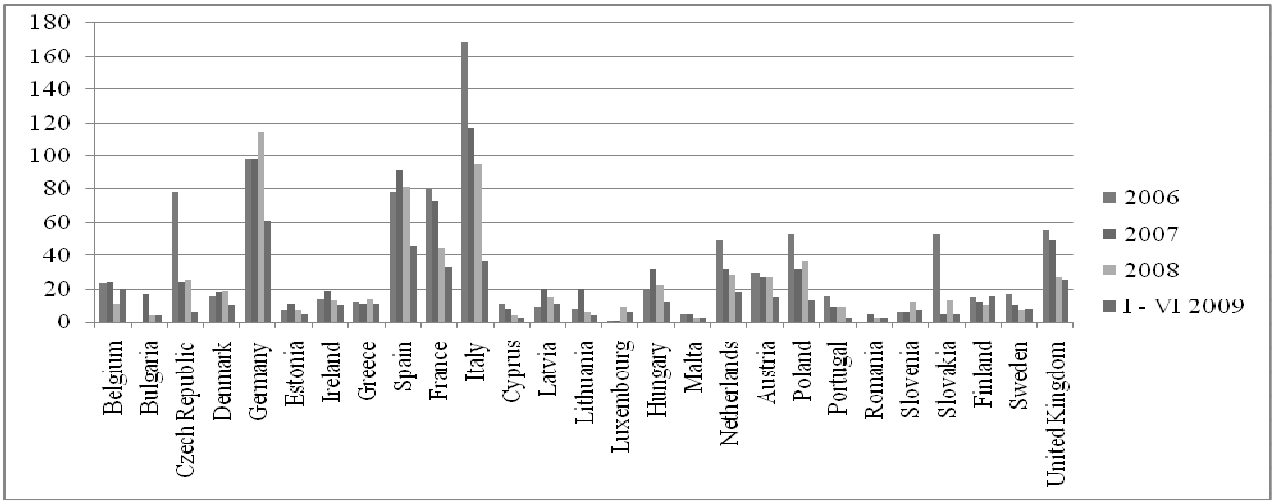
Source: Eurostat data processed by the authors

It has to be mentioned that crisis measures are represented by aid granted under exceptional circumstances and can be attributed as aid especially to the financial sector. Those large amounts injections into the financial sector were the big new challenge for the EU competition rules. It seemed that it was crucial for the European Commission to provide a clear and predictable framework for rapid approval of Member States rescue measures for entities acting in the financial sector. In order to assist Member States in taking urgent and effective measures to preserve stability and to provide legal certainty, between October 2008 and July 2009 the Commission adopted four Communications indicating how to apply the State aid rules to government measures to support the financial sector in the context of the economic crisis. In the same time the European Commission position regarding State aid was very clear, relaxing or suspending the

State aid rules for the duration of the financial and economic crisis has never been accepted as an option. As Philip Lowe, the former Director General DG Competition, stated: “subsidy race between Member States would not only be financially unsustainable, it would also delay the necessary restructuring of the economy and thus deepen the recession and its long-term effects”.

Looking at the figure 3, Member States intervention seems to support the subsidy race, Phillip Lowe was so worried about. On the first place is Germany with 114 State aid measures during 2008, followed by Italy (95), Spain (81), France (45), Poland (37), Netherlands (28) and the UK (27). Compared to 2007, in 2008, the number of State aid measures decreased with some exception in case of Germany, Greece, Poland, Slovenia and Slovakia. For the latter countries a wider range of measures were needed to stabilize the economic environment.

Figure 3: Number of State aid measures by country notified by year - covering all economic sectors



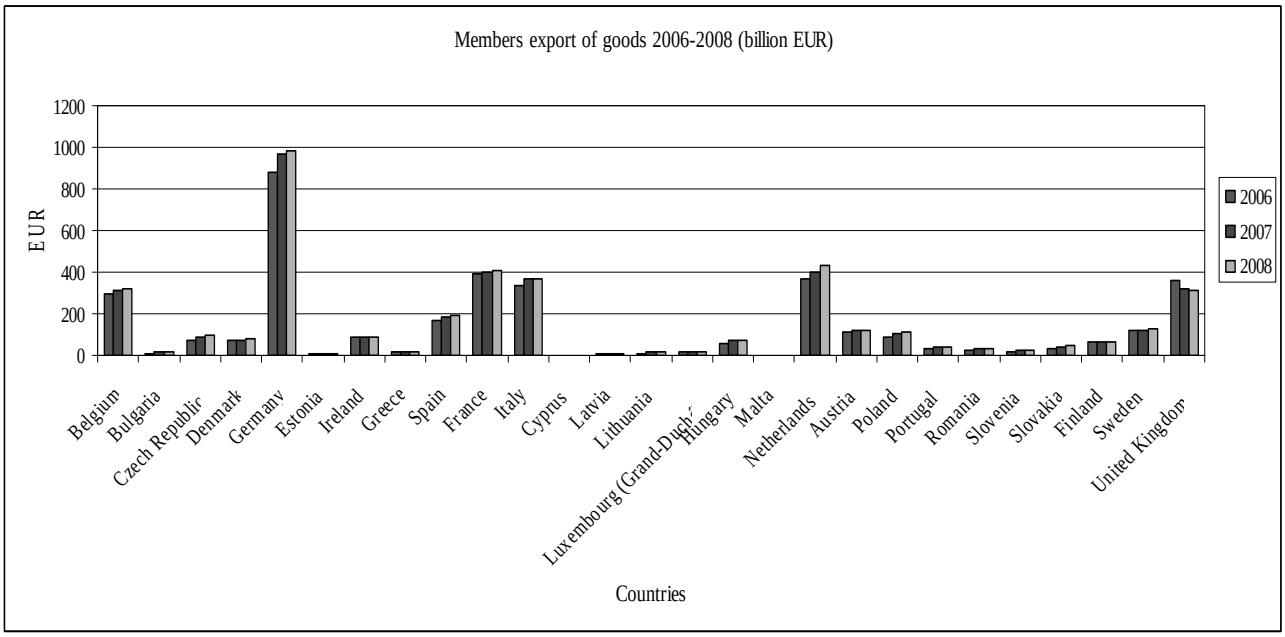
Source: Eurostat data processed by the authors

3. State aid champions and their trade performance

Looking at the above data we can now focus our attention to the main countries which received the most important aid from their governments. As mentioned above the “champions” are Germany, Italy, Spain, France, Poland, Netherlands and the UK. An important question is if there is any connection between the state aid and these countries trade performance.

We first focused our attention on the exports of these seven countries on a 3 years timeline, between 2006 and 2008. Almost all countries registered export growth during this period. In Germany, for instance, the export of goods rose from 882.53 billion EUR in 2006 to 964.04 billion EUR in 2007 and 983.26 billion EUR in 2008. In Spain there was an increase from 170.21 billion EUR to 191.39 billion EUR. In France the export of goods reached 408.78 billion EUR in 2008 while in 2006 it was 394.93 billion EUR. The situation was similar in Netherlands (422.72 billion EUR in 2008 compared to 369.25 billion EUR in 2006), Italy (there was an increase from 332.01 billion EUR in 2006 to 365.81 billion EUR in 2008) and Poland (from 88.23 billion EUR to 115.89 billion EUR). In the UK the situation was different as a slight decrease of the exports in 2008 compared to 2007 and 2006 (from 357.32 billion EUR in 2006 to 312.53 billion EUR in 2008) could be noticed. From our calculations, the rate of inflation of the euro has a minor influence on the trade data and therefore it does not have any impact on the results in the analyzed period of time. The below figure reveals an interesting fact: all the above mentioned countries are at the same time some of the most important exporters in the EU. As the figure shows, they rank between the first ten European exporters.

Figure 4: Total exports of goods (1000 millions EUR) by member states

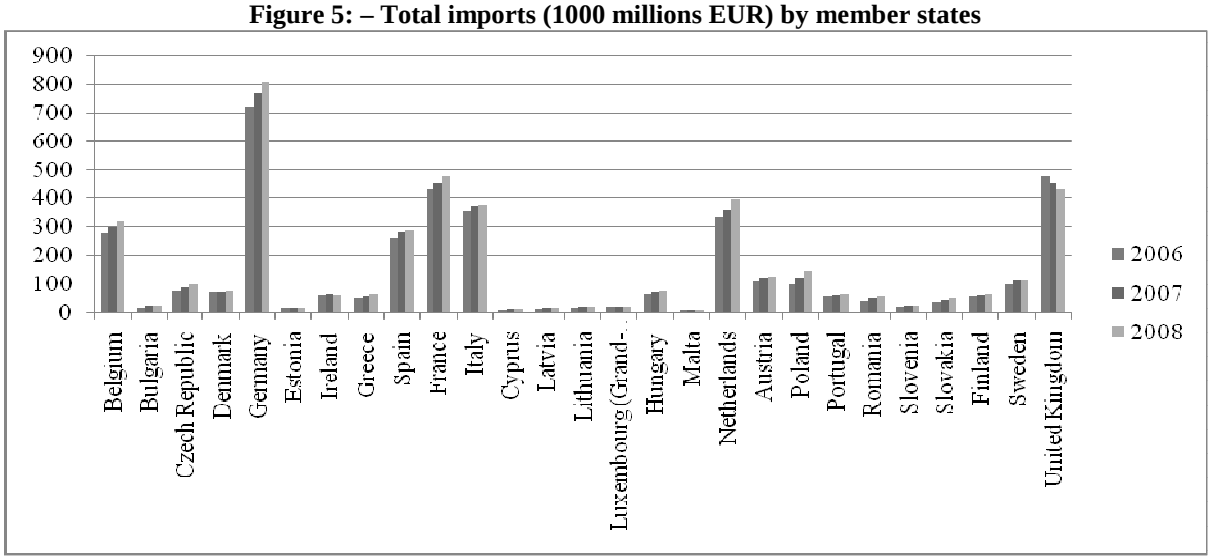


Source: Eurostat data processed by the authors

Secondly we analyzed the import of goods in these countries. Germany. Spain, Netherlands, Italy, France and Poland all registered growth of their imports. Once again the UK shows a different trend as its imports decreased in this period, from 478.99 billion EUR in 2006 to 430.36 billion EUR in 2008. An explanation could be the fact that the effects of the financial crises were felt stronger in this country during the period we studied in the article.

As the below figure shows, the situation remains more or less unchanged as the above mentioned countries still occupy their place in the top ten, this time as importers not as exporters. Germany, as we can easily notice from the analysis presented so far, is the first state aid receiver, the main importer and also the main exporter in the EU. Although the other six countries do not keep their positions they can all be found among the first ten countries no matter if we discuss state aid or trade.

Figure 5: – Total imports (1000 millions EUR) by member states



Source: Eurostat data processed by the authors

Last but not least we analyzed the balance of trade, a helpful indicator in drawing conclusions regarding the economic situation of a country. Germany is again the leader as its trade balance remained positive during all this period. In 2007 the difference between exports and imports was greater than in 2006 and 2008 (194.26 billion EUR in respect to 160.42 billion in 2006 and 177.53 billion EUR in 2008). During the analyzed period Netherlands also showed a positive balance (38.74 billion EUR in 2008, smaller than in 2007 when it reached 42.42 billion EUR in 2007). On the other hand Spain, France, Poland, Italy and the UK

all registered a negative balance. Both Germany and UK registered the most significant difference between exports and imports in the EU, 2007, the year when the crises officially began, being the year when positive (for Germany) and negative (for the UK) peaks could be observed.

4. Structural funds as alternative to State aid

The European Commission encourages actions to strengthen the competitiveness of the regional economy, and recognizes the important part that financial assistance, advice and other help to industry can play in this respect. However, such aid if not controlled, may distort competition between companies and pose a threat to the operation of the internal market. Therefore, European Community (EC) rules on State Aids apply limits to the level of support the public sector can offer to the industry.

State aid rules only cover measures involving a transfer of "State" (public) resources including European, national, regional and local funds. State Aid issues are likely to arise where an aid constitutes an economic advantage that the business environment would not receive in normal conditions, thus affecting the balance between certain firms and their competitors.

Although Structural Funds are financed from the EU budget, they are still considered as national resources as the Government has a word to say in how the funding is spent. Council Regulation (EC) 1083/2006 stipulates that projects must be fully compliant with State Aid rules. It is therefore important that all projects are initially screened and regularly reviewed to ensure they comply with State Aid rules.

Effect on competition and trade

The emphasis is very much on the Commission's assessment that there may be a threat to competition or trade - even where there may appear at first sight to be little or no impact on trade with other countries. The critical factor is that there is a potential to distort competition, not that the effects of any actual distortion appear to be limited to a particular Member State. This includes economic activity carried out by a not for profit organization unless market failure can be proved, and continues to be the case for the life of the project. State Aid issues are unlikely to arise, if the assets or activity being supported remain in the public sector, or if the program is a general measure throughout the UK, i.e. available to all firms in all sectors of the economy, e.g. tax relief or allowances.

Structural Funds as a Notified Aid

The use of Structural funds to support investment by firms in the Assisted Areas does not need to be notified to the Commission provided the relevant regional aid ceilings and all other state aid rules are observed. Where a public sector body uses structural funds to in turn support a private firm/organization, or where the funds go directly to a private firm/organization, the State Aid rules must apply. Similarly, should a project wish to take advantage of other frameworks i.e. research and development aid, further notification will be required. Aid not approved will need to be notified in the normal way and await approval, or comply with a block exemption regulation.

Once a Structural Fund program has been approved, the Managing Authority is responsible for ensuring that all operations comply with the State aid rules. This is a requirement of the Structural Funds regulation. Many uses of the Structural Funds do not come within the scope of the State aid rules e.g. support for a road building project which has been tendered. Where individual application of the Funds does involve aid, the Managing Authority must ensure that the contribution of the Funds to any individual operation always complies with the State aid ceilings.

Structural Funds Aid Limits

Structural Funds have their own maximum intervention limits, which are not necessarily the same as the relevant State Aid limit. In the case of some assisted areas, the state aid ceiling may be greater than the maximum Structural Funds intervention rate. In those cases, a project unable to raise private funding for the purpose, may seek to find another public body which would assist the scheme up to the maximum State Aid ceiling. However, Structural Funds must always be the funds of last resort. Therefore the actual Structural Funds intervention rate may be less if other funding is available.

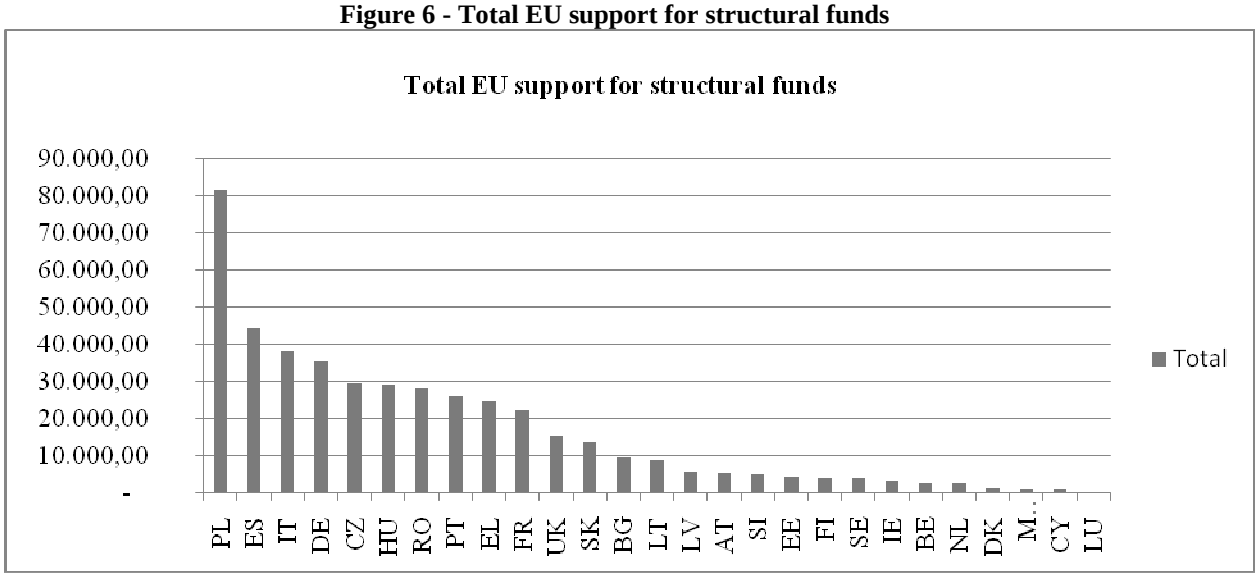
Contributions of Structural Funds

The Structural Funds Regulation sets down generally applicable ceilings on the contributions of Funds as a proportion of eligible project costs. Where the Funds are being used to invest in firms, they must also comply with State aid ceilings, which may be different. The State aid ceilings take precedence where the Funds are being used to support the investment in firms.

The State aid ceilings apply to the total of national aid (including local or regional aid) and the Community funds. Funding which is not aid from private sources, should not be included. All national aid must be approved aid before it can be implemented.

At present, there is separate reporting for the national aid offered by governments and for the structural funds received by member states. When Structural Funds are used as aid, they need to be also included in the annual State aid returns.

Figure 6 - Total EU support for structural funds



Source: Eurostat data processed by the authors

As we can see in Figure 6, the same Member States which benefit from the most numerous state aid measures, are the same Member States to take advantage from the highest EU support offered as structural funds. On the first place is Poland (81,417.3mil. EUR), followed by Spain (44,402.0mil.EUR), Italy (38,221.9mil.EUR) and Germany (35,447.5mil.EUR). France (22,119.4mil.EUR) and the UK (15,363.1mil.EUR) rank ten and eleven among the structural funds absorbers. Netherland makes an exception this time, however, our conclusion is that there is a relevant link between the state aid and the structural funds received and the members' trade flow performances.

5. Conclusions

Our study of the competition, trade and structural funds dynamics during this economic and financial crisis helped us draw a few interesting conclusions. First of all, although the number of state aid measures decreased, in terms of the amount aid level, crisis- related aid contributed to a five times higher level of total state aid to industry and services in 2008 compared to 2007. Germany is the first state aid receiver, the main importer, the main exporter in the EU and also one of the top five structural funds absorber. Although the other six countries do not keep their positions they can all be found among the first ten/eleven (if we take into consideration the structural funds) countries no matter if we discuss state aid, structural funding or trade (small exception in the case of Netherlands regarding the structural funds received).

Our main conclusion is that the higher the trade dynamics, the more protection is required. Free trade is not entirely the solution when countries deal with extreme conditions such as a financial and economic crisis or high competitive environment. The more a country is integrated in the multilateral trading system the more intervention is required in order to help it maintain its position even if this sometimes leads to growth in the countries development discrepancies.

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Appendix:

EU support for Structural Funds

EUR million	EU support for cohesion 2007-2013	Rural development 2007-2013	Fisheries 2007-2013	Total
PL	67.284,2	13.398,93	734,09	81.417,3
ES	35.217,0	8.053,08	1.131,89	44.402,0
IT	28.811,8	8.985,78	424,34	38.221,9
DE	26.339,8	8.951,90	155,87	35.447,5
CZ	26.691,7	2.857,51	27,11	29.576,3
HU	25.307,4	3.860,09	34,85	29.202,3
RO	19.667,6	8.124,20	230,71	28.022,6
PT	21.510,6	4.166,82	246,49	25.923,9
EL	20.419,8	3.906,23	207,83	24.533,8
FR	14.318,9	7.584,50	216,05	22.119,4
UK	10.613,2	4.612,12	137,83	15.363,1
SK	11.587,9	1.996,91	13,69	13.598,5
BG	6.852,9	2.642,25	80,01	9.575,1
LT	6.885,0	1.765,79	54,71	8.705,5
LV	4.620,4	1.054,37	125,02	5.799,8
AT	1.461,1	4.025,58	5,26	5.492,0
SI	4.205,3	915,99	21,64	5.142,9
EE	3.455,8	723,74	84,57	4.264,1
FI	1.716,2	2.155,02	39,45	3.910,7
SE	1.891,3	1.926,06	54,66	3.872,0
IE	901,4	2.494,54	42,27	3.438,2
BE	2.257,9	487,48	26,26	2.771,6
NL	1.907,0	593,20	48,58	2.548,8
DK	613,0	577,92	133,68	1.324,6
MT	855,4	77,65	8,37	941,4
CY	640,0	164,56	19,72	824,2
LU	65,3	94,96	-	160,2

Source: Eurostat data processed by the authors

Number of State aid measures notified by year - covering all economic sectors, 2000 - VI 2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	I - VI 2009
EU27	882	840	821	639	618	671	922	777	659	395
EU15	882	840	821	639	574	487	672	592	508	319
EU12					44	184	250	185	151	76
Belgium	35	27	29	30	23	14	23	24	11	20
Bulgaria								17	4	4
Czech Republic					12	42	78	24	25	6
Denmark	29	27	14	18	22	18	16	18	19	10
Germany	144	156	163	114	78	64	98	98	114	61
Estonia					1	11	7	11	7	5
Ireland	47	24	9	9	15	10	14	19	13	10
Greece	21	16	19	12	10	11	12	11	14	11
Spain	162	124	123	54	53	59	78	92	81	46
France	99	93	108	75	58	39	80	73	45	33
Italy	152	155	140	158	184	123	168	117	95	37
Cyprus					1	5	11	8	4	3
Latvia					6	15	9	20	15	11
Lithuania					4	14	8	20	6	4
Luxembourg	2	3	3	1	7	0	1	1	9	6
Hungary					3	6	20	32	22	12
Malta					0	0	5	5	3	3
Netherlands	51	62	72	55	33	45	49	32	28	18
Austria	40	37	22	11	10	18	30	27	27	15
Poland	0	0	0	0	10	57	53	32	37	13
Portugal	22	19	21	12	13	11	16	9	9	3
Romania								5	3	3
Slovenia					5	4	6	6	12	7
Slovakia					2	30	53	5	13	5
Finland	27	15	14	12	16	5	15	12	10	16
Sweden	8	9	11	10	11	15	17	10	7	8
United Kingdom	43	73	73	68	41	55	55	49	27	25

Source: Eurostat data processed by the authors

Ranking of exports and structural funds 2008

Countries	Ranking - Exports 2008	Ranking- Total EU support for structural funds 2008	Countries
DE	983,26	10,72	PL
NL	433,72	7,19	ES
FR	408,78	5,30	IT
IT	365,81	4,91	DE
BE	320,81	4,13	CZ
UK	312,53	3,77	HU
ES	191,39	3,60	PT
SE	124,65	3,52	EL
AT	123,26	3,08	RO
PL	115,89	2,95	FR
CZ	99,81	2,27	UK
IE	85,48	1,70	SK
DK	79,25	1,09	LT
HU	73,77	1,08	BG
FI	65,58	0,80	AT
SK	48,25	0,72	LV
PT	37,95	0,71	SI
RO	33,58	0,58	FI
SI	23,2	0,54	SE
LU	17,21	0,54	IE
EL	17,2	0,52	EE
LT	16,08	0,42	BE
BG	15,2	0,34	NL
EE	8,47	0,17	DK
LV	6,9	0,17	CY
MT	1,9	0,13	MT
CY	1,11	0,02	LU

Source: Eurostat data processed by the authors

THE PRESENT ECONOMIC CRISIS: A GLOBAL AND WORLD CRISIS

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Abstract: *The present economic crisis is a moment of extreme economic instability beyond the limits which several years ago we considered impossible. Its causes can be found both at micro and macroeconomic level. Being a complex phenomenon, it has generated numerous debates regarding the way it appeared (the decrease in houses' prices, the fall of credit market, the excessive liquidity created by the central banks, excessive saving, the inflationary policy from the beginning of 2000s etc). The first economies affected by the crisis were the developed ones, the ones with a consistent economic growth between 2003-2007. The emergent and the developing economies had different path, the economies in Asia were less affected compared with the ones in Central and Eastern Europe. Step by step, the crisis has become global, affecting all economic sectors and it has spread worldwide, affecting all national economies.*

Key words: economic crisis, credit market, monetary expansion, world economy.

JEL classification: E32, E52, F00, G01.

1. Introduction

The economic structures of national economies and world economy have been challenged for the last two years by the present economic crisis. The increasing liberalization of international trade has led to an increase in their fluidity between states. The capital markets have become more and more vulnerable since they have more and more evolved towards openness and interconnectivity. The increasing volatility of the world markets has favoured the rapid transmission of risks, especially in the financial markets and the appearance of the world economic crisis we are facing nowadays, one without antecedent in post-War economic history.

The developed economies, especially USA, in order to avoid recession, have promoted expansionist policies. Between 2001-2003, the Federal Reserve System reduced interest rate of 2.7 times, thus facilitating crediting. This was accompanied by the ease of crediting conditions, especially when it came to secured mortgage loan approval. The access to easy credit led to a change in consumer's behaviour. Numerous families gave up paying rents and bought the houses they lived in, leading, furthermore, to the increase in houses' prices, which doubled in the last decade (Montuschi, 2009, p.5). A true "real estate bubble" appeared and it became more dangerous once its dimensions increased. The bubble and its effect namely, the increase in houses' prices, was transmitted very fast from USA to the rest of the world, from one continent to another.

Looking back, such a crisis seemed inevitable, given the earlier economic developments. Milton Friedman had denunciated in this sense that government interventions have become increasingly intense, using taxpayers' money to save businesses and banks, thus preparing the ground for future crises. While previous crises were concentrated in certain geographical areas and groups of countries, not embracing the world economy as a whole, the last is much wider, affecting the entire global economy.

2. The roots of the crisis

Started in the U.S., the country with the greatest economic potential in the world, the current crisis consequences are felt throughout the global economy, which is explainable, at least in part, by the economic globalization. Currently, due to the processes of liberalization and deepening of the global division of labor, national economies have become increasingly interdependent. Increased international trade and international financial flows, increasing importance of multinational companies and accentuated international transfer of technology, especially information and communication technologies in an increasingly knowledge based society, resulted in unprecedented intensification of economic interdependences between countries and their expand to scale planet. A direct consequence of this process on the countries was to increase the global influence and the potential role of external factors in the domestic economies. The impact of external factors is felt both by the possibilities they offer in terms of better exploiting national resources and broadening of internal growth, but also by the harmful effects of imbalances and economic crisis spreads from one country to another through this channel of interdependences.

Even if in some stage of development some countries felt they were shelter from the adverse effects of economic crisis, the current conditions these effects are no longer stopped at the borders of the countries.

Some of the problems caused by the current economic crisis seems to be like those of the past crisis, but the price paid become larger. Many economists and politicians consider the current global economic crisis as the most serious threat to the global economy since the Great Depression of '30 years of the last century, after some of them even stronger. Its causes are both microeconomic and macroeconomic. Although there are quite many who argue that the current economic crisis has its roots in dramatically lowering of the cost of housing in the U.S. or in the real estate credit collapse, its fundamental causes are deeper. Being such a complex phenomenon, the crisis has generated a series of theories that attempt to explain the causes of its occurrence (Montuschi, 2009).

A first theory refers to real estate prices in the U.S. and other developed economies such as Spain and Ireland which at the end of 2006 have reached extremely high levels. Gradually, banks became increasingly reluctant to grant increasing loans, and these reduced the demand for houses and apartments. Construction companies began to reduce the number of new projects and real estate prices fell more. At the same time, the low volume of transactions and the stock exchange rates of the financial titles generated significant losses for some investors. Companies that invested large sums in the initiation or development of business, some of them even in high tech industries, have faced a significant limitation of market share, both internally and externally. Although losses were sometimes very large it could not been understand the need for structural reforms, both at the national and the global economy levels, in order to avoid such situations.

Several analysts, including Altman, Buiter and Blanchard support the theory that the main causes of the current crisis are more deep, having roots not only in the housing prices decrease in and in lower housing loan market in the U.S., considering this approach as an incomplete one. They see the abundant liquidity created by the major central banks in the world (FED, CEB, BOJ) and the oversaturated savings, generated mainly by increasing integration into the global economy of China and South Asia - East, which have created resources for investment including investment in sophisticated financial instruments, the deep causes of this crisis. An important factor in this regard was the inflationary policy taken in the early 2000. With the terrorist attacks of 11 September 2001, when the feeling of uncertainty of economic actors reached its peak, the U.S. monetary authorities have thought they were facing a strong recession. Advised by Ben Bernanke (the current FED governor), Alan Greenspan decided to reduce the interest rates by additional monetary issue (Wall Street Journal, 2009). With this relaxation of monetary policy, interest rates fell from 6.25% in early 2001 to 1% in 2003 (this being the nominal interest rate, the real rate being even negative for two and a half years, as prices increased). In these circumstances, banks have taken more money from the FED, money that they channel into the economy, entailing the expansion of mortgage credit. But the U.S.A. was not the only one who promoted this policy. Until 2006 the real interest rate in the euro area and Japan was on the same trend. This coordination of the economic policies of major countries (in the sense of generalizing inflation) determined the expansion of economic imbalance on a global scale. This proved once again what governments understand by coordination: scoring concentrated inflation (Glavan, 2009). With this cheap money, obtained by contracting loans, economic actors have started business, in some cases unsustainable.

The decrease interest rate was not due to changing preferences in society, in sense of increase savings, but bank credit expansion, which resulted in a significant increase in monetary base in circulation, increased aggregate demand and thus higher prices of goods and financial assets exchange rates. The process was conducted in a cumulative manner. The extent to which the financial markets, especially the international one got, was due, in particular, to the "multiplier" process which earlier amounts of money have generated, especially those located outside of origin countries, by repeated credit operations based on the same amount; a credit loans involved another, becoming an important factor of the expanding market and speculative capital. Thus, there have appeared an increasing gap between savings and investment. Apparently, entrepreneurs have more resources, but they are only "nominal", paper money.

At this situation was added, for the U.S.A., the government involvement in improving the housing situation of the population started in 1934 by establishing the Federal Housing Administration (FHA), with the mission to guarantee mortgage loans and encourage banks to offer credits for housing. If at its beginning the FHA was calling those who got loans for housing construction to provide an advance of at least 20% of the mortgage value, in 2004 it reached only 3%. Some of the mortgage lending activity has been acquired by a new institution - Ginnie Mae. This developed the concept of bonds covered by mortgage - mortgage based security (MBS), through which the government has outsourced a part of the public debt by transferring it to private investors (Wall Street Journal, 2009). In 1970 was created the Federal National Mortgage Corporation (Freddie Mac) with the role to transform the conventional mortgage loans into securities. These institutions attracted resources from the capital market and used them to take mortgage loans from banks. They bought more mortgages and targeting mainly to low income families. Their assets were resold in the

form of bonds secured by mortgages - instruments that were successful since offering market participants the opportunity to invest in securities with low risk. The two institutions have become the most important buyers of subprime mortgage loans (loans granted to borrowers who do not meet the standard criteria to be accepted to finance).

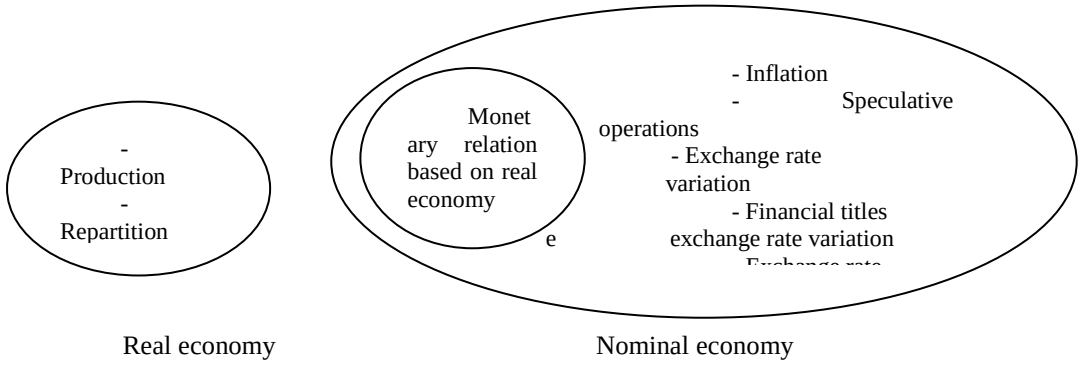
The cheap money has given rise to a boom in the housing market, an explosion of acquisitions of companies with lend money and other excesses. Real estate creditors fell their loan standards and invented new ways to stimulate the business. Investment banks have developed a variety of new techniques for transferring credit risk to other investors such as pension and mutual funds, wishing to gain more and more profit. Banks have sold their high risk mortgages, presenting them as securities called guaranteed paid bonds. Quickly and easily there have been created synthetic securities, which mimed real credit risk. More and more banks were involved in the distribution of extremely complex financial products and in the sales of loans that had behind mortgages with high risk.

Therefore, the current economic crisis has been mainly generated, by the rapid and significant expansion of bank credit, especially the subprime mortgage. Under these conditions it have often been ignored the rational behavior of economic agents, which have made increasing investments in a market that has become increasingly risky. Prices of goods and financial assets have reached a high level, which made a part of economic agents to pursue the conversion of over-estimated assets into cash or investment in industries considered of perspective. This phenomenon generated a running from those risky and overvalued assets, which led to large losses for some banks and bankruptcy of many firms. The same phenomenon has involved the removal of several economic agents on the market, falling prices, panic, etc.. As a result, banks have granted loans more difficult, creating a credit crisis that has become an important factor triggering the economic recession.

Low interest rates, appetite for assets with high returns, low vigilance against the risk masked the signals of the financial markets and led to poor understanding of the risks involved. Cheap credits have encouraged people to increase consumption and increase investment in financial assets. Thus, resulted a continuous and artificial increase of the financial assets whose value could not be converted into cash and which did not reflect the actual increase in productivity of capital and labor. This phenomenon is known in literature as "bubble" because of its unsustainable growth.

The amplification of the nominal economic sphere by increasing operations with derivatives, speculative operations, fluctuations in exchange rates, etc. have accelerated even more the imbalance between the real economy and the nominal one, generating the current economic crisis (figure 1). We have to emphasize here that the present international trade is just over 2% of all interbank transactions. The volume of foreign exchange transactions amounted about 2500 billion dollars per day, about 12 times higher than in 1986, while overall volume of exports of goods and services is less than 50 billion dollars per day. The New York's Wall - Street or the London's City have millions of people in the financial industry moving easy via computer or phone money from a place to another. The large gains obtained in this way have led to the invention of more sophisticated products, without taking into account that in this way will be opened Pandora box

Figure 1 The actual relation between real economy and nominal economy



Once the crisis was triggered by the occurrence of failure to pay rates for housing loans, the financial market has become non-transparent. The installing of investors' mistrust placed quickly the securities issued in the risky ones category and refinancing became impossible. Demand for liquidity in combination with a loss of confidence between banks has triggered a rush after cash money and the effective interest rate cash began to grow. In the U.S.A. and in some countries in Europe, governments and central banks have responded by increasing liquidity, providing government guarantees for loans, recapitalization of financial

institutions or reducing interest rates. Although such measures were applied, after two years of the start of the crisis the market has remained non-transparent, which magnified the crisis and facilitate its passage into the real economy, first in the U.S. and then in other developed or less developed countries.

The collapse of some big financial players in 2008 (Fannie Mae, Freddie Mac, Lehman Brothers, AIG, etc.) resulted in the loss of confidence in the financial system, on the background of an excessive pessimism and a general uncertainty following the contraction of the capital market and of the real economy. It began to appear then serious systemic problems such as illiquid financial assets, capital shortages, protectionist measures etc. which resulted even into a deeper and stronger recession, reduced GDP, increased unemployment and public spending etc.

Government intervention to rescue some financial institutions from bankruptcy induced on the market the sentiment of moral hazard. Saving financial institutions (like investment bank Bear Stearns, AIG) has encouraged large corporations to believe that in case of serious problems the authorities will intervene because their collapse would mean the collapse of the entire financial system, hence the expression "too big to fail" . But shortly after the managers of those large corporations had to see that things can not go this way. In September 2008 the U.S. Treasury and Federal Reserve have allowed the collapse of investment bank Lehman Brothers, which has discouraged the idea that the insolvent institutions will be saved by the government intervention.

Nobel prize laureate for economics Pal Krugman believes that the main cause of crisis is a failure in regulating the “shadow” financial system, increasingly loose. "Given that this shadow banking system starts to rival and even to overcome the importance of the conventional one, politicians and government officials should have been aware this was the same kind of financial vulnerability that made possible the emergence of the Great Depression ... In these circumstances, they would have to respond by extending the rules on this new institution, too. The influent persons should militate for a simple rule: any institution which carries out similar activities to those of banks should be regulated as a bank (Monks, 2008). This lack of authorities’ control over the financial markets is defined in the paper cited as a "malignant neglect."

3. The effects of the crisis on the world economy

The effects of economic crisis are more serious as it covers a longer period. Irving Fisher highlights some of the effects of an economic crisis (Krugman, 2008). Of these, the most important are: a contraction of money supply as a result of more expensive loans, a decrease in the level of asset prices, a sharp decrease of the net value of companies (which prolonged may lead to bankruptcies), a decrease in profits, a reduction of production and hence a decrease in trade and an increase in unemployment, a generalized feeling of pessimism and a loss of investors confidence in financial markets.

The current economic crisis has effects that are felt not only in areas directly involved in its triggering, such as financial and real estate, but also throughout the economy. In the financial market the crisis was felt first by the English Northern Rock bank, which due to large loans made during the period 2006 - 2008 has been exposed to strong oscillations in the international financial market and has requested support to the Bank of England. This fact generated panic among investors who tried to withdraw their funds. In the absence of an offer to purchase from the private sector, the English government nationalizes the bank in February 2008. These problems of the English bank were only a preamble to those who were to face financial institutions around the world. Affected, at first, were only the institutions involved in real estate projects financing (for example, the investment bank Bear Stearns, which became bankrupt and was bought by JP Morgan. Others have been nationalized, such as Fannie Mae or Freddie Mac). Gradually, the crisis wave propagated to companies that had nothing to do with real estate, large financial institutions around the world entering the vicious circle created.

The first economies affected by the crisis were the developed ones, the ones with a consistent economic growth between 2003-2007. after Lehman Brothers bankruptcy and the rescue of AIG in September 2008, the developed economies lost 7.5% of the GDP in one year. Caught in the middle of the recession, USA’s GDP decreased with 3.4% in 2009. As a result of the decrease in external demand, Japan’s national income contracted with 12% in 2008 and 5.4% in 2009. The Asian economies, known for a while as the Asian tigers (Hong Kong, South Korea, Singapore and Taiwan), also registered decreases in their GDP, as a result of the decrease in industrial output. In EU, according to the information provided by the Economic Commission, Germany, considered the engine of European economic growth, registered a decrease in its GDP with 5.1%, Italy with 5%, Great Britain with 4.5% and France with 2.1% (IMF, 2009, p.6).

The current crisis has important implications for emerging countries too, primarily due to increased interest rates on international monetary market from 3.6% in early 2007 to 5.3% today, this being the highest level since the end of 1994. This fact contributes to increased cost of funding the local banks from international financial markets and indirectly increases the interest rate, with negative effects on investment and overall development of these economies.

The next figures presents, based on information provided in the annual report for 2008 of the World Bank, the differences between the forecasted and actual level of some reference economic indicators for a number of less developed economies, reflecting the high degree the crisis affected all countries in the world. Regarding the evolution of GDP (figure 2), if per overall less developed countries the differences were from 2% to 4.1%, the most significant differences were recorded for the countries of Central and Eastern Europe, from about 8% to 4.2% and in Asia, from 6.2% to 4.3%.

Figure 2 GDP growth (%)

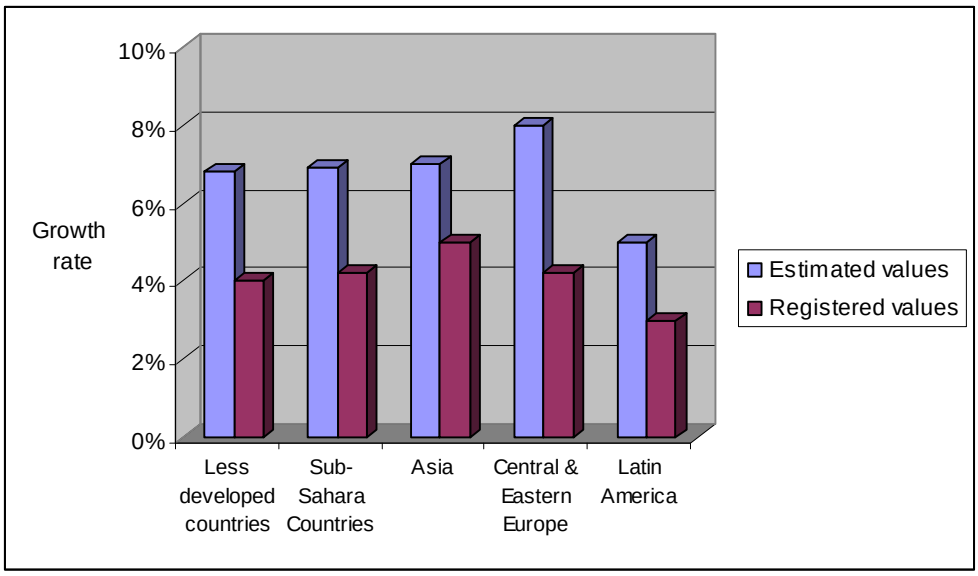
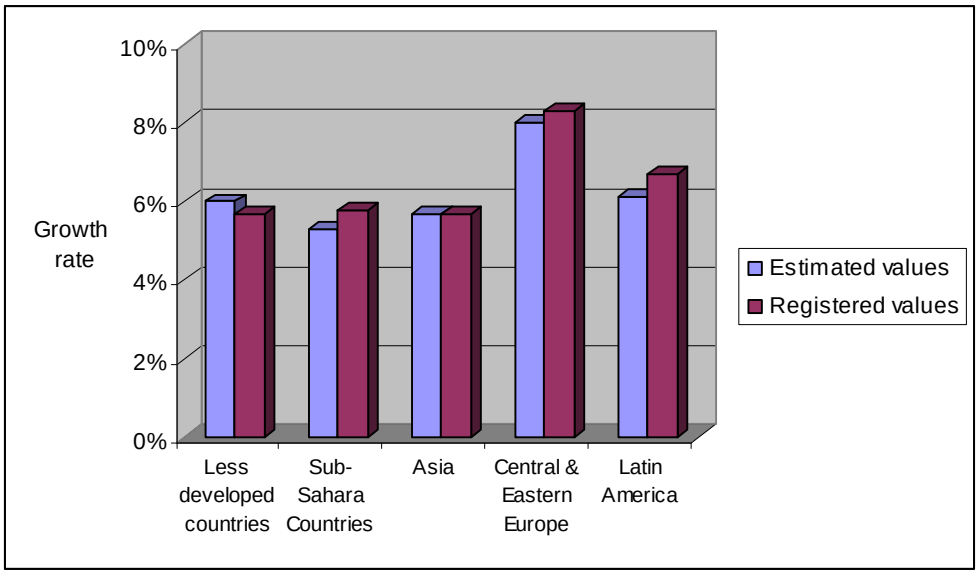


Figure 3 Inflation rate (%)



The Asian economies were less affected by the crisis because their economic growth was to a smaller extent based on exports. India and China maintained higher growth rates in 2009 (5.4% respectively, 8.5%) focusing on policies to support internal demand. The emergent African economies were confronted in 2009 with a decline in national output of 2%, as a result of the decrease of foreign investment. The emergent economies in Central and Eastern Europe registered macroeconomic disequilibria mainly because of the

significant limitation to external crediting and the decrease of internal consumption, as a result of hardening crediting, being forced to ask for the financial support of IMF.

Figure 4 Exports volume (%)

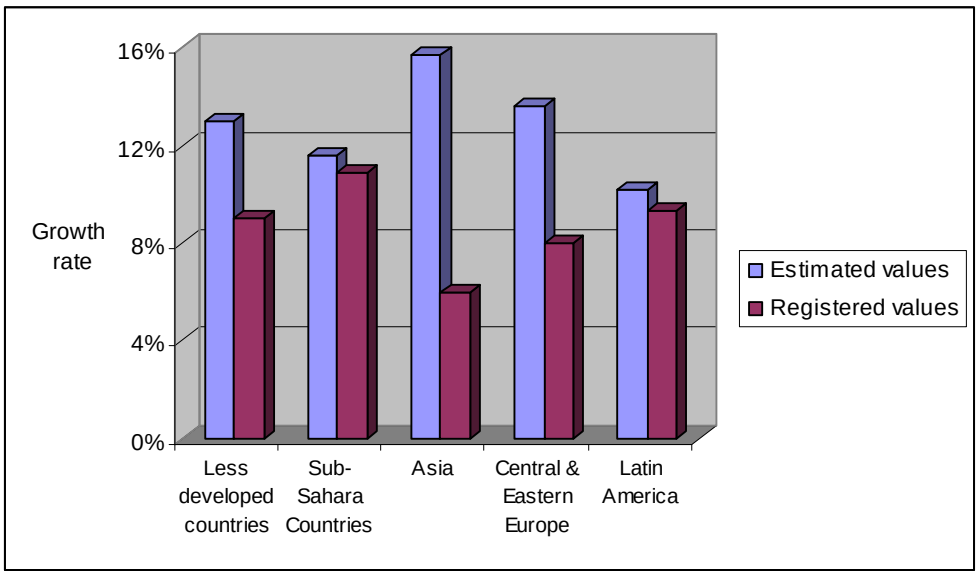
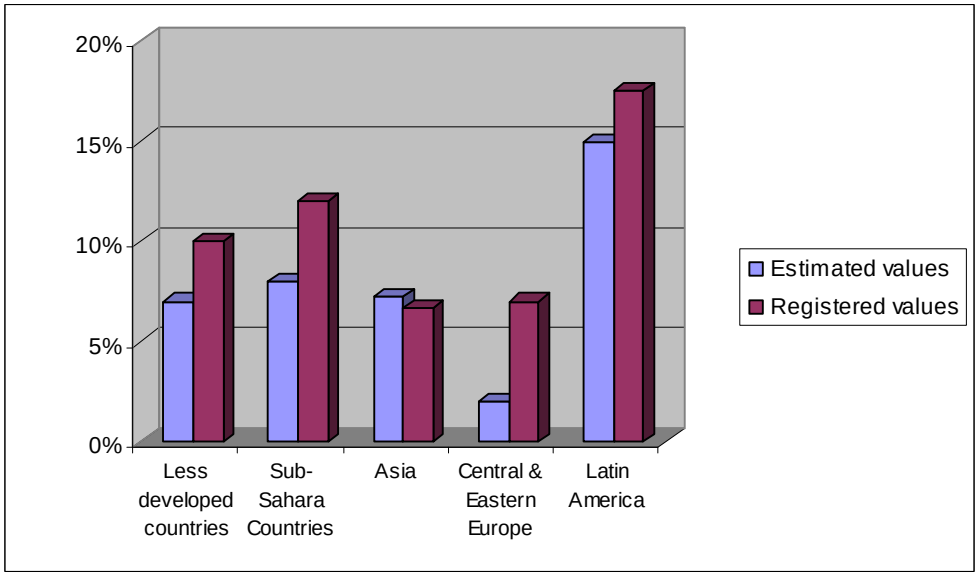


Figure 5 Current account deficit (%)



The cumulative effects of all these phenomena point out the decrease of world economic growth rate from 5.2% in 2007 to 3% in 2008, and the recession in 2009. This resulted in a significant drop in global trade flows which, after an increase of 7.3%, halved in 2008 and kept the descending trend in 2009. The foreign direct investment flows have also been affected, decreasing, according to UNCTAD, with 21% in 2008 compared with 2007, when they reached the record of 1.8 trillion dollars; the most affected were the developed countries with a decrease of 33%, the Japanese economy registering the most significant drops (IMF, 2009, p. 2)

Although in terms of inflation the differences per overall less developed countries were lower (figure 3), the most significant have also been in the case of the countries of Central and Eastern Europe, from 8% to 8.3%.

As regard exports (figure 4), the actual values from those forecasted showed differences from 14% to 8%, the highest being for the countries of Asia, from 16% to 6%.

Regarding the current account deficit, determined as a percentage of GDP, the differences between effective and forecasted values were over the less developed countries from 7% to 10%, the most significant

ones being for the Central and Eastern Europe countries, from 2% to 7% and for those in sub-Saharan Africa, from 8% to 12%.

The social dimension of the crisis is an extremely important one, whereas a more important part of the world's population faces massive unemployment and high rates of inflation. World Labor Organization has estimated that about 20 million people worldwide will lose their job by the end of 2009.

The problem of the current crisis is also one of confidence. It began from an excess of confidence of the people and businessmen in the "benefits" of financial institutions and it will end with a delay of several years because of the lack of confidence that was born once with the crisis release.

4. Conclusions

Started in the U.S., the country with the greatest economic potential in the world, the current crisis consequences are felt throughout the global economy, which is explainable, at least in part, by the economic globalization. Currently, due to the processes of liberalization and deepening of the global division of labor, national economies have become increasingly interdependent. Increased international trade and international financial flows, increasing importance of multinational companies and accentuated international transfer of technology, especially information and communication technologies in an increasingly knowledge based society, resulted in unprecedented intensification of economic interdependences between countries and their expand to scale planet.

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FINANCIAL INSTRUMENTS FOR BIODIVERSITY PRESERVATION

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Abstract: *The ecological support of our modern society is not different in its functional aspects from the one of any historical moments. Biodiversity is recognized as an important condition of the ecological functionality and is envisaged by a number of multilateral agreements. Nevertheless, the latest assessment enlightens worrying trends and the need for urgent action. Consequently new approaches and new mechanisms are needed for preserving biodiversity. Our paper explore the architecture of financial instruments proposed and used for biodiversity protection in order to find common features that could be harnessed for the development of a global approach. The analysis provided a powerful argument for the adoption of financial instruments and a set of requirements to be met as conditions for effectiveness and efficiency.*

Key words: biodiversity economics, ecosystem services, biodiversity credits, nature conservation

JEL classification: Q57

1.Introduction

Nature is the most common formula to address the world that escapes human control. The need to preserve this nature is beyond question a social goal. Nevertheless, the competition with high return investments is seldom won by nature.

Since humankind is relying on nature's resources and the regularization of processes such as water cycling, nutrient cycling, climate, pests movement, and since this linkage is strong enough to compromise the existence of humans as biological species when they are disrupted, there are voices that argue on the behalf of dropping any attempt to make a monetary assessment (Ioan et al., 2010). In other terms, if these patterns are vital, their value is infinite or so high that it does not worth quantifying it. This type of judgment lied beneath the latest approaches to biodiversity preservation. Therefore money spent in this direction is *a priori* justified.

The latest assessment in this field – *Millennium Ecosystem Assessment* (MEA, 2005) – shed light on a number of worrying trends for ecosystem services. Sixteen out of twenty four ecosystem services there found as overexploited, with human pressure exceeding their support capacity. It also provides reasons to the "sixth mass extinction episode" thesis. According to this, the path of species extinction in the last decades is far above the basic level, triggering the size of former mass extinctions, with two digit percentage of losses of different taxonomic categories.

More and more intense conservation efforts facing a continuous and intense degradation of their target is not an encouraging nor a desired situation. Although there could be found various explanations the strength of voices supporting the necessity of an economic approach is increasing (Principe, 1989; Machedon, 1997; Brown, 2001; Bran, 2002; Brody, 2003; Francis and Goodman, 2009). In their view, any contribution of nature to human wellbeing needs to be expressed in monetary terms, assuming the risk of undervaluation. This action is a necessary step for the implementation of policies shaped in the framework of strong budgetary restrains, in which any coin has to be compared with measurable achievements. Moreover, it becomes more and more obvious that the potential of market based mechanism could be harnessed in biodiversity protection only by allowing values of species and ecosystem services to be quantified in economic terms.

Our paper aims to revisit the issue of economic valuation of nature (ecosystems and/or biodiversity) and to analyze the status of recently introduced biodiversity credits. Thus, in the first part of the paper we refer to the basics, stemming in biodiversity economics. Further, there will be described the financial instruments used currently for biodiversity preservation in various countries, by referring to the legal framework, market size, dynamic. The last section attempts to evaluate these mechanisms and propose a list of conditions to be met in the design of financial instruments for biodiversity preservation.

2. Biodiversity economics

Public and private decisions that have an impact on ecosystem services reflect the fact that we are associating value to these services. However, many scientists do not believe in the instrumental value of ecosystem services, considering that their value is related to former processes and it is an intrinsic value or entropy value that leads to their development not to the utility of them for humans. From this perspective two directions of ecosystem valuing could be outlined:

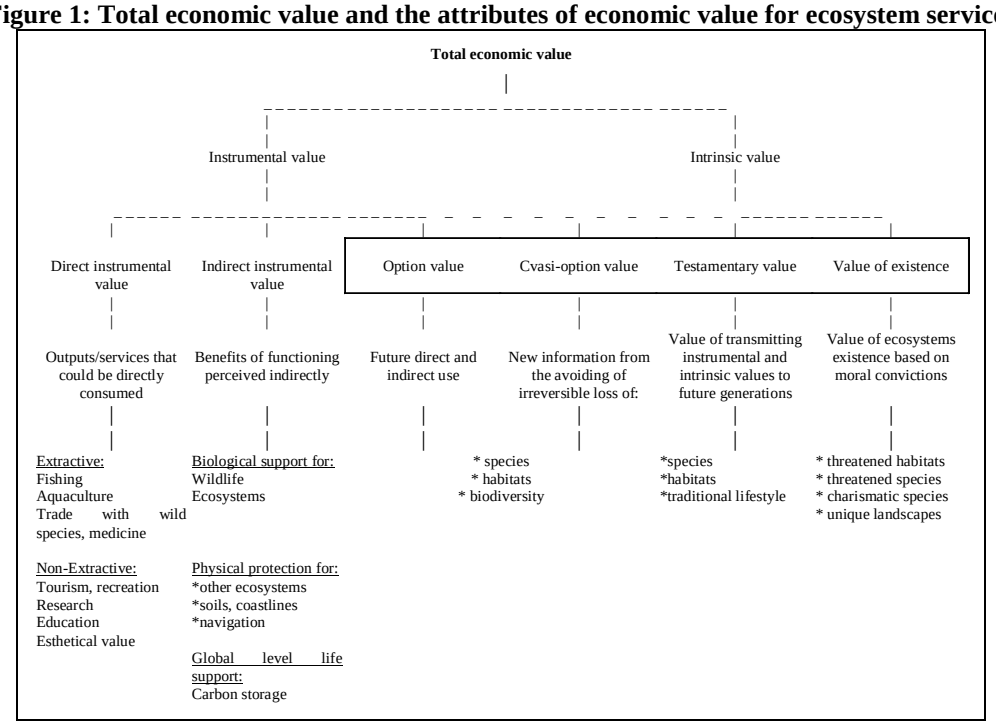
- the anthropocentric orientation – ecosystem services value emerges from their role in humans´ life (the utility theory);
- the eco-centric orientation – nature has an intrinsic value and therefore its protection is justified regardless to its potential utility.

Supporters of both orientations are attempting to find a unique solution as a monistic approach of value. Monism supposes an ethical approach that states a single coherent and complete set of principles able to cover all fields.

From an economic perspective, the success of building up a new ethical construct is not so important. Although, the individual perspective of responsibilities for nature protection could take various forms, political and managerial decisions should be separated from ethical approaches and use rationality and quantitative approaches to demonstrate it. Formulation of effective and efficient strategies and plans is an expression of ethical behavior.

The direct value means the benefits directly harnessed by humans in terms of production and consumption, while indirect value is associated with the minimum level of ecosystem services that are needed for the deployment of direct services. In fact, they are associated with the support services.

Figure 1: Total economic value and the attributes of economic value for ecosystem services

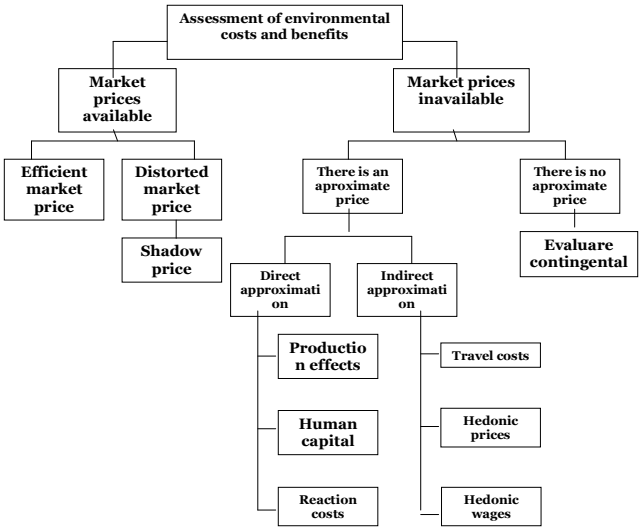


Source: Barton, D.N. (1994), *Economic Factors and Valuation of Tropical Coastal Resources*, MR-Report 14/94, Bergen, Norway.

The economic value of ecosystem services is a part of instrumental value (figure 1) and is related to the need of performing cost-benefit analysis. The theoretical foundation of economic evaluation is the variation of income as a compensation or equivalent for the direct and indirect impact on welfare due to a change in ecosystem services.

Total economic value is made up from instrumental value and intrinsic value. At its turn, instrumental value could be direct and indirect, while intrinsic value could be testamentary and existence value. Both components comprise the option value related to the benefit that could be harnessed from a potential future use by getting new information that otherwise would be irreversibly lost.

Figure 2: Environmental costs and benefits assessment methods



Source: Bran, F. (2002), *Componenta ecologica a deciziilor de dezvoltare economica*, Editura ASE, Bucuresti.

The map of ecosystem service's value is the main guidance for the assessment of environmental costs and benefits. The structure of methods used in these assessments (figure 2) reflects at some extent the structure of total economic value.

3. Payments for ecosystem services (PES)

4.

Biodiversity loss is as in case in many environmental issues only the tip of the iceberg. In fact, this problem is the observable symptom of a system which cannot be sensitive to changes in its supporting environment. The recognition of infinite value for ecosystems and biodiversity although gave a warm moral comfort was of no use in practical terms. After several decades of environmental policies and specific agreements on biodiversity preservation, increased funding, expanded scientific support, and improved tools, the path of biodiversity loss is not reduced. For example, the European Union (EU) failed to reach the target of the latest action plan for biodiversity and the loss of biodiversity was not halted by 2010. It remains to be found out what will happen beyond.

Recent assessments point more and more firmly on the economics of biodiversity as the main area for solutions. The most powerful messages are:

- rethink today's subsidies to reflect tomorrow's priorities;
- reward unrecognized benefits, penalize uncaptured costs;
- share the benefits of conservation; and
- measure what you manage.

PES is a relatively new concept that addresses especially the first two messages. The use of such mechanism could be inferred a long ago considering the major tenets of environmental economics. In the previous section we argued that the economic value of ecosystem services or of biodiversity has to be assessed assuming the risk of undervaluation. We also revisited the main means that are available to perform this task. A quantitative label on water cleaning, soil protection or biodiversity hosting could be impressive in terms of communication, but of little practical importance unless it is continued by the construction of financial tools that are able to correct markets' blindness. PES are part of these innovative tools.

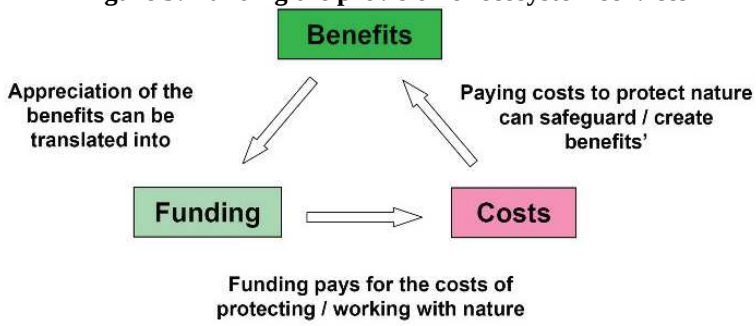
According to the one of the earliest and also most comprehensive definition, PES are represented by any arrangements through which the beneficiaries of ecosystem services pay the providers of those services. The PES could be enforced for single or multiple services. The most common PES target water quality, carbon sequestration, removal of invasive species, and biodiversity protection.

PES vary in the scale of application too. The project to Reduce Emissions from Deforestation and Forest Degradation (REDD) was designed at global level as part of the post 2012-regime for climate change mitigation. Its contribution was estimated to 18-20% greenhouse gas emission reduction from tropical deforestation and related land-use change. Other PES are applied only on local scale (e.g. northern Ecuador for water quality).

Considering the level of governmental implication, most of PES depend on such arrangements. Nevertheless, there are PES based only on private agreements. The implication of non-governmental organizations is welcomed in this area too.

PES rational is quite simple. It is based on the need for funding for protection of ecosystems and for biodiversity preservation. This funding is justified as a contribution to social goals that will bring in benefits. If benefits are to be produced on the behalf of the society then society has to pay for them. Since not all social actors share equal benefits from ecosystem services it worth to identify the ones who do so and create a mechanism that allows them to pay. Their payment will produce the funds needed for protection (figure 3).

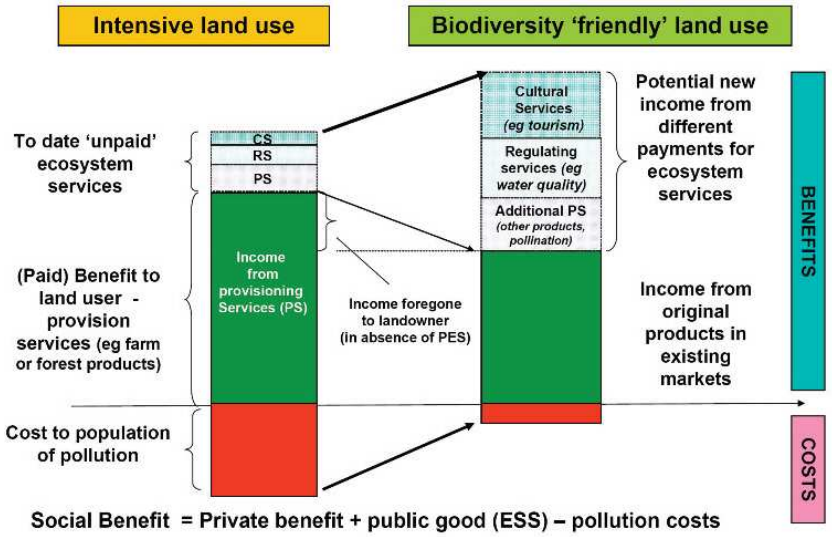
Figure 3: Funding the provision of ecosystem services



Source: TEEB (2009)

Using PES the social costs of damaging nature will be reduced by avoiding the negative processes to be produced. Meanwhile social actors that manage service provisioning ecosystems could be better rewarded and motivated in preserving the ecosystem instead of exploiting its resources (figure 4).

Figure 4: Increasing rewards for ecosystem services provision through PES

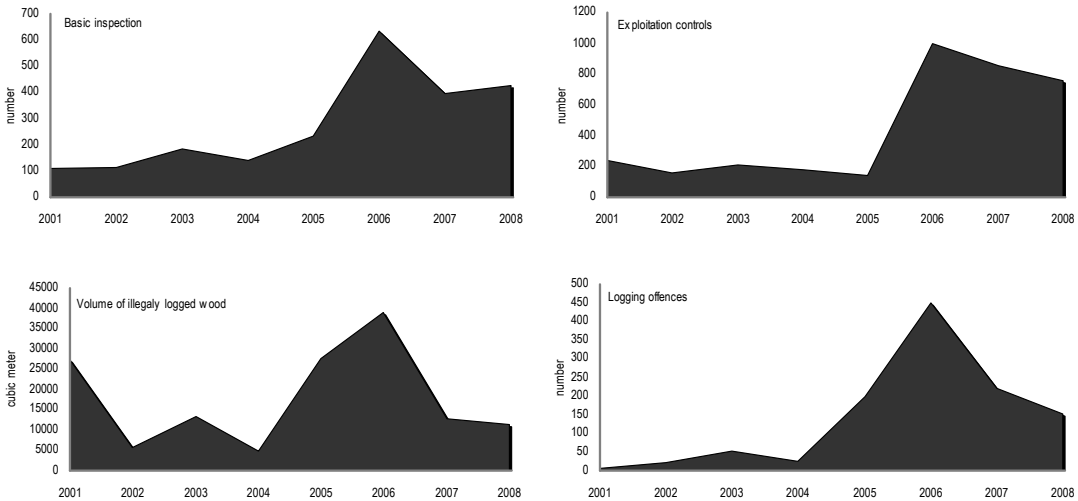


Source: Bassi et al. (2008)

In Romania, Suceava County, the main incentive of illegal deforestation was the income obtained by trading round wood or timber. Forest owners, with fresh property rights establishing papers, found themselves faced with new and large expenses for maintaining and guarding their forests. Harvesting wood represented the sole income source from these properties. The strength of this motivation could be inferred by looking to the statistics presented in figure 3 on the evolution of forestry indicators in Suceava County.

Situations like the one described in Suceava County are not a rarity in Romania. The property rights were associated with a certain type of benefit that has to be harnessed by the new owner. His or her lack of respect could be explained by lack of knowledge about long term benefits, political uncertainty since the former regime cancelled the property right, and lack of other income source. In addition, the apparently generous offer of wood traders was far more attractive than the legal obligations to apply maintenance works and to pay for protection. Assuming the offer is made by representatives of PES scheme the wood harvesting decision could be transformed in a secondary option.

Figure 5: Evolution of forestry indicators in Suceava County



Source: Suceava Territory Forestry Inspectorate

5. Progresses in the use of PES

PES are applied in different forms in many countries by using national and regional systems. Among the most prominent systems there are the ones implemented in Costa Rica, Japan and France.

In *Costa Rica* a national system of *payments for environmental services* was implemented in 1997. The services to be rewarded are carbon sequestration, watershed protection, biodiversity and landscape preservation. The system cover a 640 000 hectares area of forest and forestry plantations which is owned by 8 000 proprietors.

The scheme comprised a direct payment of 64 USD/ha/year or an 816 USD/ha/10 years. The funds to cover these payments are represented by grants from the World Bank, Global Environmental Facilities, the German Aid agency, but they are also gathered by the fossil fuel tax. Further, individual agreements with water users completed the financial resources. The carbon finance it is also envisaged as a potential revenue source for the fund.

The scheme has very positive assessments. Nevertheless, there is criticism related to its effective contribution in lowering the path of deforestation. It is argued that other factors had more important contributions.

The scheme implemented in *Japan* was initiated by the Kochi Prefecture in 2003. It is designed as "*forest environmental tax*" or "*water and green forest management tax*". Each prefecture levies a 5-10 USD per inhabitant and 100-800 USD per business to fund restoration and enhancement of forest ecosystem services (excluding timber production). An important feature is that forest owners are rewarded only then the effort is proved – after at least ten years.

In *France*, the PES is a scheme perfected by a private actor – *Vittel mineral water*. The company intended to reward land owners that apply protective agricultural practices in the watersheds where its main sources were located. Direct payments are combined with technical assistance and reimbursement of incremental labor costs. Average payments were of 200 euro/ha/year. Contract are enclosed for 18-30 years, and the payments are adjusted according to the opportunity costs on a farm by farm basis. The program was developed in a research center and its preparation took ten years, having a total cost of 17 million euro. This example proves that for a company it is cheaper to pay for a solution with farmers than to move the sourcing elsewhere. It has to be mentioned that according to French legislation the feature of natural mineral water does not allow any pre-treatment.

6. Conclusions

Biodiversity and ecosystem services are closely interwoven with a mutual connection. Biodiversity would allow for an ecosystem to function properly within the limits of ecological equilibrium, while the ecosystem is the means to preserve biodiversity. Both are nature and are protected by various means since the nineteenth century. Nevertheless recent assessments revealed worrying trends and the urgency of more effective actions. The paper addressed this topic by presenting and analyzing the concept of PES which could be interpreted as a financial instrument for biodiversity preservation.

The development of PES needs a closer look to biodiversity economics, assuming the risk of undervaluation. Based on a minimum economic value payment scheme could be designed in order to reward ecosystem owners or administrators according to the contribution of these ecosystems to human welfare. Such systems reduce the burden of social environmental costs and create the resources needed for preservation.

The case studies presented in the last section reveal that the use of PES could be very resource intensive in the initial stages. Several grants were necessary for the environmental services payments schemes implemented in Costa Rica, while the Vittel project used o product designed by a research center within a 17 million euro budget.

The provision of direct payments could be important for the success of the project, since in many cases owners have no other income sources (as in the case of Suceava County forest owners). The Japanese example also shows that the allocation of rewards has to be done carefully considering possible guarantees for keeping the forest.

Product standards with no apparent connection with environmental issues could also play an important role in fostering the use of PES. These standards made the farmers cooperation an attractive option for the Vittel company, although the projects initial costs were high.

The patterns of scheme could vary but their success relies on the strength of legal arrangements. Further research will be useful for establish schemes adapted to local conditions and for the design of flexible and resource effective legal arrangements.

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PUBLIC POLICIES – STILL A NATIONAL CHARATERISTIC OR A MATTER OF INTERNATIONAL LEVELING

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Abstract: *The paper will analyze in which way and what is the overall impact of the public policies can and should be applied governments or local responsibilities in order to fight against macroeconomic disequilibrium's. From all the major three economic policies, public spending, fiscal and monetary policy, each has a special role and has a sudden or a longer time in which results should appear.*

Are the public policies in the hands of the national policy makers or should they rely on the links given by international institutions? The aim of the paper is to stress that not a single solution exist to fight against macroeconomic disequilibrium.

Key words: macroeconomic disequilibrium, monetary policy, fiscal policy.

JEL classification: E50, E52, E58, E61, E62

1. Public policies – the same goal for all countries?

Each time that a market failure occurs, a question appears at the horizon: should the government intervene or not? Like Will Rogers says: the business of the government is to keep out of business – that is unless the business needs government help. This seems to be a quotation that was brought into the light by both economist and politicians, which means the most important actors in this business and policy maker environment. Even some presidents like Herbert Hover understood that it is a must that not only government should keep out but also and maybe most important is that business should keep out of the government. Even so maybe some times the government intervention in the economy will produce much more harm than the market failure itself. Why is that?

Is it a common situation in all the countries? The answer is no. We have examples of liberal classic view of the economy and this only for the domestic market and we have a situation of protectionism when we are speaking about having contact with other economies. It is the case of USA and also lately of UK. We can say something like: do what USA says not what USA does.

When USA preaches a classical liberal market in international trade we must ensure that it is an opinion of course in the favor of USA. But we must see and not forget that sometimes international trade it is not a win-win situation. What can be good for the American economy it is not necessarily good also for the world economy or for the European market. For instance what is the goal of the USA public policies? We must consider that the most frightened macroeconomic disequilibrium for them is the unemployment rate. So from all the three public policies to be considered maybe the most important one is the public spending policy. They must create jobs in order to ensure the growth of the markets. The important case is not to increase the consumption by using a monetary or a fiscal policy, but to create jobs, to increase the income and as a result to increase the consumption. Why the United States of America are afraid of losing jobs? Not to forget that the last major crisis felt deeply in the US economy was that of 1929-1933. We should not forget that the big crisis led to very high rates of unemployment in the USA so that what they are afraid at most.

On the other hand what is happening in the European Union? Well the unemployment rate is considered as a consequence of the public policies applied by the EU commission and all the national institutions of all EU 27. This is why maybe all the public policies are starting with financial and monetary conditions. Of course we must take into account that today world economy is much more kept together by international trade connections.

That means that one very small economic and financial crisis will be felt for sure in most of the countries. Maybe it was not the same case and for sure not with the same speed that all the other financial and economic crisis.

It is very important to stress that all the public policies applied by national governments or suggested buy international institutions should lead to a general national well being. Of course this can determine another matter to be discussed. Is it possible that one national decision taken by one national policy maker to harm the economic environment of all the others? Yes it is very possible. Let's not forget that if one country will take the decision of trying to decrease the number and the amount of credits on the national market, that decision can harm deeply the profits of companies. It was the case of Poland, in which the National Bank together with the government took the decision of restricting the amount of loans especially for consumption. That was the cause for the low growth rate of the polish economy back in 2000-2007, for the high rate of unemployment in comparison with the other European countries, low level of corporate profits. Yes it was a tough and maybe not so understood decision, but it seems that was the best decision to be taken if we now take into consideration the results. It was not a liberal classic market it was more a dirijist economy. Of course on short term we didn't have any market failure on the polish economy, but can it be a solution for long term? In the case that other economies will not react maybe, but we must specify that it is possible that the market as it is to be in competition with other markets and in that very special case maybe the entire market will fail and not sector by sector.

One of the causes of market failure is maybe that perfect competition serves only as a benchmark for the real economics and does not stand for a real situation.

There are a set of criticisms to be expressed when we use the perfect competition situation as a benchmark.

In these cases we can speak about the Nirvana criticism, the second best criticism and the normative criticism (Colander; 2004, 409). When we consider a market failure we speak about those situations in which the market strives in the direction in which the individual decision do not lead to a social desirable outcome. We can consider that this may be the time when a government intervention is needed.

A government action on the market does not have a known result. It is possible that the specific action to improve or not the desirability of the market. If we can speak about market failures why should not speak about government failures. Which is worse the governmental or the market failure?

Of course all the time we can have either positive or negative externalities of the markets. It is impossible to state from the first moment which is the case. Sometimes actions of the government or situations from the market can lead in the first moments to a positive externality and then, maybe years after, to a negative externality. Some would argue that the some inventions had positive externalities, and we can say here that maybe this is the case of the personal computer, but in the same manner the computer produces in latest year's dependency which can and should be considered as a negative externality.

Is it a situation for government intervention? We think not.

Still policy makers should at least try to solve all the problems from the economy. Fortunately in most of the countries the three economic public policies are in the hands of separate institutions. If the monetary policy is in the hands of national banks the other two are in the backyard of the governments. Unfortunately not all the time they are leading towards same goals. It seems that sometimes the policies of national banks are against economic cycle and other policies are pro cycle.

Some of the national banks are sometimes reacting slowly and maybe this is why their solutions appeared late.

2. Economic or/and financial crisis – the national and international level

What are we facing today, an economic or a financial global crisis? Reply should be: none or both. If in the beginning we "achieved" a financial crisis based on a deregulation of the financial markets, now when governments are moving towards a higher degree of financial market regulation the world is moving towards an economic crisis.

If the policy makers will consider that regulating the market will be a solution for the financial world they might be right, but in the same moment regulating too much the markets can drive the world economy into a period of stagnant economy overall.

According to the Commission's analysis, unless policies take up the new challenges, potential GDP in the EU could fall to a permanently lower trajectory, due to several factors. First, protracted spells of unemployment in the workforce tend to lead to a permanent loss of skills. Second, the stock of equipment and infrastructure will decrease and become obsolete due to lower investment. Third, innovation may be hampered as spending on research and development is one of the first outlays that businesses cut back on during a recession. Member States have implemented a range of measures to provide temporary support to

labor markets, boost investment in public infrastructure and support companies. To ensure that the recovery takes hold and to maintain the EU's growth potential in the long-run, the focus must increasingly shift from short-term demand management to supply-side structural measures. Failing to do so could impede the restructuring process or create harmful distortions to the Internal Market. Moreover, while clearly necessary, the bold fiscal stimulus comes at a cost. On the current course, public debt in the euro area is projected to reach 100% of GDP by 2014. (Economic Crisis In Europe: Causes, Consequences and Responses, 2009).

Is this economic crisis a global one? Is it spreading with a very high speed? For replying to all those questions we must make a comparison with the big economic crash from 1929-1933. if in this case we can speak about an overproduction crisis in today's problems for sure we have to talk about a consumption crisis.

If we can not speak about quite a global crisis in the first case, we must state that in the 30's not all the states were so developed considering the production, so that not all of them were affected in the same manner, for today's problems all the countries are experiencing problems with the consumption. Also considering the degree of development of the international trade and globalization it is obvious that today we are speaking of much more developed and interconnecting economies.

So, all the public policies should take into account not only the national problems but also the international developments of the economy and maybe the international problems.

Of course we can not say and we should not say that all the countries are experiencing the same economics problems, in the same sectors of the economy and with the same level of development.

It is already known that we can speak of a few number of countries in which real estate bubble did not hit with the same power. It is the case of Denmark or Poland.

In the case of Denmark we can speak of a not real estate bubble and this because the number of average inhabitants considering housing is quite developed so was not such a big increase in the demand for new houses. The other case of Poland was in fact of a public policy matter. Here the monetary policy lead to a decrease in the request for loans so that the demand for new apartments did not increase as in the rest of the world.

3. Market failure of the financial system – a global problem

Is it the time or the case to speak about market failure in the case of financial markets? For sure the answer should be yes of course. Financial markets all around the world experienced a lot of problems in the last 3 years. Even if in the very first moments of the financial crisis more and more economist promoted the idea that some economies will be affected more or less by that financial turbulence the future shown them that they were totally wrong and that even if the countries were more or less linked with the United State of America's financial system. The turmoil of the financial market from USA spread with a higher or lower speed but unfortunately was unavoidable.

Even emergent countries, even countries without a well developed stock market felt sooner or later a crash.

Even if the financial market of a country is big or small, even if it is a complicated market or not, complexity of transactions and complexity of conditions on the stock market occurs and that complexity usually it is the cause for financial turmoil. It is the case of the investment in assets, or in the modern securities. Sometimes, not even those which are trading with those modern and special tools, do not understand completely what they are trading effectively.

The complexities of the assets underlying investment securities, and of the means of originating those assets, can lead to a failure of lending standards and unanticipated defaults. Consider first the complexities of the underlying assets, which can include mortgage loans and a wide range of other financial assets.

The complexities of modern investment securities can lead to a failure of investing standards and financial-market practices for several reasons: these complexities impair disclosure; they obscure the ability of market participants to see and judge consequences; and they make financial markets more susceptible to financial contagion and also more susceptible to fraud.

Complexity can deprive investors and other market participants of the understanding needed for markets to operate effectively. Even if all information about a complex structure is disclosed, complexity increases the amount of information that must be analyzed in order to value the investment with a degree of certainty. This additional analysis entails higher cost.

Complexity can add great efficiency and depth to financial markets, but it also can cause a multitude of market failures. These failures, however, fall into three broad categories: (A) failures, such as impaired disclosure, caused by information uncertainty; (B) failures, such as financial contagion and the inability to

predict consequences, caused by nonlinearity and tight coupling; and (C) failures, such as moral hazard, servicer paralysis, and fraud, caused by conflicts and other forms of ―misalignment (Schwarz, 2009, 26).

3.1. Western European Economies

Although the crisis originated in the US, the impact is heavier in Europe partially due to the larger size of the fiscal stimulus plans as well as the speed of reaction in the US. According to the OECD Economic Outlook revised forecasts of September, US GDP will contract by 2.8% in 2009, whereas Euro area (12 countries) is expected to contract by 3.9% and UK by 4.7% (Onaran, O, 2009)

The euro zone officially sunk into technical recession in Q2 and Q3 2008, as two of its biggest economies, Germany and Italy, shrank for two consecutive quarters. Sweden and Ireland have also slipped into 'technical recession' in 2008 and Spain and the UK are expected to enter technical recession in the last quarter of 2008;

Western European trade is mostly conducted within the region with 80.0% of exports destined to European countries in 2007. 7.6% of exports were destined to North America and Australasia, which are also facing downturns; some economies are highly dependant on exports. In 2007, exports as a share of GDP amounted to 61.3% in the Netherlands, 40.0% in Germany, and 37.2% in Sweden. France, Italy, Spain and the UK were far less dependant on exports, which contributed less than a quarter of their GDP.

The financial system breakdown in Western Europe caught the governments from France, Germany, Spain and other major countries from EU not so well prepared. Different measures were taken: the bank of England reduced the reference interest rate from 5.0% in September 2008 to 2.0% in November 2008; Germany indicated that it will focus on investments in industry and infrastructure, and similar cuts were made by the European Central Bank and Sweden's central bank. It seems that not even the most developed and important countries in Western Europe did not have a unique and common policy to face crisis.

3.2. Eastern European Economies

“The consequences of the world economic crisis will burden this region more than the rest of the world in coming years,” declared the chief economist of the EBRD, Erik Berglöf, speaking on the fringes of a conference held by the Austrian Central Bank in Vienna in November 2009.

The International Monetary Fund has also issued a number of blunt warnings about developments in Eastern Europe. The Austrian Standard quotes IMF economist Christoph Rosenberg, who declares that the recent recovery of financial markets in the region is almost exclusively due to the increased appetite for risk on the part of investors and has little to do with any improvements in the real economy. (Salzmann, M, Deepening Economic Crisis in Eastern Europe, 2009)

So that we can speak not about a financial, not even an economic crisis in Eastern Europe, but we can say that it is a come back to the roots. The economies of Eastern Europe grew a lot in the last years and for sure that growing economy doest not stand as a result for increasing productivity of increasing exports, but maybe it is the result of the foreign direct investment coming from more and more appeal to risks for western European investors.

Maybe the crisis in Eastern Europe could have been lighter if the FDI were increasing with the same rate as productivity. But what happened was that the national economies increased more on the consumption basis then on the production one. An economic increase based only on consumption is now playing the last role in today’s economics.

Now it is time for public policies to enter the stage and solve the issue. Only the work of national banks will not solve the economic crisis on their own. A set of public spending policies is needed. Maybe one master plan for infrastructure and production is needed in Eastern Economies. Structural changes should follow and these structural changes should rely on the products with a real comparative advantage and increasing productivity where it is possible.

What the Eastern Europe should do? For sure should rely on western’s experience and try to catch up as fast as it is possible the gap between them and the western countries. If in the previous years some fiscal changes were made to make the business environment more appeal to foreign investors now it is time for evaluations and stability. Foreign direct investments will not represent at least for the next couple of years and start-up for the engine of the economy so maybe the emergent eastern countries should rely more on their own forces and not on imports of technology and capital.

3.3. Divergent or convergent measures between east and west?

Both economies from eastern and western countries tried on their own way to reply to the financial crisis, but unfortunately all the measures taken by the policy makers led to economic crisis. Solutions proposed by the national's governments were quite different between east and west and also between countries.

If some countries took the solution of cutting down expenses and to decrease public expenditure (like Germany, France, Italy and Romania) other took the measures of lowering taxes and aiming for a higher consumption and in the end a higher production (the case of Bulgaria and Poland).

Different measures for different structures of the economies. It is a struggle if a national economy depends too much on foreign trade (the countries mentioned in the first group) and it appear that during this economic and financial crisis, economies not so dependent of other economies, such as in the case of Bulgaria and Poland, are dealing a lot better than the previous group.

So that what will be the reply to the question to be divergent or convergent to a common situation and maybe to a common policy? Well the answer will be in the end that countries will adapt and adjust to that model that will drive them out of the economic crisis in the beginning and from the financial crisis in the end. If it is already a given that the economic crisis spread from west to east maybe this can be as in the case of a volcano. It will end from the point that all started but will leave great traces into national economies.

Table 1 Unemployment rate

%	2003	2004	2005	2006	2007	2008	2009
Bulgaria	18	14.3	12.7	11.5	9.6	7.7	6.3
Croatia	21.7	19.5	13.8	18	17.2	11.8	13.7
Romania	8.3	7.2	6.3	5.9	6.1	4.1	4.4
Poland	18.1	20	19.5	18.2	14.9	12.8	9.8
Germany	9.8	10.5	10.6	11.7	7.1	9	7.8
Italy	9.1	8.6	8.6	7.7	7	6.2	6.8
France	9.1	9.7	10.1	9.9	8.7	7.9	7.4
Uk	5.2	5	4.8	4.7	2.9	5.3	5.6

Sounce: CIA World Factbook

As it appears from the table above the economies did not show signs of economic crisis from the start, the unemployment rate was still decreasing in both eastern and western countries. Only some financial data were showing signs of macroeconomic disequilibrium.

If we analyze the GDP per capita in eastern and western Europe we will see the decreasing data even from 2007 when the unemployment rate was decreasing and maybe when the GDP per capita in Europe will stop decreasing the unemployment rate will end the increase. It is possible and quite likely to happen that the unemployment rate to have a gap of one or even two years considering the start of the financial crisis in the end of 2007.

Table 2 GDP based on purchasing-power-parity (PPP) per capita per capita

%	2003	2004	2005	2006	2007	2008	2009
Bulgaria	7.88	10.01	10.05	10.35	12.41	6.20	-4.56
Croatia	7.24	6.42	7.41	8.20	8.58	4.55	-3.76
Romania	7.91	12.16	7.53	11.83	9.62	9.77	-6.71
Poland	6.17	8.17	6.86	9.76	9.90	7.12	2.58
Germany	1.92	4.09	4.07	6.70	5.58	3.53	-3.71
Italy	2.11	3.84	2.54	4.71	3.68	0.30	-4.38
Uk	4.61	5.57	4.62	5.59	4.82	2.38	-3.28

Sounce: CIA World Factbook

As we mention above there are some case countries like Poland in which even if the GDP per capita decreased it still have a positive value and it seems that here the financial and economic crisis will not occur. But it is possible that like in the case of the gap of the unemployment rate that one entire country to have a gap from the rest of EU'27 to experience that crisis.

The financial crisis has hit the various Member States to a different degree. Ireland, the Baltic countries, Hungary and Germany are likely to post contractions this year well exceeding the EU average of -4%. By contrast, Bulgaria, Poland, Greece, Cyprus and Malta seem to be much less affected than the average.

Countries where export demand has been strong and/or which have registered current account surpluses are more exposed to the sharp contraction of world trade (e.g. Germany, the Netherlands, and Austria). Countries which have been running large surpluses are also more likely to be exposed to adverse balance sheet effects of corrections in international financial asset markets. Conversely, countries which have been running large current account deficits may face a risk of reversals of capital flows. Some Member States in Central and Eastern Europe are in this category. In some of these cases, the sudden stops in foreign financing forced governments to make a call on balance of payment assistance from the EU, IMF and the World Bank.

Countries which house large financial centers, such as the United Kingdom, Ireland and Luxembourg, are obviously exposed to financial turbulence. Conversely, countries which are the home base of cross-border banking activities in emerging economies in Central and Eastern Europe are also likely to be more strongly affected. The exposure for European banks to emerging market risk is fairly concentrated in a few countries.

Some of the countries took more financial measures than economic ones. Both Romania and Bulgaria had increased the importance of financial and fiscal policy and did not give such a great attention to economic measures. Both of them experienced high rates of increasing GDP on the basis of foreign direct investment, but when the investors experienced economic problems even with those financial measures, the crisis spread rapidly.

Poland on the other hand took some economic structural reforms that changed the country, and, also with a very big market, approximately 38.500.000 inhabitants, managed to create a national economy not so dependent of the foreign trade and foreign direct investors. Maybe the overall increase in the last 10 years was not so important in Poland in comparison with the rest of the eastern European countries but maybe was it is stronger and more reliable.

Even so maybe the good experience of Poland can lead in the end into a very bad experience. This can happen if the economies that were in a moment into a major crisis will exit and will develop much more rapidly than Poland.

Another possibility is to have small financial crisis from time to time in all countries and if this will be the case, if the world economy will not recover safely then also economies that now can seem much more strong can enter into a major and deep crisis.

4. Conclusion and proposals

Financial systems may experience problems that may give rise from two distinct developments that can each make it more difficult for central banks to keep the relevant interest rates near their policy rate targets: first, there may be unpredictable shifts in the aggregate demand for reserves; second, there may be occasions on which a central bank needs to extend large amounts of credit but at the same time keep the net aggregate supply of reserves consistent with its policy rate target.

Another important problem is that of communication. Misinformation and misinterpretation of central bank actions are more likely and costly in times of stress. What should the central banks do? First of all to try at least to increase communication with the market participants and media. Sometimes changes in economic environment are more or less turbulent in according with the capacity of the governor or the board of governors to communicate with the economic environment.

Maybe it is more important to communicate, to explain problems and measures than to act without promoting and explaining the impact of central banks actions.

Also in these cases the explanations not only of the economic and financial solutions proposed are to be explained but also some economic outcomes can be explained and than maybe when those economic outcomes occur the market will not be so to say „surprised”.

As an example the measures taken by the NBR (National Bank of Romania), even if they seemed more strict than other measures taken by other national banks.

It is the case of the reference interest rate we are able to see that the monetary policy maker from Romania acted with an against cycle policy, but specifying that in this case the National Bank of Romania acted considering national conditions and not international. This is why looking at the data below we must see that the reference interest rate started to increase only in the beginning of 2008 when the crisis was maybe not history but a certainty in the USA and Western European Economies.

Even late the monetary policy was in according with the trend at the international level. We can not say the same about fiscal policy and public spending policy. Unfortunately in the case of the last two we should speak about pro cyclical measures.

This is why sometimes when you have two institutions to decide the economic policy of a certain country it is a must that mutual and simultaneous measures are necessary.

Table 3 Reference interest rate

%	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2010	8.00	7.50	7.25	7.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2009	10.25	10.25	10.14	10.07	10.02	9.71	9.50	9.00	8.53	8.50	8.00	8.00
2008	7.50	8.00	9.00	9.03	9.50	9.75	9.75	10.00	10.25	10.25	10.25	10.25
2007	8.75	8.75	8.08	8.00	7.50	7.25	7.25	6.10	6.48	6.87	7.00	7.50
2006	7.50	7.50	8.47	8.50	8.50	8.50	8.50	8.75	8.75	8.75	8.75	8.75

Source National Bank of Romania

The expectation that central banks will act to attenuate market malfunctioning may create moral hazard by weakening market participants' incentives to manage liquidity prudently. So that maybe central bank's intervention should be or not be public? In certain cases, if we consider that all the time the financial system will have a „super-bank" to manage all the problems, the banks and other financial or non-financial institutions will deal more happy and without any burden on to the financial market. This is not what the market should do. They must be aware of all the risks and to manage liquidity wisely and not so wide-handed.

All of that can not represent but financial solutions, but maybe much more important are those economic solutions. If the cause of this financial-economic crisis seems to be the failure of the financial markets we think that the solution is more an economic one then financial. It will be in the hands of national governments to change the markets and hopefully not using only financial tools but also other economic policies like the public spending policy and the fiscal policy.

The public spending policy should create jobs for those sectors that shrank or in the worse case scenario to try to change on medium and long term the structure of the economy. A good thing that usually economic crisis are bringing is increasing interest for savings and decreasing appeal for consumption (maybe the best example here is USA in 2007 with a savings rate of no more than 1% and nowadays a saving rate of 7% average for 2009).

The question that will arise is whether the governments will have enough money to finance this new public spending policy. We can propose here two solutions: one to leave the problem of the inflation on the second plan or to try to cut other expenses not so compulsory for the national economies. Inflation can be avoided, but this means that policy makers will have to agree categories of expenses to be cut down. One solution for the countries in EU will be for instance the decreasing expenses for the officials and commissions of EU. This can be a very boiling point because it has to be decided exactly by the beneficiary of those expenses. It is a though point but let's imagine that this crisis will be due in a reasonable time of 3-5 years or the worse case scenario to have a come-back of the economy in the same manner and time as the big crisis from 1929-1933. Hopefully the policy makers will take into account the public benefit and not an individual or even a national one, otherwise they will create once again an new market failure, this time not only a financial one but more complex a general economic market failure of the capitalist market system.

This is maybe the solution for the regional and maybe for the world economy – decreasing government consumption, a flexible financial system and necessary a much more easy to be understood.

Maybe leveling the financial policy and maybe even the monetary one can lead either to economic development of one entire region, but also it maybe the case of region bankruptcy.

Maybe not leveling but financial systems competition will direct to economic increase and development. It is possible that one national experience can not be the solution for another country. For instance we consider that the flat tax system is necessary in those economies in which fiscal bad behavior is a habit, and it will bring no increase in the budgetary income in countries in which the fiscal system is quite developed and the contributors are educated in the sense of paying till the last cent the taxes.

A common money market and the same currency will be the solution for the same monetary policy. But in this case all of the countries from a region will agree to have only one regulator, only one policy maker and the national states to loose in a little sense the independence? Even so, it will be the case only from the point of view of a part of the economic policy.

What will be then the role of the national banks? Should they exist any longer? Should we have only one central bank in one region such as European Union? I think that the reply to all those questions are residing in the development of the Western Economies and USA. What is the difference between developed economies and the rest of the world?

The difference is that for almost 100 years ago we are speaking about competition and economic behavior of countries, maybe the "invisible hand" of Adam Smith. All the others experienced developing economies for the entire history. Yes something went wrong in the developed economies, but that was not the market but bad policies applied by policy makers. The reply to economic problems should be economic diversity and not leveling economics.

The very single experience of one country or even one region can be better than all other central solutions. Each country should rely on its own to promote and apply fiscal and public spending policy in according with the needs of the inhabitants, and, of course, to have a different policy maker to regulate the monetary market

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A MATCHING THEORY PERSPECTIVE ON DISEQUILIBRIA IN THE ROMANIAN LABOR MARKET

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Abstract: *The paper discusses labour market disequilibria by applying the matching theory. Two comparative analyses are developed in order to better understand the different aspects of these disequilibria in the Romanian labour market. After a short presentation of empirical figures and facts of the period 2005-2009 and the official forecasts for the period 2009-2014, the paper deals with the theoretical approaches related to the methods applied in the investigation of structural unemployment, followed by the statistical and econometrical analysis of the labour market in Romania compared to other European countries. A distinctive part of the paper is devoted to the econometric modelling of the impact of the human factor on the compatibility of unemployed people with the job vacancies. A final part discusses research outcomes and conclusions.*

Key words: labour market**,** unemployment, Beveridge curve, matching functions, human resources

JEL classification: E24, J64, J82

1. Introduction

Previous economic research has approached the issue of imbalances that came up in the labour markets from various perspectives: theoretical models that describe the main evolutions in the area, empirical studies that emphasise the manner of applying these models and process's specific features at the national, regional and local level, etc.

Among the researches realised in these fields, a specific area is represented by the study of the compatibility that exists between the people looking for a job and the vacancies using the so called "*matching functions*": the outcomes of investigations of Anderson and Burgess (1995); Burda and Profit (1996); Petrongolo and Pissarides (2001); Robson (2006), are complemented with the researches based on the graphical representation of these interactions using the Beveridge curve: Wall and Zoega (2002); Nickell, Nunziata, Ochel and Quintini (2002); Valetta (2005); Bouvet (2009).

The authors mentioned above have focused on the analysis of factors which generate the structural unemployment, paying more attention to the lack of compatibility between the existent vacancies at a given moment and the professions of job seekers in the labour market. In many cases the later ones are not updated to the structural economic shifts. Nowadays, the globalization, the technological trends, the transition towards the knowledge economy and the recent economic and financial decline represent challenges which determine the increase of competition for jobs in the labour market and, consequently an upturn for the highly qualified labour force which should be capable to adapt rapidly to the new social and economical challenges.

When regarding the Romanian labour market it is worth to notice that the actual imbalances did not come up only with the economic crises. They have just met more proper conditions to deepen under the impact of the global crises. Labour market imbalances might be related to many factors and policies. An example in Romania's case is the characteristic of the economic and social policies promoted in the recent past. They were not at all centred on an efficient motivation of unemployed persons to search for a work place. Another factor with a substantial contribution to the imbalances in the labour market is the hidden unemployment, which originates in the rather large subsistence agriculture of the country. Finally, there are significant structural mismatches between the professional and transversal competences a graduate can demonstrate and the current needs and expectations of a labour market.

To these more or less theoretical remarks one can add some specific reasons inbuilt in the recent macroeconomic evolutions and the expected trends for the coming years. Thus, according to the National Forecast Commission (forecasts published in autumn 2009), after a decrease by 7.7% of the GDP in 2009, Romania will register a real increase, but at a very slow rate: 0.5% in 2010. It is supposed to reach at 5.2% in 2014. The negative evolution of 2009 has been mainly caused by the decrease of the gross added value in the building sector (-19.6%) and in industry (-7.5%), while during 2010 and 2011 it is expected that the building

sector and agriculture to sustain the increase of GDP. As regards the GDP growths engines, it is expected that the main contribution to the real increase of the GDP starting with 2010 is going to be determined by the internal demand (0.9% in 2010, 3.0% in 2011 and 4.7% in 2012), while the net export will record negative values (between -0.5% in 2010 and -0.6% in 2011).

Thus, the evolution of employment becomes very important. A priority will be given to the policies and measures implemented in order to increase the number of employed persons aiming at their stable employment and a slow increase of the real income.

For the next period of time it is expected that the employment rate will increase very slowly after the slump of 5.1% recorded during 2009. In 2010 employment growth rate is estimated to be of only 0.3% and it is expected to increase up to 1.3% in 2014. The same situation is met when we analyse the number of unemployed people as approached by the International Labour Office (ILO). It is supposed to register a decrease by 8.1% of the unemployment rate at the 2010, expecting to reach 7.7%. These figures do not reflect entirely the situation of the people who are not employed, the situation of the subsistence agriculture being not accurately analysed. It is also worth to notice that the evolution of the real income is going to be very slow, estimated to be only 0.2% in 2010.

To the general macroeconomic frame we have to add the disparities existing between regions and counties. For example, in the end of January 2010, the unemployment rate in Vaslui-county was of 13.5%, while in Bucharest and Ilfov-county it did not surmount the 3% level. These data and facts should determine local public institutions to improve their administrative intelligence concerning the labour market aiming at a better compatibility between the unemployed people and the existing vacancies.

2. The Matching Functions

Matching functions are mathematical models which describe the connections coming up in a market characterised by incomplete information and commercial imbalances, both originated in the absence of a proper coordination frame.

For the labour market, these models offer the opportunity to analyse on one hand the intensity of the relations which are established among the people looking for a job and those who create jobs, and on the other hand to improve the knowledge on the demand and supply flows on this market.

From a mathematical point of view these functions have the following form:

$M = M(J, V, \mu)$ [1]

where M represents the level where supply is met by demand, J is the number of the people who are looking for a job, V signify the vacancies and μ the other factors which influence the relations that exists on the labour market. These functions show a logarithmic shape, being ascendant and concave, both in J and V, and much more: $M(0, V, \mu) = M(J, 0, \mu) = 0$. [2]

In the empirical analyses done by Anderson and Burges (1995) log linear functions have been preponderantly used and the homogeneity of the returns to scale of these functions has been studied.

Most of the studies (Pissarides 1986; Blanchard and Diamond 1989; Warren 1996; Pissarides 2000; Petrongolo and Pissarides 2001; Ahtonen 2004) have approached this issue from the perspective of constant or increasing returns to scale perspective. Thus, when the increase of the number of the unemployed people and the existent vacancies cause the intensification of the employment flow we can't speak anymore about the constant returns to scale. From another point of view, if returns to scale are increasing, than these can determine the formation of multiple Pareto equilibria in the market, because of the positive externalities of the job searching processes. In the situation of decreasing returns to scale, the positive externalities are surpassed by the negative effect of the labour market overcrowding causing diseconomies to scale.

Many of the studies realised on this topic have analysed the dynamic evolution of the unemployment, using the Beveridge curve, in this case the number of those who are looking for a job being considered equal with the number of the unemployed persons.

$M = M(U, V)$ [3]

From the perspective of the constant returns to scale the function has the next shape:

$M = AU^{\alpha}V^{1-\alpha}$ [4]

or $m = Au^{\alpha}v^{1-\alpha}$ [5], where:

m=M/L (hiring rate), u=U/L (unemployment rate), v=V/L (vacancy rate).

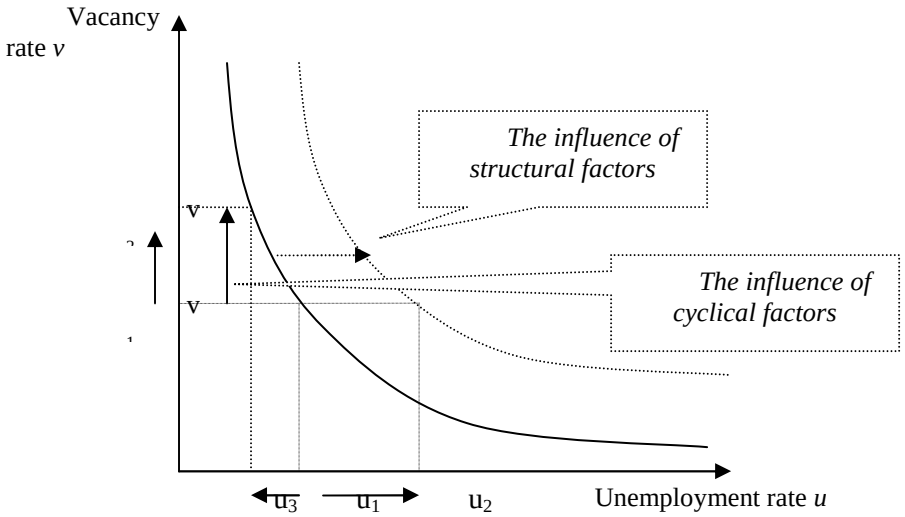
In the steady state the unemployment rate is constant the *matching rate* (m) is equal with the *fixed separation rate*(s) and that leads to a negative score between the unemployment rate and the vacancy rate. (Bouvet, 2009):

$$u = \left(\frac{s}{Av^{1-\alpha}}\right)^{1/\alpha} \quad [6]$$

Factors which are responsible for movements along a fixed Beveridge curve (at different levels of vacancy rate, same rate of unemployment) are represented by cyclical shocks in the economy, while movements to the right or to the left (the same rate job of vacancies, but different rates of unemployment) are the result of the structural factors which affect the compatibility between vacancies and unemployed persons (Diagram 1).

In fact, the curve position in space may indicate the labour market imbalances. A position near to the origin indicates that there are lower unbalances and greater compatibility between the unemployed people and job vacancies while moving to the right is a sign of lack of compatibility determined by factors such as: human capital deterioration when speaking about the unemployed or a benefit system which does not stimulate employment.

Diagram 1. Factors' influence on the position of the Beveridge Curve



Source: Our graphical interpretation

3. Main factors

Analyzing the factors that put their mark on the efficiency of the process by which those who are looking for a job manage to get employed, one of the first category includes cyclical factors and structural changes. Specialised studies have already investigated the influence of special factors such as: *composition of unemployment* (long-term unemployment, proportion of women), *institutional factors* (benefit systems, collective wage agreements, minimum wage legislation, employment protections laws), *productivity growth, regional dispersion of employment, sectoral shifts, competition between employed and unemployed for jobs, spill-over effects, the rate of setting up new businesses, population density*, etc.

- Long-term unemployment is negatively related to the matching process, both because the unemployed people do not longer involve themselves so heavily in seeking a job, becoming discouraged and on the other side, over time, the qualifications tend not to be suitable to the current demand.
- Age structure of the unemployed people has a differentiated effect. Unemployed young people are more active on the labour market and therefore find a job quicker, while older unemployed leave this status in other ways: through retirement, social assistance etc.).
- The process by which the unemployed people find a job is more difficult when it is made the transition from one economic sector to another, because the gaps that exist between offered and required qualifications. It would be one of the main reasons for which structural changes are

expected to have a negative effect on the efficiency of searching and finding a job. It is also estimated that, in the conditions of economic restructure, even the employed persons are going to involve themselves more actively in the process of searching for a new job, fact perceived by them as being useful to diminish the risk of becoming unemployed in the future.

- Competition between unemployed and employed people tends to intensify in the context of structural changes, or economic crises, where proportionally decreases the chances of unemployed to find a job, because firms tend to favour those already employed, more adapted to the new realities.
- Unlike factors such as structural changes and the competition between unemployed and employed people to fill a vacancy, which tend to exert a negative effect on the efficiency of matching process, regional specialization is expected to produce a positive effect. This encourages the formation of a workforce with a specific qualification, which is assumed to be adapted to the needs of employers in a certain region (Robson 2006).
- Regarding the rate of setting up new companies, its role has been explained by Pissarides (1994) and emphasised by Robson (2001) who has introduced the concepts of "*good*" jobs and "*bad*" jobs. The main difference between them is determined by productivity (higher for the first one category), and the costs related to create them (also higher for the "*good*" ones). Jobs that have been created by new firms are perceived by the unemployed as "*bad*" jobs, because in general are more uncertain and with a shorter lifetime period.

4. Models

The basic model for describing the relationships established in the labour market between job seekers and those who offer jobs is a Cobb-Douglas type function, which can be formalized in a log-linear form:

$$\ln M_t = \mu + \alpha \ln J_t + \beta \ln V_t + \varepsilon_t \quad [7],$$

where M_t is the number of vacancies that were filled during period t, J_t the number of people seeking employment registered at the beginning of period t, V_t the number of vacancies at beginning of period t.

Parameter μ was interpreted as an indicator of the efficiency of the matching process in the labour market, his level indicating a greater or a less intensity of the process at a given level of those who seek for employment and job vacancies (Robson, 2006).

Other forms of the model also include in the analysis parameters for studying spatial (regional) characteristics, the differences that occur over time, and a number of factors that can influence the process efficiency.

Ahtonen (2004) adapted the original model to determine the impact of spatial spill-over and population density on labour market efficiency.

The new model, which includes additional variables, as the number of those who seek for employment and vacancies in neighbouring regions and allows the variation in time and space, is described by the next equation:

$$\ln M_{it} = \mu_i + \alpha \ln J_{it} + \alpha^* \ln J^*_{it} + \beta \ln V_{it} + \beta^* \ln V^*_{it} + \eta_y + \gamma_S + \varepsilon_{it} \quad [8],$$

where μ_i is the fixed effect that measures the differences between regions, $\alpha^* \ln J^*_{it}$ and $\beta^* \ln V^*_{it}$ quantifies the external effects of the labour markets in the neighbouring areas, η_y and γ_S are time fixed effect controlling for aggregate shocks and seasonal fluctuations.

To capture the effect of population density on the efficiency of the process, it has been used a dummy variable (taking value 1 if the population density in a region is higher than average and 0 for regions with a density lower than the average):

$$\begin{aligned}\ln M_{it} &= \mu + \alpha_1 \ln J_{it} + \alpha_1^* \ln J^*_{it} + \alpha_2 Pop \cdot \ln J_{it} + \alpha_2^* Pop \cdot \ln J^*_{it} + \beta_1 \ln V_{it} + \beta_1^* \ln V^*_{it} + \\ &+ \beta_2 Pop \cdot \ln V_{it} + \beta_2^* Pop \cdot \ln V^*_{it} + \eta_y + \gamma_S + \varepsilon_{it}\end{aligned} \quad [9]$$

Robson (2006) proposes two types of models: a function for studying the behaviour of the unemployed and another to study the process by which the vacancies are fulfilled. His analysis is performed on the regions of Great Britain and uses indicators which characterise the structural changes (Lilien index), employment specialization (coefficient of absolute regional specialization - CARS), a set of control variables (long-term unemployment rate, the proportion of unemployed aged under 25 and the proportion of unemployed aged 50 and over) and a set of data to reflect the changes over time:

$$\ln M_{it} = \kappa + \theta \ln U_{it} + \phi \ln V_{it} + \lambda \ln Lilien_{it} + \mu \ln CARS_{it} + \varphi X_{it} + \tau_i TREND_i + v_{it} \quad [10]$$

$$\ln F_{it} = \kappa' + \theta' \ln U_{it} + \phi' \ln V_{it} + \lambda' \ln Lilien_{it} + \mu' \ln CARS_{it} + \varphi' X_{it} + \tau'_i TREND_i + v'_{it} \quad [11]$$

In order to model econometrically the factors that determine the position and shape of the Beveridge curve, Nickell, Nunziante, Ochel, Quintin (2002) use a log-linear model with panel data, where the dependent variable is *unemployment rate* u_{it}, while the independent variables are *unemployment rate* u_{it-1}, *vacancy rate* v_{it}, *inflow rate* s_{it} and a set of control variables Z_{it} (*benefit replacement rate, benefit duration, employment protection, owner occupation rate, employment tax rate, coordination, union density*):

$$\ln u_{it} = \alpha_i + \alpha_t + \beta_1 \ln u_{it-1} + \beta_2 \ln v_{it} + \beta_3 \ln s_{it} + \beta_4 Z_{it} + \varepsilon_{it} \quad [12]$$

A study of the factors that determine the shape and position of the Beveridge curve over time (the composition of employment and unemployment X_{it}, institutional factors Z_{it}, business cycle $outputgap_{it}$, structural changes W_{it}) was conducted by Bouvet (2009) using a panel data model with fixed effects to capture the differences that exists between countries or regions:

$$u_{it} = \alpha_i + \beta_1 + \beta_2 v_{it} + \beta_3 v_{it}^2 + \beta_4 X_{it} + \beta_5 Z_{it} + \beta_6 outputgap_{it} + \beta_7 W_{it} + \varepsilon_{it} \quad [13]$$

5. The Beveridge curve in Romania and in other EU countries

As already indicated, the Beveridge curve describes the negative relationship that exists between unemployment rate and vacancy rate, highlighting concomitantly through the position and shifts over time, the types of factors that influence the labour market development. Thus, the changes of the two indicators along a fixed Beveridge curve indicate the influence of cyclical factors, while shifts to the right or the left characterise the quality of the process by which the unemployed people are allocated to jobs (matching process) and the existence of structural unemployment.

In this context, the evolutions of the two indicators in recent years in **Romania** capture distinct moments in the evolution of the economy. The period 2005-2008 marked a decrease in the unemployment rate under a vacancy rate which hasn't varied too widely, indicating an increase compatibility between unemployment and job vacancies (other factors involved in this process being considered constant). As expected, since the second quarter of 2008, it can be observed a sharp decrease in vacancies and an important rise in unemployment once Romania entered recession (Diagram 3 in the Appendix).

A similar pattern of the evolution of unemployment and vacancies can be observed for **Bulgaria**. The decrease of the number of vacancies was not as pronounced as in Romania, and during 2009, unemployment has risen at a relatively constant job vacancy rate, which may indicate difficulties in the allocation of unemployed people to the vacancies (Diagram 4 in the Appendix).

Czech Republic has experienced two distinct phases along 2005-2009 period in its evolution. The first one, 2005-2007 was marked by a strong development, characterised by the increasing of the number of vacancies and low unemployment. After the beginning of 2008 it has been recorded a very strong increase of unemployment (above 15% in late 2009) (Diagram 5 in the Appendix).

Hungary has experienced a growing period among 2005-2008, when the number of job vacancies varied at a relatively constant level of unemployment (approx. 7%), which may reveal the existence of structural unemployment. At the beginning of 2008, when the signs of recession came up, the unemployment reached 10% (Diagram 6 in the Appendix).

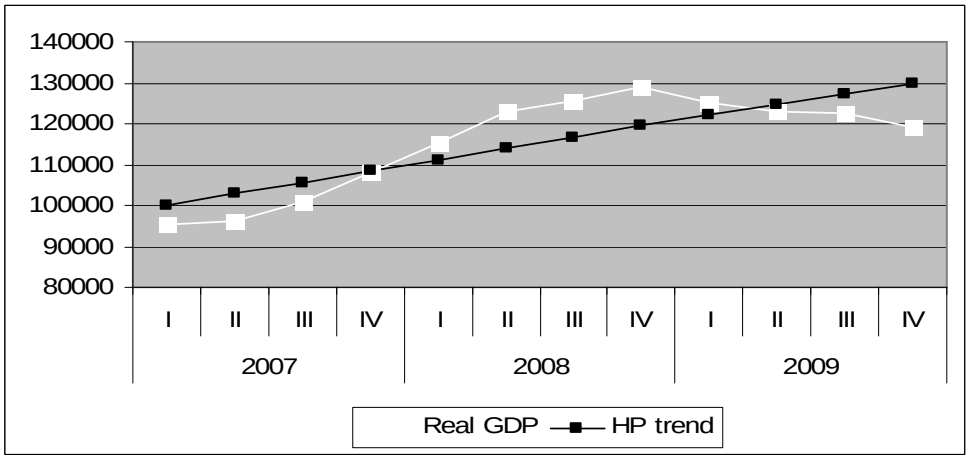
As regards **Greece**, the pattern of evolution of the two indicators is slightly different: from a high rate of unemployment in 2005, approximately 10%, in 2008 at the same rate of vacancies, the unemployment rate is with almost 3% lower, which shows a much better adaptation of the unemployed people to the jobs offered. The period 2008-2009 has been marked by fast rise of unemployment and job vacancies (Diagram 7 in the Appendix).

The evolution of **Spain** among 2005-2007 was more constant, maintaining unemployment at a relatively high level (8-9%) the same with the vacancies' one, while in 2008-2009 unemployment rose faster without being accompanied by a decrease in the same measure of the job vacancies. For Spain, this situation translates into a very low capacity of the unemployed to adapt themselves to the changes in the economy (Diagram 8 in the Appendix).

Thus, each of the considered models highlights the fact that periods of low compatibility between those who are seeking work (unemployed people) and job vacancies alternate with periods of increased efficiency of this process. From these results we can deduce that some of these countries have managed

through appropriate strategies and programmes to increase the workforce adaptability/responsiveness to the structural changes that come up in the economy, while others did not succeeded. In this context, it is interesting to analyse which is the impact of the human factor, by its structure and quality, in assuring a better compatibility between seeking employment people and job vacancies, knowing that the unemployment (mainly the structural one) translates into a loss of output (output gap between real GDP and potential GDP) and a decrease in living standards for citizens. Diagram 2 illustrates the evolution of the Romanian GDP during the reference period.

Figure 2: Romanian output-gap



Source: Our processing based on data published in *Monthly statistical Bulletin*, NIS 2007-2010

6. Econometric modelling of the impact of the human factor on the compatibility of unemployed people with job vacancies

In order to study the shape of the relationship between unemployment and vacancy rates for Romania compared with other EU countries (whose development in economic and social terms were similar) and to record the impact of the human factor on that, we have selected 12 countries of the latest accession wave (those already mentioned and: Estonia, Cyprus, Latvia, Lithuania, Slovenia, Slovakia) and an econometric model in which we have included a number of variables related to the structure and quality of human resources:

$$ur_{it} = \alpha_i + \beta_1 + \beta_2 jvr_{it} + \beta_3 jvr_{it}^2 + \beta_4 lt\_ur_{it} + \beta_5 f\_u_{it} + \beta_6 y\_u_{it} + \beta_7 f\_em_{it} + \beta_8 he\_em_{it} + \varepsilon_{it} \quad [14]$$

where ur_{it} is unemployment rate, jvr_{it} job vacancy rate, lt_ur_{it} long-time unemployment rate, f_u_{it} female share in unemployment y_u_{it} young share in unemployment f_em_{it} female share in employment he_em_{it} high-educated share in employment, *i* refers to country, and *t* to time.

In this purpose we have used data from the Eurostat database (Labour Force Survey) and it covers the period 2005-2009 (seasonally adjusted quarterly data).Unemployment rates represent unemployed persons as a percentage of the labour force. The labour force is the total number of people employed and unemployed. Unemployed persons comprise persons aged 15 to 74 who were: a. without work during the reference week, b. currently available for work, i.e. were available for paid employment or self-employment before the end of the two weeks following the reference week, c. actively seeking work, i.e. had taken specific steps in the four weeks period ending with the reference week to seek paid employment or self-employment or who found a job to start later, i.e. within a period of, at most, three months. The job vacancy rate (JVR) measures the proportion of total posts that are vacant, according to the definition of job vacancy above, expressed as a percentage as follows: JVR = number of job vacancies / (number of occupied posts + number of job vacancies) * 100 (EUROSTAT 2010).

As expected, the first model produced by running regression analysis of panel data showed that between unemployment and vacancy rate there is a significant negative relationship and the Beveridge curve describing this function is convex (the coefficient in the quadratic term in the vacancy rate is positive and significant). Also we noted significant negative influence of long-term unemployment on the unemployment

rate evolution, but also the positive impact of factors such as female share in unemployment, young share in unemployment, female share in employment.

Indeed, it is expected that younger people are able to find a job easier, because they are more active and adapted to new technologies which offer them a wide variety of search methods. Regarding the female share in employment and the female share in unemployment, these factors seem not to have a negative impact on unemployment, the explanation being offered by the large number of women who are not registered as unemployed (housewives) and also the willingness of them to accept part-time work and temporary contracts of employment (Table 1).

Surprisingly, the factor that relates to the level of education of the workforce appears to have a negative impact on unemployment. People with higher education do not find very quickly a job, which may raise a question of compatibility between training curricula and qualification requirements of the labour markets.

In order to measure the specific factors that are present for different countries, the regression was built as a fixed effects model. In this case all factors included in the analysis proved to be significant, except the young share in unemployment.

Subsequently, it has been determined whether there are significant differences between Model 1 (no effect) and Model 2(expressing fixed effects), in terms of intercept significance. To this end we used the F test. Its statistics are as follows:

$$F = \frac{(R_{EF}^2 - R_{NF}^2)/(n-1)}{(1-R_{EF}^2)/(nT-n-K)} \rightarrow F(n-1, nT-n-K) \quad [15]$$

and they test the null hypothesis according to which the intercepts of the model with fixed effects are equal (*n* refers to number of countries, *T* to number of temporal observations, *K* to number of regressors).

$$F = \frac{(0.842087-0.459931)/(12-1)}{(1-0.842087)/(12\cdot 20-12-7)} \rightarrow F(11{,}221) \quad [16]$$

As $F_{calc} = 48.6 > F_{0.05,11,221} = 1{,}83$, one has to accept that in each country there are specific factors influencing their performance in a significant manner.

7. Conclusions

Unemployment reflects an imbalance of the labour market, which doesn't allow persons without a job and actively seeking to be employed the possibility to find a job. Most times, the number of registered unemployed in official statistics is much smaller than those who do not have a job. For Romania, where much of the population still lives in rural areas, the official unemployment rate is much lower due to hidden unemployment, caused by subsistence agriculture. In addition to this, it is worth to be noticed that, in recent years, cross border migration has substantially reduced the number of registered unemployed persons.

The current economic crisis reveals through increasing rates of unemployment a weak structure of the national economy in terms of attractive job opportunities for high educated people. A consequence of this situation is a higher youth unemployment rate and long-term unemployment rate in Romania when compared to the European average. It indicates a significant lack of compatibility between the qualifications structure required in the labour market or the skills that could lead to the development of an efficient economy (i.e. entrepreneurial training, communication skills and transversal competences) and the contents and learning outcomes of the study programmes provided by the Romanian higher education institutions.

The above mentioned situation is reflected in the econometric model built for the twelve countries studied in this article. Analyzed as a whole, they are facing unemployment rates which are negatively influenced by the vacancy rates, long-term unemployment and high educated labour that don't fulfil the requirements of a competitive economy.

The consequences of unemployment increase are going to persist on long term. It is estimated to exert certain effects on the social costs which have to be covered by the public budget, and in the same time it will affect directly the life conditions of the people by increasing poverty risk and strictly related to this other side effects will arise more frequently (crime, health and family problems).

The absolute and relative level of unemployment in Romania could decrease by an efficient absorption of the available European funds, by positive actions undertaken in both the vocational education and training and in higher education to meet the needs and expectations of the labour market, by additional

education and training programmes in entrepreneurship and by a consistent and coherent strategy aiming at transforming the current subsistence agriculture in an export focused organic farming.

Acknowledgements

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Appendix

Figure 3: Romania Beveridge curve, 2005-2009

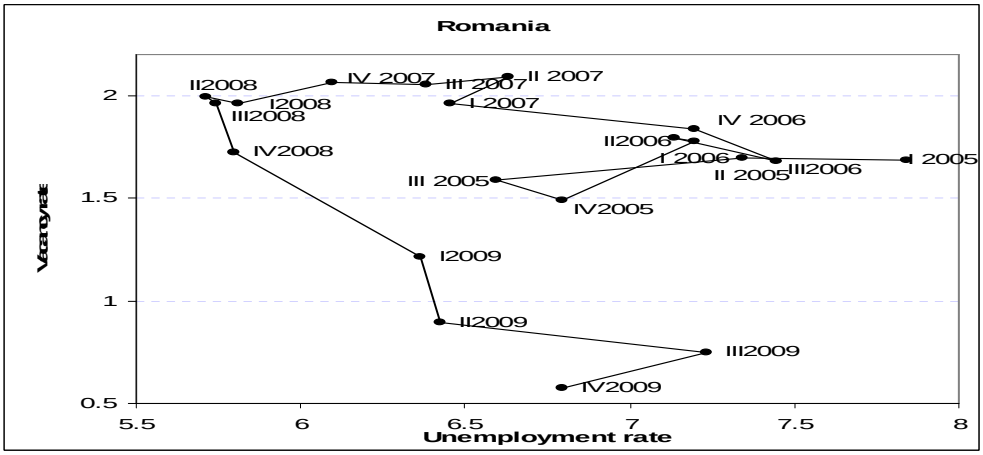

Figure 4: Bulgaria Beveridge curve, 2005-2009

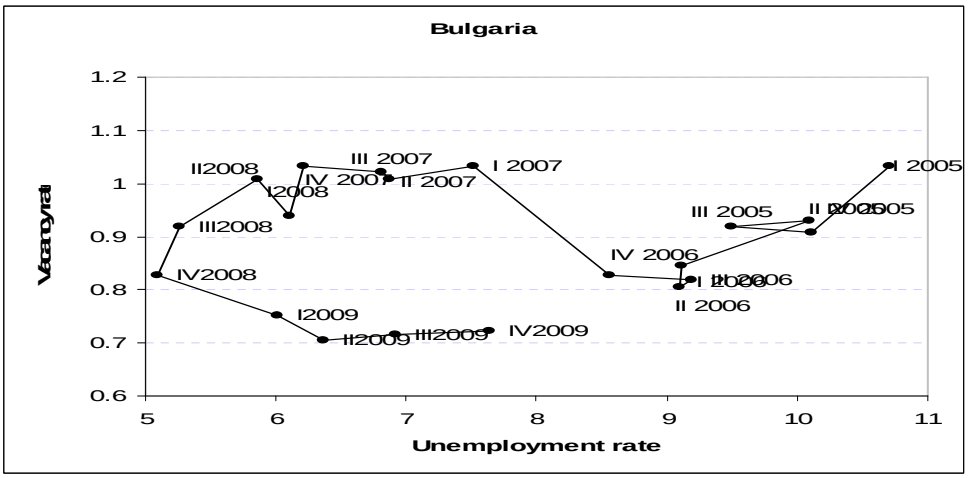

Figure 5: Czech Republic Beveridge curve, 2005-2009

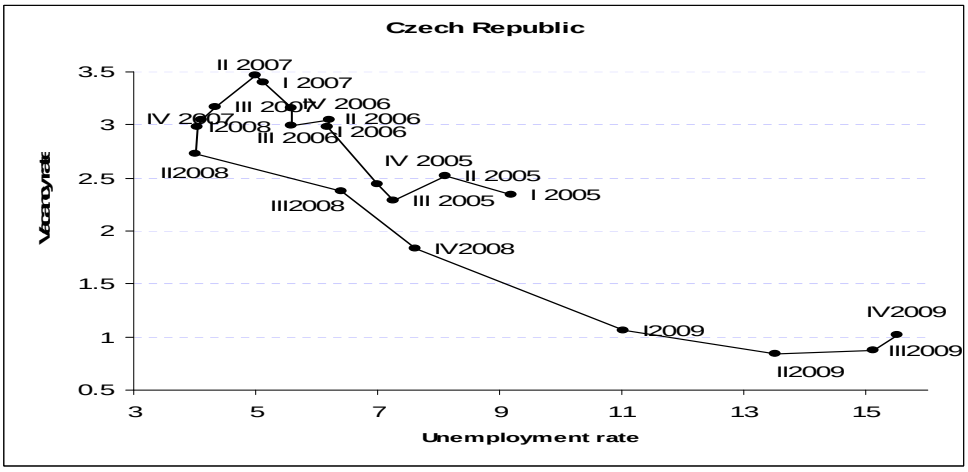

Figure 6: Hungary Beveridge curve, 2005-2009

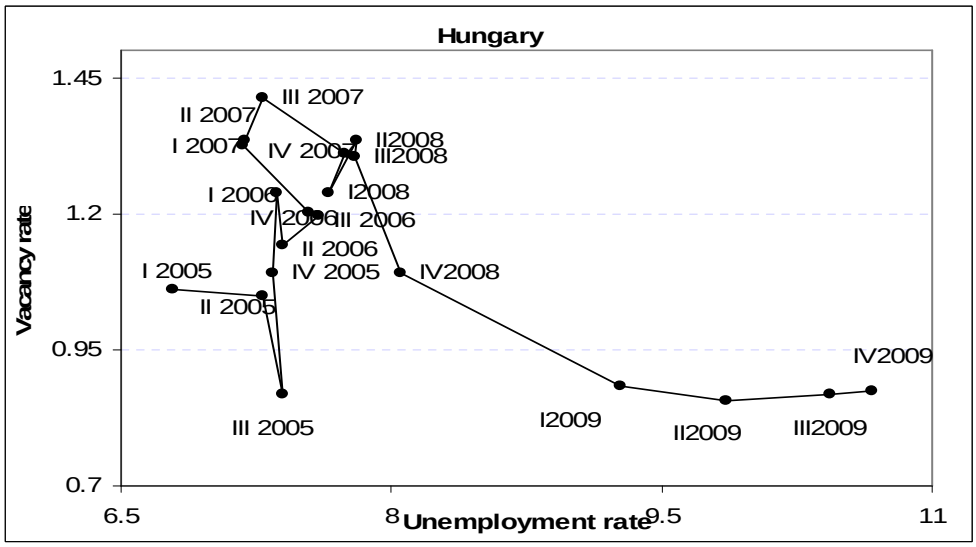

Figure 7: Greece Beveridge curve, 2005-2009

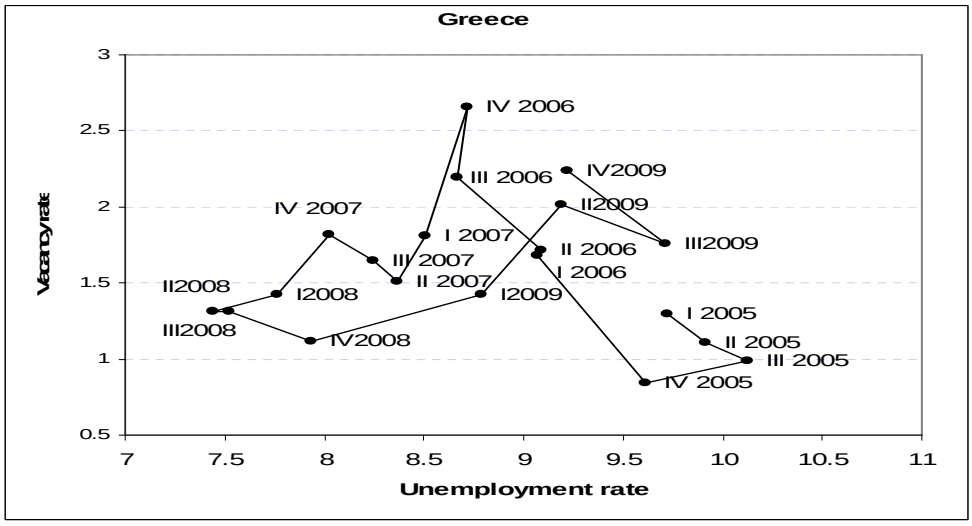

Figure 8: Spain Beveridge curve, 2005-2009

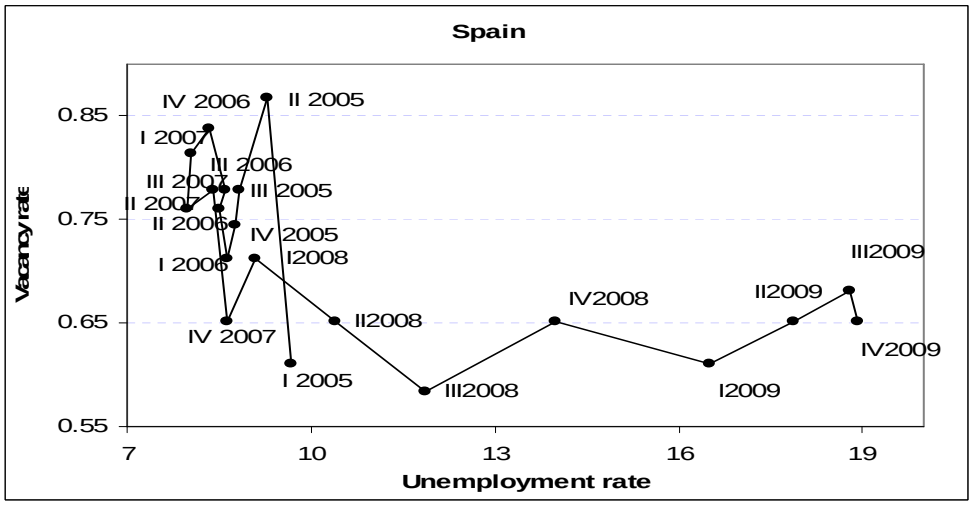

Table 1: Panel country analysis

Dependent variable: unemployment rate		
	(1)	(2)
Job vacancy rate	-3.872021*** (0.532989)	-3.527563*** 0.378157
Job vacancy rate^2	0.477504*** (0.110656)	0.380326*** 0.071180
Long-term unemployment	0.077724*** (0.014575)	0.086967*** 0.071180
Female share in unemployment	-0.247132*** (0.041450)	-0.112280*** 0.015876
Young share in unemployment	-0.116168** (0.048056)	0.044004 0.038138
Female share in employment	-0.434501*** (0.083979)	1.572760*** 0.214046
High-educated share in employment	0.184621*** (0.034639)	0.245653** 0.102289
Constant	38.75374*** (5.672674)	-64.75913*** 9.672377
Country fixed effect	No	Yes
Observation	240	240
R-squared	0.459931	0.842087

Robust standard errors in brackets
* significant at 10%; ** significant at 5%; ***significant at 1%;

THE INVESTMENT CLIMATE AND THE DECISION TO UNDERTAKE FDI

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Abstract *FDI is well acknowledged as an important factor stimulating growth at the level of national economies. Therefore, governments are interested in attracting FDI by adopting various policies and implementing focused strategies. However, the decision to undertake FDI is taken on a case-by-case basis by each foreign investor. Nevertheless, certain patterns can be observed which reveal the investor's objectives.*

The article presents certain specific analyses performed based on the latest statistical data available on FDI in order to evaluate which are the most appealing economies to foreign investors and argues on the potential criteria considered in the process of FDI.

Keywords: *foreign direct investment, multinational enterprises, investment climate, statistical analysis*

JEL classification: F21, F47

Introduction

The multinational enterprises ('MNE' hereinafter) are continuously seeking to increase their profitability, when possible by extensive means, including under the form of increase of production capacities. When the domestic market is saturated, MNE eventually decide to focus on overseas expansion by carefully choosing where the planned subsidiary is to be situated. The decision of undertaking a foreign direct investment ('FDI' hereinafter) is not less objective than the choice of the country where the new subsidiary should be located, as feasibility studies and profitability forecasts usually fundament such decisions.

From another perspective, a set of priorities acknowledged by MNE transform the statistics of FDI in something else than a simple computation of assets held by MNE in foreign countries. From a broader point of view, FDI is characterised by heterogeneity which comes from the diversity of the factors considered by MNE when choosing the location of the future subsidiary. In the context of the benefits brought by FDI to the stability and development of worldwide economies, countries attempt to become more attractive to MNE.

In the following pages, this article is trying to evaluate which are the criteria that determine foreign investors to choose a certain country as location for their foreign investment as well as on the tactics that governments often undertake in order to become more appealing to foreign potential investors. Finally, certain analyses of statistical data regarding FDI inflows were performed in order to outline FDI trends and forecasts.

1. Key drivers for MNE to select a certain foreign location for their direct investment

From a general perspective, MNE are usually considering individually or as a group the following criteria in their assessment of undertaking FDI: natural resources availability, the potential of maintaining or increasing of sales in certain markets, acquiring strategic assets or low production costs in the light of subsequent exports. As such, countries with significant natural resources, large consuming markets, attractive corporate assets or low wages labour markets would become attractive for MNE searching to meet one or several of the above objectives. In principle, we could argue that the geographical distribution of FDI around the world reflects the capacity of countries to satisfy the above-mentioned objectives assumed by MNE.

In addition, we could note, especially in the past two years, most probably as a consequence of the global financial crisis, an increased interest of MNE in restructuring their business, by taking into account specific tax aspects and more precisely by performing extensive tax planning (which hopefully generates low effective tax rates at group level and increases consolidated profitability).

On a related note, the distribution of FDI on the worldwide map during the 20th century and beginning of the 21st century proves a change of interest at the level of foreign investors. If during the 20th century (and particularly before the World War II) large investments in countries having available well-known raw material resources – the current poor countries of the world- were performed, nowadays the market-seeking investments in wealthy industrialised countries are the most frequently FDI undertaken.

Apparently, MNE are seeking for low waged and non-regulated labour protection countries were labour costs reach the lowest levels and at least theoretically the best profit level indicators should be achieved. However, FDI distribution statistics prove the contrary, meaning that, except for China, there is no positive

relationship between the level of a country's wages and its capacity of attracting FDI. Moreover, statistics show that FDI usually moves from one wealthy developed country to another. One perfectly consistent explanation would be that MNE are looking for high productivities (computed as output per unit of input) which are quite difficult to achieve if only low instructed workers with bad working behaviour are available, which is frequently the case of less developed countries. In addition, other costs such as raw materials, equipment, transportation, tax burden should be also considered as components of the production cost endured by MNE. Therefore, we could argue that the high wages of the industrialised countries would reflect the level of their productivity.

In addition, statistics show that FDI is moving towards countries with potentially high foreign consumers' buying power and not towards weakened economies. The latter, although frequently capital-scarce economies with low developed labour markets, are not characterised, statistically speaking, by a high FDI inflow. This phenomenon was named by Deloitte further to one of their researches as the *high-wage paradox*. "There is a continuing 'high-wage paradox' where developed nations are attracting far more funding than countries with historical low-wage economies. Rather than focusing solely on labour costs, investors are drawn to a host country's skill and educational levels. Also, the political and economic stability of the nations have become a much more important factor in the decision process"[1].

The study shows that despite the public perception that most overseas manufacturing investments are being made in developing nations - taking advantage of those countries' low wage scales- the vast majority of the funding is going to the developed nations in North America, Europe, and Asia.

2. The investment climate

The investment climate is one of the main elements considered by MNE when selecting a location for establishing a subsidiary. Although not quantifiable and resulting from a mix of factors, the investment climate represents mainly the foreign investor's perception on how business friendly is a potentially host country. From a more pragmatic perspective, the foreign investors make a judgement on the risk involved by FDI and whether the expected returns are satisfactory in comparison to the level of uncertainties.

There is a list of most important factors which would determine the foreign investor to establish the nature of the investment climate, as follows: political and country stability, quality of governance, stable system of law, macroeconomic policies with direct influence on the entire economy, etc. Lately, the fiscal policy is also increasingly important for the investors, either envisaging FDI or simply business restructuring. Tax planning has become a major interest for MNE which envisage diminishing the tax burden (by applying efficient tax planning strategies, MNE actually manage to reduce their effective tax rate at group level and thus realise a significant reduction of costs). Corporate tax rates, as well as the monetary policies setting the cost of borrowing in the host country are the main features of the fiscal policy.

In addition, there are also meso-economic factors such as industry policies (providing for e.g. tax exemptions, protection from import competition), regulatory environment of business, quality of human and physical infrastructure, regulation of capital outflows, import barriers, etc. that cannot be ignored by MNE.

The strategies adopted at the governmental level are very important in attracting or, conversely, discouraging FDI. As such, as a first possible attitude, governments might decide to focus on attracting FDI by adopting policies and implementing strategies and measures (either applicable to all industries or customised for certain specific industries) in order to become more appealing to foreign investors. Moreover, very aggressive governments might also target certain MNE or sectors and court them in order to offer different incentives which would hopefully determine the foreign capital inflow. Currently, from a worldwide perspective, this is the attitude the most frequently adopted by governments, interested in attracting FDI.

Nevertheless, a second possible attitude of governments is the "laissez-faire" one adopted, for example, in the US at federal level. Such attitude implies no effort of what so ever from the part of governments which have few or no policies implemented. The purpose of such position is to let the market mechanism completely free in attracting or, by opposite, discouraging FDI at different industries level. However, the above-mentioned example is one of the rarest ones.

Thirdly, governments may also adopt certain specific policies which provide for disincentives for the MNE. Such countries, under the intention of protecting the national interest (irrespective of what it consists

[1] Gabrys, D. (2002), *U.S. Global Manufacturing Investments Create "High-Wage Paradox"* [Electronic version], New York (Business Wire) pg. 1

of) may actually risk fully discouraging FDI and finding themselves destitute of the FDI benefits. This would be the case of certain very nationalists Asian countries.

A fourth situation, i.e. the one of a government which manages very poorly its national economic policies or handles very aggressively its political objectives so that is discouraging FDI, could also be considered, although such a situation would be mostly unintentional and could not be viewed as a strategy.

In this respect, the United Nations Conference on Trade and Development ('UNCTAD' hereinafter) computes annually the percentage of each country's success in attracting FDI. Such indicator, named the Potential Index is based on certain quantitative indicators (by which also the GDP) that produce an index number which should indicate to what extent a country's assets would normally attract FDI. The Performance Index is a ratio that is computed by dividing a country's share of global FDI inflows in a given year to its share of global GDP (the latter being seen as a potential to attracting FDI). Thus, such index compares the effective results of a country in attracting FDI in comparison to its "potential", method which turns to me more precise than a simple FDI to GDP ratio. If a country's ranking in the Performance Index is significantly above (below) its ranking in the Potential Index, it is presumably doing something right (wrong) in making itself attractive to MNE.

As per the latest available information, Romania was ranked 69 with a Potential Index of 0.194. Such analyses are usually performed on a three-year period in order to offset annual fluctuations in the data used for the analyses.

In relation to the above, we have included below a matrix prepared by UNCTAD which presents the four categories of FDI performers in which a country could be included further to the above comparison of their performance in attracting FDI with their estimated FDI potential.

Figure 1: Categories of FDI performers

	HIGH FDI PERFORMANCE	**LOW FDI PERFORMANCE**
HIGH FDI POTENTIAL	Front-runners	Below potential
LOW FDI POTENTIAL	Above potential	Under-performers

The four categories of FDI performers are described below, while in the footnotes we have included the names of the countries belonging to each of the respective categories (by taking into consideration the average flows of FDI and related macro-economic indicators for the period 2005-2007):

- *Front-runners*[1]: countries with high FDI potential and performance;
- *Above potential*[2]: countries with low FDI potential but strong FDI performance;
- *Below potential*[3]: countries with high FDI potential but low FDI performance;
- *Under-performers*[4]: countries with both low FDI potential and performance.

Out of the 140 countries subject to the yearly analysis performed by UNCTAD, we note that especially one country, Japan, is constantly included in the "Below potential" category and that is due to its high economic performance registered lately (which generates a high FDI potential), but also to the formal and

[1] Azerbaijan, Bahamas, Bahrain, Belgium, Brunei Darussalam, Bulgaria, Chile, Croatia, Cyprus, Czech Republic, Dominican Republic, Estonia, Hong Kong (China), Hungary, Iceland, Israel, Jordan, Kazakhstan, Latvia, Lithuania, Luxembourg, Malaysia, Malta, Mongolia, Netherlands, New Zealand, Oman, Panama, Poland, Romania, Saudi Arabia, Singapore, Slovakia, Sweden, Thailand, Trinidad and Tobago, Tunisia, Ukraine, United Arab Emirates and United Kingdom.

[2] Albania, Armenia, Botswana, Colombia, Congo, Costa Rica, Egypt, Ethiopia, Gambia, Georgia, Guinea, Guyana, Honduras, Jamaica, Kyrgyzstan, Lebanon, Namibia, Nicaragua, Nigeria, Peru, Republic of Moldova, Sierra Leone, Sudan, Tajikistan, the former Yugoslav Rep. of Macedonia, Togo, Uganda, United Republic of Tanzania, Uruguay, Viet Nam and Zambia.

[3] Algeria, Argentina, Australia, Austria, Belarus, Brazil, Canada, China, Denmark, Finland, France, Germany, Greece, Ireland, Islamic Republic of Iran, Italy, Japan, Kuwait, Libyan Arab Jamahiriya, Mexico, Norway, Portugal, Qatar, Republic of Korea, Russian Federation, Slovenia, Spain, Switzerland, Taiwan Province of China, United States and the Bolivarian Rep. of Venezuela.

[4] Angola, Bangladesh, Benin, Bolivia, Burkina Faso, Cameroon, Côte d'Ivoire, Democratic Republic of Congo, Ecuador, El Salvador, Gabon, Ghana, Guatemala, Haiti, India, Indonesia, Kenya, Madagascar, Malawi, Mali, Morocco, Mozambique, Myanmar, Nepal, Niger, Pakistan, Papua New Guinea, Paraguay, Philippines, Rwanda, Senegal, South Africa, Sri Lanka, Suriname, Syrian Arab Republic, Turkey, Uzbekistan, Yemen and Zimbabwe.

informal barriers imposed by the Japanese government to the incoming majority-owned FDI (which generates a quite limited FDI potential).

According to the latest information presented by UNCTAD, Romania is included in the first category, the front runners, having a high FDI performance and potential. Such remarkable progress was recorded after 2005, the last period of analysis in which Romania was included in the left bottom square of the matrix (i.e. in the "Above potential" category). Most probably, after such date, Romanian economy's FDI potential increased further to the constant economic growth (i.e. the increase of the share of GDP in the worldwide GDP). However, irrespective of the governments' strategies with regard to FDI, there are also other factors which cannot be controlled, such as the level of the instruction of the labour force, the potential aggressiveness of union trades, the quality of the raw materials available, etc.

Despite all, it should be stated that investment climate improvement, which would normally lead to attracting FDI is a process which requires efforts and implication from the part of governments. Most likely, such improvement requires a period of time so that the transmission mechanism (from governments adopting official FDI supporting position to reception by the foreign investors of such message) to take place.

3. The decision to undertake FDI

The decision to undertake FDI is, from the foreign investor's perspective, a case-by-case decision which ultimately takes into consideration the objectives of the investor, on one hand, and the strengths and weaknesses of specific countries/regions contemplated, on the other hand. In addition, the corporate culture has an increased significance in the decisional process, as it would attribute certain levels of importance to each of the countries' attributes and finally it would determine the acceptance and the rejection factors. At the level of the foreign subsidiary, such aspects would normally have a significant influence on the objectives and operational needs arising thereof.

The criteria that lead to the FDI decision making is unique from one foreign investor to another. However, when analysing the specific academic literature, we can note that certain criteria are similar for different kinds of investments.

As such, in case of resource-seeking investments (e.g. oil drilling activities), we can argue that there are mainly three basic criteria influencing the investment decision making, i.e. easy access to important quantities of focused raw materials, costless transportation by means of satisfactory infrastructure and an acceptable level of corruption and environmental legislation.

On another side, there are market-seeking foreign investors (mainly all players in the consumer products industry) which are primarily looking for large economies, having constant economic growth, with a strong consumer purchasing power, goods infrastructure and human capital endowment. Most of the countries which could qualify for the above desiderates are located in the EU, US or Japan / Eastern Asia.

The efficiency-seeking foreign investors are attracted by economies with relatively low wage scale (e.g. less developed countries). However, such countries should be carefully analysed in order to avoid the ones with low labour productivity or possible sources of high production costs (e.g. increased corruption, less developed law systems, inadequate infrastructure).

Finally, in respect of foreign investors seeking for acquiring strategic assets or entering into a merger with a foreign company, specific factors are taken into consideration in relation to the objectives of the foreign investor. Therefore, it is difficult to enumerate a list of factors which could be considered, as most of the times the decision is not related to the attractiveness of the respective foreign economy, but to intrinsic factors.

The bias of assessing positive factors characterising a potential host country also applies when it comes to negative factors. It is quite less probable for foreign investors to be able to find a host country for their investment having all or either part of the required strong points without having at least one weak point. Therefore, the foreign investors should determine very well which are the weak points that are acceptable and which are not from the perspective of their envisaged objectives.

4. Specific statistic analysis on the development of FDI

We aim of the following analysis is to determine which were the FDI trends in 2007, 2008 and partially in 2009 and based on such an analysis to forecast on the future potential actions to be undertaken by foreign investors with regard to the most likely location for their FDI (we note in this respect that we do not have yet statistical data available for 2009 FDI flows, however, certain analyses were already performed based on estimated figures).

However, firstly, we deemed necessary to present the two ways of computing FDI considered by UNCTAD when performing their various statistical analysis on FDI.

As such, for statistical purposes, FDI is evaluated under the following forms: annual FDI inflows and outflows and cumulated stocks.

FDI inflows and outflows comprise capital provided (either directly or through other related enterprises) by a foreign direct investor to a FDI enterprise, or capital received by a foreign direct investor from a FDI enterprise. FDI inflows/outflows include the three following components: equity capital, reinvested earnings and intra-company loans.

- *Equity capital* is the foreign direct investor's purchase of shares of an enterprise in a country other than that of its residence.

- *Reinvested earnings* comprise the direct investor's share (in proportion to direct equity participation) of earnings not distributed as dividends by affiliates or earnings not remitted to the direct investor. Such retained profits by affiliates are reinvested.

- *Intra-company loan*s or intra-company debt transactions refer to short or long-term borrowing and lending of funds between direct investors (parent enterprises) and affiliate enterprises.

On the other hand, FDI stock is the value of the share of their capital and reserves (including retained profits) attributable to the parent enterprise, plus the net indebtedness of affiliates to the parent enterprises.

Further to the review of the statistical data available on the online FDI statistical database of UNCTAD[1], we note that in 2008, the total FDI flow was evaluated at 1,697,353 MEAS[2] in comparison to 1,978,838 MEAS in 2007.

With regard to 2009, the estimated FDI inflows are of 1,040,300 MEAS. This deep decrease (i.e. approximately 15% in 2008 and estimated 38.7% in 2009) of the level of the worldwide FDI comes after a long period of constant growth and is undoubtedly caused by the global financial crisis. As such, the companies have seen their capacity of investment significantly being weakened by the lack of financial resources (both internal and external) and their propensity to invest diminished by collapsed growth prospects and heightened risks.

4.1. Analysis of FDI statistical data by type of countries

In the following table we have included the relevant information regarding the amounts of FDI inflows recorded by each category of country for the period 1992 – 2000 (considered as an annual average) and for 2007, 2008 and estimated 2009. Please note that we have chosen the period 1992-2000 for our analysis as considered a period of relative economic stability. It is also a period of increase of FDI inflows at the worldwide level which proves the increased interest of foreign investors towards FDI (which is also due to the globalisation phenomenon becoming more obvious worldwide).

Table 1: Evolution of FDI inflows by type of countries*

	1992-2000 (millions)	2007 (millions)	2008 (millions)	2009 estimated (millions)
Worldwide FDI	558,755	1,978,838	1,697,353	1,040,300
Developed economies	401,678	1,358,628	962,259	565,550
Developing economies	151,476	529,344	620,733	405,450
- out of each China	35,921	83,521	92,200	90,000
Transition economies	5,601	90,866	114,361	69,300

Source: FDIStat, the official site of UNCTAD (http://stats.unctad.org) and of the International Monetary Fund (www.imf.org)

*The numbers contained in this table are expressed in US dollars at current prices and current exchange rates

Further to the analysis of the statistical data presented above regarding the distribution of FDI, we note that a constant increase of the level of FDI flows was registered since 1990. Also, we note that FDI inflows recorded a sinusoidal evolution as of 1990, with periods of constant growth during 1992-2000 and 2003-2007. The peculiar evolution of FDI in 2008 can be argued by the financial crisis which determined a significant decrease of FDI worldwide. In addition, we note a slightly increased interest of investors towards developing and transition economies in 2008.

[1] FDIStat, the official site of UNCTAD presenting extensive statistical information regarding FDI (http://stats.unctad.org)

[2] US dollars at current prices and current foreign exchange rates in millions

With regard to the evolution of FDI inflows during 2009, a significant decrease affecting all categories of countries can be observed.

Subsequently, in the below table, we have computed the share of FDI inflows of each category of economies in order to track the evolution of the countries in attracting FDI during the period 1992-2009 (based on the statistical data included in table no. 1):

Table 2: Evolution of FDI inflows by type of countries

	FDI inflows (%)			
	1992-2000	2007	2008	2009 (estimated)
Worldwide FDI	100	100	100	100
Developed economies	71.89	68.66	56.69	54.36
Developing economies	27.11	26.75	36.57	38.98
- out of each China	6.43	4.22	5.43	8.65
Transition economies	1	4.59	6.74	6.66

After reviewing the results of the above tables, we note that a significant increase of the level of FDI inflows was recorded in 2007 and 2008 in comparison to the annual averages of the period 1992-2000 for each category of countries (i.e. the growth was up to 3.5 times). In addition, we note quite a small interest shown by foreign investors in the transition countries in the period 1992-2000 (i.e. only 1% of the worldwide attracted FDI), however such interest increased in the late 2000s, the share of attracted FDI being of approximately 6.74% in 2008.

We also note that the developing countries continue being very attractive to foreign investors, gaining advantage in comparison to developed countries (we note an important increase of the FDI inflows share in 2008 and 2009 in comparison to the annual average of 1992-2000). In addition, it seems that the global financial crises affected, at least based on the estimated figures, in a more profound way the developed countries rather than e.g. the developing countries (the latter having attracted an increased percentage of worldwide FDI inflows in 2009).

China appears to be a very important player in the category of developing countries, having by itself in 2008 a share of 5.43% of the total FDI inflows and of 14.85% of the FDI inflows attracted by the developing countries (during the period 1992-2000, China attracted in average more than 23% of the FDI inflows of the developing countries) which shows an increasing interest of foreign investors in investing also in other developing economies than China.

In 2009, the interest of foreign investors in China seemed to have slightly decreased (from 92,200 million US$ to 90,000 million US$), however, its level of FDI attractiveness worldwide and in the developing countries zone has increased (up to 8.65% of the worldwide FDI flow and 22% of the developing economies FDI attracted).

As per the above analysis, we note that the interest of foreign investors in developed countries started to slightly decrease over the past years in the benefit of developing countries (out of which China is a major player). Also, the transitional countries become more attractive from a FDI perspective.

4.2. FDI analysis at the level of developed countries

As described in the following tables, the United States, the European Union and Japan (also called the Triad by various authors), the wealthiest countries of the world, cumulated in 2007 and 2008 important shares of the global FDI inflows and inward global stock, while the respective countries gathered only a low share of the global population and an important percentage of the world GDP.

Table 3: Specific data regarding FDI inflows, GDP and population for certain regions/ countries for 2007 and 2008

	Global FDI inflows* (millions)		Global GDP** (millions)		Global population (thousands)	
	2007	**2008**	**2007**	**2008**	**2007**	**2008**
Global indicators	1,978,383	1,697,353	n/a	68,996,849	6,671,226	6,749,678
European Union (UN27)	223,341	498,440	n/a	15,247,163	495,090	497,482
United States	271,176	316,112	n/a	14,264,600	301,621	303,598
Japan	22,549	24,426	n/a	4,354,368	127,771	127,568
Total (for EU, US and Japan)	517,066	838,978	n/a	33,866,131	924,482	928,648

Source: Official sites of UNCTAD (http://stats.unctad.org), of the Organisation for Economic Cooperation and Development (http://oberon.sourceoecd.org) and of the International Monetary Fund (www.imf.org)

* US dollars at current prices and current exchange rates, ** US dollars at current prices and PPPs

In the following table we have performed an analysis of the shares of FDI inflows, GDP and population for certain regions/countries for the years 2007 and 2008 in order to determine a certain concentration of FDI inflows in certain geographical areas of the world and correlate it with the distribution of the highest GDP per capita (based on the statistical data included in table no. 3):

Table 4: Percentage of FDI inflows, GDP and population of certain regions/ countries for 2007 and 2008

	Global FDI inflows (%)		Global GDP (%)		Global population (%)	
	2007	2008	2007	2008	2007	2008
Global indicators	100	100	n/a	100	100	100
European Union (UN27)	11.29	29.37	n/a	22.10	7.42	7.37
United States	13.41	18.62	n/a	22.67	4.52	4.40
Japan	1.14	1.44	n/a	6.31	1.92	1.89
Total (for EU, US and Japan)	26.14	49.43	n/a	49.08	13.86	13.76

Further to the analysis of the data provided above, we can note that the Triad was characterised in 2008 by a very high Potential Index (superior to 1), while only approximately 13% of the worldwide population resides in the area producing approximately 50% of the worldwide wealth.

Although no official data is yet available regarding the 2009 FDI inflows and GDP, we have presented below certain estimated figures in order to evaluate the FDI evolution in 2009 (and more particularly the influence of the global financial crises on foreign investors' investment decision):

Table 5: Percentage of FDI inflows and GDP for certain regions/ countries for 2009

	Global FDI* inflows	Global GDP**	Global FDI inflows (%)	Global GDP (%)
	2009 estimate (millions)	**2009 estimate (millions)**	**2009**	**2009**
Global indicators	1,040,300	57,228	100	100
European Union (UN27)	356,700	16,190	34.29	28.29
United States	135,900	14,266	13.06	24.93
Japan	11,400	5,048	1.09	8.82
Total (for EU, US and Japan)	504,000	35,504	48.44	62.04

Source: The official site of UNCTAD (http://stats.unctad.org) and of the International Monetary Fund (www.imf.org)

* US dollars at current prices and current exchange rates

** US dollars at current prices and PPPs

As such, according to the data presented above in table no. 5, it seems that during 2009 the Triad failed to attract FDI (only the EU apparently managed to increase its share of worldwide FDI inflows) in comparison to 2008, although it achieved an increased percentage of the worldwide estimated 2009 GDP (as it seems that the global financial crises affected more powerfully the developing and transitional countries). Therefore, such evolution rhythms of FDI and GDP generate in terms of Potential Index a significant decrease (i.e. down to 0.78 in 2009).

5. Forecasts on FDI evolution in the years to come

In order to understand the way in which foreign investors think when analysing their possible destinations for FDI, UNCTAD took a survey at the level of the executives of 241 of the most important non-financial MNE. The aim of such a survey is to provide insights into FDI patterns over the following three years.

According to the 2009-2011 World Investment Prospects Survey undertaken by UNCTAD in 2009 ('WIPS' hereinafter), the most attractive countries from a FDI perspective are Brazil, the Russian Federation, India and China (BRIC countries). The respective rank was established by MNE after considering criteria such as market growth, followed by the availability of cheap labour, and, in some cases, access to natural resources, location of major assets, etc. They mentioned the quality of the business environment and market size as the main strengths of the most developed economies.

In addition, the WIPS reflects a high concentration of answers. As such, the top 15 countries in the list account for 74% of the total number of responses, while at the level of developing and transition economies the respective percentage is even higher, i.e. 76%. Thus, the interest of the MNE in developing and transition economies, although increasing, is still limited to a small number of countries.

From another perspective, as a slight increase of 3.1% of the worldwide GDP is expected for 2010 (as per the estimation of the IMF, included in the latest World Economic Outlook), against a decrease of 1.1% in 2009, we could argue that a modest recovery could be expected in 2010 mainly due to the stabilisation of the worldwide economies. However, FDI flows figures are most likely to be still significantly inferior to those recorded in e.g. 2007.

As regards Romania, the FDI inflows in 2008 were of 9,084 million EUR, an increase of approximately 26% by reference to 2007, as per the information made available by the Romanian Agency for Foreign Direct Investments. However, in 2009, the FDI inflows drastically decreased up to 4,899 million EUR. For 2010, no major recovery is envisaged (the estimated FDI flow is of approximately 5 million EUR), however in 2011, also based on the expected GDP growth, the level of the attracted FDI flows might improve.

Conclusions

The interest of national economies towards FDI is increasing, especially under the conditions of the actual global financial crisis when the appetite of foreign investors for FDI is very low.

Studies performed show quite pessimistic views of foreign direct investors with regard to 2010 and 2011, however it is envisaged an upward trend for FDI inflows for the years to come.

Foreign direct investors in developing and transitional countries are more optimistic about future FDI inflows in the years to come, probably also because their countries were less affected by the financial crisis from an FDI perspective.

The results of the above analyses show an important interest in performing FDI in wealthy countries. Apparently, there is not a migration of foreign capital from North to South (a vertical movement), but a horizontal one. However, percentages held by developing countries and transnational countries in global FDI inflows are slightly increasing.

In addition, it should be stated that the 2008 and 2009 data should not be considered as reference years for the purpose of this analysis due to the effects of the global financial crisis affecting with a different intensity the various categories of countries (e.g. developed countries versus e.g. transition countries). The most severally affected by the global financial crisis in 2008 and 2009 were the developed countries, while developing and transition countries have experienced low growth rates of inflows of FDI. However, it is quite probable that the worst is yet to come for the developing and transitional countries and they are expected to record decreases of FDI inflows in 2010 and possibly 2011.

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INTRA-FIRM TRADE AND GLOBALIZATION

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Abstract: *The process of globalization has as main feature the liberalization of the international trade. And although initially by liberalizing the international trade we understood especially trading of final goods in another country, globalization has fostered a new form of trade: intra-firm trade. The goal of this paper is to explore the changes in the intra-firm trade in the context of globalization and to point out its evolution in the context of an increasing number of multinational companies.*

Key words: intra-firm trade, globalization, transnational corporations (TNCs), foreign direct investments (FDI), intra-industry trade

JEL classification: F01, F14, F23

1. Introduction

Traditionally, globalization is characterized through the increase of: international trade volume, foreign direct investment, assets, liabilities and capital movement. Within international trade, capital, intermediate goods, services and high technology goods have currently a higher rate and are growing faster than ever.

In time, the process of globalization has led to the obsolescence of traditional concepts of exchange. They were affected by various factors such as the economic context, the credibility of business partners, the high costs of intermediation activities that have all affected exporters' profitability and stability.

Companies (and in international trade we refer especially to transnational corporations - TNCs), play a greater role than ever in explaining the modern trade and, often, they make strategic or contract basis alliances (intra-industry or intra-corporate), which ensure them that their actions are less influenced by specific market conditions.

2. The new characteristics of globalization

There are three primary channels of economic globalization: trade (including intra-firm trade), foreign direct investment (FDI) and the international transfer of knowledge and technology (Kleinert, 2001, p. 3).

According to the RIETI Report (2008), the process of globalization can be separated into two distinct periods:

a. The first fragmentation (1870 – to the present) defined as the separation of production and consumption. This first fragmentation was produced by a decrease in trade costs for goods. This experience underlies the classical theories of international trade (e.g. Ricardian theory or Heckscher-Ohlin model)

b. The second fragmentation, (1985 – to the present) is defined as the unbundling of factories and offices (not only goods but also tasks are traded). The second fragmentation takes place mainly on a regional rather than global basis.

The fact that nowadays fragmentation occurs at a different level led to the development of other characteristics of economic globalization like:

- intra-firm trade represents a major share of the world trade;
- the international risks imply quick structural adjustments for the TNCs;
- the location of TNCs is influenced by comparative advantages and by the fragmentation of production.

3. Intra-firm trade or trade between countries?

It is estimated that a growing proportion of global trade is represented by intra-corporate trade (between multinational) and not between countries. Multinational companies and multi-product companies that have expanded from the '60s, both in number and purpose of the activities, have encouraged the

development of intra-corporation as a mean of overcoming geographical, financial and technological limits. Multinational behavior varies by country. For example, the subsidiaries of U.S. firms have a higher propensity to export to Japanese subsidiaries. Significantly, in the category of global trade, intra-corporate transactions are less controlled by the conventional traditional determinants of trade: price/cost. Is less likely that transactions between subsidiaries to be determined by market; these are sensitive to international decisions of multinationals. Intra-corporate trade responds differently to changing economic conditions and not as one between unrelated parties (Grant, 2000, p. 424).

A high share of technology flows are intra-firm flows. Using data from the U.S., Japan and Germany, UNCTAD (1997) calculated this share to be about 80% of all flows (Kleinert, 2001, p. 13). The intra firm trade is proportional to the number of parent companies and subsidiaries. We can see in the following table that from 1990 to 2007 there was a general tendency of increase. Along with the number of companies the share of intra firm trade increased.

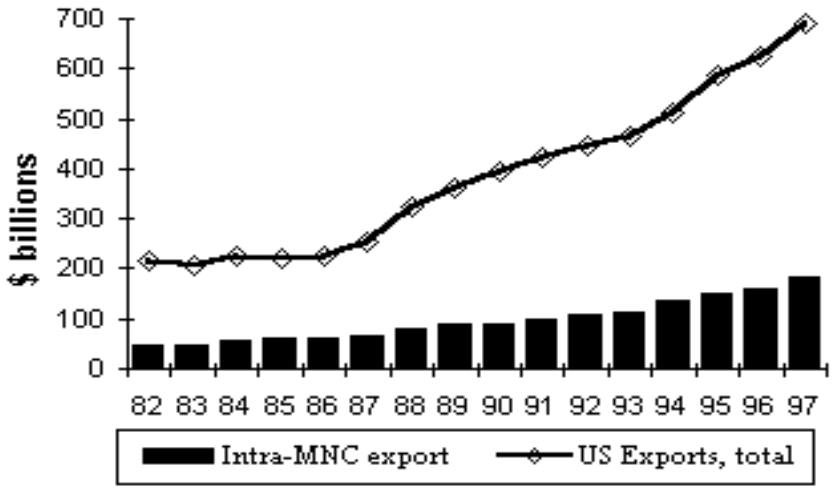
Table 1: Number of TNCs parent companies and its foreign subsidiaries (1990–2007)

Year	1990-1995	1996-2000	2001	2002	2003	2004	2005	2006	2007
Number of parent companies	37.530	63.312	64.592	63.834	61.582	69.727	77.175	78.411	78.817
Number of foreign affiliates	206.961	821.818	851.167	866.119	926.948	690.391	773.019	777.647	794.894

Source: Folfas (n.d.), p. 3

The relationship between intra-firm trade and the number of multinational companies can be observed if we correlate Table 1 with Figure 1. The increase of the number of TNCs was followed by an increase of intra firm trade.

Figure 1: Total U.S. exports and intra-TNC export, 1982-1997



Source: http://training.itcilo.it/actrav_cdrom1/english/global/multinat/main.htm

4. Intra-firm trade in the world

Generally, in the case of two countries **A** and **B**, there can be 6 types of intra-firm trade:

- Imports by the parent in country **A** from its affiliate in country **B**;
- Exports from the parent in country **A** to a subsidiary in country **B**.;
- Exports from a subsidiary from country **B** operating in country **A** back to its parent company in **B**;
- Imports by that affiliate from its parent in country **B**;
- Exports from a subsidiary in country **A** of a foreign parent (not **A** or **B**) to an affiliate of the same company in the country **B**;
- Imports by a foreign (not **A** or **B**) affiliate from its subsidiary in the **B** country.

Intra-firm exchange includes all flows of goods, services and factors of production within companies, in other words it includes related-party transactions. The bulk of intra-firm exchange occurs within transnational companies (TNCs), namely transactions between parent company and its subsidiaries or between affiliates. These transactions can be cross-border (e.g. between parent company and its foreign subsidiary) or domestic (e.g. between two foreign subsidiaries located in one country). Data and conclusions presented in this paper focus on cross-border intra-firm exchange within TNCs (Folfas, p. 2).

For a more detailed view of the structure of intra-firm trade see the following table:

Table 2: Structure of intra-firm exchange

Transaction	Transaction type
Intra-firm trade	trade in goods: in finished goods, in semi products, in raw materials
	trade in services (intercompany services)
Non-trade intercompany transactions	capital movements: short-term intercompany loans, long-term intercompany loans, leasing, cash pooling, bonds, foreign direct investments
	exchange of intangibles (e.g. royalties, license, franchising, know-how, trade marks, trade names, brand names, goodwill)
	intercompany R&D
	exchange of information, documents
	employees migration

Source: Folfas (n.d.), p. 2

In TNCs there are not only trade relations but there are movements of capital and personnel. We can see in the table above that in a multinational company we have two kinds of transactions: of trade and non-trade. Regarding intra-firm trade conducted by the U.S. TNCs operating in Europe, about half of the shipments to non-host countries took the form of intra-firm trade, from the moment they got in Europe (Chesnais & Saillant, 2000, p. 37). Globally, the total intra-firm trade was estimated at 1.6 trillion dollars in 1993, representing one third of global trade and half the trade of multinationals, according to data from UNCTAD (Phelps & Alden, P. 14).

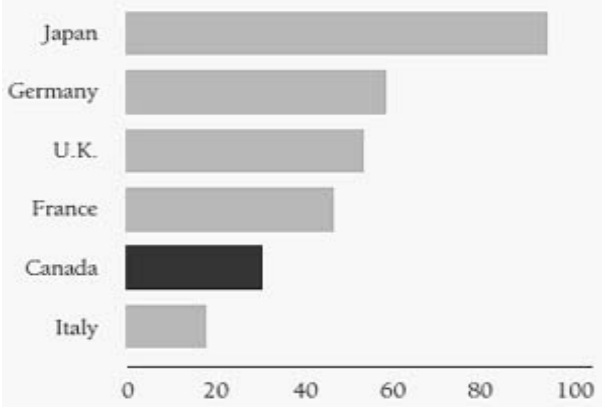
Table 3: Estimated structure of global intra-firm exchange in 1980, 1990, 1995, 2000 and 2005 (%)

	1980	1990	1995	2000	2005
Trade in goods	80.3646	75.0266	74.5686	64.5807	72.6931
Trade in services	16.2589	18.0520	17.8588	15.0898	17.0958
FDI	3.0242	6.2847	6.9848	19.6792	9.3696
Royalties and license fee receipts	0.3523	0.6367	0.5878	0.6503	0.8415
Total	100	100	100	100	100

Source: Folfas (n.d.), p. 3

In Table 3 we can see that the composition of intra-firm trade has not known radical changes from 1980 to 2005.

Figure 2: Share of Trade with the U.S. that is Intra-firm (2005)



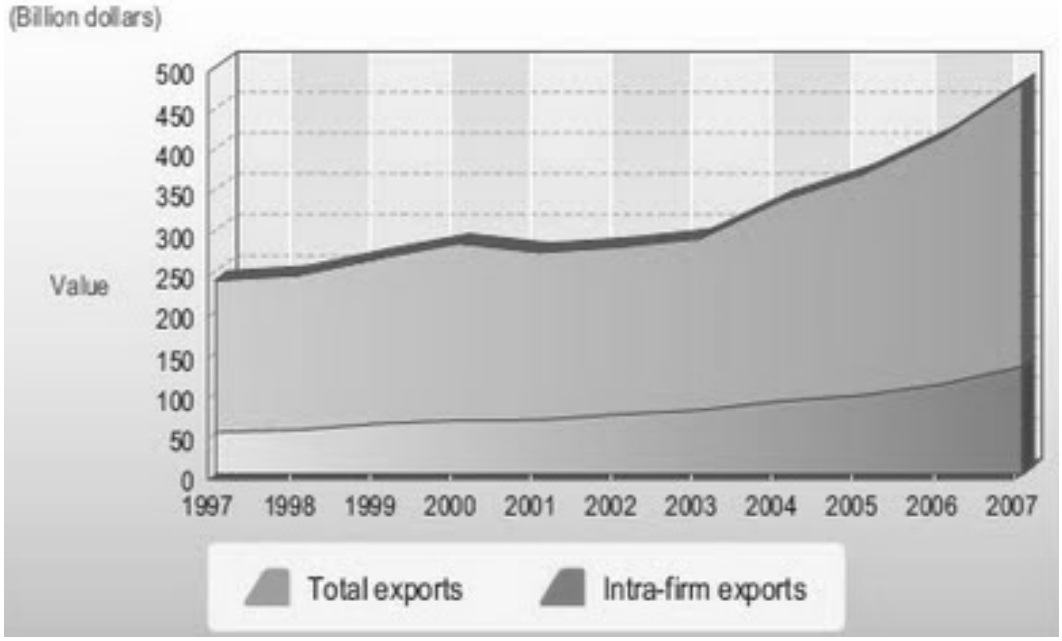
Source: Canada's State of Trade and Investment, 2008

Throughout the studied period the largest component was the one of intra-firm trade in goods (about 70%) and the second component was the one of trade in services (over 15%). The component which has known some significant changes is the one of the FDI (from about 3% in 1980 to almost 20% in 2000).

We can see in figure 1 that generally the share of U.S. intra-firm trade is of at least 50% with its major partners. The largest share is with Japan, country which through its economic policy from the 80 led to the amplification of this kind of trade.

The share of intra-firm trade played a significant role in regional integration, particularly in the European Union. Between 1957 and 1982, sales of U.S. subsidiaries in the EU increased from 14% to 46% of total trade. This prompted Dunning to suggest that one of the most notable features of the European integration process, by the mid '80s, was the increasing division of labor which was established by U.S. multinationals, with corresponding effects on intra-firm trade growth and contribution to the increase of intra-communitarian trade (Phelps & Alden, p. 54).

Figure 2: Intra-firm trade in US total private services exports, 1997-2007



Source: after *International Political Economy Zone. Attitudes of elegant despair on sub prime globalization*, Available at http://ipezone.blogspot.com/2009/11/us-infrafirm-trade-when-mncs-rule-world.html

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Transnational mergers and attracting resources through intra-corporate trade networks have become competitive strategies as continuous profits were increasingly dependent, as nations reduce their trade barriers. Deregulation of businesses that were national monopolies (telecommunications, banks, utilities) was a spreader factor of growth, once it became politically possible for them to be acquired by large corporations. In the ‘80s, many nations have reduced tariffs and other trade barriers to attract global corporate investment. After reduction, manufacturing corporations were forced to become efficient producers and distributors to survive import competition (Ronald, 2003, p. 258).

Also, cultural and linguistic barriers have prevented corporate integration in terms of flows of materials and finished goods and had an even greater effect on suppressing intra-corporate employment transfers (Phelps & Alden, p. 55). Each factory strategy remained based on specialized models and penetration of export markets, in tandem with improving productivity, production capacity utilization and cost reduction. Specialization implies dependence on a narrower range of products and a tighter integration

with intra-corporate and "sister" plants supply chains. This specialization in intra-firm division of labor has created new dependencies between plants (Phelps & Alden, pp. 227-228).

Intra-corporate development has reached an enormous share. Thus, in 1991, products manufactured in the U.S. for export to foreign subsidiaries of U.S. multinationals totaled about 26% of total U.S. exports. And products made in U.S. by the subsidiaries of global corporations headquartered outside had also a share of 23% of the total U.S. exports. In one form or another, global corporate products totaled almost 50% of U.S. exports and this trend continued in the '90s, when big companies have built networks of intra-corporate trade to achieve economies of scale and favorable exchange conditions. What happened in the U.S. took place in E.U. and in a lesser extent in Japan (Ronald, 2003, p. 260).

5. Cross border production rationalization

In order to reduce costs and optimize production TNCs have acted for cross border production rationalization.

Cross border production rationalization followed two patterns. The first is the pattern of vertical integration, in which the subsidiaries, and external bidders of components, semi-integrated in the production chain, are specialized in the supply of components or in various phases of production. The trade associated with the links between production capacity, located in different national positions and constant change in connection pattern is concentrated in components and intermediate products. This holds almost entirely of intra-industry variety. Often, it belongs to intra-firm relationships, but not invariably (Chesnais & Sailleau, 2000, p. 32).

This type of rationalization across borders was considered "weak" by the new paradigm of industrial management of the company / factory and, in particular, by the just-in-time production, which involves proximity of resources and of the small specialized manufacturer’s components, required by large corporations (through inter-firm relationships and long-term subcontracts).

During the ‘80s the "quasi integration" raised the cost of hierarchical vertical integration. Intra-industry trade continued to grow, especially for products with high added value, but intra-firm trade is not necessarily tied to further streamline cross-border variety (Chesnais & Sailleau, 2000, p. 32).

The second type of rationalization across borders, is the horizontal integration, in which the subsidiaries of given countries are assigned by TNCs with "production mandates” for a certain variety of final products. It is more likely that larger subsidiaries incorporated in international corporate structure, following the merger and acquisition processes, will be assigned with such a status, because it facilitates the integration and merging of very different corporate cultures.

Net trade effects created could be small – often the target corporation is acquired due to its market share, but a part of intra-firm trade will increase, perhaps significantly. The nature of the branches will also grow; each subsidiary should offer a complementary product part of the total corporate production (Chesnais & Sailleau, 2000, p. 32).

Firms increase their value by internalizing markets for these assets (the value is increased in direct proportion to the market size). Because these assets are based primarily on owned information, companies can not achieve efficient exchange. Therefore, firms increase their value by expanding overseas, if through this they can get a win to exceed the additional costs related to administration of a subsidiary.

Multinationals are able to transfer and disseminate technology to measure and compare costs, to detect the best way to compete on price, quality and service in different countries. The nature of the market can also be a stimulating factor for intra-firm trade. The U.S. intra-corporation trade is related in particularly to manufacturing products, while alien intra-corporate trade in U.S. is related in particular to marketing and distribution activities (Grant, 2000, p. 425).

6. Conclusions

International trade today, more than ever, is guided after the rules of free trade. Trade flows to and from various countries around the world have now reached unprecedented levels (as volume and value). And these levels were reached in the condition in which increasingly parts of the trade, of the FDI are made intra-firm.

Practically, as the globalization process advances and the power of transnational companies increases, the effects are felt in the sphere of trade, which has, more and more, the tendency to be integrated intra-firm.

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PREDATORY PRICING: PARADOX OR CHALLENGE FOR COMPETITION POLICY?[1]

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Abstract: *This paper is an overview of the predatory pricing and the main competition challenges regarding this issue. The aim is to provide a framework for understanding predatory pricing and to discuss how to manage different opinions about tests, standards, and costs for policy makers. The paper starts with a conceptual overview of predatory pricing and the main theories in this field. We also discuss standards and tests proposed in the literature for identifying predatory pricing, with a short benchmarking of the types of costs appropriate in different cases.*

Key words: predatory pricing, relevant cost

JEL classification: L11, L40, D4

1. Introduction

In this paper we try to prove that predatory pricing is a challenge for competition policy. Generally, low prices are associated with higher consumer and social welfare. From this point of view predatory pricing may appear a paradox: why competition authorities are concerned with situations where a firm charges "too low" prices? The answer is the mechanism of predatory pricing. A big firm sets so low prices that competitors quit the market and after that the predator will raise the prices and recoup losses. The concern for competition policy is not the low price in the first period, price that is good for the consumers, but the high price in the second period, when the incumbent will have significant market power. Competition policy will protect the competition not the competitors, its aim is to prevent monopoly and abusive practices. Edlin (2010) explains why predatory pricing and competition policy in predatory pricing are based on sacrifice. Sacrifice theories observe that in predatory pricing the firm sets a price below cost; this reflect a sacrifice, and sacrifice raises the question – "what for?". One possible answer is that the sacrifice was suffered "to exclude competition", and if this is the answer, then an antitrust problem emerges.

There are many definitions of predatory pricing. Motta (2009) notes that predatory pricing occurs when a firm sets prices at a level that implies the sacrifice of profits in the short-run in order to eliminate competition and get higher profits in the long-run. This definition, contains two main elements for the identification of predatory behavior in practice: first, the existence of short-term loss; second, the existence of enough market power by predator so that it can reasonably expect to be able to raise prices so as to increase profits in the long-run once a rival or more rivals has been driven out of the market. Gavrilă and Gavrilă (2008) define predatory price as an extremely low price, below average variable cost. Selling price below average variable cost is considered predatory pricing only if there is a dominant position and is promoted for a long period of time. In Romanians' authors view, there is predatory pricing if: competitors left the market; those who intend to enter the market quit the project; the incumbent firm has significant losses that can't be attributed to external factors; after the competitors has been driven out of the market, price increases to recover previous substantial losses.

Predatory pricing could be a business strategy designed to create or maintain a monopoly position. In the short run, during the price war, consumers enjoy low prices. But consumers end up paying monopoly prices in the long run. If the predator's discounted long-run monopoly profit exceeds its short run profits sacrifice during the price war, the consumers' discounted long-run loss will exceed the gain that consumers enjoy during the price war. All things considered consumers would be better off and the market would be more efficient if the target firm survived rather than being eliminated in a price war.

Edlin (2010) considers that successful predation requires: (1) low prices – price must be sufficiently low to tempt the rivals to exit (generally below AAC) or otherwise to chasten them; (2) credibility – the threat must be credible that the predator will keep prices low until rivals exit; (3) no re-entry – re-entry or new competition must be sufficiently delayed that the predator can recoup its losses from predation.

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Predatory pricing presents a policy dilemma for antitrust (Elzinga and Mills, 2005). The conduct of a predator during a predatory pricing episode looks a lot like vigorous competition, so its hard to distinguish an instance when low prices are sustainable and pro-competitive from an instance when low prices are unsustainable and seek to persuade the target firm that its commercial success are poor.

2. Theories of predatory pricing

Among the most influential articles in predatory pricing were McGee's article *Predatory price cutting: The Standard Oil (NJ) Case*, published in Journal of Law and Economics in 1958, and Areeda and Turner article *Predatory Pricing and Related Practices under Section 2 of Sherman Act*, published in Harvard Law Review in 1974 (Motta, 2009; Utton, 2008; Edlin, 2010; Anderson, 2003; etc.). McGee criticized the idea that a firm is interested in predatory pricing, arguing that a large firm will suffer greater losses when the price is low, and also, the small firm can re-enter on the market when the price rise. McGee's position was equally sustained and criticized in the literature. Vickers (2009) mentioned the arguments of "Chicago School" which argues that a competition policy which tries to stop low pricing risks to promote inefficient competitors and to harm consumer interests. Moreover, Mc'Gee's arguments are sustained by "Chicago School", showing that predatory pricing is rare and less profitable. "Post – Chicago" economists have proved that price predation is not only plausible, but profitable, especially in a multi-market context where predation can occur in one market and recoupment can occur rapidly in other markets.

Motta (2009) disagree with McGee's conclusions, and makes the following arguments: bigger looses of the dominant firm can be avoided if predatory pricing is used only on the markets where the firm has some interests to make the competitors to exit - this reduce the costs of predation strategy; re-entering the market can be very costly, the small firm cannot return very easy on the market; if the incumbent preyed successfully once, this will probably affect other firms which want to enter the market. McGee's most important argument is that small competitor has limited resources (a "small pocket") comparing to the predator (which has a "deep pocket") and will be unable to survive long enough.

Recent theories solved the problem: predatory pricing is a phenomenon that can be explained only in the context of imperfect information. Edlin (2010) shows that many economists pointed out a fact: firms have asymmetric fundamentals (cost of production or finance or discounting) and asymmetric information about these costs. The predation makes perfect sense if the firm with high cost may cut price in an effort to convince entrants that it has low costs and the competitors should therefore exit.

Recent models of predatory pricing are based on asymmetric information and games theory. There are three main types of models (Motta, 2009): ***reputation models, signaling models, financial market models of "deep pocket" predation.***

In global economy it is possible to assist at predatory pricing on external markets, in order to make the domestic firms to leave the market. This type of behaviour is close to dumping, but is not identical. Elzinga and Mills (2005) explain that competition policy has the same purpose in both cases: to protect the domestic firms. The original intention of anti-dumping policy was very similar to that part of antitrust which aimed to protect competition from the abusive behavior of dominant firms. Thus, an anti-dumping action would be aimed at a foreign firm which entered the domestic market at a very low price with the intention of driving domestic firms out, acquiring market power, and than raising prices in the domestic market to monopoly or near monopoly levels. In other words in its original formulation the policy was designed to prevent the domestic competition from being undetermined by predatory dumping. Willig (1998) mentioned by Elzinga and Mills (2005) identifies five categories of dumping: market expansion dumping, cyclical dumping, state trading dumping, strategic dumping and predatory dumping.

Predatory dumping aims to destroy competition in the importing country by sacrificing short-run profits and then to raise prices to monopoly levels to recoup previous loses. Successful predatory dumping is bad for the world economy. The long term losses to consumers in the importing countries outweigh their short-term gain from the initially low prices, like in all predatory pricing strategies. Anti-dumping actions would fail if antitrust criteria to establish predatory pricing were employed instead of trade policy criteria.

Heyes (2009) notes some important contributions (Klaasen and McClaughlin, 1996, Salop and Scheffman, 1983) at non-price predation. Predatory pricing theory focuses on conduct that lowers revenues. Alternatively, a firm can induce its rivals to exit the industry by raising their costs. The market predatory cost-raising strategies more likely to be attractive to the dominant firm when: (a) market demand is comparatively inelastic; (b) the strategy in question has a more pronounced impact on the relevant cost conditions of the fringe firms than the dominant firm. A cost increasing strategy is more credible if

embedded in legislative or regulatory requirements. For that, rules against predatory pricing and dumping might be natural weapons for non-price predator.

3. Standards and tests in predatory pricing

Until Areeda and Turner's article (1974) numerous complains (77) about predatory pricing were settled favorably in US. This article has set a standard based on average variable cost, and after that only 8 complains about predatory pricing have been admitted.

More recently, theories of predatory pricing try to set some standards and tests, generally accepted for identifying predatory pricing. We will present few positions on this issue, and will analyze them.

Elzinga and Mills (2005) propose a three steps test for determining predatory pricing:

(1) define the relevant market and determine whether the defendant firm could exercise monopoly power in this market;
(2) determine whether the defendant's prices in the relevant market were below an appropriate measure of costs (the authors accept Areeda – Turner test, with price below the average variable cost, P<AVC);
(3) "recoupment test" – defendant could charge monopoly prices high enough and long enough after disposing of the target rival.

The first step is very important because the real economy is based on a multi-market system, the dominant position doesn't have to be global. Price discrimination on this multi market system is possible, and the test has to look only at the relevant market. The third step is the most challenging point. We think is hard to measure the predator's capacity to recoup looses and to determine the exact time needed to this.

Elzinga and Mills (2005) mentioned that a number of economists pointed out that an established, dominant firm could reduce its price below that offered by an entrant but still above its marginal cost (Schrerer, 1976; Williamson, 1977 and Baumol, 1979). It could then not be caught by the Areeda – Turner rule and yet the entrant may be unable to survive at the reduced price now offered by the incumbent. Limit pricing models essentially arrive at this result: incumbent firms can price strategically to ensure that the demand available to the entrant firm is insufficient to allow them to do better than break even. Many limit pricing models assume that a potential entrant could in principle attain the same cost levels as the incumbent. Other commentators have been concerned with the possibly more realistic cases where the existing dominant firm has a series of cost advantages over potential entrants.

Motta (2009) says that two elements should be stressed from predation mechanism: (a) the sacrifice of short-run profits; and (b) the ability to increase prices in the long run by exercising market power once predation has been successful. He proposes to have a *two-tier test of predation*:

1. Analysis of the industry to determine the degree of market power of the dominant firm. If the firm is not dominant, we cannot say that is a case of predatory pricing; if the firm is dominant, proceed with the second phase:
2. Analysis of the relationship between price and costs:
    - A price above average total costs should definitely be considered lawful, without exceptions.
    - A price below average total costs but above average variable costs should be presumed lawful.
    - A price below average variable costs should be presumed unlawful, with the burden of proving the opposite on the defendant.

The first point is similar to the test proposed by Elzinga and Mills. The ability to increase prices after the small firm left the market depends of the market power. It is possible for a non-dominant firm to price below the cost, but this will not harm the competition or the consumer. The reasons for this behavior could be: the existence of switching costs – most consumers would be locked-in with the dominant firm, and only a significant price cut might convince many of them to address another seller instead; the presence of network externalities; learning curves and economies of scale; product complementarities with another market.

The market power test should catch only dominant firms, and not just any oligopolistic firm that has some market power. The existence of dominance should refer to the period when the first allegedly predatory episode starts, not at some later dates.

In 2008, International Competition Network conducted a research through Unilateral Conduct Working Group (UCWG, 2008). Based on the responses of agencies and non-governmental advisors (NGAs)

covering thirty-five jurisdictions, the UCWG examined specific practices on predatory pricing. Respondents are divided with regard to whether the alleged predatory pricing must occur in the market in which the firm holds a dominant position or substantial market power. For eleven agencies that responded, to be unlawful the alleged predatory pricing must occur in the market in which the firm holds a dominant position or substantial market power. By contrast, seventeen agencies responded that the dominant firm also may be found liable for predation in other markets in which it lacks dominance and substantial market power. We can explain this kind of approach by reputation models.

Sacrifice of short-run profits is analyzed through price – cost relationship. It could be acceptable for a dominant firm in some market situation to price below the average total cost, but in Motta's view, pricing below average variable cost is not acceptable.

Looking at predatory pricing paradox – we have to have competition policy measures to diminish the risk of too low prices, Vickers (2009) mentioned that have been advanced three principles, or tests, to distinguish anticompetitive conduct from competition on the merits – ***the sacrifice test, the as-efficient competitor test, and the consumer harm test.*** Anyway, there remains plenty of scope for argument over (a) the relevant cost concept; (b) how to measure the cost; (c) the role, if any, for evidence on intent; (d) whether or not separate proof of recoupment should be required; (e) what scope should be allowed for justifications of below-cost pricing.

Edlin (2010) presents three potential standards for identifying predatory pricing: ***the sacrifice standard*** **-** price-cost test based on sacrifice theory requires that either price and cost be measured by inclusive measures; ***equally efficient competitor standard*** **-** a price-cost test to prevent the exclusion of equally efficient competitors, by contrast, requires that price and cost be measured by inclusive measures; ***a consumer betterment standard*** for monopolization and predatory pricing.

Perrot (2008) proposes an effects-based approach, relied on two pillars: first a sacrifice test and second a microeconomic analysis.

4. Appropriate measure of costs in predatory pricing

Almost all the tests propose a test on price – cost relationship to identify the predatory pricing. The next question is which is the most appropriate measure of cost? We find the following costs:

- Marginal Cost (MC) – Areeda and Franklin consider marginal cost the most appropriate measure of cost in predatory pricing from a conceptual point of view, since a firm that sets price below marginal cost would not maximize the short – run profits;
- Average Variable Cost (AVC) – is the most common measure used for cost-price test;
- **Average Incremental Cost** (AIC) - Bolton et al. (2000) define *average incremental cost* as per unit cost of producing the added output to serve the predatory sales. Incremental cost is a better standard than either average variable cost or full cost because it most accurately reflects the costs of making the predatory sales.
- **Average avoidable cost** (AAC) consists of the costs that can be avoided by not producing any given number of units divided by that number of units. In UCWG study is mentioned the Canadian authority, which uses an avoidable cost test in determining whether prices are predatory on the basis that a firm selling at prices that do not cover its avoidable costs will not be profit-maximizing unless there is an expectation that its pricing policy eventually will create or enhance the firm's market power. Canada considers avoidable costs to be all costs that would be avoided if the firm chose not to produce or sell the relevant product(s) during the period of time the firm engaged in its alleged predatory pricing policy.
- **Long run average incremental cost** (LRAIC) – is the sum of the variable and product-specific fixed costs divided by the number of the units produced. LRAIC has been used in addition to other measures to analyze costs of multi-product firms when some costs cannot be uniquely attributed to a particular product. Some agencies consider LRAIC an appropriate benchmark, in particular for industries characterized by high fixed costs and low variable costs, such as telecommunications or postal.

When analyzing predatory pricing cases in all countries prices must be below costs for predation to occur. We can also take into account some or all of the following factors: recoupment of losses, competitive effects, predatory intent, and justifications and defenses.

Edlin (2010) extend the discussion to marginal revenue: it can be seen as an inclusive notion of price; it includes revenue effects. So, the alternative way to measure sacrifice is to talk about an inclusive notion of revenue that includes the lost revenue on inframarginal units, and the limitation to costs tests is not enough in predatory pricing.

5. The frequency of predatory pricing

The question about the frequency of predatory pricing appears very often in the literature. Edlin (2010) quotes Frank Easterbrook (1981) who says that "predatory pricing is like dragons – everywhere in the literature and nowhere in the world". The perfect competition almost excludes predatory pricing. Real world economics shows that symmetric costs, symmetric information, decreasing returns of scale, and no switching costs, are rare. Once one deviates from these assumptions, we are seeing that price cuts can be anticompetitive ant we asked how frequently they can be.

In UCWG study, during a period of ten years, responding agencies brought approximately twenty-four cases in which predatory pricing violation was established and have initiated at least five times as many investigations in which predatory pricing was alleged but no violation was found (UCWG, 2008).

In Romania, there are several complains about predatory pricing, but they have not been admitted by Competition Council (Decision no.174/2004 – cable television, Decision no.46/2005 – cable television, Decision no.11/2010 – energy market). Although the competition law interdicts predatory pricing, all cases were considered irrelevant for this issue considering there wasn't a dominant position on the relevant market. Looking at these decisions, we can say that the conditions for predatory pricing considered in Romania are: the existence of dominant position on relevant market; the intention to make the competitor to exit the market; the existence of a consumer's prejudice.

Time is a very important aspect in predatory pricing. There are studies that show the need for an appropriate timing and suggest some policy options to reduce the time of the investigation. Eckert (2002) analyzes the factors that influence the length of time required for the analysis of an allegation of predation. The necessary time depends both on the legal framework and on the detailed microeconomic analysis required. The antitrust process in a case of predation can be broken down into two broad stages: the data collection and analysis stage, and the legal proceedings. The time required for data collection and analysis is at least important as the time for legal proceedings, although this would likely depend on the nature of industry. Accordingly, Eckert (2002) suggests some policy options to reduce the time costs of the economic analysis: (1) one suggestion has been that the enforcement of laws or regulations dealing with predation in certain industries be handled by industry-specific agencies. This might reduce the time based on specialized knowledge of the cost and pricing practices in certain industries, the existence of regular monitoring of market characteristics; (2) another suggestion for specific industries would be requirements of data availability. By requiring, through law or regulation, that firms in particular industries keep certain records of their costs and price structures, one could potentially reduce the time required for data collection; (3) some proposals for reform focused not on the speed of existing economic analysis, but on abandoning the two stage economic analysis (the recoupment analysis and the cost-based test) in favor of a different economic test.

6. Conclusions

Why should we care about predatory pricing? Is predatory pricing a competition policy issue? We demonstrate in this paper, using the most recent and the most relevant opinions in this field that predatory pricing is not a paradox, it is a challenge. The competition problem related to predatory pricing is not the low price during the predation, but the high price during a period without competition or with less intense competition.

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ANTI-CRISIS MEASURES TAKEN IN THE EU. ICT INDUSTRY DEVELOPMENT AS THE MAIN MEASURE OF THE ROMANIAN ECONOMY OUT OF CRISIS

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Abstract: *This paper aims to highlight the main effects from the global economic crisis in the European Union and a comparative analysis of anti-crisis measures taken both by the old members of this group, as well as newcomers. It is also presents an analysis of Romanian IT & C industry (analysis for holding the IT&C industry as a factor to relaunch the Romanian economy) and the main proposals focused on the reform of the world and European financial system, presented on the occasion of the recent meetings of some world or regional organizations.*

Key words: anti-crisis measures in EU, reform of the world financial system, unemployment rate in EU, Romanian IT&C industry

JEL classification: E63, F63, L63, L86

1. Introduction

Started in the United States of America in the summer of 2007, the world economic and financial crisis gradually extended all over the world. This failure of operation as regards our completely globalized world took us by surprise. Nobody predicted the outburst or magnitude of crisis. It generated sounding bankruptcies, bank nationalizations, mergers or massive restructurings of American, European and Asian companies' business. This situation has revealed that the global financial system is built on fragile pillars.

The current crisis began somewhere in 2001, when the Central Bank of the United States (Fed) lowered the interest rates up to 1% in order to reflate the economy and implicitly to sustain the economic growth based on consumption. Therefore, in 2001, requirements of rendering home loans, these being rendered to all categories of people, including the low income people. The loans had a two-year period wherein the interest rate was fixed, and in the coming period it was adjustable according to the market value. Therefore lots of people purchased real estates, but for many of them, the real reason was speculative trading of house value, that seemed to be a continuously upward trend.

Starting with the year 2006, Fed increased the reference interest rate, and as a result the interest rate for home loans soared. Under these circumstances, thousands of people could not pay the due rates, some of them selling the houses. Massive sales led to a sharp fall of housing prices. When the housing value dropped below the mortgage value, banks were in the position not to recover the debts based on the mortgages held, reaching the crisis of „subprime" loans.

The bonds rendered under the above mentioned conditions have been converted into securities and sold by the banks to other financial institutions (for instance: Freddie Mac, Bearn Stearns, Lehman Brothers), in order to get liquid funds and scatter risks. In their turn, these institutions have associated these risky securities to others, belonging to some solvent debtors, obtaining derived financial assets. However, the decline in housing prices led to the value degradation concerning these derived financial assets, their value starting to decline significantly („toxic" assets). When the first liquid fund crises occurred on the market, fears, suspicions started, the banks became sceptic as regards valability of other financial institutions' portfolios, and did not accept to render loans. All this led to the rise of interbanking interest rates and the decline of amount of rendered loans. (Bal A., 2009, „Opinions concerning causes of current financial crisis", in „The Roumanian Economic Journal").

2. Economic effects generated by the global crisis at EU level

Globalization of financial markets has driven crisis extension all over the world. Banks from other continents confronted with difficulties similar to the American ones, on the one hand, as a result of having „toxic" assets and on the other hand of refinancing difficulties. Disbelief have scattered internationally generating a global economic and financial crisis.

The crisis has extended quickly all over the world, however, experiencing different magnitudes and intensities from one country to another. The instability wave propagated from one sector to another, firstly in the

real estate sector into the banking sector, and then in all fields of real economy. The crisis wave exceeded the universe of the developed countries, its effects being exerted utterly in the developing countries as well.

Within the world economy, the crisis major effects focus on a drastic decline of consumption, industrial production, economic growth, price levels, but also on the rise of budget deficits, public indebtedness and unemployment.

Table 1: GDP growth rate in EU – 27 in 2005 – 2011 (%)

Countries	2005	2006	2007	2008	2009	2010		2011
						IV 2009	X 2009	
Belgium	1.8	2.8	2.9	1.0	-2.9	-0.2	0.6	1.5
Germany	0.8	3.2	2.5	1.3	-5.0	0.3	1.2	1.7
Ireland	6.2	5.4	6.0	-3.0	-7.5	-2.6	-1.4	2.6
Greece	2.2	4.5	4.5	2.0	-1.1	0.1	-0.3	0.7
Spain	3.6	4.0	3.6	0.9	-3.7	-1.0	-0.8	1.0
France	1.9	2.2	2.3	0.4	-2.2	-0.2	1.2	1.5
Italy	0.7	2.0	1.6	-1.0	-4.7	0.1	0.7	1.4
Cyprus	3.9	4.1	4.4	3.7	-0.7	0.7	0.1	1.3
Luxembourg	5.4	5.6	6.5	0.0	-3.6	0.1	1.1	1.8
Malta	4.1	3.8	3.7	2.1	-2.2	0.2	0.7	1.6
The Netherlands	2.0	3.4	3.6	2.0	-4.5	-0.4	0.3	1.6
Austria	2.5	3.5	3.5	2.0	-3.7	-0.1	1.1	1.5
Portugal	0.9	1.4	1.9	0.0	-2.9	-0.8	0.3	1.0
Slovenia	4.5	5.8	6.8	3.5	-7.4	0.7	1.3	2.0
Slovakia	6.5	8.5	10.4	6.4	-5.8	0.7	1.9	2.6
Finland	2.8	4.9	4.2	1.0	-6,9	0.2	0.9	1.6
EURO ZONE	1.7	3.0	2.8	0.6	-4,0	-0.1	0.7	1.5
Bulgaria	6.2	6.3	6.2	6.0	-5,9	-0.1	-1.1	3.1
The Czech Republic	6,3	6.8	6.1	2.5	-4.8	0.3	0.8	2.3
Denmark	2.4	3.3	1.6	-1.2	-4.5	0.3	1.5	1.8
Estonia	9.4	10.0	7.2	-3.6	-13.7	-0.8	-0.1	4.2
Latvia	10.6	12.2	10.0	-4.6	-18.0	-3.3	-4,0	2.0
Lithuania	7.8	7.8	9.8	2.8	-18.1	4.7	-3.9	2.5
Hungary	3.5	4.0	1.0	0.6	-6.5	-0.3	-0.5	3.1
Poland	3.6	6.2	6.8	5.0	1.2	0.8	1.8	3.2
Romania	4.2	7.9	6.3	6.2	-8.0	0.0	0,5	2.6
Sweden	3.3	4.2	2.6	-0.2	-4.6	0.8	-1,4	2.1
Great Britain	2.2	2.9	2.6	0.6	-4.6	0.1	0.9	1.9
EU	2.0	3.2	2.9	0.8	-4.1	-0.1	0.7	1.6

Source: „European Economic Forecast – Autumn 2009" – European Commission, Brussels, Nov. 2009

Financially**,** the major effects generated by the crisis all over the world included bankruptcy or nationalization of some of the most important investment banks and insurance companies in the world, disastrous depreciations of the shares quoted at exchanges in New York, London, Frankfurt, Paris and Tokyo, an acute money bottleneck, a massive withdrawal of investor capital from emerging economies and even from developed countries. Effects also resulted in major fluctuations of national currencies, a strong increase of credit price, a coordinated reduction of reference monetary interest rate of central banks in Europe, America, and Asia, a very careful attitude of investors and a very high uncertainty over the structure and rules of financial markets. The global impact of the current crisis has revealed not only the interdependence degree of the economic system and financial system, but also the relationship between the financial and economic world and the American market.

The main effects of the world crisis occurred across the European Union will be presented as follows.

In November 2009 the European Commission published the traditional „Economic Report-Autumn 2009", that surveys the evolution of economic circumstances in 2009 and presents the forecasts for 2010 and even 2011. Compared to the situation contained in the „Economic Report-Spring 2009", the new estimations concerning evolution of European Union's economy are slightly more optimistic, reflecting the visible improvement of productive activity starting from the second half of 2009. The situation is also valid across the world economy.

Starting in 2008, economic activity of European Union's member states was affected by the world economic crisis. According to the Report mentioned, in 2009 these countries registered the lowest curtailments of the GDP

growth rate in the past 50 years. The following table shows the evolution of GDP growth rate registered in EU-27 in 2005 – 2011 (forecast of European Commission).

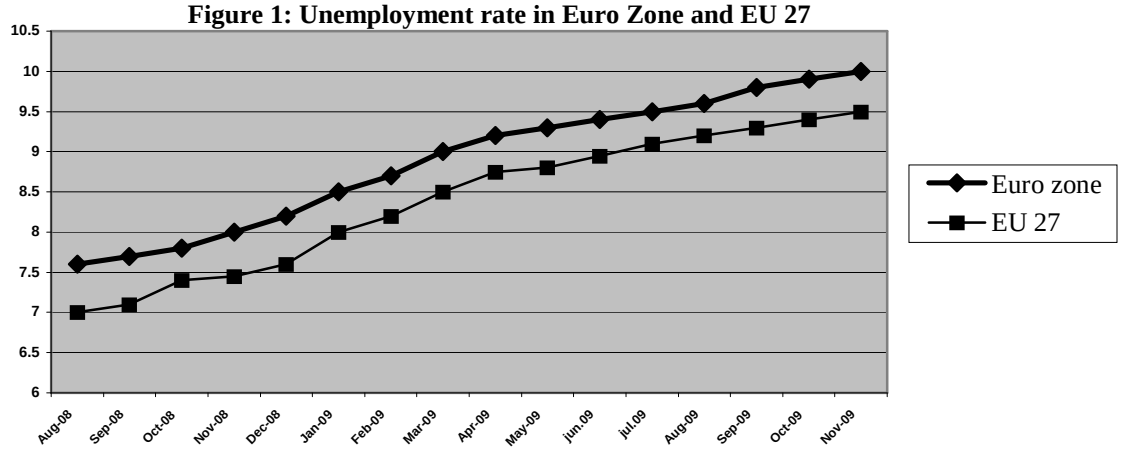
The year 2009 ended with the poorest performance registered within economic growth by the EU. Thus, the estimated GDP rate on the whole EU was – 4.1%, after 2.9% and 0.8% registered in 2007 and 2008, respectively.

Of the EU member states not included in the Euro Zone, the biggest declines of the GDP growth rate were in 2009 for: Lithuania (-18.1%), Latvia (-18%), Estonia (-13%), Romania (-8.0%) and Hungary (-6.5%). The steady situation of Poland should be mentioned, as the only country in this group that accounted a positive growth rate (1.2%) in 2009. Decreases of economic growth rate registered in 2009 and in the Euro Zone area, the most important being : Ireland (-7.5%), Slovenia (-7.4%), Finland (- 6.9%), Slovakia (-5.8%), Germany (-5.0%).

According to the authors of this Report, this major decline as magnitude of the economic growth rate in EU-27 is due to the strong reduction of domestic demand, especially the payable investments, as well as foreign demand.

The increasingly unemployment rate is also a consequence of the global economic downturn. In 2009, the unemployment rate accounted in the European Union reached to 9.1% of occupied population. This is the highest unemployment rate registered since 1998 in this region (http://ec.europa.eu/eurostat). A situation concerning the development of this indicator in August 2008 – November 2009 is shown in the figure below.

Figure 1: Unemployment rate in Euro Zone and EU 27



Source:

Although the unemployment rate increased in the Member States, its distribution remains quite uneven. According to data published by Eurostat, in 2009, in the Netherlands, the unemployment rate was only 3.9%, while in Spain it reached 19.4%, being surpassed only by Latvia by 22.3%. Romania, with an unemployment rate of 7.2% is at the bottom of the top, at the same level with Denmark and by 0.4% below the unemployment in Germany. Young people continue to be the most affected as unemployment increases in Europe. In the Euro Zone, unemployment rate among young people is 21%, while in EU-27 is 21.4%. Increase of unemployment takes place despite governmental programs of labor protection adopted since the start of current economic downturn and risks to stop the flimsy restart of economic growth accounted in the last two quarters in 2009, as the household consumption is 57% of the Euro Zone's GDP.

Following a strong economic growth, economies in the Central and Eastern Europe countries, EU members, became extremely vulnerable to global economic crisis. Confronted with a significant economic slowdown, with current account deficits among the highest in Europe and affected by the the decline of production activity, investments and demand in Western Europe, most of these states applied the reduction of budget costs, and as a result, their consumption and life standards went down.

Three of the countries in this area required the help of International Monetary Fund: Hungary, Latvia and Romania.

In April 2009, the Managing Board of IMF approved in Romania's favour a stand-by agreement of Eur 12.5 billion. The stand-by agreement comprised the following main requirements: target of the budget deficit is 7.3% of GDP in 2009 and 5.9% of GDP in 2010, adoption of three key laws – law of single remuneration in the budget system, law of fiscal responsibility, law of pensions in the public system. Until now, our country received the following tranches: the first two amounting to Eur 6.57 billion (transferred in 2009), and the third and the fourth tranche (transferred in February 2010) amounting to Eur 2.3 billion.

The Ministry of Finances and the National Bank of Romania will have to pay back the Eur 12.5 billion in 2012 – 2016. The 3.5% interest rate per year is added to the amounts borrowed. Romania will have to pay the first

installment in August 2012, amounting to Eur 600 million. In 2012 the installments of the credits provided by the IMF will amount to Eur 1.4 billion.

The only former communist state in Europe that succeeded to avoid the world economic crisis was Poland, this registering a positive economic growth rate (1.2% in 2009). Having an economy mainly based on domestic demand, Poland succeeded to get over the crisis. With a number of 38 million inhabitants, this country has a broad domestic market, a diversified economy, without depending on exports and consequently, on the decline of world trade.

3. Anti-crisis measures taken by the Euro Zone countries and new EU countries - comparative analysis

Starting in 2008, with the dawn of the first signs of crisis, EU leaders held a series of meetings which took the main topic coordinated measures across groups to combat the effects of global crisis. After lengthy debate, in december 2008 was adopted a crisis plan worth 200 billion to member countries aiming at economic recovery. Of this amount, 170 billion represent funds from national budgets and 30 billion came from the Community budget and the European Investment Bank. Since then, the European Commission president stressed that a union of independent states as the EU can not apply a uniform pattern of economic recovery, valid across the clusters, because of differences in economic structure and budget of these states.

Although the importance of coordinated action has been extensively specified by EU leaders, the reality principle "everyone for himself" replaced that of solidarity and joint action held since 1993 with the adoption of the Maastricht Treaty. Therefore, we able to talk about two main types of anti-crisis measures adopted in the EU: measures of economic recovery by boosting consumption protect jobs and investments, adopted by most countries in the euro area and harsh measures, tight, reducing expenditures in former communist countries and especially those who appealed to International Monetary Fund - IMF.

In developed countries, measures to combat the current global downturn have focused on two central elements:

- first, was based on taxes incentives to boost short-term demand, protect jobs and consumer confidence play in the economy;
- second, aimed at "smart investments" by the state in key economic sectors such as automotive, banking, or buildings.

Measure of taxes reduction was followed by most Western states, more interested in stimulating household consumption than budget deficit reduction. Countries such as Germany, France, Sweden and Denmark have increased deductions granted the assessment or have extended lower tax rate in several categories of incomes.

As regards VAT, the EU developed countries have avoided significant reductions, with a notable exception - the UK has temporarily reduced the standard rate from 17.5% to 15%. Other governments have taken the decision to reduce VAT to certain goods or services. Greece is the case, who chose to drop VAT on tourism services, of Belgium, which reduced VAT for new housing from 21% to 6% and social at 6% and 12% and for Finland which temporarily reduced VAT on food. Also, most governments have decided to provide some relief or to accelerate the reimbursement mechanisms of VAT by companies.

At the opposite place, some states have increased VAT, such as Hungary, Lithuania, Latvia, and Ireland due to increasing pressure on national budgets eased an economic activity. Corporate profit tax was reduced in very few cases. For example, Sweden fell from 28% to 26.3% and the Czech Republic from 21% to 20%.

Regarding at the second element of anti-crisis measures in developed countries such as the investments of state in key sectors of the economy, saying that they have done essentially the nationalization of banking or investments industry.

In Europe, financial crisis prompted the governments to take the control over some major financial institutions in order to save them from bankruptcy. For instance, the British government nationalized the most important credit supplier in the country – Northen Rock, the state holding now the major stake at this bank. The Lloyds Banking Group and the Royal Bank of Scotland followed.

In 2009, Ireland took over the control on two major banks – Allied Irish Banks and Bank of Ireland – after granting each a capital of Eur 3.5 billion.

The Fortis financial group received a help financial package in 2008 amounting to Eur 11.2 billion from Belgium, the Netherlands and Luxembourg, at present these countries having 49% of the stake held by the

national branches of the bank. In 2007, Fortis had 445 billion assets in inventory and an income of Eur 120.5 billion. However, the crisis of American loan system caused the Fortis group losses of over Eur 2.1 billion during the year 2007 and in the first half of 2008.

In 2009, Germany modified its legislation to be able to nationalize banks, and Italy obtained the approval of European Commission to be able to recapitalize banks experiencing difficulties. The same situation is in France. Therefore, even if this country's officials insisted their bank system is strong, the state injected several billions of Euro into the new bank resulted after the merger between the Savings House with the People's Bank,whose control will be held by the state.

The Austrian Government nationalized the Hypo Alpe Adria Bank in 2009, the sixth creditor in the country considering the size, following to invest around Eur 450 million in order to save it from bankruptcy. This is the second nationalization of an Austrian bank since the start of the financial crisis, after the state acquired Kommunalkredit Austria in November 2008, bank specialized in loans for local municipalities and authorities, from Volksbank and Dexia.

The car industry in the countries members of the Euro Zone represent one of the most important business sectors in the structure of their national economy seriously affected by the current crisis. It has a significant weight in the developed countries' export and provides a high number of jobs. As they are in close relationship with restriction of credit requirements, sales of new cars in Europe dropped by 7.8% in 2008, representing the most significant decline in the last 15 years. Aware of this sector importance, governments invested heavily in their own car industries in order to save them from bankruptcy and keep the jobs. It is the case of France, that, to react promptly to the financing need of the car sector granted a Eur 6 billion aid, to the Renault and Citroen – Peugeot car producers.

In Germany, Volkswagen registered major declines of sales in 2009 (by 8% compared to 2008), the company firing a high number of employees. BMW was also affected by the crisis. Thus, the company's sales decreased by almost 5% in 2009 compared to the previous year, this being the first decrease since 1973 until now. The company reduced the number of employees by 7% in 2009 compared to 2008. The German company, Opel, is experiencing an almost similar situation. At present, the three companies want the Berlin government warrants the loans carried out by their financing divisions and also require that the German government provides a bonus to each person who replaces a car older than 10 years with a new one. The car producers want the institutions in Brussels give up to the plan of fining the car companies that do not succed to comply with the targets set for carbon dioxide emissions.

In 2009, the Italian group, Fiat, took over 35% of the American company's stake, Chrysler, company that received a $ 7 billion loan from the American State to avoid bankruptcy. The agreement between Fiat and Chrysler will provide the Italian producer the opportunity to survive, while Chrysler will access the Fiat technology that enables the manufacture of some cars with a lower fuel consumption.

Of course, all these measures had the desired effect of Western European governments, but caused increased budget deficits of these countries. Also, they were not exempt from the negative social effects such as strikes and increased unemployment.

A year ago, in deep financial crisis, ex-communist countries EU were considered most vulnerable countries in the face of this global recession. But now, given the pressing problems of euro area countries as Greece, Portugal, Spain, Ireland, the problems of small East European countries are seen as a much lower scale and more manageable. Since the beginning should be an indication that this group of countries is not homogeneous, and therefore, measures and their effectiveness were mostly different.

For example, in 2009 the Czech Republic had doubled the value of the boost the economy 73 billion kroner (3.3 billion dollars), representing 1.9% of GDP. In last year, in Lithuania economic stimulus totaled 1.86 billion dollars and were aimed at facilitating access to credit for companies, speeding and easing the use of EU structural funds regulations in the labor market. Over recent years, Estonia has implemented a policy to reduce risks, so that the permanent budget was in surplus and the economic crisis broke, its budgetary reserves amounted to 12% of GDP. In 2010, this country aims to adopt a program to increase budget revenues by increasing excise duties on fuel, alcohol and cigarettes, but also increase VAT. Recently, Bulgaria has adopted a package of 60 anti-crisis measures aimed at reducing budget costs and increase state revenues by 818 million euros. These measures include salary cuts of 10%, delay of increasing pensions and luxury tax for luxury homes and expensive cars. Following the sharp reduction of government expenditure, the increase in VAT, Hungary could record this year one of the lowest budget deficit in the EU, less than 4% of GDP. Furthermore, it raises the question of surrender of the money from the IMF, receiving in return one billion euros of capital market through a Eurobond issue.

To all theses must be added to the merit of good governance, good tenacity and judgement of the former communist politicians mentioned. They have demonstrated more flexibility on the labor market, greater

adaptability to stress conditions compared to the old EU members. In addition, Greece, Portugal, Spain and Italy seem even more "sick" today than the ex-communist Europe.

Formerly communist Europe is currently facing its problems: aging workforce, the underground economy, corruption and poor infrastructure especially. Also, private duty system in the region is likely to reduce economic growth over the coming years.

As regards Romania, the current economic crisis has only served to add a political crisis, institutional competence, moral mentality and confidence.

The main anti-crisis measures taken by the Romanian Government in 2009 were:

- Measures to boost demand by increasing the purchasing power of households (the "First Home"), cars (Rabla program), supporting exports (Eximbank capitalization);
- Measures to boost agriculture (program “first silo" and " first track");
- Measures to protect the labor market (lay, extend unemployment benefits by three months, support for training and retraining);
- Maintenance of VAT at 19% and 16% flat tax;
- Introduction of guaranteed minimum social pension.

But as ambitious as crisis programs, their actual effect in the economy depends directly on the timeliness of their implementation, the effectiveness of government and government's ability to inject financial resources means that faster productivity. Lack of investment in healthcare, education, IT, infrastructure, agriculture, facilitate business access to credit, political instability, corruption are all factors in terms of brake Romanian economy recovery.

In autumn last year, the economy research center - CESifo Group, sponsored by the University of Munich has made a study of the world economy on the effectiveness of anti-crisis measures. It has given each country a score obtained by centralizing opinions of many specialists in each state under consideration. Measures taken by Romania to combat the crisis were marked with 1.3 on a scale of 1 to 9, being qualified among the most inefficient in Europe and worldwide. The EU received the highest score in Denmark (7.2) and lowest Latvia (1.0). In Eastern Europe the best performances were recorded by the Czech Republic (6.3 points) and Lithuania (5 points).

4. Necessity of European and World Financial System Reform

The current financial and economic crisis is the effect of a global financial system characterized by financial markets and sophisticated, non-transparent and dysfunctional mechanisms, by means of excessive assumption tendency of risks by the financial investors, doubled by faulty risk management practices and favored by unsuitable macroeconomic policies.

At the beginning of last year, the G20 leaders agreed on working together in order to adopt a package of even financial-banking regulations, valid worldwide in order to prevent the risk of a new crisis. However, at present, the disputes between the two big politico-economic blocks, U.S.A. and EU respectively, about the financial system reform, causes serious doubts as regards the opportunity of such agreement.

The proposal launched early this year the U.S.A administration concerning the reform of world financial system relate to restriction of activities a bank can run. More precisely, this idea, launched by Paul Volcker, former governor of the Central Bank of U.S.A., currently the president of an advisory council concerning economic recovery, includes the stipulation that commercial banks strictly deal with financial jobberies, not the investment activities. In his opinion, therefore risks induced by speculative activities into the banking would diminish. The proposal complements other measures aiming to reform the world financial system, such as: increase of compulsory reserve capital, restriction of indebtedness, improvement of financial supervision and revision of accounting standards in force („Săptămâna financiară” publication, 22 February 2010).

At the Ecofin meeting (group within the Council of Ministers of EU) in February 2010, the finance ministers of EU rejected the introduction of the „Volcker” rule in legislation regarding regulation of European banking financial system. According to them, the American proposal of separating financial activities from banking activities is in contradiction with the standing principles of common market and European model of multipurpose bank.

As opposed to U.S.A, where financial services and banking activity were separated until 1999, in Europe there is a tradition of multipurpose banks, dating back the end of the XIXth century and that is firmly established in countries such as France and Germany. Major European banks have always mixed banking activity with investments and insurances. As a result, European officials do not want dissolution of major bank holding companies. According to their vision, the issue of preventing financial crises is approached exclusively by means

of strengthening prudential regulations and supervising bank-financial operations. They also sustain the idea of creating a mechanism of transaction control with derivate tools, that prevents the unjustified rise of interest rates to which states experiencig difficulties borrow money. Moreover, Europeans are preparing to create a fund out of which to finance and save other banking entities from bankruptcy in the future, in case a new crisis strikes again.

Having as main topic the deep crisis Greece is confronting with, the Euro Zone officials excluded the IMF's intervention in a state in this region, in exchange accepting, Germany's idea concerning establishment of a European monetary fund that is able to interfere in situations of crisis. Daniel Gros, the director of the European Centre of Political Studies and Thomas Mayer, chief-economist of Deutsche Bank, suggested to create a fund able to lend money to the countries in the Euro Zone, or to provide warranties for the bonds issued on foreign markets and to impose sanctions or to suspend granting other aids. If a government is in imminent danger of entering insolvency, the fund will be able to pay the due debts („Adevărul" publication, 10 March 2010). Details concerning the construction of this new European institutions are at level of intention for the time being.

Also on the line of global financial system reform the idea of applying a global tax on financial transaction is contained in, in order to recover the public funds used to save banks from bankruptcy. This year the Managing Director of IMF will have to present a report concerning the ways to implement the tax. The idea was restated on the occasion of the G7 meeting held in Canada early this year („Săptămâna financiară" publication, 22 February 2010).

5. Necessity of IT & C industry development - recovery factor of the Romanian economy

Romanian IT & C industry continued its upward trend in 2008 with increases in all three sectors: telecommunications, software / IT services and hardware / electronics. Total turnover of the industry (Vuici, 2010) exceeded 9.3 billion, up 13%, production / services sold reached 7.9 billion (17%), and the total of employees reached 130,500 (+ 6%). A stronger increase (50%) registered IT & C exports that reached 3 billion.

Thus, in 2008 completed a period of eight years of continuous expansion and strong IT & C industry.

The crisis started in the last quarter of 2008 influenced rather than indicators throughout 2008, but was felt strongly in 2009 when the turnover on IT & C industry as a whole fell to 8.28 billion (-12%), reaching 2007 level. Total production decreased by 12% to 7 billion and gross value added (contribution to GDP) declined by 14% to 3,63 billion, below 2007.

Overall figures for 2009 show a trend of IT & C industry is close to that of the whole economy. Phenomena have been revealed and contrary to the rest of the economy, such as increase exports or insignificant reducing of staff. At the same time, IT & C services were affected by the recession much stronger than the manufacture of hardware while, industry was more pronounced decrease than services in the entire economy.

How the relationship between domestic and external dynamics influenced the economy sectors applies to IT & C industry. Entire manufacturing activity in 2009 was reduced by about 30%, while total exports of goods decreased by only 17%, indicating a drop in production for the domestic market. Same is true in sectors IT & C where the reductions were caused largely by dependence on domestic markets.

Weakening external financing and lending sudden halt immediately after the fall of Lehman Brothers resulted from the last quarter of 2008 to collapse in these markets (markets for PCs and servers for enterprise systems), followed in 2009 by a fall in consumption hardware in less than half of the year. In this context, distributors and retailers computer assemblers were the first hit by the crisis, saw more than 50% reduction in revenue and, in some cases have reached the stage of insolvency or bankruptcy. After over-increases of the past, this segment saw a decline accelerated in 2009.

In autumn 2008, the international financial crisis, interest of foreign investors and resources they were willing to place in Romania fell. Many transactions were abandoned or delayed. Even if the value of assets entered on a decreasing trend and the market was not dictated by vendors, most investors have adopted an attitude of expectation that was maintained in 2009.

Flows of foreign investment (FDI) in IT & C has continued in 2007 and 2008, with increased interest in Romania as a location both offshore and near-shore production and IT services. To this, on contributed also Romania's accession, macroeconomic developments, record economic growth in two years, with a reasonable improvement of business environment. Level of FDI in the Romanian economy has remained in the second half of 2008, during the critical global financial crisis and began to decline in 2009 were only powerful, but without investment in IT & C be stopped entirely.

Analysis of existing data (reports NBR / INS) detailed by industry shows that IT & C share in total FDI fell steadily over the past six years. Thus, in FDI stock 2003, branches of the IT & C represented about 18%, and then, that percentage down to about 14% in 2005 to 9.9% in 2007 and 8.1% in 2008.

Overall increase in FDI continued in January 2009, and then the trend was reversed only in the coming months, when foreign investment started to fall heavily. Cumulated in the first six months of the year, total FDI flows to Romania reached only 2.89 mld.euro, with 43% less than the same period the previous year and throughout the year was reduced by over 50%.

IT & C sector exports reached 2 billion in 2007 and increased significantly (53%) in 2008 exceeded 3 billion, with relatively equal contributions of hardware (1.57 billion) and services (1.43 billion), in 2009 increased with 10%, from 3 billion to 3.3 billion, while the entire economy has been a strong reduction. Reported to total exports of goods and services of the Romanian, IT & C exports accounted for 7% in 2008, a relatively small percentage, after 5.5% in 2007 and 5% in 2005, reaching to 9% in 2009.

Although exports, especially those of services increased continuously in recent years, massive imports of hardware and electronics have led to maintain a strong negative balance, which has increased from year to year, reaching -2.2 billion in 2007, up 45% from a year earlier. This trend reversed in 2008 were only the external deficit IT & C was significantly reduced to -1.88 billion due to positive developments of hardware sectors. All hardware was in 2009 new source of exports rises nearly equaled imports, reducing the deficit estimated at only 0.6 billion.

The year 2010 is considered year of recession and economic revival. Most factors that determine the economic recovery should be placed in doubt. Resumption of domestic consumption is being threatened by rising unemployment, central bank lending to delay all efforts to decrease the reference rate, and reduced public investment in terms of budget austerity. In this period, to these are added maintain a climate of uncertainty, fear and distrust visible results in enterprise and consumer surveys or opinion polls among the population.

This provides that IT & C sector, in 2010, have a positive development, but it will be driven more by influences recovery in developed countries than the foundations of the Romanian economy.

Software development services for external customers and business R & D centers of multinational companies and services will witness a more pronounced advance. In this respect, it is significant the recent ads of expansion and start recruiting campaigns in such centers. As in the previous year, will further develop Internet-related activities, online services of IT & C industry in Romania 2008-2009 and electronic commerce. In these conditions provided that throughout 2010, software and services sector to grow by over 5% approaching to the 2007 level.

In hardware/electronics launching of foreign investment, including those deferred in 2009 (eg Nokia suppliers) and a positive flow of orders from existing production units may lead to an advance of 5% - 10%.

Share of industry IT & C in GDP remains relatively low compared with other European countries (which range between 5% and 10%) and had a negative dynamics after 2005, lowering of telecommunications is not fully offset by growth in software/services IT and hardware.

It is expected that over the next two years IT & C contribution to GDP to increase, approaching 3.5%, given the prospects for faster growth than other sectors of the economy.

The study on the evolution of the ICT industry in Romania between 2008-2009, can make a few reasons why it may be considered as a factor to relaunch the Romanian economy, such as:

- Export growth and also increased of the share in total exports of goods and services in Romania,
- The existence of a flow of foreign investments in the ICT industry,
- Is very dynamic in terms of entrepreneurial initiative,
- Some major IT companies are in the top 10 in order of turnover,
- The Company's reputation in the field of IT to invest in Romania.

Conclusions

The current economic crisis has caused the strongest slow down of economic growth in the recent history of EU, seriously affecting both the Euro Zone economies and those outside the zone. It also represented a real challenge for this group because it revealed that European Union is not as united as it seems.

Within the EU-27 have outlined two main types of anti-crisis measures: some based on tax incentives to spur consumption and massive investment in the economy, others based in any way to reduce spending. The first was applied in the euro area, other than her. Moreover, measures have led to different results from one country to another. Thus, if countries such as Germany, France, Denmark and Finland have already begun to show signs of recovery, for countries like Greece, Spain, Portugal or Ireland can not say the same thing. Explanation for this is premature entry of the latter group of countries in the euro area.

Large differences in structure and effectiveness of measures to combat the crisis and recorded among the former socialist states. Some, such as Hungary, Czech Republic, Lithuania, proved to be capable of enormous

fiscal adjustment but also to show great consistency in decision making, giving signs of recovery, others, including Romania, have proved don't be equally resolute measures for recovery.

Regarding the situation of Romania, the government must understand that the political campaign is gone and that only immediate and resolute actions can lead the country out of crisis. Recovery Strategy of the Romanian economy has to go to the real situation of our economy, businesses, services. We need measures that lead to the elimination of corruption, underground economy and political stability.

The current global economic crisis brought back to the attention of international community the requirement of managing jointly the problems the mankind confront with. Under these circumstances, the principle „for global problems, global solutions" should not be abandoned or ignored. Only the simple assertion of political will in order to coordinate the efforts of world states to turn the corner and prevent some future downturns, is not enough. It is required to elaborate some common measures regionally and even globally, especially common action measures.

Of course, important steps on the line of combining efforts of the world states have been done. Examples in this respect are various meetings of some organizations such as: G20, G8, IMF, World Bank, EU. However, harmonization of opinions proved to be difficult and sometimes undesired, producing delays in coming to decisions. Also, individual measures, unevenly adopted within the European Union risk to demolish the poles of the single home market. We need common and even action so as the echoes of this recession should not be heard any longer.

Agriculture, tourism, engineering and IT & C industry should represent the beginning of re-launching areas. It is also necessary to steer at least 10 billion to infrastructure (not just on paper, a draft optimistic, but the "ground", ie money to go specifically to be used in economics and honestly).

Romania has proved a strong market for outsourcing (outsourcing) and nearshoring (outsourcing in areas close), able to meet even higher standards and expectations of Western Europe. Software in Romania has become a successful export commodity.

The companies have delayed decisions and cut costs and investment in all areas. This has affected the Romanian IT industry. Thus, companies whose products were designed especially Romanian domestic market and hardware manufacturers and other technical products have been hardest hit by the crisis than companies and export-oriented service providers. In Romania, companies can buy relatively inexpensive solutions to complex software and IT services, for which many have used the crisis to dedicate IT outsourcing. Power of innovation to the IT sector in Romania and proven experience is a stabilizing element of Romanian foreign trade, IT industry is guaranteed and the engine of economic growth in Romania.

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ENERGY SECURITY POLICIES IN POST-GLOBALISATION COMPARATIVE STUDY

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Abstract: *The functioning of modern economies depends on the access to cheap energy. The uneven distribution of energy supplies has led to significant vulnerabilities for some countries. This paper aims to undertake a comparative presentation of the energy security systems of four major political entities: Russia, USA, China and EU. It seeks the similarities and differences of these security systems. We expect to find that above all national policies regarding the energy, a global view a new spirit oriented on environmental protection and global cooperation, emerges.*

Key words: energy, security, policy

JEL classification: Q48

1. Introduction

Energy plays an important role in the national security all countries it is the fuel that powers the economic engine. The functioning of modern economies depends on the access to cheap energy. The uneven distribution of energy supplies has led to significant vulnerabilities for some countries. Threats to energy security include: competition over energy sources, political instability of several energy producing countries, manipulation of energy supplies, attacks on supply infrastructure, accidents and natural disasters. The uneven distribution of the limited supplies and the rising costs of resources like oil and gas, create a need to change to other sources in the foreseeable future.

The aim of the energy security is in first place minimizing economic and also other risks associated with different energy supply options. Energy security implies:

• a reliable, affordable and environmentally sound energy system;
• the continuous availability of energy in varied forms, in sufficient quantities and at reasonable prices;
• security of energy supply, competitiveness and protection of the environment.

The risks that might compromise or threaten the reliable distribution of energy services include: supply constraints, transport or transmission constraints, cost and financial limitations, natural disasters, poor planning and logistics, poor management or maintenance, market shifts, technological changes, acts of nature, sabotage or international market fluctuations. There are a few approaches to energy security. The traditional approach has been to *diversify energy supplies*. This can be done internally, by maximizing the use of domestic resources, preferably based on domestic technologies. Externally a country can select a variety of products from a diversity of supplies from different geographical regions to reduce the risk linked to the dependency on only one supply. However, there is no universal consensus on the level of energy import dependency considered acceptable or sustainable, and this level varies from country to country depending on the existence of internal resources, on the power of the economy, etc. An important measure to enhance energy security may be: using less energy to accomplish the same tasks or supply the same energy services. This equals the more effective and efficient use of the energy. This is predominantly viewed as a supply issue. The European Commission, stated in a 2000 Green Paper on energy security, that ‘only a policy that is also geared to control demand can lay the foundation for sound energy supply security policy’. Security also includes the notions of vulnerability and reliability. More energy services deriving from options that are less vulnerable, more diverse, dispersed or renewable are preferred. An analysis of energy security requires the examining of the complete chains from primary energy sources to the provision of energy services to the final consumer. Existing energy systems are inherently vulnerable, especially given their centralization and complexity.

Energy security also encompasses different timescales, ranging from the immediate – a power station breakdown causing a nationwide blackout – to the very long term – the risk that world oil production will peak within the next 10 years or 40 years and the extreme oil market price volatility. There is also the risk of climate change, which may force the premature retirement of previous investments. A low-carbon economy could also have long-term security benefits compared with the current fossil-fuel-dependent system. Such an economy would be associated with a combination of end-use technologies with high energy efficiencies, the use of resources that are either renewable (and often local) or plentiful and the use of nuclear power.

A low-carbon economy does not protect against all risks. Energy efficiency and the use of renewable energy and nuclear power are effective against the dependency on fossil fuels but they are not an effective response to a sudden supply crisis for two reasons: these options are usually fully utilized and leave little margin for additional output and their expansion is a time consuming process that requires many years until new the capacities become operational. Transmission networks, pipelines, distribution systems, etc., present the risks of failure and disruption, irrespective of a low-carbon economy. Therefore, it is necessary to consider possible policy responses to a wide range of security issues. The following *events have been driving forces that have made energy security a global issue* in the past 30 years:

• The first oil crisis in the 1970s

• The Iraq–Iran War in the 1980s, Iraq's invasion of Kuwait in the 1990s, the Iraq War in 2003 and the political instabilities in the Middle East, the region with the largest oil reserves in the world

• Studies of global climate change and the United Nations Framework Convention on Climate Change in the 1990s

• Worldwide electricity supply uncertainties resulting from the liberalization of the energy markets at the turn of the 21st century

The energy system security includes two perspectives:

1. *Physical security*: vulnerability to disruptions, accidents, and attacks

2. *Strategic security*: the flexibility to react to fluctuations of the availability and of the prices in the national and international energy markets

Reducing the operational complexity, making the subsystems as independent as possible and diversifying the system's demands on fuels, equipment and suppliers increases the security of a system. For most developing countries, security of supply means security of expanding supply in line with their economic development. The main energy security risk is rooted in economics. Uneconomical pricing or the lack of access to capital for energy infrastructure investments or funds for energy imports, especially for oil and oil products constitute a major risk. Capital and funds often are not forthcoming because of low expected returns or the high risk when revenues from energy product sales are insufficient to cover costs.

Energy vulnerability has serious political implications. The potential for interruptions of any form of energy supply, by deliberate means, on any scale, at any time and place, the threat of terrorism can fundamentally alter the political balance between large and small groups in society. Modern energy supplies depend on technicians with specialized skills. Strikes that disrupted electric power generation helped to unseat the ruling party of Britain in 1974 and with the aid of oil and gas workers deposed the Shah of Iran in 1978. Similarly, power strikes, or threats of them, have been used as political instruments elsewhere. Coordinated attacks on electric power systems hastened the fall of President Salvador Allende in Chile in 1972.

2. Energy security policies

2.1 China's Strategy of Energy Security

Energy is a key strategic issue for China's economic development, social stability, and national security. China sees energy shortages as one of the biggest potential threats. It faces challenges both from within and without, with rapid domestic economic growth combined with unstable and volatile international environments.

To meet these challenges, China has created the State Energy Leading Group, led by Premier Wen Jiabao. Its major tasks include research on China's energy strategy, key energy development and saving policies, energy security and external cooperation. The Chinese government has also established a team to draft the Energy Law. The Law formulates long-term energy strategy, regulating all the aspects of China's energy exploration, production, consumption, and international cooperation. The Energy Law is conductive to building a conservation-oriented and environment-friendly economy by optimizing energy structures and implementing clean production. China wants to promote both energy development and energy conservation, giving top priority to energy conservation. In recent years, a preliminary energy supply mix has begun to take shape, with coal as the principal fuel; electricity as the core and utilizing the full development of oil, natural gas, and renewable energies. China's strategic goal is to reduce the use of energy per unit of GDP by 20 percent by 2010 and improve energy conservation and efficiency, while cultivating a new economic growth mode to achieve sustainable development. China is both a major energy producer and a major energy consumer. Currently, more than 90 percent of its overall energy demand are met with domestic supply and will adhere to a policy of meeting its energy needs mainly through domestic supply. On the other hand, China wants to take an active part in energy cooperation with other countries on the basis of mutual benefit. To meet the global energy challenge that is the common responsibility of all, China declares itself to be ready to strengthen energy dialogue and cooperation with other countries to ensure global energy security and stability.

2.2 USA's Strategy of Energy Security

"So we have a choice to make. We can remain one of the world's leading importers of foreign oil, or we can make the investments that would allow us to become the world's leading exporter of renewable energy. We can let climate change continue to go unchecked, or we can help stop it. We can let the jobs of tomorrow be created abroad, or we can create those jobs right here in America and lay the foundation for lasting prosperity." These were USA President Barack Obama words in March 2009.

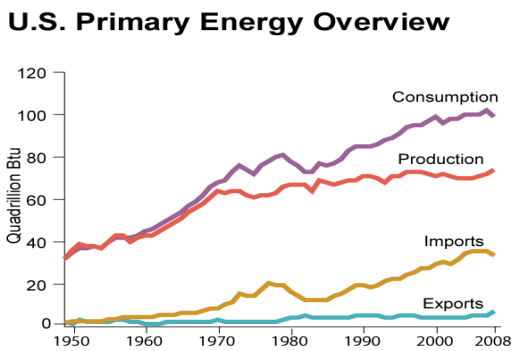
To take the new direction USA needs a comprehensive legislation to protect it from the serious economic and strategic risks associated with its reliance on foreign oil and the destabilizing effects of a changing climate. Policies to advance energy and climate security are expected to promote economic recovery efforts, accelerate job creation, and drive clean energy manufacturing by investing in the clean energy jobs of the future. USA does not want anymore to accept a future in which the jobs and industries of tomorrow take root beyond the borders of USA. The United States feels it is time to lead again by:

- *Creating new Jobs in the Clean Energy Economy***.** Drive the development of new, green jobs that pay well and cannot be outsourced.
- *Investing in the Next Generation of Energy Technologies***.** Invest $150 billion over ten years in energy research and development to transition to a clean energy economy.

USA reliance on oil poses a threat to its economic security. Over the last few decades, it has watched its economy rise and fall along with the price of a barrel of oil. USA wants to commit now to an economic future in which the strength of the economy is not tied to the unpredictability of oil markets. The investments in clean energy sources that will curb the dependence on fossil fuels and make America energy independent are considered to be imperative. The three basic steps towards its goals are:

- *Breaking Dependence on Oil***.** Promote the next generation of cars and trucks and the fuels they run on.
- *Producing More Energy***.** Enhance U.S. energy supplies through responsible development of domestic renewable energy, fossil fuels, advanced bio-fuels and nuclear energy.
- *Promoting Energy Efficiency***.** Promote investments in the transportation, electricity, industrial, building and agricultural sectors that reduce energy bills.

Figure 1: US Primary Energy Overview



Source: US. Energy Information Administration: Energy

Closing the Carbon Loophole and Cracking Down on Polluters that threatens the climate and sustains the dependence on fossil fuels is an other important point in Americas strategy. USA has had limits in place on pollutants like sulfur dioxide, nitrogen dioxide, and other harmful emissions for some time. After decades of inaction, it finally wants to close the carbon pollution loophole by limiting the amount of carbon polluters are allowed to pump into the atmosphere.

- *Closing the Carbon Loophole***.** By stemming carbon pollution through a market-based cap, USA intends to address in a systematic way the use of fossil fuels, and promoting new industries in America.
- *Protecting American Consumers***.** Revenues generated by closing the carbon loophole are intended to be returned to the people, especially vulnerable families, communities, and businesses.
- *Promoting U.S. Competitiveness***.** Ensure a level playing field for domestic manufacturing and secure significant actions to combat climate change by the trading partners.

2.3 Russia Strategy of Energy Security

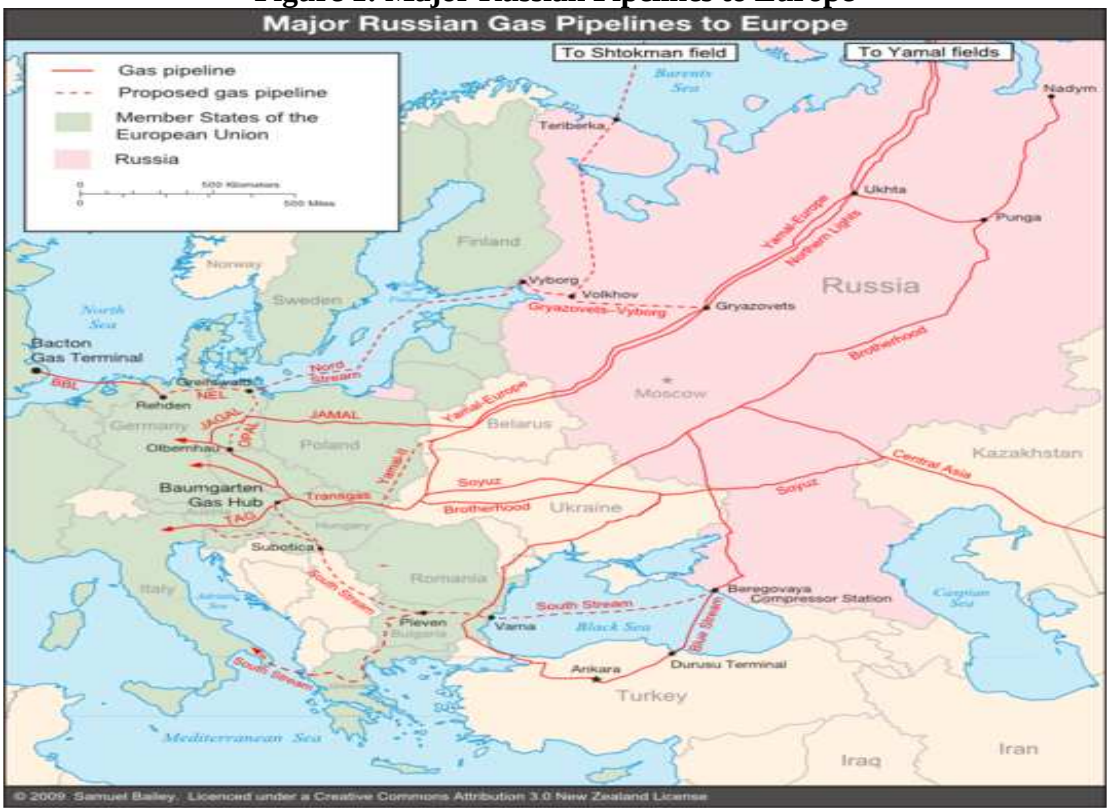
The *Energy policy of Russia* is contained in an Energy Strategy document, which sets out policy for the period up to 2020. In 2000 the Russian government approved the main provisions of the Russian energy strategy to 2020, and in 2003 the new Russian energy strategy was confirmed by the government. The Energy Strategy document outlines several main priorities:

- an increase in energy efficiency,
- reducing impact on the environment,
- sustainable development,
- energy development and technological development,
- improved effectiveness and competitiveness.

Russia, one of the world's two Energy superpowers, is rich in natural energy resources. It has the largest known natural gas reserves of any state on earth, the second largest coal reserves, and the eighth largest oil reserves. Russia is the world's fourth largest electricity producer after the USA, China, and Japan. Russia is the world's leading net energy exporter and a major supplier to the EU. Renewable energy is not exploited in Russia although there is considerable potential for renewable energy use. Geothermal power, which is used for heating and electricity production in some regions of the North Caucasus economic region and the Far Eastern economic region, is the most developed renewable energy source in Russia. On July 2008 Russia's president signed a law allowing the government to allocate strategic oil and gas deposits on the Continental shelf without an auction procedure.

The *gas sector* is of key strategic importance for Russia. Compared to the rest of the world, the share of natural gas as a primary energy source is very high. Russia has the world biggest natural gas reserves. Gazprom mainly owns and operates these reserves. It is the biggest Russian monopoly which produces 94% of Russia's natural gas production witch also are 25% of the world's known gas reserves. In 2006, Russia was the world's biggest natural gas producer with 22.0% of global natural gas production and also the biggest exporter with 22.9% of global natural gas export. The main export markets of Russian natural gas are the EU and the CIS. Russia supplies a quarter of the EU gas consumption, mainly via transit trough Ukraine (Soyuz, Brotherhood) and Belarus (Yamal Europe pipline). The main importers are Germany, Ukraine, Belarus, Italy, Turkey, France and Hungary.

Figure 1: Major Russian Pipelines to Europe



Source: Samuel Baily www.wikipedia.org

Russia is *the largest oil producer* in the non-OPEC countries, and second biggest in the world after Saudi Arabia, which it overtakes as the world's number one from time to time.

It also has the *world's second largest coal reserves*: 157 billion tonnes of reserves. The Russian coal reserves are widely dispersed. The principal hard coal deposits are located in the Pechora and Kuznetsk basins. The Kansk-Achinsk basin contains huge deposits of brown coal. The Siberian Lena and Tunguska basins constitute largely unexplored resources, the commercial exploitation of which would probably be difficult.

Other primary energy sources in Russia are: oil shale, natural bitumen and extra heavy oil, uranium. The production in this country greatly exceeds domestic demand which makes Russia the world's leading net energy exporter. Russia's overwhelmingly large reserves of natural gas have helped give it the title of Energy superpower without much debate but this has recently become a hot topic in the EU. Russia has recently been accused by Europe and the USA of using its natural resources as a policy tool to be wielded against offending states like Georgia, Ukraine, and other states it perceives as hindrances to its power. Since 1991 there were more than 55 energy incidents, of which more than 30 had political underpinnings. In almost all debates Russian officials remind their Western partners that the Soviet Union never disrupted energy supplies to the West and accuse the West of applying double-standards relating to market principles, pointing out that it has been supplying gas to the states in question at prices that were significantly below world market levels, and in some cases remain so even after the increases. Russia argues that it is not obligated to effectively subsidy the economies of post-Soviet states by offering them resources at below-market prices.

2.4 EU Strategy of Energy Security

Europe has agreed upon a political agenda to achieve its core energy objectives of sustainability, competitiveness and security of supply, by reducing greenhouse gas emissions by 20%, increasing the share of renewables in the energy consumption to 20% and improving energy efficiency by 20%, all of it by 2020. This agenda implies substantial change in Europe's energy system over the coming years involving the public authorities, energy regulators, infrastructure operators, the energy industry and citizens. It means choices and investments during a time of much change in global energy markets and international relations. Europe's political leaders need to give clear messages on the energy strategy. Energy security is an issue of common EU concern. In the light of the integration of energy markets and infrastructures within the EU, specific national solutions are often insufficient. Within the EU each Member State is responsible for its own security but solidarity between Member States is a basic feature of EU membership. Strategies to share and spread risk, and to make the best use of the combined weight of the EU in world affairs is more effective than dispersed national actions.

EU considers the 20-20-20 strategy to be the right direction for a medium to long-term energy security. An energy system with a diversity of non-fossil fuel supplies, flexible infrastructures and capacities for demand management will be very different in energy security terms than today's system. In the short to medium term, Europe's dependence on imports means that effective provisions for preventing and dealing with supply crises must always exist. Europe can and needs to diminish its vulnerability to energy supply shocks, first and foremost by developing its own strengths, internally and externally.

The Commission proposes a five-point EU Energy Security and Solidarity Action Plan:

- Infrastructure needs and the diversification of energy supplies
- External energy relations
- Oil and gas stocks and crisis response mechanisms
- Energy efficiency
- Making the best use of the EU's indigenous energy resources.

The 3rd internal energy market legislative package encourages investments in infrastructures, notably cross-border infrastructures. The Commission considers that a number of infrastructure developments should be recognised as energy security priorities of the Community:

- Development of a Baltic interconnection plan, better linking the region with the rest of the EU, improving the security and diversity of its energy supply, enabling solidarity;
- Development of a Southern Gas Corridor for supply from Caspian and Middle Eastern sources and possibly other countries in the longer term, improving security of supply;
- As liquefied natural gas (LNG) is now contributing to diversity of gas supply, sufficient capacity should be available to all Member States, either directly or through other Member States on the basis of solidarity arrangements; particularly important for the Member States which are currently overwhelmingly dependent on a single gas supplier; an LNG Action Plan to be considered;
- Completion of a Mediterranean energy ring, linking Europe with the Southern Mediterranean through electricity and gas interconnections to improve energy security and to help develop the vast solar and wind energy potential;

- Development of North-South gas and electricity interconnections within Central and South-East Europe, building on the Energy Community inter alia, supporting the national energy regulators and Transmission System Operators;
- Development of a blueprint for a North Sea offshore grid, interconnecting national electricity grids and plugging in planned offshore wind projects.

The Trans-European Energy Networks (TEN-E) instrument and its budget were conceived and developed when the EU was considerably smaller and faced energy challenges of a completely different dimension compared to today. The Commission brings in a Green Paper, a reflection on how the existing TEN-E instrument could be replaced by a new, the EU Energy Security and Infrastructure Instrument with the possible objectives of completing the Internal Energy Market, ensuring the development of the grid to permit the achievement of the EU's renewable energy objectives and guaranteeing EU security of energy supply, through infrastructure projects within and outside the EU. The Green Paper also launches a reflection on how to ensure the effective use and evolution of the EU's external policy and financial instruments that could contribute to achieving these objectives.

Another important step for the EU is to intensify its efforts in developing an effective external energy policy; speaking with one voice, identifying infrastructure of major importance to its energy security and then ensuring its construction, and acting coherently to deepen its partnerships with key energy suppliers, transit countries and consumers.

With energy interdependence of countries growing, in the coming years international frameworks capable of sustaining the major investments and innovations are needed. Effective cooperation with Norway, part of the European Economic Area, is essential for EU energy security. A framework for cooperation is also provided by the Energy Community which is building an integrated energy market in South-East Europe anchored to the EU. If negotiations are successful, the accession of Ukraine, the Republic of Moldova and Turkey to the Energy Community would catalyze their energy sector reforms and create a mutually beneficial enlarged energy market based on common rules. With producer countries like Russia and the Caspian countries, outside Europe, the developing of a new generation of “energy interdependence" provisions in EU's broad-based agreements is needed. Europe seeks security of supply, external suppliers and industry seek security of demand. Africa role in the EU energy security is increasing. The EU-OPEC Energy Dialogue recognizes the common interests of producer and consumer countries in encouraging regular supply at affordable prices.

Relations with other consumer countries are important in energy security. Cooperation needs to be deepened, promoting a common view on global energy security and addressing sustainability. Progress on a global climate deal could be a powerful driver of cooperation and change worldwide. EU's strategic oil stocks legislation needs to be revised, improving coherence with the International Energy Agency regime, reliability and transparency on available stocks and clarifying emergency procedures. Greater harmonization of security of supply standards and predefined emergency measures at regional and EU levels are needed.

The 2006 *Energy Efficiency Action Plan* was evaluated in 2009. In 2008 Energy Efficiency Package was tabled, focused on improvements in the legislation on the energy performance of buildings and on energy labeling as well as intensification of the implementation of ecodesign and cogeneration Directives. These are all areas in which energy efficiency improvements can be achieved, with substantial impact on Europe's energy consumption and energy security. A new *Sustainable Energy Financing Initiative* is being prepared jointly with European Investment Bank and other financial organizations, to mobilize large-scale funding from capital markets for investments in energy efficiency as well as renewable energies, clean use of fossil fuels and combined heat and power from renewables in Europe's cities.

Indigenous production currently provides 46% of the energy used in Europe. The EU's greatest potential source of indigenous energy is renewable energy. Today it accounts for about 9% of final EU energy consumption and the agreement is to raise this to 20% by 2020. Technology is crucial in developing and using our resources in a cost-effective and environmentally-sustainable way so our next step in the Strategic Energy Technology Plan will be a Communication on Financing Low Carbon Technologies. This will propose ways to support large scale demonstrations at EU level, including up to twelve Carbon Capture and Storage (CCS) demonstration plants. Europe's aim to have up to twelve commercial scale demonstration plants in operation by 2015 and the G8 commitment to launch twenty demonstration plants globally by 2020 will require greater incentives than currently available. Use of coal in the longer run is only compatible with climate challenge if highly-efficient plants predominate and CCS is widely available. The Berlin Fossil Fuel For will look at which additional measures could be taken at Community and national level, and in partnership with Norway, to promote cost-effective and environmentally-compatible access to indigenous EU fossil fuels.

It is for each Member State to choose whether or not to invest in nuclear energy. The nuclear safety and security framework applied everywhere in the EU is of common interest. A common legislative framework on the safety of nuclear installations and the management of nuclear waste is needed. The Commission is tabling a revised proposal for a Directive on nuclear safety.

The EU's agenda for 2020 has set out the essential first steps in the transition to a high-efficiency, low-carbon energy system. The EU needs to develop a vision for 2050 and a policy agenda for 2030. The fundamental technological shifts involved in decarbonising the EU electricity supply, ending oil dependence in transport, low energy and positive power buildings, a smart interconnected electricity network will only happen with a coordinated agenda for research and technological development, regulation, investment and infrastructure development. The transition to a high-efficiency, low-carbon energy system needs to be promoted not only in Europe but worldwide.

3. Conclusions

Around us, the financial sector is being re-shaped after a dramatic collapse in some parts of it, trust in the market has been eroded, and governments have been making a comeback as regulators and overseers. The need for responsible business engagement in the big issues of our time is urgent. The potent social and emotional cocktail of high energy and fuel prices, the biofuels debate, agricultural subsidies, deforestation, water stress and environmental degradation have all been proving too difficult for governments to manage on their own. Around the globe, there is a growing realization that the future world will be resource-and carbon-constrained.

The big Energy powers and consumers are aware that this is a time of change and with the financial crisis sustainable development has not "fallen off a cliff". On contrary: the world's population will continue to grow, China and India will continue to increase their wealth and use of resources, and everything that comes from the Earth will continue to be under pressure. The need for sustainable development has never been more pressing and all energy security policies point this put. A tendency of decentralization and a need for energetic autonomy can be observed. Not only the big consumers but also the big suppliers are now considering the importance of renewable energy sources.

Although there are natural differences between the points of view of the big suppliers – Russia in principal – and the big consumers a very important aspect of every policy regarding energy security is international cooperation. Time will show if the Superpowers will find a way to collaborate and to meet through this collaboration their own internal needs and also to define a global one.

A highlight of every energy security policy is also the need to work towards achieving widespread energy efficiency, which has the dual benefit of saving money and reducing greenhouse gas emissions.

In conclusion Energy security is and will remain on the top of the international agenda and hopefully all the players have learned the lesson and will move towards sustainable development by enhancing their energy security without risking somebody else's in this process.

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E-CRIME: COLLABORATIVE MAPPING OF CRIMES

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Abstract: *How could we prevent criminality? What could we, citizens, do to help authorities analyze and control this phenomenon? These are questions which often arise in our thoughts when we hear, read about or see around us different kinds of criminal incidents.*

The answer we give is the development of a collaborative portal named "e-Crime", part of a complex e-Government information system, dedicated to the tracking of criminal incidents. Such a module will allow the posting of information regarding criminal incidents, directly by the citizens, and the synthesized information will be visualized mainly through local and national thematic maps where areas with high crime rate, hot spots, are identified.

Key words: crime, e-Government, GIS, hot spot analysis, collaborative portal

JEL classification: R58

1. E-crime, one new module of an e-Government information system

Crime... a terrifying word, a word which frightens us every time we hear it or we speak it. Yet, in the context of actual financial crises we hear it increasingly more often: news channels daily relate about this kind of incidents from Romania or worldwide, the written media often presents the most shocking cases, most of the times on the first page and, of course, the Internet is no less important for the illustration of such happenings.

Crime means "the totality of crimes committed on a certain territory in a certain period of time" (Romanian Academy „Iorgu Iordan" Institute of Linguistics, 1998). According with Romanian Police, crime level has recorded a downward trend in 2008 in Romania, meaning there are no records of extreme violence, but, according with the same source, in 2008 Romania has experienced frequent crimes such as: burglaries from shops, cars. Yet, as it was expected, with a global financial crises as a background, year 2009 brings news regarding the criminality in Romania, the number of armed robberies has doubled in 2009 over 2008, the number of burglaries has increased from 2636 to 3163 (in November 2009). In reality, though, the crime number is much higher, because citizens do not always declare to the Police the fact that they were victim of a criminal act. All these factors raise the necessity of some new modules in e-Government Information Systems. We propose such module to wear the name "e-Crime".

The "e-Crime" module of an e-Government Information System suppose that citizens will post information regarding: the date, time, place and the type of crime they were witnesses, either or not they have declared the crime to the Police. Also, citizens will be able to post this information anonymous.

We propose the module "e-Crime" to be maintained and the information to be validated by designated persons of local or national Police (depending on the e-Government Information System which will host this module).

The advantages of an "e-Crime" module are:

- the information will be visualized by the citizens through reports or maps at local or national level, depending on the type of crime selected by the user;
- the information stored in this module will better illustrate the crime rate for a certain territory, in a certain period of time, in comparison with the information held by the Police;
- the citizens will be able to post information in an anonymous way, so that the fear to be further persecuted by the aggressors to be eliminated;
- it will be possible to identify new high risk areas concerning the crime rate, areas not known by the Police, so that new tactical measures can be implemented.

The only disadvantage of such a system is that not all the information posted by citizens can be verified.

2. "E-crime" type systems successfully implemented in the world

We will further present two of the most successful information system used worldwide, that are likely to our proposed "e-Crime" module.

- *WikiCrimes System (Brazil)*

Vasco Furtado Professor from Fortaleza University (Brazil) had the idea to create an electronic map of the most dangerous areas of the Planet, the information being added by the users of the portal. Professor Vasco Furtado has developed this project because:

Most of the times, in Brazil, where the crime rate is very high, the citizens do not declare to the Police when they are the victim of an attack;

The official information regarding the crime rate is processed and then published only by the Police and, in Brazil, the correctness of this information is questionable.

This portal was launched in April 2008, and after only 10 days there were already 1700 recorded crimes. The greatest disadvantage of this electronic map is that the information is not verified or validated by a competent institution: "From technical point of view, the most important aspect is that of establishing the mechanisms to identify false accusations" told Furtado. In WikiCrimes system have been created some fields to allow the user to add auxiliary information regarding the crime, for example newspaper links, information which provides more credibility. Also, there have been developed some algorithms with the purpose to compute the veracity of published information (www1).

The national Crime Map (United Kingdom)

A portal which hosts so called the national crime map was launched in October 2009 in the United Kingdom.

Unlike the Brazilian model presented (WikiCrime), the national Crime Map only allows the visualization of the information (as reports or maps), the information being uploaded only by the Police.

The national Crime Map allows:

- compare one police area with another;
- compare figures over a three-month period against the same period for the previous year;
- see annual crime rates (www3).

When this portal was launched, Policing and Crime Minister David Hanson stated: "Giving communities access to information like this not only improves public confidence but ensures police are responding to local people's needs" (Clarkson, 2009).

This kind of Information Systems (WikiCrimes and The national Crime Map) have the purpose to inform the population regarding the areas with a higher crime rate, so that they could be avoided, for example by the tourists, on the other hand, they have the purpose of actively involve the population in the prevention of crime, providing indirectly support for the local policing.

Geographical Information Systems for crime mapping

As the fundamental question in crime analysis is "where the crime took place?" crime mapping became a subfield of crime analysis and it is based on the geographical visualization of crime incidents. Geographical Information Systems used as a tool in crime mapping do not offer only the production of crime maps, but also allow the possibility to "manipulate the data behind the maps, to combine various geographic data, and perform statistical functions" (Harris, 2007).

Crime mapping allows investigators to perform complex spatial queries, to correlate different data sources based on common spatial variables and it provides an effective way of visualizing the information.

The areas in which GIS has become widely used are: crime data analysis such as crime hot spot mapping, repeat victimization, temporal pattern analysis of incidents, police policy making for crime reduction and prevention (Wise; Craglia, 2007).

Hot spot mapping is the most popular method for identifying the areas of high concentration of crime, for exploring the variables of crime patterns and helps police departments in their tactical and strategic planning. There are many hot spot mapping techniques such as: spatial ellipses – applying techniques like hierarchical clustering or k-means clustering; thematic mapping of geographic boundaries – administrative or political areas such as beats, census blocks, polling districts, wards; quadrat thematic mapping - uniform

grids (or quadrats) are drawn across the study area and thematically shaded; kernel density estimation – creates a smooth surface of the variation in the density of point events across an area. These techniques are explained in a 2005 publication from the National Institute of Justice entitled Mapping Crime: Understanding Hot Spots (www4).

An intercomparison study between these techniques has been done in research paper (Chainey; Tompson; Uhlig, 2008), KDE proven to be the best technique for predicting future patterns of crime. In the same research was also revealed the differences in hotspot maps between crime types in their ability to predict future patterns of crime. Street crime hotspots maps were consistently better in their ability to predict spatial patterns of street crime than any of the other crime types in their ability to predict crimes of their respective type.

Due to the complexity of crime types, hot spot mapping has to be done in a very flexible way.

Research paper (Townsley, 2008) highlights that a hot spot map indicates usually areas of high crime, without considering the distribution of the incidents over time. Using statistical programming language R, the author claims that there exists considerable variation in the temporal distribution between hot spots at different levels of resolution: within year and within day.

Two free software packages for hot spot analysis are well-known: CrimeStat and GeoDa. The CrimeStat program was developed by Ned Levine under research grants from the Mapping and Analysis Program (MAPS) of the National Institute of Justice (NIJ). CrimeStat is a stand-alone Windows spatial statistics program for the analysis of crime incident locations that can interface with most desktop GIS programs (Levine, 2006). This software allows: summary spatial description, hot spot analysis, interpolation, space–time analysis, and journey-to-crime modeling, crime travel demand module for analyzing travel patterns over a metropolitan area. Statistical tests available in CrimeStat include the Nearest Neighbor Index (NNI), Moran's I, and Geary's C statistic, Local Indicators of Spatial Autocorrelation (LISA).

As for commercial software for hot spot analysis, ArcView Choropleth Mapping and ArcView Spatial Analyst are often used, an intercomparison of these software tools could be found on (www5).

Geographical Information Systems are also used in repeat victimization and repeat crime places identification. Repeat victimization refers to the multiple attacks on the same individual, regardless of location. A repeat place might have a number of different victims (www4). Mapping repeat victimization is more likely to reveal patterns with vulnerable populations -potential victims who engage in similar activities. When GIS is used to reveal repeats in the same place, the system has to examine a set of points with the same geo-coordinates. In order to retrieve the repeats on the same person, a search for the same textual value in a certain field could be done by any database.

Temporal pattern analysis of incidents allow users to make statistics regarding the number of incidents that occurred each month, day of the week or hour and create predictions such as "when" incidents are more likely to happen.

U.S., the pioneer country regarding crime mapping, has recently launched CrimeMapping.com, geographical portal which provide the public with valuable information about recent crime activity by neighborhood, in the form of maps and reports. This application represents a new hybrid in mapping technology which utilizes both Google Maps and ESRI's advanced geographic engine (www2).

3. Crime mapping at Romanian countries level

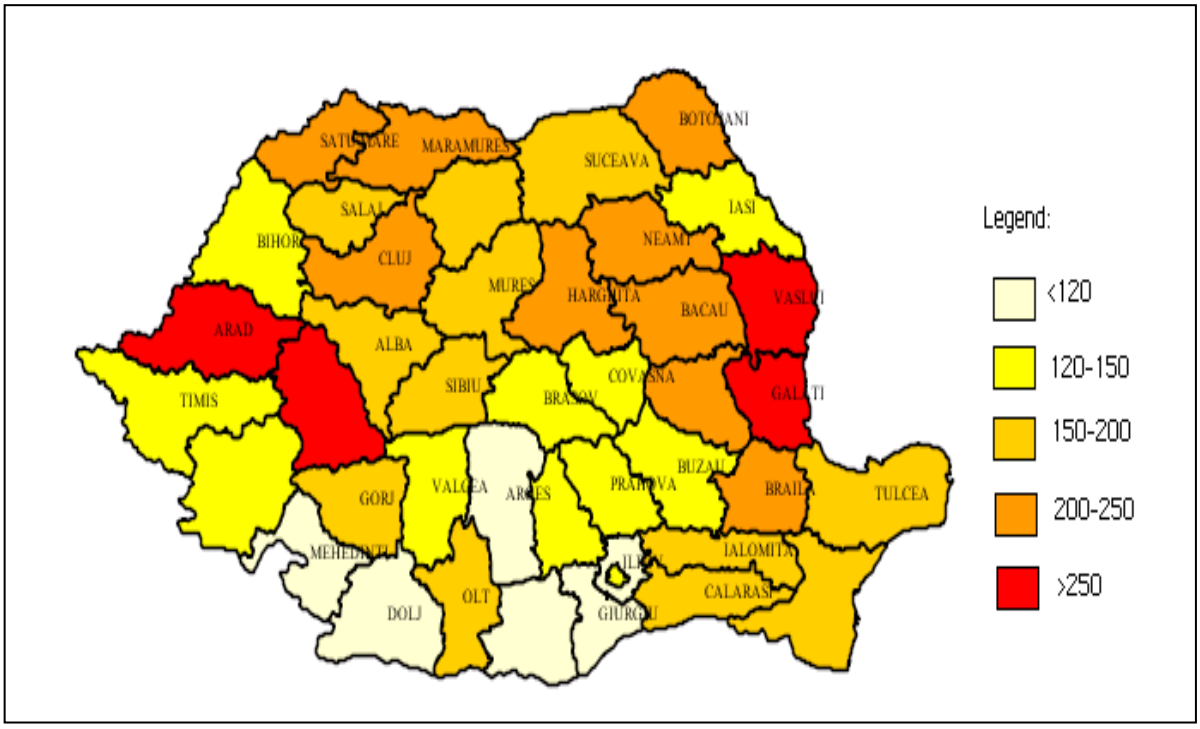
Table Counties_ro has been created in PostgreSQL/PostGIS open source spatial database, its structure presented in below table.

Table 1: Structure of Counties_ro

Column	Data Type	Comment
Name	VARCHAR2	The name of Romanian county
Geom	MDSYS.SDO_GEOMETRY	The spatial information for county boundaries; information taken from Romanian geo-spatial.org community
Pop	NUMBER	Population by county on July 1, 2008;
Earn	NUMBER	Average net nominal monthly earnings by county in 2008 total employees;
Cr	NUMBER	Crime rate (per 100,000 inhabitants definitively convicted persons), by county

Using open source web mapping server GeoServer, the data stored in PostGIS database is visualized through a thematic map for the crime rate (per 100,000 inhabitants definitively convicted persons), by county (figure 1).

Figure 1: Crime rate (per 100,000 inhabitants definitively convicted persons), by county



The technical flow that we have followed in order to generate the thematic map starting with the information stored in PostGIS table is detailed in research paper (Mocanu; Velicanu, 2009). A new user-defined style was created based on GeoServer SLD support which tells the server how the map of Romanian counties should be rendered, what colors to use (different colors for data within the feature in which crime rate is between 5 different predefined ranges: <120; 120-150; 150-200; 200-250; >250 per 100,000 inhabitants definitively convicted persons).

From this thematic map, one can identify two crime hot regions, one in the east of the country in the area of Vaslui – Galați counties and one in the west of the country in the area of Arad – Hunedoara counties.

Therefore, these are the areas in which the implementation of "e-Crime" module should start within local eGovernment Information Systems, but the eGovernment Systems do not have the chance of being operated and properly used by citizens unless they benefit from powerful and sustained advertising (Lițan, 2009).

The advantages are obvious:

- one can get profiles of the county areas where the crime rate is higher;
- it can be easily highlighted the problems of a community;
- it can be indirectly evaluated the efficiency and the quality of the policing services.

4. Conclusions

The implementation of a Geographical Information System for the Police develops a new series of capacities for the police officer, making an advantage in his fight with the offenders, and for the manager this system becomes a good tool to allocate resources depending on priorities. The anticipation of behavior, the visualization of the criminal phenomena dynamic, the identification of the places and times the crimes are more likely to happen are new facilities developed for a new paradigm of police activity, proactive activity (General Inspectorate of Romanian Police, 2006).

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ECONOMIC CRISIS IN ROMANIA. A BRIEF ANALYSIS

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Abstract: *The purpose of this paper is to examine the effects of recent economic crisis on the Romanian economy. To support the argumentation, we use and process statistics data which we interpret in terms of conventional economic theory. The fundamental idea defended in this article is that the current economic crisis is the expected consequence of an unhealthy economic growth in the last decade. Although recorded high rates of growth of GDP after 1999, the national economy was based on overconsumption, the excessive lowering of interest rates and on high external deficits. The economic difficulties accumulated under high rates of economic growth of last years simultaneously exploded with the global financial crisis. Far from being caused by the market failure, the present economic crisis was the result of poor government management.*

Key words: economic crisis, overconsumption, monetary policy, government failures

JEL classification: E32

1. Introduction

After ten years of major economic difficulties, marked by mild increases and strong decreases of GDP, the Romanian economy came in a prolonged period of economic growth in the last quarter of 1999. Available data show that in the first nine years of this millennium, the national economy expanded at an annual rate which allowed high revenues growth, reducing unemployment, and a strong increase in consumption. In this period, especially between 2005 and 2008, the national currency strongly risen, the stock market indices increased with an astronomical speed and the GDP growth rates were among the highest in Europe. Meanwhile, the interest rates used by the national central bank had fallen heavily while the inflation rate was substantially diminishing. According to widely accepted standards, the Romanian economy was among the most dynamic economies in the world. The international financial crisis started in mid 2007 did not seem to have any negative effect on domestic economic system. Everybody believed that the economic difficulties experienced in the Western world were transient and could only slightly reduce the growth rate of national economy. Even the most appreciated local economists believed that economic growth will remain positive during 2009 in despite of decreasing to a half the growth rate compared with that of 2008. But after nine years of strong GDP growth, the Romanian economy has suffered a serious crash at the end of 2008 and especially in the first quarter of 2009. Despite all expectations the economic crisis suffered by Romania proved to be one of the worst in Europe. In a single year, the national economy was subjected to an immense pressure passing from a positive growth rate of 8% to a negative one of the same size.

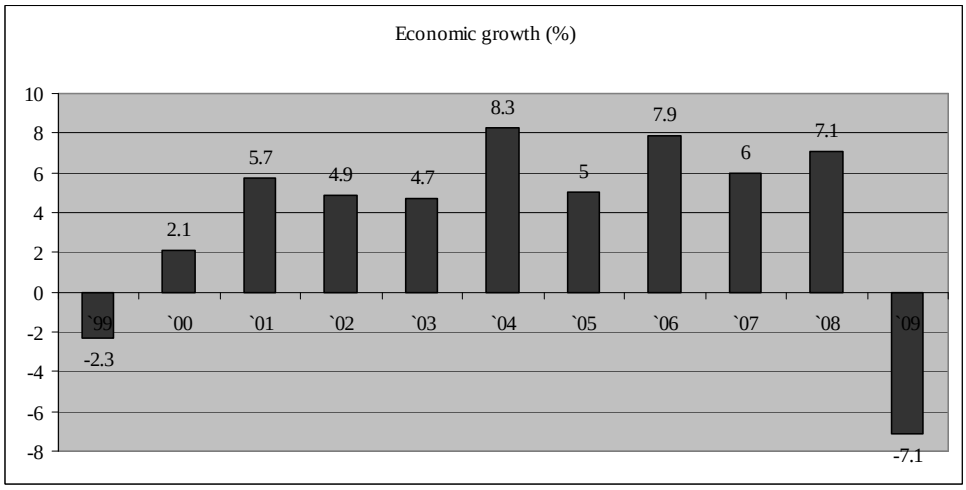
2. Romanian economy in the last decade – between the strong growth and rapid fall

To explain the present situation of national economy is even more interesting because in Romania the crisis occurred after several years of sustained growth. This allegation is based on the analysis of GDP growth, but also in many other topics. At the end of 2008 the crisis was produced by a huge drop in the stock exchange indices, a sharp devaluation of the national currency, the trend of stagnation in the housing market and a severe compression of industrial production. The beginning of 2009 shows signs of a severe economic crisis. From our point of view, this economic crisis was inevitable. Economic theory teaches us - and, therefore, was called the dark science - that exuberance and wonder have no links with the economic system. We say this based on economic developments that preceded the crisis.

2.1 The economic ecstasy (1999-2008)

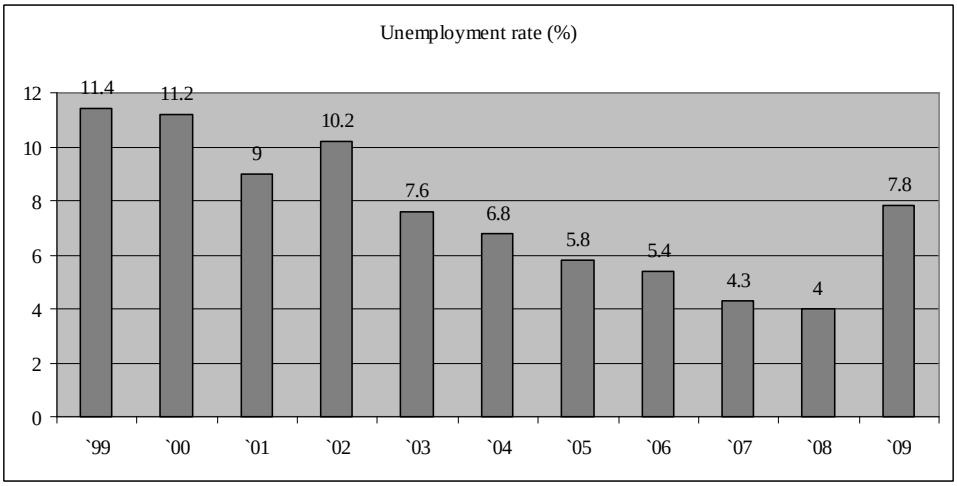
In the last ten years, the national economy has entered a period of prosperity that was reflected in GDP growth, the growth of stock exchange indices, declining unemployment, rising incomes especially for consumer. In the graph below we can see that this phenomenon has accelerated, even after 2004, despite the terrible droughts of 2005 and 2007. If weather conditions were not hostile, Romania has recorded annual GDP growth of over 7%, which would have been a very good performance. This period coincides with the reduction of high unemployment and the rising of stock exchange indices. To some extent this is logical. Obviously, the expansion of production requires labor and the economic system generates jobs and reduces unemployment. The increased production, increased the demand for labor, and increased the income of employees in a very fast rate.

Figure 1: Economic growth in Romania (1999 – 2009)



Source: Based on data published by INSSE

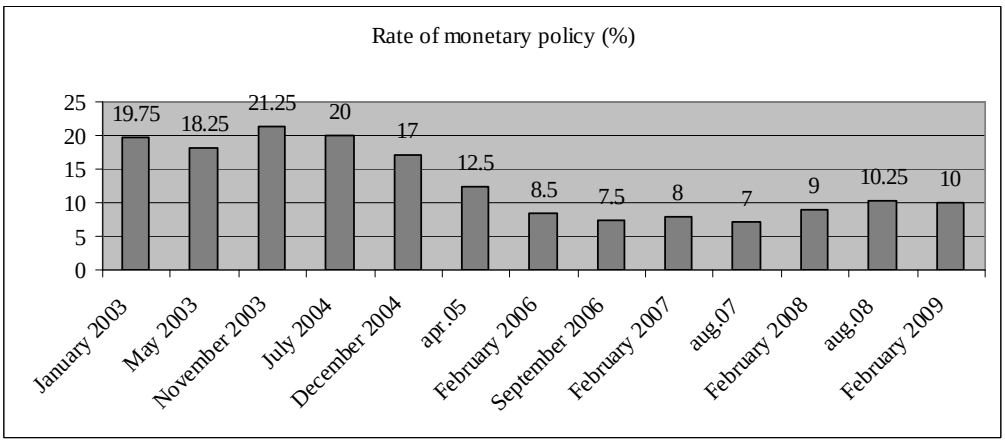
Figure 2: Unemployment rate in Romania (1999-2009)



Source: Based on data published by INSSE

This decade was the period in which Romania was entering a long period of disinflation and a sharp decline in the rate of monetary policy. Basically, in just three years, the interest rate used by the National Bank has been reduced to one third of its initial level. This is the period when the annual rate of price growth down psychologically, for the first time since 1990, to a value of a single figure. In addition, between 2004 - 2007, the national currency raised to one of the highest growth rates in the world. The stock indexes have soared too. Looking at the graph, we see that between 2002 and 2004, the index of the Bucharest Stock Exchange has doubled. With the BET-FI index was even more explosive situation.

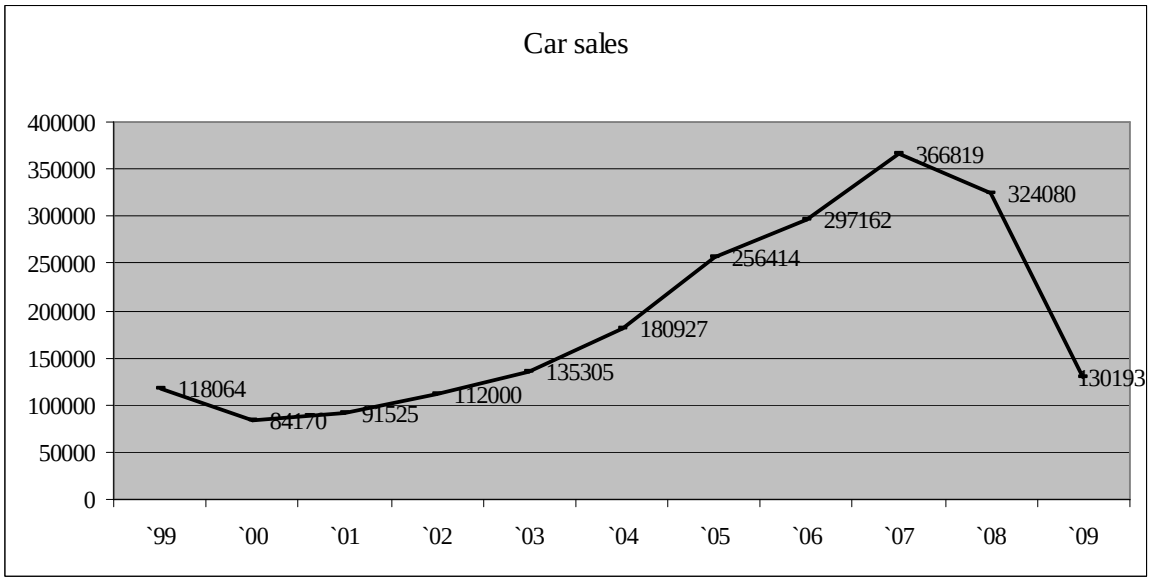
Figure 3: Rate of monetary policy (2003 – 2009)



Source: Based on data offered by National Bank of Romania

A very interesting thing happened in the car market. It has been known for long time that the economic situation of the economic system can be synthesized through the production and selling cars because these reflect the demand for companies to develop their production and the situation of middle class. When auto sales are increasing, most of the economic system is in a huge development. From this point of view, the car market has witnessed an explosion which was supported by the optimistic expectations of buyers and a dramatic reduction in the rate of interest on consumer loans.

Figure 3: Car sales in Romania (1999 – 2009)



Source: Based on data published by APIA

This exuberance has led to sales that grew 4.5 times between 2000 and 2007. The annual foreign investment grew very fast and the most of markets, including building materials, were expanding steadily. Only between 2005 and 2008 the magnitude of the cement market doubled. Something similar happened in the housing market where the high expectations have been transformed into a significant increase in the volume of transactions and, in particular, rates of profit. The sale of the property had usually a profit rate of 100%. For example, the price of an apartment in a city in Romania increased between 2000-2008 about 6-7 times, in some cases, even 10 times. Practically, Romania was an El Dorado of real estate affairs in the last years. Everything was sold, anywhere, at any price.

The banking system was in a strong growth and the profits grew each year due to a significant growing of credit volume. Credit conditions were very light and the consumer credit could only claim the identity card. This allowed an impressive growth of sales of consumer goods. In some years had queues in front of shops selling electrical appliances. The markets have expanded enormously in the fields of the form

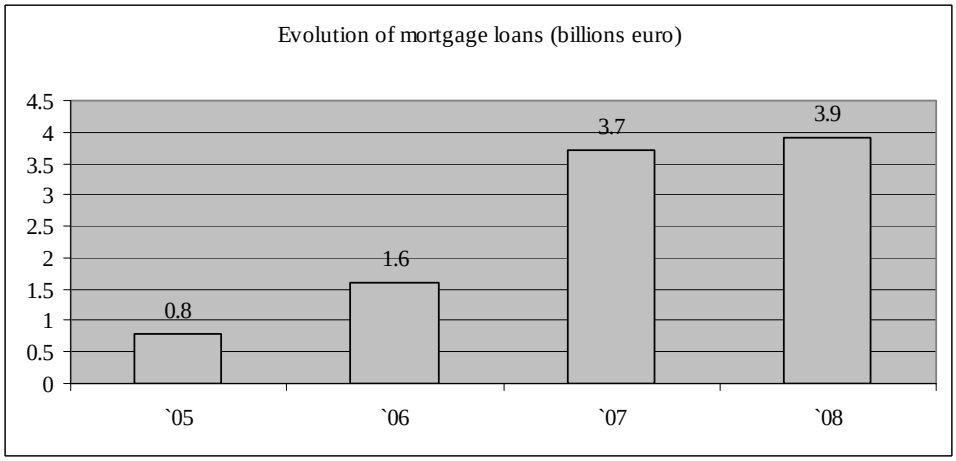
and encourage the expansion of global markets. The prices for oil, steel, chemical industry, the real estate sector touched historical peaks.

2.1 The economic crisis (2008 -)

The economic system is not the wonderland and the economic history of the first decade of the century ended. In any case, it was a need that the crisis to be over. The signs of the crisis have begun to appear since 2007. After a historical growth, the domestic currency started to devaluate and the rate of growth of stock indices was rather moderate. The growth of car sales fell slightly and yields of the real estate business began to grow at a modest rate. This is because in the summer of 2007 in the USA are the first clear signs that the economy has problems. The rate of Central Bank's monetary policy began to grow after reaching a record low of 7% in 1990. In addition to these signs, there are data to confirm that the Romanian economy grew too fast. Despite all the trends, the Romanian economy accumulated a lot of tension that should be eliminated. Therefore, the economic crisis emerged although it was largely imported. To some extent, the Romanian economy is similar to an individual who refinance their current level of borrowing every day life. If we analyze the evolution of Romanian economy deficit understand the truth of that claim. The current account deficit increased from 3.4% of GDP in 2002 to 5.9% of GDP in 2003, and 12.3% in 2008. In other words, this percentage has been multiplied by 4 in just 5-6 years and was largely caused by increased imports of consumer products. The same trend can be observed with respect to foreign debt. The data show that only between 2006 and 2008, the private debt balance increased from 16 billion to 35 billion, which means an increase of 120%. It is estimated that 60% growth in 2007 and 2008 due to increased external debt. The same increase was felt in foreign debt between 2000 and 2003 only.

The sector where the crisis has occurred with greater intensity has been the housing sector. After 8 years of strong growth, real estate prices have experienced a severe drop; in fact, was inevitable. As we said already, the last 8 years real estate prices in large cities were multiplied by values between 6 and 10. Only between 2005 and 2008 prices rose by 250%. This acceleration of growth could not continue because the income of Romanians, in the same period increased only by 78%. Consequently, between increases in prices and income of the population was 172% difference in three years. The question is how did this difference given thinking that the apartments are built, however, for people ? The answer may be the increased volume of loans. If we analyze the data from the Central Bank of Romania we found that during the same period of the mortgage volume rose from 1.3 billion in 2005 to around 10 million euros in January 2009, which means an increase of 750 %.

Figure 4: Evolution of mortgage loans (1999 – 2009)



Source: National Bank of Romania

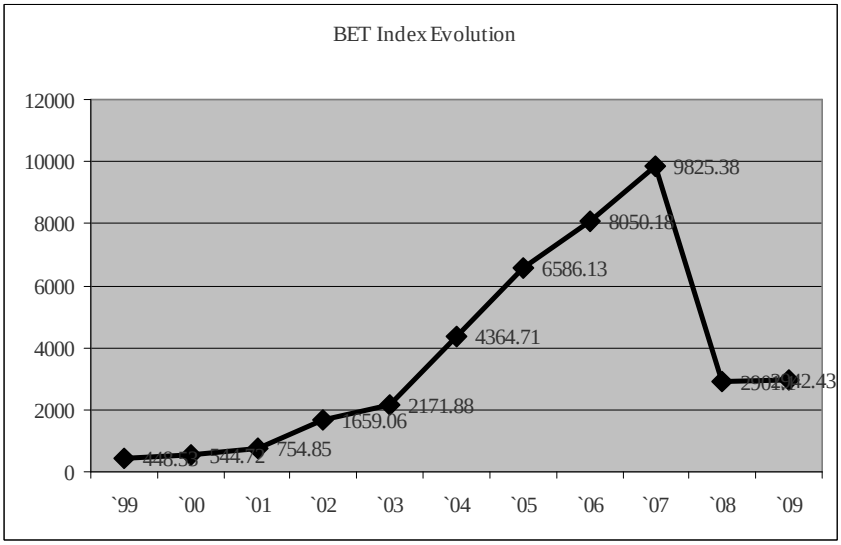
Therefore, we conclude that the main source of the prices explosion in the housing market was the credit policy. Especially in the years 2005 - 2007, the price increasing were equal to the rate of increase of credit volume, which means that the supply of real estate has increased somewhat. The most obvious is that in 2007, the highest point of euphoria in the housing market, the monetary policy rate has reached 7% while inflation was 6.57% which shows that real interest rate was actually close to 0%. This huge difference increases in real estate and the growth in incomes was not sustainable in the long run and the economic crisis has made the necessary corrections. Thus, between March 2008 and March 2009, prices have fallen so much that now compared to 2005 growth in house prices dropped to 110-135%. How income is now higher, with

values ranging from 76-98%, we conclude that the difference between growth in the price and income between 2005 and 2009 is maintained between 35-37%. This could mean that the adjustment in the housing market have not finished yet. Last year the prices of the old buildings have already been reduced by 50%. In the market for building materials are major price adjustments (up to 50%). The number of stakeholders in mortgage lending has fallen by 90%. Now, most people buy property with money, 2 / 3 of turning real-estate transactions that way. The increase in interest rates was necessary to curb consumption and encourage savings. That is what really happened in those last months. Today, credit conditions are harder. The policy of cheap money failed again. The difficult period of the year is natural and should recover the wealth and illusory prosperity of previous years.

The same correction is happening in the car market, which in turn had been very encouraged by the development of consumer credit. Basically, in the first quarter 2009 sales of cars diminished by 60%.

By far the most important correction was made in the stock market. Following the rapid growth in recent years, the capitalized value at the Bucharest Stock Exchange reached a level higher than in 2005, that is, a value with which existed before the boom years of 2005 to 2008. In 2008, the BET index has suffered a correction of 70% and BET-FI index has fallen 85%. After the fastest growing worldwide in recent years, the indices of the Bucharest Stock Exchange have known one of the biggest drop in the world.

Figure 5: BET Index Evolution (1999 – 2009)

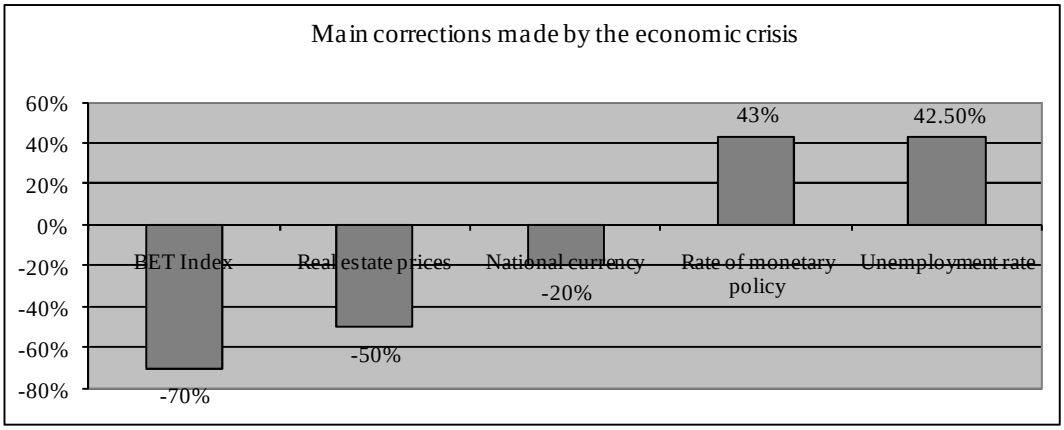


Source: Based on data offered by Bucharest Stock Exchange

Looking at the graph we observe that the elimination of the bubble of 2005-2008, BET index puts a trend smooth and soft. The year 2008 meant for Romania, which meant the Black Tuesday (29/10/1929) for the Great Depression, the indices of Bucharest Stock Exchange losing everything gained between 2004 and 2007.

The same happened with the national currency. After very rapid growth in 2007, the national currency has undergone a correction of 20% in late 2008 and early 2009, losing that value only in a few months. Perhaps this correction would have been greater without the intervention of the Central Bank, a fact demonstrated by the reduction of foreign exchange reserves during the first months of 2009. From the first signs of economic crisis in the U.S. (Summer 2007), the national currency has lost 28% of value. But the depreciation of the currency has determined that one of the great problems of the Romanian economy, the current account deficit, which was one of the sources of growth in Romania, was reduced by 80% in the first quarter of 2009. The private sector deficit fell from 11.6% of GDP in 2007 to 7.7% in 2008 and 3% in 2009. Steel production has been compressed by 60% and profits of banks have been significantly reduced. These adjustments have been manifested by the significant decline in GDP (an increase of 7.1% in 2008 to -6.4% in the first quarter of 2009).The reduction of economic activities of such great magnitude has caused the unemployment rate rise from 4% to 7.9 %, which means an increase of 100 % in one year. This increase in unemployment is due to structural adjustments occurring in the economic system after strong growth in recent years, based on over-optimistic expectations. Unfortunately, the correction is made only in the private sector without restructuring the public sector although this is compulsory.

Figure 6: The main corrections made by the economic crisis (1999 – early 2009)



Source: BNR, APIA, BVB, INSSE

4. Conclusions

The current economic crisis, though largely imported, is the result of an exaggerated optimism of past years. Its aim is to approach us with feet on the ground and to remind us, even to the economists, that in the economy with scarce resources, there can be no miracles, at least in the short term.

The main cause of the crisis seems to be exaggerated optimism that produced a large increase in consumption in previous years. This is not a crisis of overproduction but an excessive consumption. Its origin seems to be the changes in monetary policy. The world speaks of the sub-prime crisis, but this could not exists if monetary expansion did not create the illusion that there is no limit in the use of the scarce resources. We are in that situation because the real interest rate was almost 0% creating the illusion that the money and the goods purchased with money are unlimited. This created the euphoria of the consumer that ultimately produced most serious distortions in the economic system.

The crisis has come to correct the excessive expectations of the people, bankers, entrepreneurs, consumers. It shows that the markets can be fooled in the short term. In the long term, the self-regulating markets use their instruments to remove the anomalies. The origin of the crisis seems to be the irresponsible actions of monetary authorities. As Paul Heyne said, the crisis is the sum of our deceived expectations.

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SOCIAL RESPONSIBILITY OF FIRMS AND ABUSIVE LABOR PRACTICES ABROAD: IS CONSUMERS' BOYCOTT THE ETHICAL ANSWER ON THE HOME MARKET?

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Abstract: *By employing the case of abusive labor practices by companies in foreign countries, we demonstrate that firms cannot ignore ethical choices despite adopting a realist behavior ("law-only" approach). We conclude that boycotting such companies for their involvement in countries with poor human rights record isn't always the ethical consumers' choice. They may prove to be "less efficient" in abusing laborers than local counterparts. Moreover, if consumers aren't neutral towards the ethics of business practices in other countries, they impose cost disadvantages on them. We recommend both from the perspective of ethics and efficiency a "territory-only" approach in social responsibility.*

Key Words: *international business, social responsibility of firms, labor practices, business boycott*

JEL classification: *F23, K31*

1. Introduction

The debate on business social responsibility lies at the core of the modern society. In a society that has empowered individuals as citizens through political rights and welfare redistribution, the question whether such individuals have additional rights, this time as consumers, has been naturally raised. In an increasingly politically sensitive social environment where any individual action is almost universally qualified both from an ethical and welfare perspective, the activity of firms is increasingly qualified not only from a strictly welfare dimension but also from an ethical point of view. The assumption that lies at the core of the debate on social responsibility of firms is that business activity produces not only welfare effects on consumers but also social externalities that, when negative, must be dealt with.

One of the most common reactions of consumers (but also of trade partners which sometimes fear a negative impact on their reputation) towards the perception that a company adopted an irresponsible social behavior is boycott. Such a position becomes however debatable in the context of the presence of such a company on two countries and of a manifest contradiction between the mainstream ethical systems of the two societies. Consumers usually tend to extrapolate their own ethical judgments about the business practices of companies beyond their national borders and that puts these companies in a truly challenging dilemma which is not only ethical but also financial. Using the particular case of "abusive labor practices" in a broad sense, we argue that boycott is not always the optimal position of consumers towards enforcing such ethical norms for the activities of national companies beyond local borders. Moreover, companies that tend to coherently observe their home country' ethical standards all over the world will be put, from a business perspective, at a cost disadvantage.

The most significant debate on social responsibility in business emerges in the context of principal-agent relations. This is the case of the modern corporation where management is separated from ownership and the former has the ability to arbitrate among competing interests of different categories of stakeholders. However, we ignore this issue in this paper. We concentrate on the social responsibility of firms where there are no agency problems, that is, the management is the same as the ownership of the company. We prefer to employ the term "social responsibility of firms" instead of "corporate social responsibility", which is the most frequently used term.

2. Ethics and business

Morality primarily deals with the ends that individuals should pursue in their actions. It offers the principles that legitimize such ends. Whether an entrepreneur should pursue the profit as the main goal of his business activity is, for example, a moral questions. Qualifying an end as good or bad implies a moral judgment. Ethics, on the other hand, qualifies the legitimacy of the way individuals interact in society. It qualifies their actions as right or wrong not from the perspective of the ends they pursue but from the perspective of the way they interact in society. The concepts of ethics and morality are sometimes used

interchangeably but there seems to be a significant difference between the individual who acts alone in autistic exchanges (when morality qualifies his actions as right or wrong) and the individual who acts in society (when he asks himself the question of what is the legitimate behavior to adopt in interactions with other individuals).

While philosophers have attempted to identify the norms of a universally-valid ethics (the so-called natural ethics) (Rothbard, 1982a), it is obvious that during history and even today there have been competing ethical systems in the world. Religion, politics, culture and history (what we usually include under the banner of "anthropological factors") have played a critical role in shaping the way societies qualify human actions as right or wrong, desirable or undesirable, legitimate or illegitimate. It is a significant paradox that societies are the result of voluntary interactions between individuals but at the same time significantly restricts the way that individual members interact. This ethical particularism leads to path-dependent systems of ethical norms that sometimes are in manifest contradiction with each other.

When an individual from a particular community with its own ethical system interacts with individuals from other communities with different ethical system, he may be perceived as acting unethical even if he strongly believes that he follows all the legitimate norms of ethics. He is, in fact, ethically conditioned by the native system of ethics and proves to be ignorant towards the value systems of others. As a frequently employed example, let's think of a businessman from a Latin country – where being in-time at meetings seems not to be a "must" of the business culture – which is late to a meeting with business partners from a Scandinavian country – where being in-time is apparently considered to be among the minimal ethical standards of social conduct. Such a break of the ethical norms is not of course criminal so it should generate a proportional reaction / punishment but it may affect the reputation of such an individual.

On the other hand, law is a subset of ethics (Rothbard, 1982b). The rules of law are those ethical norms whose break legitimizes violent enforcement in the logic of proportional punishment. Being late at the business meeting should not determine the Nordic business partners of the Latin entrepreneur to sue him for damages. But, in the case of the break of the contractual clauses, such business partners are entitled to be compensated for any failure to act of the above-mentioned entrepreneur. Such an entrepreneur becomes, in fact, an aggressor against the rights of his business partners. Several legal philosophers have argued that attempting to violently enforce norms of ethics beyond the proportionality punishment is, in fact, an aggression. Killing a person for not being in-time at a meeting is such an example.

Law is in consequence that subset of ethics which is violently enforced by particular institutions in any society. Breaking the law will definitely qualify the aggressor as unethical.

2.1 The morality of profit

The perspective on the morality of profit-oriented activity of individuals has evolved over time. In medieval times, the mainstream interpretation of the Christian bible in Europe has condemned the search for profit. While this interpretation could not logically condemn any kind of production activity – otherwise it would have promoted a purely autarchic society – the immoral anathema was particularly used in the case of certain business activities which were considered "non-productive": credit activity (the legal reaction of sovereigns resulted in the usury regulations) and merchant activity (which resulted in the "just prices" regulations) (Roover, 1958). In late Middle Ages, different complex social transformations (Renaissance in Italy, Reformation in Western Europe, the separation of the church and the state as well as political democracy) have meant a more liberal environment towards economic activity.

Profit became moral as for-profit activity, as Adam Smith confirmed, serves social ends: the egoistic attempt of any entrepreneur to search for profit means that all consumers will benefit from his production. Profit is the result of serving the needs of the consumers so any for-profit activity increases social welfare (Smith, 1776).

Today, the science of economics argue that there is no incentive for individuals to engage in economic activity unless the prospect of profit (Mises, 1949). The socialism system failed, among other factors, because of lack of correct incentives for individuals in the production activities. Unless the prospect of personal profit, individuals have no incentives to engage in productive activity and to adopt a rational behavior.

2.2 Ethics and economics

As we have already seen, ethics deals with the way individuals interact in society. It qualifies human actions as right or wrong, legitimate or illegitimate. On the other hand, economics is a science of purposeful behavior. It takes the ends of the acting individual as given (it attempts to be a value-free enterprise like any

science which is indifferent to morality) and studies the human action as a way to employ means in order to reach those ends (Mises, 1949).

It is a natural outcome that ethics and economics overlap in what regards the object of their study which is human action and especially the way individuals interact in society (and, in particular, on the market). They are clearly differentiated however by their approach to this object: legitimacy in the case of ethics and efficiency in the case of economics. In the modern debate regarding the social responsibility of firms, the core challenge does not consist in the moral problem as the search for profit is universally accepted nowadays as a legitimate end of the business activity. The real focus in the debate is the tension between ethics and economics, between the legitimacy of the business conduct and its efficiency. In other words, how entrepreneurs reach the profit goal? How far are they ready to explore the social limits of ethical norms in order to be efficient? And, from an international perspective, the challenge is even more complex: how should firms which come from a particular social culture and ethics behave in the space of another culture and ethics?

2.3 The hard dimension of social responsibility: the "law-only approach"

Any successful business enterprise should observe the rules of law enforced in the particular market it attempts to enter. Irrespective of the fact that a particular entrepreneur agrees or disagrees with a particular piece of legislation in that country, he is obliged by the logic of the legal system to adjust its behavior and comply with laws. The state has all the legitimacy to violently enforce any rule of law which is adopted by its political institutions. Whether such a government is legitimate or not is another issue. However, foreign companies seem to be among the last that are entitled to challenge the legitimacy of foreign governments. Members of that society – who do not challenge their own government and so demonstrate that they support it – may perceive as an aggressor a firm that does not want to observe all of the local rules of law. As law is a subset of ethics (Rothbard, 1978), the members of a community whose rules of law are broken by an individual perceive him not only as a criminal but also as an immoral person.

There have been circumstances in which a company that entered a new market realized that the legislation on that new market was radically different from the legislation on the home market. For example, competition law was adopted in United States of America at the end of the XIXth century while in Europe and Japan only after the Second World War. Even then, it was just loosely enforced until for a significant period (Kolasky, 2004). One of the core aspects of the competition law has been the government fight against cartels through which agreements between competitors to fix prices and production quotas and share markets were forbidden. An European company then entering the American market may have disagreed with the logic of the competition law (which may even have been in sharp contrast with the domestic regulations where agreements between competitors, at that time, were even encouraged) but the first condition in order to have a successful presence on that market was to comply with the laws.

2.4 The ethical choice

A very challenging debate may emerge however in the case of a firm that may want to enter a new market and considers a particular piece of regulation on that market as ethically unacceptable. When the legal system of this country is in apparently manifest contradiction with the values that define an individual entrepreneur (and, for simplicity, its home ethical system), he faces a difficult choice: he may choose, on the one hand, to entirely avoid that particular market or, on the other hand, to enter that particular market and adopt a particular type of behavior.

Consider the case of a company which is dedicated to serving consumers which comes from a country where political rights are fully enforced, weighting the option to enter a new market where there is a political system which abuses human rights. The choice is not so easy from an ethical point of view:

If such a company decides to enter the market, it faces the following moral reprobation:

a. It may also be abused by such a government;
b. It may also be morally associated with the government;
c. It will be taxed and may be morally accused of supplying resources to the government, allowing it to survive;
d. It may become also an aggressor against some of the human rights of the population.

The last claim may be indeed dramatic in the case of a system where the rights of the laborers are aggressed against and any entrepreneur, by acting under the cover of the legal provisions, is in fact a state-licensed aggressor. Imagine the extreme case of a dictatorship and the decision of a foreign entrepreneur to start a production activity in such a country. The government may even make an offer to such an

entrepreneur who is looking for cost reduction to supply slave labor as in the case of any other entrepreneur. Is such an entrepreneur willing to use such slave labor in order to maximize profit? It is obviously complying with the rules of law in that particular country.

The apparently correct decision to refuse such an involvement and ultimately boycott such a country is not always a sign of social responsibility. There may be cases when such an involvement may, paradoxically, save lives and help victims of a criminal political system. The involvement of an entrepreneur in such an economy may not be determined by a cost reduction and maximization of profit by using the slave labor but by a reduction of the burden of work on some of the victims of the systems. Such an entrepreneur may be morally praised in the case that he is not "efficient" and not using the limits offered by law in exploiting at maximum his victims. In other words, the end of his action is not profit any more but saving lives and making life easier for some of these slaves. But, of course, in such a case, he is already involved in a charitable enterprise and not a for-profit (in the sense that monetary) one.

Such an extreme case suggests that the typical realist approach of a company entering a foreign market – observe the local rules of law and that's it – may not be ethical. First of all, if the ethical systems between the new market and the home market collide, that particular company cannot avoid an ethical judgment.

2.5 Ethics and consumers in the home market

A significant role is played into such a situation by the final consumers. It makes a lot of difference whether the products manufactured in the foreign country are to be sold on that market or on other market (suppose it is the home market of the company). If these products are sold on the local market, consumers cannot have a negative reaction as the company complies with all the laws of the country. Consumers cannot discriminate between the foreign company and the local producers.

In the case that the production is however exported back into the home market of the company (or into any market with similar ethical standards), consumers on that market may be morally outraged by the break of the ethical norms. They know that if the producers would have applied the same methods of production in its home market, it would have been qualified as criminal. Such consumers have the right to react and to punish the would-be unethical company. In the moment that a company is qualified as socially irresponsible, a difficult decision of the rest of the society on its home market is demanded: which is the proper reaction towards such a company?

First of all, it is obvious that the company didn't break any rule of law both on the home market and on the foreign market. It is not a criminal in either country as its only offense is, from the point of view of consumers on its home market, an ethical one. They weren't aggressed against by such a company. There is no victim on that market.

The proportionality principle usually applied in law enforcement and punishment (Rothbard, 1982a) seems to tell us that the proper reaction is also an ethical and not a legal one. And the most ethical but in the same time dramatic reaction is consumers' boycott. Such a reaction is deadly for any company that is serving consumers. Any unethical person should be afraid by it. It isolates a company on its home market and deprives it of resources and consumers.

The other possible reaction towards such a company would be a regulatory or legal one: should governments punish such cases of socially irresponsible behavior of its citizens? The answer is not simple. A legal punishment would simply mean that such a government decides to enforce its domestic law outside its borders, at least for its nationals.

2.6 Effects of extraterritorial enforcement of ethics

The attempt of societies to enforce beyond their borders particular norms of ethics (and, in a narrow sense, the enforcement by governments of rules of law) leads to very difficult choices from the part of national companies. Purely and simply this translates into the necessity of such firms to follow not only the local rules of law from the country they enter but also the rules of law of the home country. When we take into consideration even multiple markets where such a transnational company sells its products, we find the situation when, with the specter of a mass reaction of consumers from any particular market, such a company has to observe all the norms of ethics of all the markets which it attempts to serve.

The ignorance of the ethical system of a particular country where it also operates may lead to a reaction of consumers on that particular market and, ultimately, to a loss of market share or even the entire compromise of its operations on that particular market. In such a situation, more countries it attempts to serve more ethical restrictions from those particular societies. Obviously, such restrictions translate into business costs which put the company into a competitive disadvantage on each market where it operates.

Such an ethically-induced competitive disadvantage of a globally socially responsible firm is caused by the fact that local companies (or, less global) observe less norms of ethics. The entrepreneur that despises slave labor will be put, at least on the destination market, to a competitive disadvantage to a local competitor who ignores the ethical dilemma and maximizes the behavior in the limits offered by law. Such a local entrepreneur, who serves only his home market, will be placed in a better position to serve the consumers on the destination market than any other competitor who observes additional norms of ethics that restricts its choices of a more efficient – albeit, according to its native ethics, unethical – production activity.

From this perspective, *ceteris paribus*, the companies which have less ethical restrictions on their operations will be more likely to succeed on any particular market as they adopt any method that increases their efficiency. At a global level, however, this competition is arbitrated mainly by the most significant consumer markets. Consumers from such markets, by imposing their ethical system by the products they buy will award the winning position to the company that is, *ceteris paribus*, more efficient in maximizing the profit inside the ethical framework imposed by these consumers.

Such a widespread coherent social trend will lead, paradoxically, to a localization of the business activity and will put a serious barrier in the path of business trans-nationalization. The ethical consumer will award its buying power to the company that observes more consistently his norms of ethics. And that choice will go, more likely, to the companies that share his own ethical system. In consequence, instead of a trans-nationalization of business activity, the ethical consumer will determine an "ethicalization" of business activity. Taking the model of Samuel Huntington and his "Clash of Civilizations" in the political field (Huntington, 1996), the ethical consumer will determine a divide of the global market into "ethical blocs".

Irrespective on who calls for a more socially responsible business firm, the final decision maker will be the consumer. As ethical norms impose, in a form or another, business costs for firms (the debate postulates this aspect, otherwise it will be somehow without object), the difference between ethical products and unethical ones will reach the shelf of the supermarket. Here, the consumer, by its choice of the content of the shopping basket, will award the prize to the companies that behave ethically and the companies that do not.

In the end, the social responsibility of the firm is given by the social responsibility of the end-consumer that buys from it. If the consumer is increasingly aware of the ethical issues, the business firms will react accordingly. No company will be willing to exit the market because of the high ethical standards it imposes on itself.

2.7 Ethics versus efficiency?

The idea that firms that do not observe ethical norms may be more efficient due to this aspect than those that do is not however self-obvious. This statement is true as apparent reduction in costs in the case of unethical choice of means may distort natural incentives and increase, in fact, costs on the long term. In other words, unethical business practices apparently make a trade-off between immediate explicit costs (which are reduced) and mediate implicit costs (which are increased). In our case of slave labor, for example, the exploitation of a slave apparently reduces the costs of labor as the slave is not paid any compensation for his work. However, such a perspective ignores differences in incentives between a free laborer and a slave. The same Adam Smith noticed already in XVIII-th century that slave-labor is, in fact, less efficient than the labor of freemen (Smith, 1776).

In this case, ethics, maybe paradoxically, should not be perceived as the antithesis of efficiency. In fact, political philosophers have long argued that the best positioned entrepreneur in the economic competition will be the one that has the correct economic incentives (Reich, 2008). These incentives are created by the natural institutions of private property and freedom of exchange. This is the minimalist universalist ethical system which is called the natural ethics (Boyle, Joseph in Cherry, 2004). Other systems of ethics which come into contradiction with it will in the end not only come at a cost but alter the correct incentives.

3. Conclusions

Firms that operate into an international environment are more frequently exposed to different ethical systems from the part of different categories of stakeholders, most importantly consumers. We argued in this paper that they simply cannot adopt ethics-free business practices. The attempt of the consumers to enforce ethical standards beyond the national borders puts however a serious burden on the operations of their national businesses. As a general rule, firms who come from such consumer empowered societies may risk to be put at a cost disadvantage as compared to their competitors that do not face such pressures. Moreover, from an ethical point of view, even the presence of these firms into countries with poor human rights record

may, at some point, mean a less abusive employer for local laborers than national firms. The boycott of consumers from the home market is not always justified from an ethical and efficiency point of view.

We speculate that taken into consideration these realities, a territorial-only approach is the most legitimate approach to social responsibility of firms. Businesses should observe in their business practices only the ethical standards of the local economy. They should not take into consideration additional standards. Consumers, on the other hand, are those which are invited to arbitrate among these ethical standards and they choose by their buying decision the dominant ethics in business.

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EUROPEAN UNION UNEMPLOYMENT AND SOCIAL EXCLUSION

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Abstract: *The paper aims to bring into attention the problem of unemployment in European Union, aspect that preoccupies today economists and economies, in order to find ways for jobless reduction but more than that to find methods of improve labour market conditions. First part represents a brief incursion in specific literature then the paper continues with establishing a specific framework, the one of social exclusion. The analysis of unemployment in EU has as goals identifying causes of unemployment, presenting the dynamics of unemployment rate and also proposes actions consisting in skills developments with benefits to society, economies, employers and individuals.*

Key words: labour market; unemployment, social exclusion; skills

JEL classification: J01; J21; J24

1. Introduction

The present paper aims to drag attention to a subject that keeps the forefront of the economic and social context, unemployment and social exclusion, in order to obtain a better understanding of labour market dynamics and structure, and problems that it confronts to. Although the picture varies across Member States of European Union, the crisis had and still has significant consequences for all of their labour markets. The most common effect is the increase of unemployment.

There is great literature on the causes of unemployment in the aftermath of the oil price shocks, its subsequent persistence in the 1980s, and the different performance of the countries in the 1990s (Blanchard, 2006). Explanations relate the unemployment growth in the US to higher structural unemployment caused by stronger international competition (Groshen and Potter, 2003) and the increase in the second half of the 1990s in European employment to the effects on ongoing labour market reforms (Mourre, 2006). For a long time it had hardly been disputed among economists (Solow, 1997) that changes in unemployment were linked to changes in output by a stable linear relationship. While Europe with small growth rates experienced a pronounced acceleration in employment growth resulting in a reduction in unemployment since the mid 1990s, the US which grew at a much higher rate saw almost jobless growth. The decline in labour productivity is another issue in the growth pattern of the euro area, which has gained attention only recently.

Speaking about the unemployment structure there are studies that reveals the incidence of unemployment is greater among women, youths, and persons of medium education. As in many other transition countries, the unemployment rate of women is much higher than that of men; but in Romania for example was nearly double in the 1990s. But economists (Earle and Pauna, 1996) proved that this is not due to a high rate of re-entrants among women, which accounts for very little of unemployment; rather, the differential is the result of higher layoff and new entrant rates. People with secondary and vocational education should become a special target for policy-makers, as their capacity for re-employment, likely in a job requiring new skills, is reduced by their narrow specific skills (Mello, 2008). Most of the unemployed come, not surprisingly, from mass lay-offs. The most recent and relevant paper that refers to skills problem is a report issued by European Commission that points out the necessity of upgrading, adapting and widening the skills portfolio of individuals to create and fill the jobs of the future (European Commission, 2010).

In the present post-globalization era, labour market faces changes. In a number of European countries, job losses have been rather restrained to date, largely due to recourse to increased internal flexibility in the form of shorter hours or temporary partial unemployment. Historical experience shows that employment reacts to economic conditions with a certain lag; hence labour market conditions can be expected to worsen for some time even after the trough in the economic situation has been reached. Another problem is that the crisis appears to affect some groups of workers more deeply than others.

2. Unemployment in a specific framework: social exclusion

Labour force and labour market implicit confronts with problems that have great impact not only to the labour force market level but also to social level to. The present economic and social context is one which reveals the consequences of social exclusion. Social exclusion is a problem for European Union with impact on many aspects of economic life. The concept of social exclusion refers to factors that leave groups

of society isolated. These include such wide ranging factors as unemployment, access to education, childcare and healthcare facilities, living conditions, as well as social participation. The persistence of large numbers of people excluded from work represents a key challenge for the objective of social cohesion. The longer a period of unemployment for an individual, the more entrenched that person generally becomes in social exclusion through their inability to afford material goods, services and housing, while their social contacts are often reduced (in part due to a lack of money for going out socially, or due to the stigma of being unemployed); this may lead to a lack of confidence and a reinforced sense of isolation. Poor housing conditions, a lack of basic facilities, overcrowding, subjection to noise, pollution and violence are likely to reinforce problems of health, educational attainment, labour prospects and integration. Where long-term difficulties in meeting mortgage and rental payments are evident this can lead to greater demands on social housing, relocation and, in extreme cases, homelessness.

European Union tried and still tries to put an accent on education benefits because education can directly provide the skills, knowledge and qualifications that are important in social and labour market participation. The educational resources available in Member States and the length of compulsory education are likely to have some effect on outcomes regarding educational attainment. That was the reason for establishing the basis of the social dimension of the Bologna process to be ensuring that higher education is open to all, regardless of their social or economic background. Access to pre-primary education and/or affordable childcare can play an important role in employment participation, particularly for those facing other barriers such as low skill levels or single parenthood.

Technology can be used as a means to break down integration barriers by providing widespread access to information, as well as networks. As with other areas, the development of the information society has brought risks of social exclusion for those individuals who do not possess the necessary skills, equipment or access. Computer and Internet skills are just one form of participation in today's society. In a wider sense, social participation refers to whether individuals participate in activities and organisations, or whether they keep in touch with neighbours, family and friends.

3. Unemployment analysis in European Union

Characterizing the unemployment situation requires to point out the causes of unemployment. Having already established a framework in the previous part of the paper, it can be said that the causes of unemployment are complex and tend to cover a large spectrum of social and economic problems (Boni, 2000). The causes can be referred as the following, but the list is not limitative:

- mismatch of employee qualifications; despite efforts to improve quality and level of qualifications, the actual potential in terms of qualifications and competence is not very high.
- low labour mobility; the level of long-term unemployment, lack of possibilities for geographic mobility, lack of funds for programs training in active approaches and supporting mobility of many jobless on the verge of poverty due to lack of income – all of this defines a large population among unemployment with a low mobility potential (correlated with low qualifications).
- economic modernization requirements; there is still necessary to create new jobs in services and in small and medium business.
- excessive cost labour; there is little chance that social security contribution rates could be reduced over the next few years, unless a decision is made to offer more employment subsidies.
- excessive rigidity of labour laws; labour laws lack provisions allowing for atypical forms of employment so badly needed in, for example the service sector or when hiring women or part-time employee.
- regional disparities; there is a need for drafting of regional policy, incentives to invest in weaker regions

For the purpose of the next analysis it is necessary to take into account the following definitions of the used indicators. First of all the labour force is the total number of people employed and unemployed. Unemployed persons comprise persons aged 15 to 74 who were:

a) without work during the reference week,

b) currently available for work, i.e. were available for paid employment or self-employment before the end of the two weeks following the reference week,

c) actively seeking work, i.e. had taken specific steps in the four weeks period ending with the reference week to seek paid employment or self-employment or who found a job to start later, i.e. within a period of, at most, three months. For the purposes of this final point, the following are considered as specific steps in the search for a job: having been in contact with a public employment office to find work, whoever took the initiative (renewing registration for administrative reasons only is not an active step); having been in contact with a private agency (temporary work agency, firm specializing in recruitment, etc.) to find work; applying

to employers directly; asking among friends, relatives, unions, etc., to find work; placing or answering job advertisements; studying job advertisements; taking a recruitment test or examination or being interviewed; looking for land, premises or equipment; applying for permits, licenses or financial resources. This definition is in accordance with the International Labour Organisation (ILO) standards and Commission Regulation (EC) No 1897/2000.

According to Eurostat, the unemployment rate for the EU 27 fell from 9.0 % in 2003 to 7.0 % in 2008, but rise huge in 2009 reaching 8.9%. It is easy to observe from the table 1, that the year 2009 brought rising unemployment rates in all the countries of European Union.

Table 1: Unemployment rates in 2000-2009 period (%)

Countries\Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
E U (27 countries)	8.7	8.5	8.9	9	9.1	8.9	8.2	7.1	7	8.9
Euro area (15 countries)	8.3	7.8	8.2	8.6	8.8	8.9	8.3	7.4	7.5	9
Belgium	6.9	6.6	7.5	8.2	8.4	8.5	8.3	7.5	7	7.9
Bulgaria	16.4	19.5	18.2	13.7	12.1	10.1	9	6.9	5.6	6.8
Czech Republic	8.7	8	7.3	7.8	8.3	7.9	7.2	5.3	4.4	6.7
Denmark	4.3	4.5	4.6	5.4	5.5	4.8	3.9	3.8	3.3	6
Germany	7.5	7.6	8.4	9.3	9.8	10.7	9.8	8.4	7.3	7.5
Estonia	13.6	12.6	10.3	10	9.7	7.9	5.9	4.7	5.5	13.8
Ireland	4.2	3.9	4.5	4.6	4.5	4.4	4.5	4.6	6.3	11.9
Greece	11.2	10.7	10.3	9.7	10.5	9.9	8.9	8.3	7.7	9.5
Spain	11.1	10.3	11.1	11.1	10.6	9.2	8.5	8.3	11.3	18
France	9	8.3	8.6	9	9.3	9.3	9.2	8.4	7.8	9.5
Italy	10.1	9.1	8.6	8.4	8	7.7	6.8	6.1	6.7	7.8
Cyprus	4.9	3.8	3.6	4.1	4.7	5.3	4.6	4	3.6	5.3
Latvia	13.7	12.9	12.2	10.5	10.4	8.9	6.8	6	7.5	17.1
Lithuania	16.4	16.5	13.5	12.5	11.4	8.3	5.6	4.3	5.8	13.7
Luxembourg	2.2	1.9	2.6	3.8	5	4.6	4.6	4.2	4.9	5.4
Hungary	6.4	5.7	5.8	5.9	6.1	7.2	7.5	7.4	7.8	10
Malta	6.7	7.6	7.5	7.6	7.4	7.2	7.1	6.4	5.9	6.9
Netherlands	2.8	2.2	2.8	3.7	4.6	4.7	3.9	3.2	2.8	3.4
Austria	3.6	3.6	4.2	4.3	4.9	5.2	4.8	4.4	3.8	4.8
Poland	16.1	18.3	20	19.7	19	17.8	13.9	9.6	7.1	8.2
Portugal	4	4.1	5.1	6.4	6.7	7.7	7.8	8.1	7.7	9.6
Romania	7.3	6.8	8.6	7	8.1	7.2	7.3	6.4	5.8	6.9
Slovenia	6.7	6.2	6.3	6.7	6.3	6.5	6	4.9	4.4	5.9
Slovakia	18.8	19.3	18.7	17.6	18.2	16.3	13.4	11.1	9.5	12
Finland	9.8	9.1	9.1	9	8.8	8.4	7.7	6.9	6.4	8.2
Sweden	5.6	5.8	6	6.7	7.6	7.7	7	6.1	6.2	8.3
United Kingdom	5.4	5	5.1	5	4.7	4.8	5.4	5.3	5.6	7.6
Croatia	:	:	14.8	14.2	13.7	12.7	11.2	9.6	8.4	9.6
Turkey	:	:	:	:	:	9.2	8.7	8.8	9.7	12.5
Norway	3.2	3.4	3.7	4.2	4.3	4.5	3.4	2.5	2.5	3.1
United States	4	4.8	5.8	6	5.5	5.1	4.6	4.6	5.8	9.3
Japan	4.7	5	5.4	5.3	4.7	4.4	4.1	3.9	4	5.1

Source: Eurostat database, accessed on http://epp.eurostat.ec.europa.eu

More than this there are countries which had an unbelievable growth in rate of unemployment like Estonia (from 5.5% in 2008 to 13.8% in 2009), Ireland (from 6.3% in 2008 to 11.9% in 2009), Latvia (from 7.5% to 17.1%). In comparison to Member States, Japan has in 2009 only 5.1 % rate of unemployment representing a very good level, almost two times less than United States that is also facing problems regarding unemployment rate in the last period (9.3% in 2009 compared with 4.6 in 2007 for example).

The unemployment rate is the share of unemployed persons over the total number of active persons in the labour market; active persons are those who are either employed or unemployed. Persons are

considered to be long-term unemployed after 12 months of unemployment, and very long-term unemployed after 24 months. In 2008, the long-term unemployed in the EU 27 represented just over one in three of all unemployed persons. Slovakia had the highest rate of long-term unemployment and, furthermore, the long-term unemployed accounted for more than two thirds of all Slovakian unemployed. Cyprus, Denmark and Sweden all recorded relatively low rates of long-term unemployment, and in these countries only around one in seven unemployed persons were long-term unemployed. In order to improve the re-integration of the long-term unemployed into the labour market, Member States have agreed on a common benchmark for 2010: to encourage at least 25 % of the long-term unemployed into training, re-training, work practice, a job or other employability measure, combined where appropriate with on-going job search assistance (Eurostat, 2010).

In a country long-term unemployment rates usually tend to have a broadly similar regional distribution to overall unemployment rates. However, there are a number of examples of regional pockets of long-term unemployment that point to inequalities – for example, eastern Germany, north-western Greece, French and Spanish overseas regions, southern Italy, or eastern Slovakia. The only capital city regions with long-term unemployment rates of more than 6 % were in Belgium and Germany.

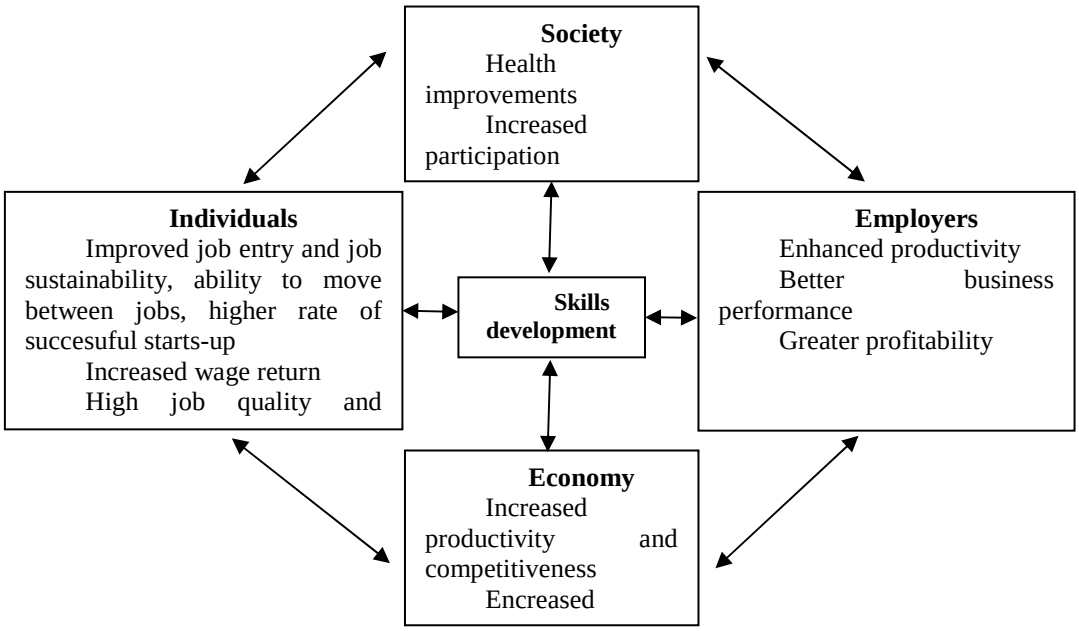
In 2007, close to one in ten adults aged between 18 and 59 was living in a household where nobody was working. Particularly high rates of jobless households were reported in Belgium, Hungary and Poland, while by far the lowest proportion of people living in a jobless household was recorded in Cyprus. Unemployment also affects other household members. In 2007 a similar proportion (9.4 %) of children aged between 0 and 17 lived in a jobless household in the EU-27.

More than one in seven persons in employment worked under a temporary contract in the EU-27 in 2008, with this share reaching one in five in Portugal and more than one in four in Spain and Poland. Romania and the Baltic Member States had the lowest incidences of temporary contracts.

4. The importance of skills for the future labour market

For combating unemployment, poverty and social exclusion, access to pre-primary education and/or affordable childcare can play an important role in employment participation, particularly for those facing other barriers such as low skill levels or single parenthood. In every Member State, a higher unemployment rate was recorded for persons with primary and lower secondary education than for persons with tertiary education, with the smallest differences in relative terms being in Greece and Denmark.

Figure 1: The benefits of skills development



Source: European Commission, *New Skills for New Jobs: Action Now*, 2010, pg. 10

It well known that low levels of educational attainment and illiteracy are often barriers to employment and further training. Participation in education (among 15 to 24 year olds) averaged just less than 60 % in the EU-27 in 2007. The cut-off age of 24 years allows a comparison between young and adult

populations, although the resulting rates are influenced by choice or students having to repeat school years and reflect national service commitments. A high proportion of students may also have already completed tertiary education before the age of 24 in a number of Member States.

The importance of education in terms of acquiring skills that can be used in the labour market is underlined by the substantial differences in unemployment rates depending on the level of education attained by members of the workforce. According to Eurostat data, in the second quarter of 2009, the EU-27 unemployment rate among persons aged 25 to 64 with primary or lower secondary education as their highest level of educational achievement was almost three times (2.9) as high as for persons who had completed tertiary education. This ratio has grown in recent years, as it was 2.4 in 2004.

According ro European Commission, the beneficiares of skills improvements are: the society, the economy, individuals and employers. Ther benefits of having competitive skills are sintetized in figure 1.

Analysing the structure of unemployment (table 2), it can be observed that people with high level qualification have the smallest unemployment rates, between 6% and 5.2%, because their skills permited them to find jobs. Yet, despite the fact that it is obvious the progress in recent years (the unemployment rate for medium qualified people was in 2006 only 8.7 % compared with 10.9 % in 2004, for example) much of people in European Union are not enough skilled. Nearly one third of Europe's population aged 25-64 – around 77 million people – have no, or low, formal qualifications and only one quarter have high level qualifications (European Commission, 2010).

Tab. 2 Unemployment rates by qualification level (EU-27)

Year	Level of qualification			
	Low	Medium	High	Total
2000	12.9	10.7	6.0	10.5
2001	11.5	10.2	5.2	9.6
2002	11.9	10.0	5.3	9.6
2003	12.4	10.2	5.6	9.8
2004	13.6	10.9	5.8	10.3
2005	12.9	10.1	5.5	9.8
2006	12.1	8.7	5.5	8.7

Source: EU Labor Force Survey database

Of course those with low qualifications are much less likely to upgrade their skills and follow lifelong learning. A problem that needs to be solved is to ensure that people have the right skills. This is not just a question of short-term employability, but of our capacity to adapt to the jobs of tomorrow. In the future, these pointed problems will still exist because fewer people will graduate from schools and universities and the only growth of the labour force is likely to be amongst those aged over 50. The older generation consist in a great number of people which soon will leave the labour market so the young generation (especially but not only this) must be encouraged to invest in skills development and to upgrade, adapt and wide the skills portfolio in order to create and fill the jobs of tomorrow. In last period education and training systems in Europe have become more relevant and responsive to the needs of society; but labour market mismatches still exist and create situations like skill shortages and skill gaps co-existing with unemployment: an economic and social exclusion.

5. Conclusions

Unemployment in the framework of social exclusion may have and already had implications to economic and social level so finding solutions for diminish the unemployment rate must take into consideration the causes of this.

The improvements of skills are obvious as the above analysis shows, so putting a stronger accent on developing skills is a good solution. For having a labour market to absorb employees in the future there are necessary priorities for public funding of education and training. Individuals and employers must invest more heavily in their skills development. These may minimise job losses, prevent unemployment from becoming entrenched (i.e. becoming long term unemployment), favour transitions back into employment and boost job creation, and pave the way for economic renewal and for sustainable recovery and growth. Employers, individuals and other interested persons or economic agents, the education sector, governments and other stakeholders must cooperate in order to develop and implement the right policies and actions: to preserve

sustainable jobs in economic activities and help people into productive employment; to support the most vulnerable groups; and to prepare for the jobs and skills of the future.

Increased global competition means that European countries will no longer be able to compete on cost and price, but need to produce higher quality and more innovative products and services, delivered by higher skilled people. Learning process is fundamental for future growth because the employment rate for those with high skill levels across the EU as a whole is approximately 85 %, for medium skill levels 70 % and for low skill levels it stands at 50. Those with low qualifications are much less likely to upgrade their skills and follow lifelong learning. The present crisis may be crossed also by accelerating the pace of economic restructuring, with a lasting structural effect on the volume and types of skills needed.

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CARBON EMISSION ALLOWANCES – FINANCIAL INSTRUMENTS TRADED ON CAPITAL MARKETS

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Abstract: *The carbon dioxide allowances trading market has rapidly developed over the past years, having a tendency to maintain such development pace in the future as well. An issue in dealing with climate change is deciding who has the right to emit CO_2 and under what conditions, when those emissions are limited. The European Union Emissions Trading Scheme is the world's first large experiment with an emission trading system for carbon. The Commission would like to see reforms made to the European mechanism to reduce costs, improve its efficiency and environmental effectiveness and help more countries participate in the carbon market.*

Key words: carbon emission allowances trading, allowances allocation, carbon market, EU ETS

JEL classification: G15, G17, L17, Q52, Q56

1. Carbon emission allowances – transferable financial instruments

The information regarding both carbon emission allowances and the European Commission Plan for reducing emissions was abundant over the past two years.

1.1. Greenhouse gas emission allowances characteristics

Carbon emission allowance is defined by the Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community. The provisions of the Directive were transferred in the Romanian legislation through Government Decision No.780/2006 establishing a scheme for greenhouse gas emission allowance trading; such legislative act defines carbon emission allowances as a title which gives the right to emit one tonne of carbon dioxide equivalent during a specified period, which shall be valid only for the purposes of meeting the requirements of the specific legislation.

Installation means a stationary technical unit where one or more activities listed in the Directive's Annex are carried out and any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions and pollution.

The operator of the installation means any person who operates or controls an installation or, where this is provided for in the national legislation, to whom decisive economic power over the technical functioning of the installation has been delegated.

For each period established by the Directive, each Member State shall develop a national plan stating the total quantity of allowances that it intends to allocate for that period and how it proposes to allocate them. The plan shall be based on objective and transparent criteria, taking due account of comments from the public.

Concerning the method of allocation, for the three-year period beginning January 1st, 2005, Member States shall allocate at least 95 % of the allowances free of charge. For the five-year period beginning January 1st, 2008, Member States shall allocate at least 90 % of the allowances free of charge.

In order for greenhouse gas emission allowances and derivatives based on them to be admitted for trading, we have analyzed their characteristics from a legal point of view and we have come to the conclusion that greenhouse gas emission allowances are claim rights.

A claim right is a patrimonial right according to which the right-holder, that is the asset subject – the creditor – is entitled to require that the named debt subject – debtor – give, perform or not perform a certain action.

The greenhouse gas emission allowances characteristics and the criteria establishing the nature of claim right are: opposability – opposable to state authorities, the content of the obligation is not to perform an action, respectively not to emit greenhouse gas, while the relation may be regarded as a direct relation between persons. Thus, greenhouse gas emission allowances give their holder a claim right in which the debtor (state authorities) has the obligation to refrain from stopping the right-holder (creditor) to emit a certain amount of carbon dioxide over a specified period of time.

The definition of the greenhouse gas emission allowances results in the conclusion that such allowances are standardized – they give the respective rights for a certain period of time, while the rights have the same "value" (the right to emit a tonne of carbon dioxide).

In view of including greenhouse gas emission allowances in the financial instruments category or in the goods category, the following aspects should be taken into account:

a) the nature and the rights greenhouse gas emission allowances give;

b) the possibility of standardizing greenhouse gas emission allowances;

c) comparing the characteristics from points a) and b) with the characteristics of goods and financial instruments.

Financial instruments have the following characteristics (cumulatively): they give their holders claim rights over the issuer or the central counterparty, and are standardized in order to give their holders equal rights over the issuers and in order to be susceptible to being traded on a regulated market.

As regards goods, they have the following characteristics (cumulatively): they give the holder an absolute right over a good that is useful to people and which can be subject to a patrimonial right (has an economic value), and are goods resulting from production or operation activities.

The analysis of greenhouse gas emission allowances results in the following characteristics:

- give the holder the right to emit a tonne of carbon dioxide equivalent during a specified period (claim right);
- are standardized – give the holders equal rights regarding the emission of carbon dioxide during a specified period.

Analyzing greenhouse gas emission allowances leads to the conclusion that such alowances fall under the category of financial instruments, while their trading on a regulated Romanian market depends on the compliance with the provisions of the Law No.297/2004 regarding capital market and the related regulations. Moreover, considering that gas emission allowances give their holder a claim right, being regarded as government-backed securities, we believe that – taking into account the national regulations and the Directive 2004/39/EC on markets in financial instruments (MiFID) – such allowances are securities.

1.2. European Union Carbon Emission Allowances

Carbon trading markets are not markets on which greenhouse gas is physically traded, but financial markets on which the following are traded: the right to emit a quantity of carbon dioxide (carbon dioxide emission allowances - EUA) and the proof to the fact that the emission of a cetain quantity was avoided (certified emission reductions - CER)

Carbon emission certificates, herein referred to as EUA (European Union Allowances), as defined by the Directive EU ETS (Directive 2003/87/EC), are issued for installations that have a maximum limit for emissions under the EU Emissions Trading Scheme (EU ETS). The installation must have and send EUA and/or the carbon credits equivalent to the monitored carbon dioxide emissions until the annual reconciliation date. Each EUA unit is equal to the equivalent of a carbon dioxide metric tone.

Given the importance of the allocation process to the overall efficiency of any potential emission trading scheme, the process of allocating the carbon emission allowances (EUAs) in Europe has attracted world-wide attention.

EUAs are government-backed securities, issued and distributed by Member States governments according to the National Allocation Plans approved by the European Union. It is envisaged that National Allocation Plans be dropped starting with 2013 and a European Allocation Plan be used.

1.3. European Union Emissions Trading Scheme

The European Union Emissions Trading Scheme (EU ETS) is an institutional effort by the European Union to fulfil the obligations undertaken under the Kyoto Protocol. The EU ETS currently covers over 10,000 energy consuming facilities in the 27 member states. The Emissions Trading Scheme is not only a mandatory environmental requirement, but also an instrument to stimulate the competitiveness of the installations that are part of it.

On January 1st, 2005, the EU Emissions Trading Scheme was officially launched, only two years after the European Council adopted the EU Emissions Trading Directive (European Community, 2003). As a consequence of this formal start, the world's largest ever market in emissions has been established, and European companies now face a carbon constrained reality in the form of legally binding emission targets. Within essentially one year, 2004, the international carbon market has gained momentum through major policy developments and quick market responses, which among others have enabled the establishment of a framework for the EU carbon market.

In order to make sure that real trading emerges (and that CO_2 emissions are reduced), EU governments must make sure that the total amount of allowances issued to installations is less than the amount that would have been emitted under a business-as-usual scenario. For each Phase, the total quantity to be allocated by each Member State is defined in the Member State National Allocation Plan (NAP). The first and foremost

criterion set out in the Directive is that the proposed total quantity is in line with a Member State's Kyoto target.

During Phase I, most allowances in all countries were given freely. This approach has been criticized as giving rise to windfall profits, being less efficient than auctioning, and providing too little incentive for innovative new competition to provide clean, renewable energy.

In the first phase (2005-2007), the EU ETS includes some 12,000 installations, representing approximately 40% of EU CO_2 emissions, covering energy activities (combustion installations with a rated thermal input exceeding 20 MW, mineral oil refineries, coke ovens), production and processing of ferrous metals, mineral industry (cement clinker, glass and ceramic bricks) and pulp, paper and board activities.

The second phase (2008-2012) expands the scope significantly: greenhouse gas reduction commitments are introduced and three non-EU members - Norway, Iceland and Liechtenstein - join the scheme. Aviation emissions are expected to be included from 2012. The inclusion of aviation is estimated to lead to an increase in demand of allowances about 10-12 million tones of CO_2 per year in phase two. According to verified EU data from 2008, the ETS saw an emissions reduction of 3 per cent, or 50 million tons, but it also included at least 80 million tons of “carbon offsets” which were bought as part of the scheme.

From the start of Phase III (January 2013) there will be a centralized allocation of permits, not National Allocation Plans, with a greater share of auctioning of permits.

In a first phase, allowances will be allocated per economy sectors of activity and then per installations that emit carbon dioxide. Subsequently, companies can sell and buy emission allowances based on how they achieve pollution targets.

Carbon credits are retired once used to demonstrate compliance with a scheme, and so cannot be ‘used twice’. In the case of offsets, these credits are retired by the organisation wishing to demonstrate carbon neutrality.

Carbon credits are used by project developers as an additional revenue flow to the project. They also have value as collateral for loan finance, or to strengthen the financial structure of a project through sale to investment grade carbon purchasers.

Currently, the EU ETS only covers 45% of the carbon dioxide emissions at the level of the European Union, while 25% of the emissions that are not covered are produced by the transport sector, and 20% of greenhouse gas emissions are not carbon dioxide.

2. Carbon emissions trading in Europe

The trading market for CO_2 allowances has rapidly developed over the past years, having a tendency to maintain such development pace in the future as well, given the interest by the authorities in developing this market at European and international level as a way of actively responding to the climate change problem.

2.1. Allowances trading mechanism

Starting with January 1st, 2008, the National Allocation Plan establishes – for a period of five years and for each subsequent period of five years – the total number of greenhouse gas emission allowances allocated for the respective period and the total number of greenhouse gas emission allowances allocated to operators for each installation.

Following the approval of the National Allocation Plan, each operator must open an account with the greenhouse gas emissions National Registry through which greenhouse gas emission allowances held by every person are recorded, as well as all transactions with such allowances; all transactions are made electronically.

Greenhouse gas emission allowances can be transferred: between persons from member states of the European Community and persons from third-party countries, other than those belonging to the European Community, provided the greenhouse gas emission allowances are mutually recognized, based on international agreements.

Until the 30th of April each year, at the latest, each installation’s operator has the obligation to give back a number of greenhouse gas emission allowances equal to the total amount of greenhouse gas emissions discharged by the respective installation during the previous calendar year, based on the monitoring report analyzed by a certified independent verifier, while these allowances are subsequently cancelled. Greenhouse gas emission allowances may be cancelled at any moment, upon request by the person who owns them.

Regarding the EUA trading method, the two markets must be taken into consideration: the primary market and the secondary market.

So far, on the primary market EUAs were allocated free of charge by state authorities to the recorded polluters, according to the Annual Allocation Plan. By revising the Directive ETS, the European Commission has proposed that starting with 2012 the main allowances allocation method be auctioning.

On the secondary market, EUA trading is made both outside the regulated market (OTC) and on regulated markets. In 2006, the proportion regulated markets/OTC was ¼, while currently the proportion of trading on OTC markets is around 80%.

The main factors influencing the EUA price are: contract maturity and the number of allocated contracts.

Contract maturity slightly influences the EUA price. Considering that the EUAs from the first phase could not be transferred to the second phase, the EUAs allocated during 2005 - 2007 became valueless during the last 6 months of 2007. Contract maturity is conventionally defined; it does not depend on the characteristics of the supporting asset, as in the goods' case, and can only be modified by the European authorities.

Considering that during the first phase a greater number of EUAs was issued and allocated than it was necessary to cover the needs of the polluting industries, the EUA price dramatically decreased towards the end of 2007. The over-allocation generates a decrease in the price, while under-allocation leads to an increase in the EUA price and to the significant diminishing of the polluting industries' profit.

The number of EUAs issued by member states governments is fixed. Once the National Allocation Plan – which includes the total number of allowances and the allocations for each entity covered by the Plan – is approved at European level, the allocations cannot be modified. Post-allocation adjustments are not allowed; such adjustments were rejected by European bodies, as they would have caused distorsions in the EUA price.

The EUA price depends on the state's economic activity, the intensity of energy using, and the population number. Apart from the mentioned factors, the scenarios used in establishing the EUA price take into account the anticipated energy consumption and the energy policies in the field of carbon dioxide emissions.

OTC trading is made both spot and forward between large companies activating in the energy field. In the first phase of EUA trading, carbon emission allowances were OTC traded through forward contracts: the price was established upon contract signing, while payment was made upon delivery of the allowances at maturity, and it depended on the short term interbank interest rate (LIBOR). Transactions were negotiated directly between brokers or directly between contract parties as final beneficiaries.

The legal framework for EUA trading was developed by the International Swaps and Derivatives Association (ISDA), International Emissions Trading Association (IETA), and the European Federation of Energy Traders (EFET).

In the first trading phase, the transactions with derivatives based on EUAs (forwards, futures and options) represented 95% of the total volume on the European carbon market, while only 5% was traded on the spot market, due to the initial difficulties generated by the establishment of the national registries and by the allocations within the National Allocation Plan.

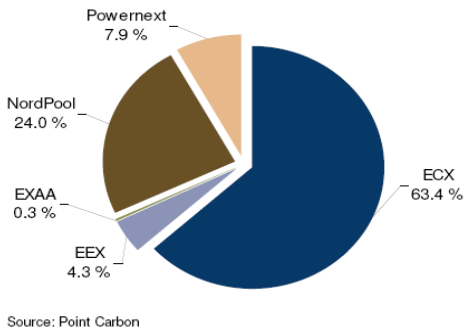
2.2. European Carbon Markets

The overall carbon market continued to grow in 2008, reaching a total value transacted of about Euro 86 billion at the end of the year, double its 2007 value. Approximately Euro 63 billion of this overall value is accounted for by transactions of allowances and derivatives under the EU ETS for compliance, risk management, arbitrage, raising cash and profit-taking purposes. The second largest segment of the carbon market was the secondary market for CERs, which is a financial market with spot, futures and options transactions in excess of Euro 18 billion, representing a five-fold increase in both value and volume over 2007. These trades do not directly give rise to emission reductions unlike transactions in the primary market.

Currently, there are a great number of exchanges operating in the European Union on which EUAs can be traded: European Climate Exchange (ECX), European Energy Exchange (EEX), Energy Exchange Austria (EXAA), NordPool, Powernext, markets covering almost half of the traded EUA volumes. The main European markets in the context of the environmental product markets development in the European Union, starting with the commencement of the EU ETS, are presented below.

European Climate Exchange (ECX) manages the development and marketing of carbon financial instruments (ECX Carbon Financial Instruments - ECX CFIs) allowed for trading on the electronic platform of the ICE Futures exchange. ECX/ICE Futures is the most liquid Pan-European carbon emissions trading platform, attracting over 80% of the exchange volume traded on the market.

Figure 1: Structure of environmental product markets in the European Union

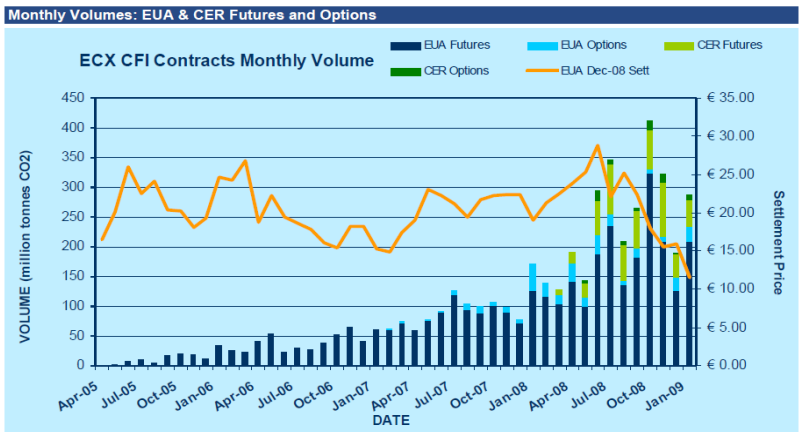


ECX provides carbon financial instruments (ECX CFI) which are listed and traded on ICE Futures. ECX CFI are standardized instruments based on EUAs and other instruments (CER) which represent CO_2 emissions. Trading ECX CFI futures contracts allows the reduction of the risks of price modification upon EUA delivery on future dates.

Futures contracts options based on emission rights were launched in September 2006. Futures contracts are based on 1,000 allocation rights. The quotation is in Euro and Euro cent per metric tonne. The options are European type, exercised on the futures market, while the premium is paid/ received on the date the transaction is made.

The figure below presents the volumes of contracts listed on ECX, futures and options EUA contracts, as well as options and futures CER contracts from the beginning of the trading period, in 2005, to January 2009.

Figure 2: The evolution of the monthly volumes traded



Source: http://www.ecx.eu

Over 65 members signed up for trading ECX products – among them: ABN AMRO, Barclays, BP, Clayon, E.ON UK, Fortis, Morgan Stanley and Shell. Several hundred clients can access the market daily through banks and brokers.

European Climate Exchange (ECX), Chicago Climate Exchange (CCX) and Chicago Climate Futures Exchange (CCFE) are owned by Climate Exchange plc, listed on London Stock Exchange.

ECX manages the development of the contracts listed on the electronic platform of ICE Futures Europe. Contracts supervision and authorizing is done by the competent authority in the Great Britain, Financial Services Authority (FSA).

Futures and options contracts based on EUA allowances are settled through ICE Clear Europe which acts as a central counterparty to all trades and guarantees the financial performance of the ICE Futures contracts registered in the name of its Members.

Nord Pool Exchange is the sole energy market for Norway, Denmark, Sweden and Finland. It is the second largest trading market for EUA and CER. Nord Pool trades both spot and forward EUA: spot contracts (next day market) and forward contracts for 2008-2012.

European Energy Exchange (EEX) appeared after the merging of two energy exchanges in Germany. EEX, based in Leipzig, Germany, trades spot EUA, derivative financial instruments based on EUA (futures and options), electrical energy, gas and coal.

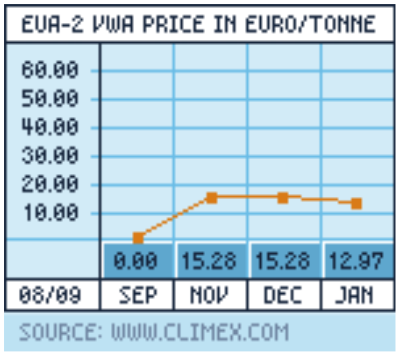
Climex Environment Exchange is a Dutch exchange owned by New Values B.V. known for trading environmental products and energy contracts offering spot trading for EUA and CER, auctioning for all carbon products: EUA (CO_2 emission allowances), CER (certified emission reductions), ERU (emission reduction units) and VRE (voluntary emissions rights), as well as auctions for electricity, gas and renewable energy allowances. Climex hosted all the on-line public governmental auctions for EUA organized so far and traded over 16 TWh amounting to Euro 450 million.

Climex traders do not trade directly between themselves; APX B.V. acts as a central counterparty for spot trading on Climex, also offering the advantage that participants do not have to check each other's financial soundness, as APX guarantees EUA and CER carbon allowances payment and delivery.

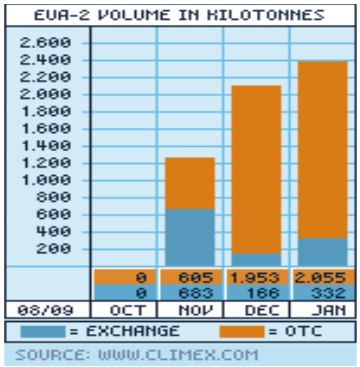
The charts below present information on EUA contracts price and volume from the second trading period of the EU ETS.

Figure 3: Price and volumes of EUA contracts

Price of EUA contracts during September 2008-January 2009 (Euro/tonne)



Volume of EUA contracts during September 2008-January 2009 (kilotonne)



Source: www.climex.com

Carbon allowance (EUA) spot trading on Climex, which offers an on-line trading platform, started in July 2005. In 2007, the total volume on Climex increased to 7,001 kilotonnes, from 4,750 in 2006. The volume increase was due to the larger number of members and to the European carbon markets development. The carbon trading market is continuously developing, while from 2008 Climex also provides CER spot trading.

Climex Alliance Platform provides a pan-European carbon spot exchange for trading EUA allowances under the EU ETS scheme. The regional partners of the platform are: Climex owned by New Values based in Holland, SENDECO2 based in Spain, Vertis Environmental Finance based in Hungary and STX Services based in Holland and APX Power Limited based in Great Britain and APX B.V. in Holland which act as central counterparty.

Over 7 million EUA allowances have been traded through Climex Alliance, 2 million out of which were OTC traded, and settled through APX Group.

The highest price since the European market appeared in 2005 was over Euro 30 per tonne, while the lowest was Euro 0.5 per tonne. The value of the carbon dioxide allowances transactions worldwide was US dollar 60 billion in 2008, representing an 80% increase as compared to the previous year.

3. CO_2 emission allowances trading in Romania

As an EU member state, Romania had the obligation to prepare an allocation plan for 2007, which was the last year from the first trading period, as well as a plan for the second trading period 2008-2012.

3.1. CO_2 emission allowances allocation in Romania

On January 16th, 2008, the Romanian Government adopted the Romanian National Allocation Plan for 2007 and 2008-2012 through a government decision. National allocation plans establish for each member state the "ceiling" or the limit from the total CO_2 quantity that the installations included in the greenhouse gas emission allowance trading scheme can emit, specifying the exact number of emission allowances that each of them will receive.

According to the National Allocation Plan, the ceiling allocated to Romania for 2007 is 74.8 millions of emission allowances, while the annual average for 2008-2012 is 75.9 million emission allowances. The National Allocation Plan is the document establishing the total number of greenhouse gas emission allowances at national level, as well as per each sector and each installation.

On December 13th, 2006, Romania submitted the National Allocation Plan to the European Commission for approval. The plan was revised – according to the decisions by the European Commission that approved the document at the end of October 2007 – by decreasing the national ceiling for 2007 with 10.8% and for 2008-2012 with 20.7%. These reductions are applied proportionally for each installation, with no differences, through the National Allocation Plan, both for the national ceiling, and for the reserve of new-comers and for all the installations included in the greenhouse gas emission allowance trading scheme.

At the end of 2007, Romania disputed the EC decision at the European Court of Justice. Romania requested the annulment of the EC decision to reduce CO_2 emission ceilings with 20.7%, as "the decision is not sustainable" and it might affect – by cost increasing – the environmental investments that industrial manufacturing companies have to make; it seems that the energy industry, where costs will increase significantly, will be affected the most. Other industries, such as cement industry, glass industry and paper industry, will also be affected. Apart from Romania, a large number of other EU member states have issued objections regarding the measures that the European body was to make public in view of reducing CO_2 emissions with 20% in 2020 as compared to 1990; however, the European Commission has refused any compromise regarding the plan proposed to the 27 EU member states in order to reduce greenhouse gas emissions in the EU, reminding the three objectives of the European body: competitiveness, sustainability and safety of purchasing.

The European ceiling for the period 2008 - 2012 is 2.08 billion tones of emissions annually. As regards Romania, the national allocation ceiling for 2008-2012 is 379,721,760 total allowances for the five years, respectively 75,944,352 allowances annually, representing 3.6% of the European ceiling. The situation is as follows per activity sectors:

Table 1: CO_2 emission allowances per activity sectors

Sector	Allowances allocated 2008 – 2012	Number of installations
Energy	208,674,068	146
Mineral oil refineries	28,818,122	9
Productions and processing of ferrous metals	61,654,319	15
Chalk	4,908,313	5
Production of cement	41,251,885	7
Manufacture of glass	1,618,308	7
Manufacture of ceramic	1,753,842	28
Production of pulp and paper	2,449,411	10

Source: Romanian National Greenhouse Gas Emission Allowance Allocation Plan for 2008-2012

Out of the 229 installations, eight companies – the biggest polluters in Romania – will receive over half of the national greenhouse gas emission allowances, according to the trading scheme published by the Environment Ministry. Considering the number of allowances allocated for the period 2008-2012, these are: Mittal Steel Galați - approximately 71 million allowances, Turceni Energy Supply Complex - 34 million, Rovinari Energy Supply Complex - 28 million, Electrocentrale Deva - 20 million, Craiova - Isalnita Energy Supply Complex - 17 million, RAAN Romag Termo Branch - 14 million, Lafarge Cement Medgidia – 12.3 million and Petrom - Arpechim Pitești – 9.6 million allowances.

An operator using an installation included in the allocation scheme can be in one of the following situations:

- it emits a carbon dioxide quantity which is lower than the allocated amount and can sell the exceeding allowances on the market, without any restraints;
- it emits a carbon dioxide quantity which is higher than the allocated amount, so he must either buy allowances on the market or diminish the activities that generate emissions;
- it emits within the allocated ceiling, therefore he does not need to sell or buy allowances.

If an organized, safe and accessible carbon allowances market does not exist, the installations included in the national allocation plan can be penalized in case they exceed their annual allocated ceiling; penalties can be as high as Euro 100/ carbon dioxide tonne. Similarly, the installations that have a surplus of

allowances cannot use them efficiently. The solution to avoid either penalties or losses is precisely purchasing, respectively selling allowances on an organized market.

3.2. CO_2 emission allowances spot market

The administrator of the National Registry in Romania is the National Environmental Protection Agency (NEPA). The Registry only includes the transfers of allowances and units as stipulated in the Kyoto Protocol; no details can be found regarding the transactions made by operators which represented the basis for the actual allowances transfer. All transfers are made electronically and are recorded.

The national registries' role is to check whether the parties making allowance transfers meet a number of minimum requirements:

- both parties have opened accounts with the registry and such accounts are functional;
- the party that is about to make the transfer actually owns the number of allowances to be transferred and such allowances were not already transferred;
- the party that is about to receive the allowances agrees with the transfer.

With regard to the volume and number of greenhouse gas emission allowances transfers, made among domestic operators as well as between domestic and foreign operators, the following transfers were identified within the Romanian National Registry during 2008: 49 transfers between Romanian and foreign operators on the ETS market, amounting to 8,031,199 emission allowances, and 38 transfers among Romanian operators, amounting to 816,560 emission allowances.

The Romanian National Securities Commission (RNSC) qualified these instruments as securities even in April 2009; however, RNSC subsequently suspended the approval, in order to clarify certain technical and legal aspects regarding the trading of such allowances on the capital market. At the end of February 2010, the capital market authority issued a new approval that also included regulations regarding the intermediaries allowed to participate in such transactions. According to the new approval, the rendering of financial investment services and activities involving greenhouse gas emission allowances will only be carried out through authorized intermediaries. As an exception, the operators of polluting installations, to whom emission allowances are allocated, will be able to make transactions with such instruments by themselves using their own accounts.

The qualifying of emission allowances as securities results in the necessity of clarifying some problems caused by the inconsistencies in the Law No.297/2004 regarding the capital market and the legislation related to greenhouse gas emission allowances. Below is a non-exhaustive list of aspects that need clarifying as well as potential solutions:

1. ensuring unitary registration of emission allowance transactions on a regulated market by clarifying the issues related to depositing, recording, settling and clearing that would guarantee the end result of such transactions on a regulated market, considering that the Law No.297/2004 regarding the capital market stipulates that all categories of securities traded on a regulated market or within an alternative trading system should be deposited with and recorded by an authorized central depository, while Government Decision No.780/2006 stipulates that the national registry is a sole, standardized and secured electronic database administered by the National Environmental Protection Agency that records and oversees all greenhouse gas emission allowances transactions.

We believe that the best solution in order to ensure the unitary registration of allowances is the interconnection between central depositories in Romania and the greenhouse gas emissions National Registry, similar to the parallel way of trading government securities on the capital market and on the interbank market. Unlike government securities that are traded exclusively using the mechanism without the financial instruments pre-validation, we believe that such a mechanism cannot be used for emission allowances, considering the National Registry's obligation to check whether the party that is to make the transfer actually owns the number of allowances to be transferred and such allowances are not already transferred.

2. the terms and the way of admitting such allowances on a regulated market should be tailored, as through Government Decision No. 60/2008 approving the National Allocation Plan, the Romanian Government established the number of greenhouse gas emission allowances for 2008-2012 allocated to each installation where one or more activities in the targeted sectors are carried out, while the National Environmental Protection Agency – through the national registry – issues a part of the total number of allowances corresponding to each year in the period 2008-2012 and in the subsequent 5-year periods, until February 28th of the respective year.

According to the Law No.297/2004, securities admission for trading on a regulated market will be done after the publication of a handout by RNSC. In our opinion, these securities should be exempted from such provisions.

3. greenhouse gas emission allowances validity

Currently, according to Government Decision No.780/2006, greenhouse gas emission allowances are valid for the emissions during 2008-2012, which were recorded in the National Registry. Therefore, starting with January 1st, 2008, these allowances are valid for a period of 5 years and for each subsequent 5-year period. This means that the securities which can be admitted for trading on a regulated market have a maximum maturity of 5 years and 4 months. After the expiry of such period, the administrator of the National Registry shall cancel the emission allowances that are no loger valid for the respective period.

Sibiu Exchange (SIBEX) intended to introduce the direct trading of greenhouse gas emission allowances as early as October, but the commencement of the transactions with such products was delayed until the clarification of the issues related to the trading and clearing of these securities. In March 2010, the BSE Board of Directors approved the greenhouse gas emission allowances admission to trading on the Bucharest trading market.

3.3. CO_2 emission allowances futures contracts

Carbon dioxide emission allowances have been traded as supporting assets since December 2009 on SIBEX, through futures contracts with one day time of maturity and physical delivery the following day. If an organized, safe and accessible carbon allowances market does not exist, the installations included in the National Allocation Plan can be penalized in case they exceed their annual allocated ceiling; penalties can be as high as Euro 100 per carbon dixode tonne.

The same is the case for the institutions having a surplus of allowances that they cannot use efficiently. The solution for avoiding penalties for some and losses for the others, proposed by the Sibiu Monetary Financial and Commodities Exchange, consists of the purchasing, respectively selling of CO2 emission allowances futures contracts with one day time of maturity and delivery of the supporting asset.

SIBEX is the only market in Romania that is authorized to trade CO2 emission allowances, while the guaranteeing and clearing of transactions is done through Romanian Clearing House Sibiu (RCH). Futures contracts for 100 allowances (100 tonnes of carbon) are traded on this market, which are executed at maturity by actual delivery, for the RON price negotiated on the market. Trading of such allowances is done through the participants on the Sibiu market. All intermediaries trading on this market have accounts with the National Registry of the greenhouse gas emissions, where RCH also has an account.

A client who wants to sell allowances must transfer them in the account of an intermediary who will then transfer them in the RCH account. This will credit the account opened by the intermediary on behalf of his clients with the respective quantity of allowances, which will be available for selling as futures contracts.

A client who wants to buy allowances will deposit their counter value with an intermediary who is a participant in the Sibiu market, who will transfer that amount in the account opened with RCH. When giving the purchasing orders, each market participant will be constrained by the amount of money it has in his account with RCH. Following the transactions, RCH will make the clearing the next day and the delivery of the allowances to the intermediaries who, in their turn, will transfer the allowances and the money to their clients.

The idea for this solution came from the European exchanges that implemented it a few years ago. Although there is an interest for such transactions, the market is currently blocked because the issues related to the VAT collection for these allowances are not clarified.

By implementing this type of transactions, SIBEX wanted to attract new categories of market investors, create a new liquidity center and generally increase the volumes traded on the market.

In the European Union, the approach to the fiscal treatment applicable to greenhouse gas emission allowances transfer is different. While states such as Sweden, Belgium, Denmark and Italy have qualified the allowances as securities, the other member states have qualified them either as financial instruments or as commodities.

In 2009, as a result of the large frauds committed in the European Union, some states took inflexible measures: France decided to exempt allowances from VAT collection, Great Britain applies 0% VAT, while Holland chose "reversed taxation", requiring that the tax be paid by the buyer, upon purchasing.

4. Conclusions

The results obtained in the first phase of the EU ETS programme showed that in case of using allowances trading markets, significant reductions are achieved on the EU budget, as compared to the

aggregated level of taxes collected from greenhouse gas emitting industries, as well as the achievement of the targeted goal of reducing the total CO_2 emissions. At the same time, carbon contracts and carbon financial instruments trading markets have turned out to be extremely profitable, given the rapid increase of participants in such markets.

Carbon dioxide emission allowances have been traded as supporting assets since December 2009 on the Sibiu Exchange, through futures contracts with one day time of maturity and physical delivery the following day.

Considering the herein analysis, we believe greenhouse gas emission allowances to be securities that can be admitted for trading on a regulated market. As shown above, allowances are claim rights issued as government-backed securities, with a maximum maturity of 5 years and 4 months, starting with January 1st, 2008. There is still an issue to be clarified: the fiscal treatment in what regards the value added tax applicable to such allowances.

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ADAPTING TO THE TIMES: THE CASE OF EU COMPETITION POLICY REGARDING THE MOTOR VEHICLE SECTOR

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Abstract: *In the case of EU competition policy regarding the motor vehicle sector, an analyze of the most important issues of the Motor Vehicle Block Exemption Regulation (MVBER) No.1400/2002 is imperative. Furthermore the article focuses on the Regulation' provisions facing the reality before and during the economic crisis. The draft texts for the revised MVBER are also brought to discussion for a better understanding of the future guidelines concerning the Competition Policy in the analyzed sector.*

Key words: *Competition Policy, Motor vehicle sector*

JEL Classification: *K33, L42*

1. Introduction

When dealing with competition policy one of the most important sectors is the motor vehicle sector. It is important both for economy seen as a whole as well as for the individual consumers. In the European Union the main role regarding the motor vehicle sector is the one played by the European Commission, by DG Competition[1]. Competition Commissioner Ms Neely Kroes said that "Cars are a big chunk of the average household budget. Competition is therefore vital both as regarding vehicle sales and repair. Our analysis has shown that competition is fierce as regards car sales, so we have no reason to treat this sector differently from any other."

The current Regulation regarding the distribution of new motor vehicles, spare parts and after sales services is Commission Regulation (EC) no 1400/2002. This Regulation appeared from the previous experience that led to the conclusion that stricter rules regarding the vertical agreements and concerted practices were needed to this sector. These rules apply to vertical agreements for the purchase or sale of new motor vehicles, vertical agreements for the purchase or sale of spare parts for motor vehicles and vertical agreements for the purchase or sale of repair and maintenance services for such vehicles where these agreements are concluded between non-competing undertaking, between certain competitors, or by certain associations of retailers or repairers. The Regulation establishes market share based thresholds in order to reflect the suppliers' market power. It is considered that the vertical agreements that have efficiency-enhancing effects are those where the supplier concerned has a market share up to 30% on the markets for the distribution of new motor vehicles or spare parts or up to 40% where quantitative selective distribution is used for the sale of new motor vehicle. However, irrespective of the market share of the suppliers concerned the Regulation does not cover vertical agreements containing certain types of severely anti-competitive restrains (hardcore restrictions) which generally restrict competition even at lower market shares and which aren't indispensable to the attainment of the positive effect mentioned above.[2]

2. Conceptual (de)limits

The Regulation explains the most important terms contained by it. The potential suppliers on the same product market[3] are defined as "competing undertakings".

Above, we mentioned "vertical agreements" but haven't define them yet. According to the Regulation the vertical agreements are the ones that suppose agreements or concerted practices between two or more

[1] DG Competition is the Competition Directorate General of the European Commission, which takes decisions on competition law cases

[2] This concerns in particular vertical agreements containing restraints such as minimum or fixed resale prices and restrictions of the territory into which a distributor or repairer may sell the contract goods or services. Commission Regulation No.1400/2002, article (12).

[3] The product market includes goods or services which are regarded by the buyer as interchangeable with or substitutable for the contract goods or services by reason of products' characteristics, their prices and their intended use.

undertakings, each of which operates, for the purposes of the agreement, at a different level of the production or distribution chain. When in a vertical agreement are contained restrictions falling within the scope of Article 81 (1), these restrictions are called "vertical restrictions".

By "motor vehicle" the Regulation understands a self propelled vehicle intended for use on public roads and having three or more wheels.

The terms "undertaking", "supplier", "buyer", "distributor" and "repairer" shall include their respective connected undertakings. "Connected undertakings" are usually undertakings in which a party to than agreement directly or indirectly: a)has the power to exercise more than half the voting rights, or b) has the power to appoint more than half the members of supervision board, board of the management or bodies legally representing the undertaking, or c) has the right to manage the undertaking's affaires. They may also be the undertakings which directly or indirectly have, over a party to the agreement, the rights or powers mentioned above (from a to c).

Based on Article 81 (3) of the Treaty and under the provisions of the Regulation the Article 81 (1) do not apply to vertical agreements that relate to the conditions under which the parties may purchase, sell or resell new motor vehicles, spare parts for motor vehicles or repair and maintenance services for motor vehicles. The "exemption" mentioned however does not apply to vertical agreements between competing undertakings. Also, the exemption does not apply to the hardcore restrictions (restriction of the distributor's ability to determine the sale price or to recommend a sale price, or restrictions of territory).

3. Evolution of competitive environment in the light of Regulation No.1400/2002

In what follows, we will analyze the factors affecting the evolution of the competitive environment of car manufacturers and car dealerships prior to the economic crisis in the 12 European countries to which the most recent EC study refers. For a better understanding the factors are divided into inter-brand factors and intra-brand factors affecting competition.

In respect to inter-brand factors it is important to say that relatively low operating margins[1] for vehicle manufacturers suggest a healthy competitive environment in the car sector. Even the best-performing car manufacturers, above all Nissan, Toyota, BMW and Honda, managed only rarely to achieve operating margins in the double figures (Figure 50), so that overall margins do not seem excessive compared with other industries. The average operating margin for the selected car manufacturers in 2004 was 3.9%, compared with, for example 10.5% for chemical manufacturing, 8.1% for the tools/appliances industry, and 6.8% for the technical/scientific instruments industry. Many manufacturers experienced a slump in their earnings around the years 1998 to 2000, but margins for most car manufacturers increased markedly in 2004. Only a few manufacturers experienced negative operating margins over the period 1997-2004 (Kia, Fiat, Ford, Mazda and Mitsubishi), and of those who did, all but Ford and Mitsubishi managed record positive margins again by 2004.

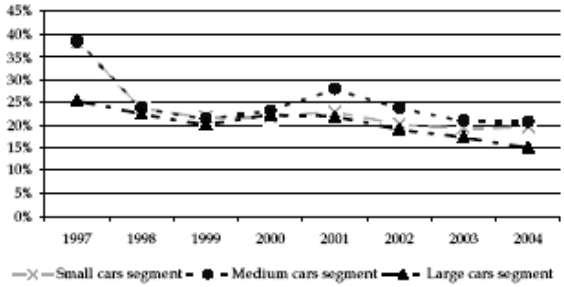
Overall, it seems that the special protections granted to car manufacturers by the BER have not resulted in inflated profits (Reuters). Another important aspect concerns motor vehicle distribution. To this respect it appears that competition in the European car market was vigorous and that consumers were offered a choice from a large variety of manufacturers that had to struggle to maintain their position in the market. Regarding to the market entries and exits it is important to say that the only exit of a manufacturer from the European market, over the period in discussion was that of MG Rover in 2004. The continuing entry into the European market suggests that barriers to entry were low. The rationalization of their dealer networks by established manufacturers was likely to make entry costs lower, as dealership sites and qualified personnel became available and were ready for appropriation by entrants.

An increased competition was achieved by Multi-brand dealerships intra as well as inter-brands, by giving consumers the chance of directly experiencing and comparing cars by different manufacturers. Thus, from the consumers' point of view, the proliferation of multi-brand dealerships represented a positive development.

The intra-brand competition is affected by the impact of restrained intra-brand competition on market access, prices, and inter-brand competition. Subject to a customer's geographic mobility, exclusive territories could lower intra-brand competition, and so partition markets in ways that facilitate price discrimination. Yet welfare effects were ambiguous, as a manufacturer's attempted to profitably sub-segment the market might or might not expand consumption and total surplus.

[1] earnings before tax and interest payments as a percentage of total turnover

Figure 1: Price differentials across the EU



Source: Evaluation Report on the operation of Regulation (EC) N° 1400/2002 concerning motor vehicle distribution and servicing (may 2008)

As it can be easily seen car prices in Europe when crisis wasn't an issue were converging. Responsible for the convergence were the new Member States, while in the older Member States convergence appeared to have had peaked. In the respect of the study Germany continued to be the most expensive market, while Denmark was the cheapest, followed by Estonia.

4. The motor vehicle sector in time of crisis

The 2009 DG Competition's report is based on list prices[1] provided by European, American, Japanese and Korean manufacturers for 86 best-selling models representing 27 brands.

For calculating the differences is used a reference price- that is the lowest price from the cheapest country within the euro zone for each model. The equipment for calculating the prices is the standard one and all prices are given in Euro[2] and also, in case, in local currency before and after tax. Also are supplied prices for major options and for right hand specifications. On certain national markets may exist variations in standard equipment and further options. Also, it may be possible that actual retail prices differ from the recommended list prices (dealers are free to propose lower prices and offer additional financial benefits for the costumers, according to the specific national market).

The Eurostat inflation figures and the DG Competition Report show that there is a dispersion in an environment in which the car prices are increasing less than the average price for any other products in the Member States.

Consumers in the vast majority of Member States have benefited from a significant decrease in car prices adjusted for headline inflation in 2008, as real prices decreased by 3.1% at the EU level.

Starting to the second half of 2008, several EU currencies devalued strongly against the Euro and the economic crisis hit consumer confidence and demand to varying degrees in different Member States and, subsequently, price dispersion increased across the EU. However, this increased dispersion does not appear to reflect at this stage a fundamental change in the strategies followed by car manufacturers, which have been characterized in recent years by a long term trend towards a progressive reduction of price differentials within the EU.

The real car prices [3],in the context of a recession (which deeply affected the car sector starting the last half of 2008) declined in 23 out of 27 Member States. The EU price index for cars (reflecting nominal prices paid by consumers, including VAT and registration taxes) decreased by 1.3%, against a 1.8% rise in overall prices, translating into a fall in real car prices of 3.1%.

The UK market was hit earlier than other countries by the economic crisis. The ensuing drop in consumer confidence and a strongly weakened demand combined with a 2.5 % reduction of the value added tax contributed to a massive fall of real car prices in the UK by 9.7%. Consumers in Germany, France and Spain enjoyed more moderate real price decreases (-0.9 %, -0.2% and -1.1% respectively), while real prices in Italy increased slightly against the EU-wide trend (+0.9%). Prices in the Euro zone fell more moderately than in the EU as a whole. While the new Euro zone member Slovakia, formerly a high-price country, experienced the highest price decrease (-10.9%), followed by Finland (-7.3%) and Slovenia (-4.6%), prices in the major high

[1] List prices do not include any discount and may include or exclude taxes
[2] The conversion rates are those published in the Official Journal C1 (January 6 2009, p.6)
[3] These are prices adjusted according to inflation

volume markets, namely in Germany, France, Italy and Spain displayed much smaller movements. As a result, real prices in the Euro zone decreased by -0.9% compared to the - 3.1% for the EU-27 average.

A very important and special issue concerns the new member states. In these states, lower incomes have led a high share of consumers to reorient to second hand cars, manufacturers having to face particularly price-sensitive consumers. As a result, real prices in this group of countries decreased significantly on average (-6.9%), most strongly in Latvia (-14.7%), Estonia (-14.2%), the Czech Republic (-13.0%), Malta (-10.8%), Lithuania (-10.7%) and Poland (-9.4%). A particular case among the new states is Romania where real prices increased with +3.7%. In Romania the Commission's consumer confidence indicator remained relatively high at the end of 2008[1]. Also, in Romania the car registration tax, which had been temporarily introduced in mid-2008 may have contributed to the price increase. Real prices in Hungary remained unchanged.

Generally, the long term decreasing price trend is confirmed by the -3.1% real price decrease in the EU. This trend is to the benefit of consumers in a context of increased competition between car manufacturers. Also, price dispersion has markedly increased at EU level due to strong currency turbulences at the end of the year and contingency-driven reactions to the crisis. It is important to mention that the price convergence which had been observed until 2007 and the subsequent increase in price differentials brought about by the crisis, happened while the sector specific Motor Vehicle Block Exemption (Regulation 1400/2002) was in place. This would seem to indicate that the main factors influencing price dispersion are external market forces rather then sector specific regulation.

At this point a question is rising: How did the crisis influence the price dispersion indicators?

First, the crisis entailed exchange rate turbulence in the last quarter of 2008 which consequently affected the EU-wide price dispersion figures. Several EU Member States, in particular the UK, Sweden and Poland, experienced a sharp fall in their currencies against the Euro (by -30%, -16% and -15% respectively by 1st January 2009 compared to 1st January 2008), thus triggering a corresponding sharp fall in Euro denominated car prices in these countries.

Secondly, the consumers from different Member States did not feel the economic crisis, which began with turmoil in the financial markets, to the same degree and at the same time. This is the main reason for which consumer demand and confidence differ significantly within Member States.

The Commission's European Economic sentiment indicator for December 2008 showed that, in the Euro zone, consumer confidence had not yet reached a low in a number of countries such as Germany, France and Italy where car prices are historically higher than in other EU countries. By contrast at the end of 2008 the consumer confidence indicator hit the lowest point since the beginning of the 1990s in some low-price countries marked traditionally by high consumer price sensitivity, such as Finland[2].

Thirdly, manufacturers apparently reacted to the unprecedented fall in demand in those countries which were affected early by the economic downturn with contingency-driven strategies and very different degrees of price aggressiveness. It appears in particular that car manufacturers' strategies to counter the fall in demand were made up on a country by country basis and were met with different degrees of success

Fourthly, it appears that certain Member States' measures designed to stimulate consumer demand in the light of the crisis, such as scrapping schemes, may have contributed to an increase in price dispersion, as car manufacturers were able to sustain prices in these countries at a higher level than what could have been expected in the absence of these measures.

Finally, it is important to say that special price reductions and promotions have most probably proliferated during the crisis in an attempt to reduce the costs of growing stocks of unsold vehicles. Since the methodology followed in the Car Price Report analyses price dispersion indicators which are derived from the official lists of recommended prices issued by car manufacturers and do not reflect actual selling prices, it is possible that the higher incidence of special discounts and contingency-driven promotions may affect, for the present monitoring exercise, the robustness of the estimated price divergence at EU level.

Next we will see which are, in the middle of the economic crisis, the cheap and which are the expensive EU countries within and outside Euro zone. Within the Euro zone, Finland remains the cheapest country in terms of pre-tax prices (average list prices are 6.7% below the Euro zone average), followed by Greece (as in the previous year) and Slovenia. The new Member of the Euro zone, Slovakia, takes the fourth place. Overall, Member States' relative price ranking within the Euro zone remains broadly unchanged. In the EU as a whole, the three Member States with currencies that devalued most dramatically against the Euro

[1] See European Commission, DG ECFIN, Business and Consumer Survey Results, December 2008, Consumer Confidence Indicator, p.10.

[2] See European Commission, DG ECFIN, Business and Consumer Survey Results, December 2008, Consumer Confidence Indicator, p.10.

became the cheapest countries: In the first place the UK (with prices 19 % lower than in Finland, the least expensive Euro zone country), followed by Sweden (10.3 % lower than in Finland) and Poland (8.3% lower than in Finland). It should be noted that Denmark's currency did not devalue against the Euro in 2008. Therefore Denmark, which used to be the cheapest country within the EU, now takes fifth place regardless of the fact that its relative price position compared to the Euro zone remains broadly unchanged. Also benefiting from the price decrease, Germany still remains the most expensive country in the Euro zone and became the most expensive country in the EU (with prices 5.5% above the Euro zone average), followed by France and Belgium which became the second and third most expansive countries in both the Euro zone and the whole EU**.**

At manufacturer level, in the Euro zone (excluding Slovakia[1]), price dispersion increased particularly among the Renault models (to 9.4%). On the other hand, dispersion did not change significantly for Fiat models stayed the same within the Fiat group and increased only slightly for Daimler and BMW models, so that Daimler and BMW continued to have the lowest dispersion indicators (2.4% each).

Table 1: Car prices declining in real terms

Euro zone	Cars	Headline inflation	EU 27	Cars	Headline Inflation
Belgium	+0.6	+2.1	Bulgaria	-0.2	+6.0
Germany	0.0	+0.9	Czech Republic	-11.6	+1.4
Greece	-1.7	+2.0	Denmark	-0.5	+1.7
Spain	-0.3	+0.8	Estonia	-9.5	+4.7
France	+0.6	+0.8	Latvia	-5.0	+9.7
Ireland	-2.1	+1.1	Lithuania	-1.2	+9.5
Italy	+2.3	+1.4	Hungary	+2.4	+2.4
Cyprus	-0.2	+0.9	Poland	-6.2	+3.2
Luxemburg	+1.4	+0.0	Romania	+10.5	+6.8
Malta	-7.7	+3.1	Sweden	_3.0	+2.0
Netherlands	-1.8	+1.7	United Kingdom	-6.7	+3.0
Austria	+0.5	+1.2	**EU**	**-1.3**	**+1.8**
Portugal	0.0	+0.1			
Slovenia	-3.2	+1.4			
Finland	_4.8	+2.5			
Slovakia	-8.2	+2.7			
Euro zone	**+0.2**	**+1.1**			

Source: Eurostat HCPI

5. Conclusion

On 21st December 2009 the European Commission launched the public consultation for a revised Block exemption regulation and Guidelines on motor vehicle sales and repair agreements. The Commission evaluation has shown that the European markets for motor vehicle distribution are fairly open and there are relatively low entry barriers. Also the model ranges have expanded, so the consumers have a much wider range for choice within each car segment and the price levels are highly competitive.

In its' Communication the Commission found no evidence that the agreements between vehicle manufacturers and dealers would continue to require a different treatment in comparison with other sectors. The propose made by the Commission is that, starting from 31 may 2013 (after a three year adaptation period) the general competition rules should apply. [2]The Commission's Communication draws a basic distinction between issues arising in the primary market for the sale of new vehicles, where it has found no indications of significant competition shortcomings in the EU, and those which may affect consumers in the so-called "after market" (after-sales service and repairs), where competition is less intense. The Commission's policy orientations recognize that the general rules on vertical restraints (i.e. agreements between firms at different levels of the production and distribution chain) can protect the primary market and, at the same time, aims at improving the protection of competition in the aftermarket. The Commission also acknowledges the need for a

[1] Slovakia joined the Euro zone in 2009
[2] See IP/09/1984 from 21/12/2009

smooth transition with regard to the primary market and announces its intention to propose to extend the respective provisions of the current Regulation for another three years.

Neelie Kroes, the Competition Commissioner, said that : "It is important to give the automotive sector, one of the most important sectors in the EU, legal certainty and predictability as to the future competition law regime. This holds even more true in times of crisis. That is why I favor a new framework which will make it easier for market players to respond to rapidly changing market circumstances while better safeguarding consumer interests".

Block exemptions create safe harbors for categories of agreements, relieving companies from the need to individually analyze whether those agreements comply with EU rules on restrictive business practices (Article 81 of EC Treaty). The motor vehicle sector (both passenger cars and commercial vehicles) is subject to a specific block exemption, Commission Regulation 1400/2002, which will expire on 31 May 2010.

Concluding we may say that is a certainty that the objectives underlying Regulation 1400/2002 are and should be valid. However, the Commission has not found indications of significant competition shortcomings in the EU primary market (sales of new vehicles) but rather structural overcapacity and falling real prices. The future competition law framework in this sector should therefore not impose regulatory constraints which might increase distribution costs and are not justified by the objective of protecting competition on the market. In the light of these market conditions, the Commission proposes to align the rules applying to the primary market to the general competition rules on vertical agreements. It underlines, however, the need to introduce safeguards in the form of guidelines against any possible closing off of new entrants, price discipline imposed by manufacturers, or market segmentation through territorial protection or impediments to cross-border sales, in order to ensure at least as much competition in these areas compared to the situation under the current Regulation. As investments in the primary market are often brand-specific and made in the long term, there is a specific need for a smooth transition. The Commission therefore announces its intention to propose to extend the provisions of the current Regulation relating to the primary market for a period of three years[1].

It is particularly important to protect competition in the aftermarket[2] that accounts for some 40% of consumer expenditure on cars. The Commission intends to apply the general competition rules in conjunction with sector specific guidelines and/or an additional, more focused sectorial block exemption Regulation. These will address core aftermarket issues, such as independent operators' access to technical information, access to spare parts and access to the network of authorized repairers, but also tackle new issues which have become more prominent in recent years, such as the misuse of warranties aimed at excluding independent repairers.

This report prompted by February 10, 2010 numerous comments from a wide range of stakeholders, including vehicle manufacturers, dealers and authorized repairers, the independent motor trade, consumers, national authorities and lawyers and most of them agreed on a very important aspect: a specific block exemption is no longer warranted for the sale of new cars and commercial vehicles. This is an crucial aspect that opens the door for a new Era of competition policy rules in the motor vehicle sector.

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[1] See IP/09/1168

[2] The aftermarket is less competitive due to its brand-specific nature

THE INVISIBLE HAND HIDDEN BEHIND THE CURRENT ECONOMICAL REALITY

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Abstract. *According to "the invisible hand" theory, stated by A. Smith, the economy, based on competitive market forces, can provide, spontaneously, equilibrium between production and consumption, supply and demand, which makes government intervention unnecessary. In the last century, the two most important schools of economic (The Chicago School and the Keynesianism) thought had an open confrontation regarding the most effective market economy system and which one should be adopted by the state in its policies for sustainable economic development and sustainable economic growth and today Friedman's critics recognize the beneficial effects of state intervention in the economy (deregulation, privatization, reduced public spending, reduced taxes, non-intervention in the currency market).*

Key words: "the invisible hand", "economic equilibrum", "crisis", "market freedom"

JEL classification: E13

1. Introduction

"An individual who intends to win only for himself is determined by an invisible hand to promote a goal, which was not part of his initial intentions. And it is not always the worst case scenario that could happen to society if that aim was not part of the initial intentions. By not deviating from the personal interest, it frequently promotes the interests of society more effectively than when it only intends to support it." (Adam Smith)

We can state that the central problem of economic science is given by the following question: How do the actions of a multitude of autonomous human beings reconcile? In this regard it can be claimed that one answer is the plan and the other one is the market. If we analyze the first response, throughout time, the systems which were based on central and imperative planning, proved to be unsuccessful and inefficient in terms of achieving a certain degree of prosperity. Thus, in the struggle between plan and market the result was that a sustainable growth can only be achieved within the system which revolves around the market, by applying a "laissez-faire" policy in which economic agents are free to make their own decisions and to take the best strategy, which they consider appropriate, in order to maximize their results. Following this confrontation of market traders in a free scenery, without any interference from other forces that could have negative influence, market equilibrium is achieved, and also the state of equilibrium of all participants, which further leads to maximized earnings and higher living standards.

2. The Invisible Hand Theory

The problem of economic equilibrium concerns the political economy since its early beginnings, more precisely speaking since economic thinking was established as an independent science. Classic economic thinking of equilibrium can be found in works of A. Smith, D. Ricardo and St.Mill, to mention the most representative exponents of classic liberalism. In this context, publishing the book "The wealth of nations" by Adam Smith, in 1776, is considered to be the origin of economics as a science. Classics evolved their works in an era when the industry was going through an unprecedented development. Their main concern was economic growth and related issues such as distribution, value, international trade, etc. One of the main goals was denouncing the restrictive mercantilist ideas of free competition which were even more extensive in their time. For Adam Smith, the state must refrain from intervening in the economy because when people act freely in search of self-interest there is an invisible hand that transforms efforts into benefits. In fact, the theory of "the invisible hand", stated by A. Smith, can be regarded as a form of expressing a concept related to economic equilibrium. According to this theory, the economy, based on competitive market forces, can provide, spontaneously, equilibrium between production and consumption, supply and demand, which makes government intervention unnecessary. Also under the theory of "the

invisible hand", the interest game, which unfolds in a market, is sufficient to even economic life (Jessua C., Labrousse C., Vitry D., Gaumont D., 2006). Thus, the market represents a decentralized coordination process, which requires no intervention or control: the invisible hand justifies the “laissez-faire” policy. Also, it must be mentioned that the basic principles of Classical Liberal School were based upon the philosophical foundation of classical deterministic science, inherited from Newton and then used in all sciences, including political economy. In the Classical School of economic thought, economic issues were analyzed from the perspective of a model with ideal conditions of stable equilibrium, according to which, if economic freedom is ensured, then the system is accomplished and works by itself, being governed by natural laws. Classical economists did not remark the fact that between their model of thinking, which was perfectly justified, and economic conditions prevalent in real life was a huge difference and did not study with equal consideration the disequilibrium which dominates the economic realities. Also, they did not grasp the need for structural reforms, creating an ideal model where natural laws would govern. Over time, Classical School was the subject of various critics because of existing discrepancy between theory and practice; it considered physical, social and economic reality through the perspective of stable equilibrium. In other words, evolution is towards unity, harmony, symmetry, reversibility in the sense that if we consider ex-ante or ex-post, micro or macro has makes no difference, because the result must be the same.

This presentation is narrows down to two ideas. The first idea regards the convergence of individual interests with the general interest, attributed to Mandeville and was also present in the works of Hume, Ferguson and Hutchinson, all inspired by Adam Smith; and the second idea consists of the fact that the result obtained through market is the most likely. This is not the result which could have been obtained by a perfectly rational individual. The presence of the invisible hand in the market requires permanent adjustments, adapting individual behavior based on information provided by relative prices and profits, which are also variables as the transactions take place. Thus, the market represents a process of continuous discovery, with unexpected and unpredictable results, unable to "simulate the market," as Lange and Kanda suggested and as today the supporters of "market socialism" claim.

In this dynamic vision, economic agents play the fingers of the invisible hand (being motivated by profit ownership); they pay attention to the information conveyed throughout the market and then they manage the disequilibrium, which this information reveals. These entrepreneurial reactions ensure the better overall coordination of business than any adjustment through which hypothetical general equilibrium is searched. Invisible hand originates from a eighteenth century Scottish social philosophy, but also has roots in the works of Austrian School economists, according to whom the social order is the unwanted result of voluntary actions of individuals.

In his studies, Adam Smith described the essential institutional framework: the invisible hand can function only if there are property rights, security contracts, currency stability, competition (i.e., freedom to enterprise and trade). Later, Hayek concluded an evolutionary theory of institutions, so that today we speak of an "invisible hand approach" (Ullmann-Margali) in order to characterize theories explaining the emergence and changes in institutions without the intervention of voluntary human action.

Following the above statements we can say that the invisible hand is central to the fundamental debate on individual freedom and social harmony.

3. Market freedom between Friedman and Keynes

Classical liberal theory is called into question by the Chicago School by one of its foremost exponents, Milton Friedman. In his book, *Free to Choose*, Milton Friedman points out, through a series of examples of several countries from both sides of the former "iron curtain", that the economy will not be functional as long as it is commanded and controlled by a center, by comparison with countries where the implementation of measures such as price liberalization and free exchange, have acted as a propellant engine, ensuring a functioning economy. Among other interesting topics considered in this book, the renowned professor emphasizes the importance of clear delimitation of the powers assigned to the state and to the government, revealing how certain economies, which practiced a centrally planned economy, could not function, like for example the former Soviet Union. Of course, analyzing this fact, we understand even more as our country was led, in the past, by a government that applied such an ineffective system. Obvious ineffectiveness which resulted from the centralized economy system is exposed broadly, as the author manages to show through some examples how it has failed. It is clear that countries whose economy was based on free exchange had only to gain, benefiting from both human prosperity and freedom. Of course, in a society mutually agreed exchange, competition and free choice have a positive impact on the economy and

on increasing living standards; as obvious examples are the countries which today have a strong economy. In relation to the price system which works so well when it is free, the author talks about the oil crisis of 1974, when the U.S. government, trying to intervene by adopting measures in order to prevent domestic oil price increases, had the opposite effect than the one expected, leading to long queues for gasoline and supply shortages even in the U.S., the country that produced most of its oil. Meanwhile, countries like Germany and Japan dependent on imported oil, were not affected. Friedman manages to show how the transmission of price information may be one of the most harmful effects of inflation.

In contradiction with concepts of "the invisible hand" and the "laissez faire" policy is a Modern School (which argues through Keynesianism correcting market imperfections solution through state intervention in the economy) which brings an important contribution in terms of achieving economic equilibrium. Thus, within the Modern School, economic problems are seen exclusively through the perspective of a model which assumes conditions of disequilibrium or deviations from the classical model, but with the premise that government intervention through fiscal and monetary policy implementation can promote the overall prosperity and stability, as recommended by Keynes. The peak of the modern school was achieved through the formulation of the *Law of Full Employment* regarding natural and human resources, stated by John Maynard Keynes, in his book that became famous during the last century "The General Theory of Employment, Interest and Money" (1936). This represents the modern concept of stable equilibrium through government intervention from outside the system.

4. The invisible hand hidden behind the current economical reality

In the last century, the two most important schools of economic thought had an open confrontation regarding the most effective market economy system and which one should be adopted by the state in its policies for sustainable economic development and sustainable economic growth. Also, when analyzing the pros and cons of “the invisible hand” from the perspective of the two concepts of economic thinking, the two major economic crises, that have marked economic developments in the last century, must be taken into. Thus, the crisis of 1929-1933, which had overproduction as the main cause, supported the idea of state intervention policies. And yet, after a number of years later, clear observations show that the most liberal states, regarding their market economy system, are the strongest economies in terms of economic growth and sustainable development (United States and United Kingdom), and today Friedman’s critics recognize the beneficial effects of state intervention in the economy (deregulation, privatization, reduced public spending, reduced taxes, non-intervention in the currency market). Friedman says that it is essential to leave people the freedom to make their own decisions, even though many will experience loss as a result of their decision - because whether an individual loses or wins, we, as a society, have only to gain from the fact that someone has taken some risks. The economic crisis inspired courage among many not only to doubt the virtues of free market and globalization, as they have been theorized by Friedman and by the Chicago School, but also to call into question the old ideas regarding Keynesian’s origin - stimulating the economy by increasing public spending and state involvement in regulating the economic disequilibrium, rather than allowing the market to adjust itself.

Paul Krugman sees as the obvious solution for the crisis introducing more capital in the system. In fact, this is a standard response in crisis situations. Krugman also offers a set of examples to highlight this issue. Thus in 1933 the Roosevelt administration created the Reconstruction Finance Corporation, which was used to recapitalize the banks by buying preferred stocks. Swedish Government intervened in the crisis in the early 1990s and provided the banks with an extra capital, equal to 4% of the country's GDP. In 1998, the Japanese government purchased preferred stocks of 500 billion US dollars, in order to save the banks. In each case, the additional capital contribution helped restore banks’ capacity to provide loans and thawed the credit market. A financial rescue operation takes place, in similar conditions, in present times, in economies which are heavily affected by the crisis, from the United States (where an intervention plan worth $ 700 billion was applied) to Ireland (where a rescue plan for the banking system worth 81 million € was applied). Also Greek’s economy, the most affected one out of the euro area, seeks emergency measures that will most likely result in a capital injections program into the economy. Just as considered by Krugman in his work entitled *The Return of Depression Economics and the Crisis of 2008* “still seems quite doubtful that this will be enough to topple the whole situation”. The Nobel laureate also comes with the solution to this uncertainty: “the recapitalization will eventually have to get bigger and broader, and that there will eventually have to be more assertion of government control – in effect, it will come closer to a full temporary nationalization of a significant part of the financial system.” This assumption that Krugman made, since 2008 became a certainty

in the rescue plans of national economies; financial markets received capital injections in exchange of a temporary nationalization. However, this is a short term solution and should not represent a long-term goal, otherwise the positive effects of the rescue plans will be insignificant. Thus, the financial sector must be re-privatized as soon as it is safely to do so, just as Sweden did when the banks got restored in the private sector, after the rescue operation, in early 1990. (Krugman, 2009)

Even if the rescue operation of the financial system begins to revive credit markets, there is a danger that savings could face further global decline. Regarding this aspect, the answer seems to be traditional Keynesian fiscal stimulus. United States tried a fiscal stimulus in early 2008; that the Bush administration touted it as a plan to “jump-start” the economy. The actual results were, however, disappointing, for two reasons. First, the stimulus was too small, accounting for only about 1 percent of GDP. Second, most of the money in the first package took the form of tax rebates, many of which were saved rather than spent. The usual objection to public spending as a form of economic stimulus is that it takes too long to get going – that by the time the boost to demand arrives, the slump is over. Also, the cost for the taxpayers would still be a concern - any government intervention in a market almost always involves socializing losses and privatizing earnings. Therefore, it extends the moral hazard - the inclination of private participants towards the markets where there are explicit or implicit warranties, to take risks that under other conditions would have avoided. Thus, further market regulation the will not lead to improvements of markets’ performance. (Greenspan, 2008)

The crisis is seen, by many economists, as an inevitable consequence of past excesses in the economy and indeed as a healing process. “Recovery”, as stated by Joseph Schumpeter, “is only sound if it does come from itself. For any revival which is merely due to artificial stimulus leaves part of the work of depression undone and adds, to an undigested remnant of maladjustments, new maladjustments of its own. "

5. Conclusions

The current economic crisis context offers positive prospects in developing a synthesis of various models regarding the aggregate market equilibrium, which could lead to a stable general equilibrium with a sustainable framework for re-launching and then developing the global economy. In other words, getting the economies out of the crisis will be achieved through concerted action by state and by market forces, as long as it is taken into consideration the fact that the market represents a system based on the principle of self-regulation, and the state should not interfere in its functioning mechanism; it must remain a "partner" in order to ensure a consistent fiscal policy and a regulatory framework for markets, enabling traders to express freely in a legitimate competition, so that the desired benefits can be obtained.

Regarding the results of the economic crisis we can state that the answer can be found within classical liberal thinking. In fact, the economic crisis caused a sharp decrease in demand in almost all markets. In this case, the principle of physics according to which *every action has a reaction*, undertaken from the Classical School, we can say that it perfectly applies in these circumstances. Thus, the power of the self-regulating market ("the invisible hand") will lead the markets to equilibrium through the readjustment and the decrease of the supply so that new market equilibrium conditions can be provided. Certainly the state has an important role in developing the strategies that would lead to the solving of the economic crisis, but eventually "the invisible hand", that determines the behavior of market trades, will have the last word.

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THE EFFECTS OF THE CURRENT CRISIS ON EMPLOYMENT

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Abstract: *We live in an era where most of the social and economic life is determined by global processes, where the cultures, the economies and the national boundaries have begun to disappear. The transcontinental spread of the crisis phenomena reveals other facets of the globalization, the less attractive ones. Thus, in a world where values and institutions by which they are expressed acquire a crucial importance, and the competition for resources and markets becomes fiercer, the human factor is decisive. That is why, our work aims to capture some aspects of the implications of the current crisis on employment in our country and provide some solutions to overcome it.*

Key words: globalization, economic crisis, financial crisis, employment, unemployment

JEL classification: E24, G01, J64

Under the circumstances of the globalization, the economic and financial developments in a country influence and are influenced by the developments in the other countries. The current crisis has once again confirmed that economies are interconnected and no region in the world can be independent in a globalized world economy.

The economic crises can be defined as situations characterized by instability, and thus, they are accompanied by volatility and uncertainty in growth. Under crisis situations (whatever form it would take) we are in a constant state of anxiety and uncertainty state, fear or panic related to the future. Our instinct for defense and preservation sometimes encourages us to behave irrationally and to emphasize this more volatility because each of us, with our cognitive capacity filters information and understands the phenomenon in his/her way and then translating it into a certain behavior related to market.

It is difficult to appreciate when a financial crisis becomes an economic crisis, or if an economic crisis generates a financial crisis or vice versa. Mainly, we always talk about an economic crisis caused by financial, political or social reasons. The financial crisis is only a form of manifestation of the economic crisis and reflects mistrust in the financial system, a significant decrease in the volume of stock transactions, a disorder of market mechanisms. The stock trading is a barometer of the economy and businesses of different sizes and from different sectors. When the market of this business (the real estate market, oil market, labor market) suffers from disorder or major corrections they will be reflected in the listed stock market business profitability and hence in the price of the financial assets (shares or bonds) that directly depend on the expectations of the investors. The panic related to the economy only increases the amplitude of these corrections and uncertainties the economy. From here to reducing the appetite for savings and investment and then to the increase of market interest is only a step.

We talk about a crisis only when its effects affect a large number of people / companies. But crises can exist in a latent and not so visible state, gradually deteriorating our existence. These are not hard to predict (their causes are quite clear) but who will make such a prediction would be hard to believe by most of us far too little concerned with the effects of global warming or with the expansion of money and more concerned how to exploit better our privileged position (see Robert Triffin`s example who predicted a few years before the fall of the Bretton Woods System).

1. Formal similarities of the current crisis with the crisis in years 1929-1933

It is not the first when time the world`s economy is facing recession. The Great Economic Crisis or The Great Depression of the years 1929-1933 was a period characterized by a dramatic decrease in the global economic activity. The first signs of crisis occurred since 1928.

The beginning of The Great Depression in the United States is usually associated with the collapse of the Stock Market on Tuesday (the so-called Black Tuesday) October 29, 1929. The economic crisis had devastating effects both in industrialized countries and in the least developed ones, whose economy

depended mostly on exports of raw materials. The world trade levels fell rapidly, as it also decreased the personal income, budget revenues and profits from business. Cities worldwide have suffered heavily from the crisis, especially those dependent on heavy industry. The construction activity was virtually stopped. The rural areas suffered from the falling of prices of agricultural goods by 40 - 60%. Mining and timber probably suffered the most dramatic decline, as demand fell sharply and re-employment of the miners and forestry workers were at the lowest level. Thus, the unemployment increased considerably, so in 1932, the year with the peak of the crisis in the developed countries there were more than 30 million unemployed people.

The world economic crisis of 1929-1933 was a crisis of overproduction. During the crisis, the industrial production of the capitalist countries fell by 37%, inseminated mass of agricultural products have not found buyers because of the significantly reducing solvent demand. Almost all the currencies of countries, including the sterling, the U.S. dollar depreciated. The international famous banking crash, the industrial and commercial bankruptcies followed one after another. The international trade decreased in a few years up to a third. Many restrictions were applied in the foreign trade, in particular to the importation of goods. The economic crisis was also accompanied by strong price reduction, which was unequal in different categories of goods and in producer groups. Such a price reduction made, except for the general negative effects on the material situation of those with relatively fixed incomes, to register strong income redistribution at the expense of the small agricultural producers and countries with a main agrarian economic structure. The crisis has greatly intensified the so-called price scissors for the price of goods produced and sold by large monopolies.

In Romania, the 1929 outbreak of the crisis occurred when our country had a mainly agrarian economy - a weak and poorly technical equipped agriculture. About 78% of the country's active population worked in agriculture, most of the agricultural producers were little and medium peasant farms, which combined in varying proportions in the system of natural economy work with the one in the production of goods. This led to the deepening of the gap between the prices of agricultural products and the ones of the industrial products. Based on this gap there was made a great new value transfer from agriculture to industrial monopolies and thus, across borders. That certain mechanism led to the loss of a great part of the national income. On the other hand, the prior large loans made at the banks by the peasants were very difficult to pay, under the conditions of very low prices for the agricultural products. The living standards fell considerably due to the increasing revenues and reducing lower the solvent demand of the masses. The crisis also led to a lower industrial production and in all industries, to significant effects and in finance, the monetary circulation and credit. The taxes increased, especially the indirect ones.

The economic crisis of 1929-1933 has some formal similarities with the one we live in today. Thus, the focus of these events is the private entities controlling The U.S. Federal Bank (FED). The imposed measures and their effects also resemble.

The interwar financial crisis was triggered by an excessive investment in stocks and in real estate markets, being taken great risks in searching a great profit. The abuse of consumer credit, stock and property speculation created an imbalance which ultimately led to a major economic crisis.

The story repeats itself 80 years later, when the U.S. market aims to throw 700 billion dollars in an attempt to artificially artificially keep prices from the over-evaluation of some securities covered by mortgages and other assets of the same type. The Federal Reserve has become active in this unstable market, according capital to entities in bankruptcy (Fannie Mae and Freddie Mac).

In February 2007, the future global crisis seemed to be more a U.S. financial problem. And this is because increasingly more customers in the United States have not paid the mortgage with high risk, which caused the first bankruptcy of the specialized banking institutions.

The present crisis resembles to its predecessor and because the interventionism is felt not only by infusion, but also by nationalization. This happened with The Northern Rock Bank (UK), AIG (USA), Fortis (Benelux), Bardford & Bingley (United Kingdom). Despite the name, FED is not a state bank, but a consortium consisting of private banks, controlled directly or through subsidiaries by representatives of financial structures such as: Rothschild Bank in Paris and London, Lazard Brothers Bank of Paris, Israel Moses Safe Bank of Italy, Wartburg Bank (Amsterdam and Hamburg), Lehman Brothers and Chase Manhattan Bank.

In August 2007, the U.S. stock markets started declining and the central banks intervened in markets with liquidity. The American financial problems continued in 2008, when the financial crisis was felt also in Europe.

The crisis has caused and continues to cause effects in different economic sectors, and the job losses are among the most acute effects of the economic system, because of the companies` lack of necessary funds to

keep the number of employees, thus they have to lay them off. The unemployment is growing, having not optimistic forecasts. The U.S. unemployment ratio reached a rate never seen before for 15 years, while countries with strong economies in Europe are facing the same problem.

As a result of the serious global economic problems, the crisis spread rapidly in all areas. Currently, more powerful companies around the world, have announced restrictions on operations, as a measure of adaptation to the market turmoil, it inevitably leads to a large number of layoffs and, in some cases to reduce wage remuneration.

On April 22, 2008 Standard & Poor's agency published an analysis according to which Romania, along with Lebanon and Turkey is among the countries most vulnerable to the effects of the U.S. mortgage crisis.

The expanding of the global financial crisis is based on 3 effects:

- the contagion effect - it refers to imbalances spread from one region to another (especially in the globalization conditions),
- the cumulative causation effect - which means that the imbalance occurred in an area overlaps the imbalances in other areas,
- the "herd" effect - the managers of speculative fund investment simultaneously leave the territories whose earnings opportunities are reduced.

The signs that showed the beginning of the financial crisis in Romania were: the Leu depreciation, the stock market volatility, the increase of the external debt, the increase of the current account on the basis of the deterioration of the commercial balance and the decrease of the foreign investment, the 'freeze' of the credit.

The global economic crisis causes massive layoffs in Romania and hits the Romanian industrial giants. The most affected areas are metallurgy, textiles, auto components, vehicles and chemistry.

The Romanian companies started from the first quarter of 2008 to rethink their cost structure and personnel.

The conditions tougher and tougher, but also the lowering of the standard of living will make the Romanians spend increasingly less money. Reducing the budget for shopping has led many companies to produce less, to reconsider any extension and to lay off an important part of the staff to minimize costs. This leads to increased unemployment, given that those working hardly sustain the insurance of the pensions and social benefits. On the other hand, it seems that some companies may enter into bankruptcy because of the higher prices and the lower credit or the cancellation of orders.

In the following period, the trend of contraction in the economic activity will increase, having a strong influence on the labor market. It is estimated that the global financial and economic effects will be felt in a lesser extent in Romania than in other countries in the region for several reasons, namely:

- Romania has one of the smallest share of exports in PIB , which means a lesser effect of contraction in foreign markets; the export of goods and services in Romania is of about 30% compared with 41% in Poland, 63% in Bulgaria, 80% in the Czech Republic and Hungary;
- Romania has one of the lowest rates of dependence on energy imports;
- Romania has an important economic sector outside the markets (agriculture, its own way of construction, etc.)

Because of the restricted activity in several areas, the unemployment rate will continue to grow, being more and more difficult to find a job or keep the current one.

The industrial production will be reduced. Construction will record the largest contraction, although the infrastructure works financed from public funds should be intensified. In agriculture it is expected an increase of 4.2% in normal weather conditions, but we must not forget that the cultivated land decreased and that it is still practice the subsistence agriculture.

The highest rates of the vacancy jobs have been recorded lately in the following areas: public administration and defense, health and social assistance, agriculture, hunting and forestry and financial intermediation.

2. The current economic crisis impact on jobs in Romania

After three years of continuous decline in unemployment, the economic crisis hit the labor market across Europe. Both the Eurozone (16 countries: Belgium, Germany, Ireland, Greece, Spain, France, Italy, Cyprus, Luxembourg, Malta, Netherlands, Austria, Portugal, Slovenia, Slovakia and Finland) and the European Union (27 countries: Zone euro plus Bulgaria, Denmark, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Sweden, United Kingdom), the number of unemployed people has increased every month, after the month with the lowest recorded level, which for most countries was in March 2008. Last year, it is

observed the same increasing trend of unemployment in most EU countries. The highest levels of unemployment are recorded in Latvia, Spain and Slovakia, and lowest levels in the Netherlands, Norway and Austria. Unemployment in Romania, according to Eurostat is of approximately 80% of the EU average (in December 2009), following the same upward trend.

Table 1: Unemployment rate (March 2009-February 2010)

	03.2009	06.2009	09.2009	12.2009	02. 2010
European Union (27 countries)	8.5%	8.9%	9.3%	9.4%	9.6%
Germany	7.4%	7.6%	7.5%	7.5%	7.5%
Norway	3.1%	3%	3.2%	3.3%	3.3%
Netherlands	3.1%	3.4%	3.7%	3.9%	4%
France	9.1%	9.5%	9.8%	10%	10.1%
Spain	17.3%	18.1%	19%	18.9%	19%
Poland	7.9%	8.1%	8.5%	8.7%	9%
Hungary	9.6%	9.9%	10.6%	10.6%	11%
Romania	6.2%	6.4%	7.2%	7.6%	…
Bulgaria	6.3%	6.5%	7.3%	8.3%	8.7%

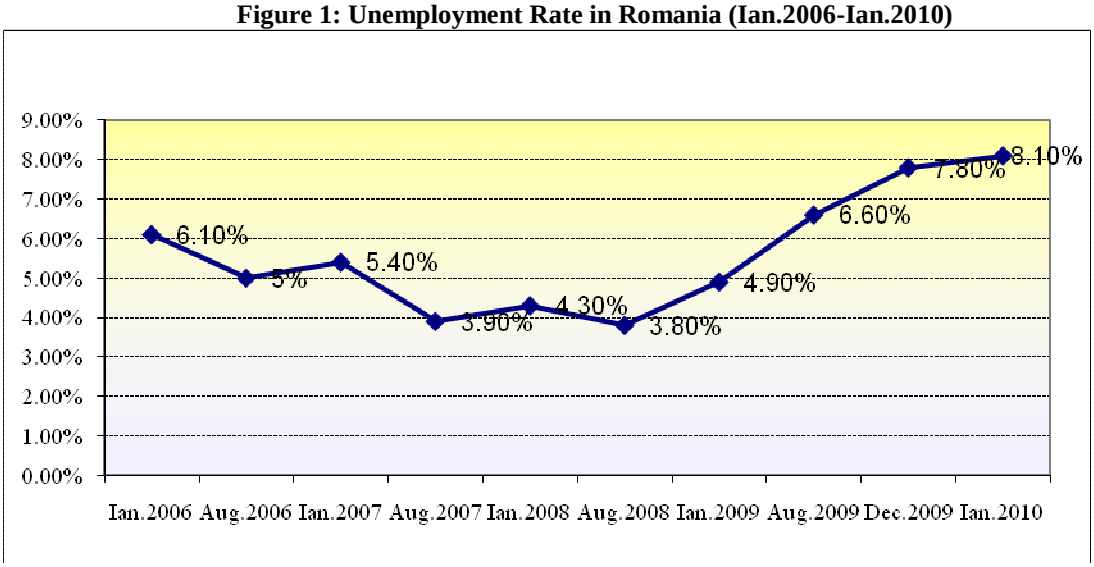
Source: http://epp.eurostat.ec.europa.eu/

Under the effect of the consequences of the international economic crisis, closely linked to the financial one, the major foreign investors in Romania have gradually restrict the work, moving to the implementation of restrictive economic measures, with direct impact on the employment situation.

According to the National Institute of Statistics, the number of employees in August 2009 was of 4537, 7 million people, with 40.5 thousand people less than in the previous month. The decreasing trend continues, thus the number of employees in January 2010 reached 4333, 8 million people. Compared to August 2008, the number of employees decreased in most areas of activity, the biggest reductions occurring in the manufacturing and construction area. Also significant reductions occurred in the fields of wholesale and retail, agriculture, mining, transport and storage, real estate.

Therefore, the issue of employment in the current conditions is a major one. As investments go down, creating new jobs is an unattainable goal, and this leads to increased unemployment. It is an extremely delicate situation, and what remains to be done by governments is the implementation of monetary, fiscal and social policies so as the economic crisis to be reduced.

Figure 1: Unemployment Rate in Romania (Ian.2006-Ian.2010)



Source: Monthly Statistical Bulletin, 2007-2010, The National Institute of Statistics, www.insse.ro

Unemployment rate registered in Romania, according to the National Institute of Statistics in January 2010 was of 8.1%, with 1.5 percentage points higher than in August 2009 and 2 percentage points higher than in January 2006. Also, the unemployment rate recorded in January. 2010 shows a significant increase, from 4.3 p.p. as to the one recorded in August 2008, when it reached the lowest rate in the recent years (3, 8%).

This trend of the unemployment in the recent years can be seen in the chart below. If in January 2006, unemployment reached 6.1% in the coming months, until August 2008, although it has fluctuated, it registered a downward trend due to economic growth, to the economic business development of that period (especially on account of the consumption and ease of access to credit). From August 2008 it is observed a large increase in unemployment, up to 8.1% in January 2010.

The job loss affects mainly the capital intensive sectors, sectors with long production cycle and the ones that offer durable products (e.g. auto industry). The most affected people by the crisis are primarily those who have fueled a desire to provide as much funding solutions to their customers: commercial banks, investment banks, investment funds and strategic investors. When they withdrew their financial support and became more aware of the conditions for granting the credit, the economy started to show signs of fatigue and adjustment. The policy of encouraging the consumption through quick and easy access of the consumer to credit and the mortgage has led to increased activity in some sectors, such as: car factories, real estate, and construction and building materials area. There was an economic growth based on consumption and financed by debt. But when the economy showed signs of change, increasing the interest, the consumer`s behavior has changed, realizing that their incomes can not support the same type of consume. Thus, there is liquidity crisis, which further accentuated the problem of those without financial resources attracted by the market unable to see the current running business operations.

3. Solutions for the crisis in Romania

The demographic and occupational issues management in our country should take into account firstly the indestructible unity between the labor market mechanisms and responsible involvement of the public power. It is very important to take into account the effects of EU enlargement on labor markets in Romania, such as the increased labor migration into the European Union, the increasing demands for skilled labor, the greater use of information technologies, the need to create a more flexible workforce, who can continue to participate in professional training etc. All these require special attention to the education system and also to the development of some employment policies aiming at full employment and efficient workforce in line with the existing trends in EU.

These policies of employment must also take into account the other macro-economic policies adopted, so as to be pursued active measures aimed at creating new jobs, especially in areas that could be developed in our country, such as agriculture, infrastructure development, environmental protection.

The active measures should fit our country`s level trends: the aging population, the developments in the dynamics of participation in the work of various socio-professional categories, migration of young specialists leaving to work abroad temporarily.

No matter the professional training stage of a person, the labor market crisis will affect it for a longer period of time. When the labor market crisis will fade and the employers will re-employ, they will be more rigorous in terms of requirements they will have on the potential employees. In addition, after the hiring will take place, the requirements will not fall and there will be required a higher educational training than the pre-crisis one**.**

Thus, it is very important the access to information, knowledge of labor market trends, opportunities to speculate, for any individual under the current crisis. Another path to success for those who wish to engage is the ability to be the best in their domain. Under the flexibility of the labor market conditions, it is important to avoid limiting at only one area. They will have to try to form a multidimensional perspective in activities where they will get involved and use the knowledge they accumulate.

The attitude is an important factor in crisis situations and contributes significantly to how they face problems. Things during the hiring process are the same as the ones so far but the essential difference is a necessary involvement and perseverance that is needed to succeed. It is essential to be considered that, especially in a crisis or post-crisis environment one must have the ability to make oneself indispensable at work in order to maintain the desired position and thus to evolve. Knowing foreign languages, the continuous training, adapting to any changes become the necessary conditions that are needed for "survival" in an increasingly competitive environment.

Romania stakes to exit from the crisis, according to the economist Daniel Dăianu are:

- the convergence which allows Romania to get closer to the development and living level in the European Union;
- the collateral damage of the crisis as small as possible;
- the institutional modernization and the quality of the political process.

Moreover, during the crisis, as appropriate, it can get to radical measures such as temporary or partial interruption of activities, staff layoffs, wage renegotiation / staff bonuses, relocation, etc.

Since companies are not interested only to overcome the crisis, but also in the sustainable recovery after its completion, it should be given a series of measures before going to layoffs such as:

- measures with preventive role that do not involve special efforts: planning at least three scenarios budgets, business plans, quarterly reviews of planning and a stricter monitoring of payments and receipts in the context of liquidity;
- the renegotiation of contract terms with the suppliers, providing funding, promotion, reporting of individual performance, in order to increase liquidity;
- measures to reduce (optimize) the stocks involving both positive aspects (availability of immediate cash payments: wages, rent locations) and negative aspects (higher prices for distributors to import goods in particular because the unit price increases for small orders); the lack of fluidity in the realization of works taking into account the fact that when retailers do not have in stock materials, they increase the waiting time and costs. Also, the optimization of stocks should be done after a clear analysis of products and services that are still required on the market.
- identifying the key points where it must be acted upon on the purchasing behavior, investment portfolio, various financial analysis of business processes. Thus, for identifying the market trends and aligning the product portfolios, companies intend to study customer behavior and take appropriate measures to promote.
- creating multidisciplinary teams to identify and implement anti crisis projects. Thus, the companies must rely on experience and team spirit to find viable solutions. For the successful implementation of strategies/decisions it appears a necessity of their understanding by all the members of the companies;
- avoiding the outsourcing of the services, the relocation of activities to reduce rents costs in order to keep a large number of jobs.
- seeking for an external support (consultancy, external assistance) to examine the feasibility of measures intended to be applied.

Paradoxically, in economic crisis situations there can also be identified some positive aspects such as organizational changes easier to implement. Correlated with lower labor demand and increasing unemployment rate, the opportunity to recruit well-trained staff arose in an easier manner and in more favorable conditions for the company. However, the providers are more flexible, having to accept lower prices and make different offers to customers under more favorable conditions. From this perspective we can say that the labor market becomes more flexible.

Possible explanations of these issues are:

- reducing the resistance to change of personnel involved as a result of decreased demand for labor and increased unemployment - increased job instability;
- the emergence of additional time due to the reduction in activity - optimal for the development of internal projects of the organization;
- carrying out some change projects is still needed in order for the company to recover.

It is a known fact that in a time of economic crisis changes are more easily accepted by the organization. The question is whether they are in the right direction for the company's long-term recovery.

In such moments, there appear critical issues such as: professional competence, formal and informal communication (both within the organizations and external relations), assuming a responsible behavior and promote values beneficial to the wider community, relevant for long-term results (against opportunistic even manipulative temptation, on short term).

Indeed, getting out of the crisis and registering a healthy growth can be achieved by boosting the public investment in infrastructure, but mostly by human capital development through education, research and innovation. In this respect, Romania should contribute to the objectives of The United Europe, and relate to upgrading infrastructure, educational system adapting to European requirements, the reinvigoration of scientific research and innovation, with emphasis on application in economic practice based on the partnership between business, universities and research institutes, fundamental restructuring of the agriculture and boost the rural development and strengthening of the administrative capacity to implement the communitarian acquis.

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RURAL DEVELOPMENT POLICY IN ROMANIA

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Abstract:
The Rural Development Policy is a priority of Romania's strategic approach. The Romanian rural reality is characterized by the underdevelopment and the disparities between the different rural areas. As an EU member state, Romania by its policy moves the focus from a solely agricultural policy to a rural development policy to increase the number of non-agricultural employees on account of unused agricultural labour. For the rural development policy, Romania has prepared the National Plan for Agriculture and Rural Development for the period 2000 - 2006 and from 2006 to 2013. For the period 2006 - 2007 the general, specific and operational objectives, contained in the National Plan for Agriculture and Rural Development are implemented through funding programs supported by the Community budget through the SAPARD program. By the National Rural Development Programme 2006 - 2013 Romania aims: to exploit the agricultural potential of 6% of the agricultural area of the enlarged EU, to diversify crops, to develop large farms competitive, to introduce organic farming, to improve infrastructure irrigation, to use available workforce in agriculture, to develop a legal framework for rural development, taking advantage of the availability of a large in emerging markets both domestically and throughout Europe, to help boost foreign direct investment agriculture as a result of Romania's EU accession.

Key words: sustainable rural development, organic farming, the operational objectives, general, specific rural areas viable, competitive farms.

JEL classification : O13,Q18,R38

The rural development policy is a policy of vital importance for the future of the Romanian village. Currently the rural development is one of the priority strategic approaches to the Romanian economy and society.

The integration of Romania into the EU agriculture, namely by accepting and implementing the "acquis communautaire" concerning the CAP (Common Agricultural Policy)and that this policy was intended to relate more to achieve economic stability as agriculture as a branch of the Romanian national economy recorded a real declining. It also aimed to obtain greater investment of European Structural Funds (EAGGF, ESF, ERDF, etc.) for Romanian farmers to obtain higher incomes. In this context based on the free movement of goods and services has ensured to the Romanian agricultural products an easier access to the EU internal single market.

Romania is the second farmer of Central and Eastern Europe because of its agricultural area of 14.8 million hectares, many EU Member States felt threatened by the invasion of Romanian products on their markets, the massive immigration of farm workers seeking better paid jobs and higher costs of the EU budget to support agriculture and rural development.

In this context it was intended and designed to move the focus from a solely agricultural policy to a rural development policy to increase non-agricultural employees on account of unused agricultural labour.

The Romanian rural reality is characterized by underdevelopment but also by the massive inequalities between the large villages and the small villages.

The large villages, the village centres near a town or a settlement in a relatively developed European road are somewhat developed. The outskirts communes located in small villages are isolated, aging and relatively poor. Since the last census data show that only 42% of Romanian villages are equipped with cold water supply facilities and only 0.6% of them have hot water installations connected to the public system and the sanitation facilities.

As far as the youth access to some form of training is concerned, there are significant differences between the urban and rural areas. The low average number of rural schools and sometimes their distant location to the domicile of the children, combined with limited financial resources of parents make the rural population share school, attending an educational institution to fall sharply. Thus, only 48.4% of the population aged 15-19 years and 7.7% of the population aged 20-24 years from the rural areas attend a form of education.

The socio-economic conditions farmers are facing and their land fragmentation are the main causes of abandonment of the arable land. This drop resulted in damage to biodiversity and semi-natural habitat. It was estimated that each year between 5% and 10% of agricultural land is abandoned, fertile agricultural land even abandoned due to an aging population, the lack of agricultural equipment and the small income made by farmers.

The abandonment affects the local ecosystems, the rural landscapes and contributes to the degradation of the agricultural land. According to recent statistics, farming is practiced on only 0.20% of the country.

In this context, the rural development became a priority of the strategic approach of Romania. This priority is based on the National Plan for Agriculture and Rural Development that has been implemented in our country through the SAPARD program and the SAPARD Agency.

SAPARD funding program, established under Council Regulation (EC). 1269/99 in 1999 aims to support sustainable rural development in all candidate countries and solve problems affecting the long-term adjustment of the agricultural sector and rural areas and support the implementation of the "acquis communautaire" in the field of common agricultural policy.

In turn, in 2005 Romania has the necessary legislative framework to support the development of farms and agriculture.

The self-employed farmers and the citizens of the EU member states or the stateless persons domiciled in a Member State or who established their residence in Romania or the stateless persons residing in Romania are acquiring ownership of agricultural land, forests and forest land under the same conditions applicable to the Romanian citizens, even after Romania joined the European Union, in 1st January 2007. The condition imposed on the foreign farmers by Romanian special laws is not to change the destination of the agricultural land, forests and forest land for a period of 5 years after Romania's EU accession.

Also, Romanian laws also stipulates that the Member States and the stateless citizens residing in an EU Member State and a legal persons constituted under the laws of a Member State may acquire ownership of agricultural land, forests and land forest for a period of 7 years after Romania's EU accession. These special laws intended to implement the free movement of goods and services in Romania as a EU member state but also support agriculture and rural development.

The National Plan for Agriculture and Rural Development in Romania 2000 - 2006 was the bases for the implementation of SAPARD funding program. This plan has provided a total of 2 billion public and private expenditure of 1.113 million euros which represented the contribution of the European Union.

The absorption capacity under this program was low ,until late 2006 when there was a higher absorption rate.

Currently, there is the National Rural Development Programme 2007 - 2013 which requires the use the potential of Romanian agriculture, the introduction of the organic agriculture in Romania, the use of the rural labour, the availability of a large growing market both domestically and throughout Europe, the accelerated restructuring in sectors of milk, meat, eggs, etc. and the agricultural modernization.

The National Plan for Agriculture and Rural Development is structured around key objectives, priorities and targets. Of this plan, there results clear and specific objectives of sustainable rural development, particularly for the mountain areas. The specific and the operational objectives for rural development that Romania assumed as a EU member are: conservation of a viable rural areas, the protection of the rural areas and the encouraging of a diversity of services provided by the multifunctional agriculture, the more competitive farms; the rural development policy should be applied in the rural areas, the rural development policies are designed to meet the needs of the whole rural society, the rural development policy should be promoted through partnership between public organizations, deprivation and civil society in accordance with the principles of subsidiarily.

Preservation of a viable rural and rural world is in the interest of society as a whole but this requires large investments. Investment in rural economic recovery is vital to increase the attractiveness of these areas through sustainable development and generate new employment opportunities, especially for young females. Of particular importance for the Romanian society is to protect the countryside and encourage the diversity of services provided by the multifunctional agriculture.

An appropriate management of farms and forests will serve the national heritage conservation and the cultural diversity in Europe. Due to the diversity of agricultural potential of different rural areas there should be more competitive farms. It will be important for the new Member States due to the restructuring process that new the Member States are going through in the agricultural sector. In these countries the

agricultural sector sustainable growth is achieved through diversification, innovation and the development of high added value products.

Rural development policies are designed to meet the needs of the rural society as a whole and contribute to social cohesion in rural areas. Cohesion of rural communities will help promote a new concept on sustainable development in the areas where they live.

The rural development policy should be noted that organizations should be promoted through partnership between public, private and civil society in accordance with the principles of subsidiarily. There is also need of a continuous dialogue between partners at the rural level and consistency in implementation, monitoring and evaluation.

To achieve the said objectives, significant financial resources are mobilized both at EU and each Member State.

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HUMAN CAPITAL. ANY INVESTMENT IN EDUCATION LEADS TO ECONOMIC GROWTH?

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Abstract: *This article is based on the idea that, although the human capital plays a very important role for the economic development, not any accumulation of this factor generates economic growth. Relying on qualitative analysis, we attempt to demonstrate that, in the case of Romania, the issue of financing the education should be thought in close relationship between the stage of development and the workforce level. We underline that, no matter how much the Romanian tertiary education will be financed, the expected economic effects will not be achieved as long as on primary and secondary level there is no qualitative revolution.*

Key words: human capital, education, public policies

JEL classification: H52, I20, J24

1. Introduction

The theories of human capital as a distinct perspective to address the phenomenon of economic growth have opened new horizons for understanding the mechanisms through which countries that have put a great accent on education and health were able to pass faster the intermediate stages of development. There are many controversies regarding the relationship between education and economic growth, especially in determining the cause and the effect. There are two distinct and apparently conflicting lines that are trying to solve this dilemma.

The first line results from the classical theory, in which all the traditional factors of production combined - labour, land and capital – are generating an output that might increase from one period to another, if the inputs are used in an increasing scale. The investments in capital were very important in creating new jobs and the increase of productivity or of the population could solve the need for additional labour force. The result, as described by the father of the economic science, Adam Smith, would consist in an increasingly higher wealth, which underpins a higher material welfare.

"The amount of work not only increases in every country when the capital that uses it increases, but, due to this growth, the same amount of work produces a greater quantity of goods." (Smith, 1992, 184)

Subsequently, Smith demonstrates that, through the distribution of the national product, the population would have more material resources, which are primarily allocated to satisfy the consuming needs, for health and education. Therefore, education seems to be a consequence of the economic growth process, being possible with the help of some increasing incomes. The idea was taken from a number of critics of human capital theory and contextualized in a few instances when countries that have substantially invested in education did not obtain higher rates of economic growth but rather have stagnated or regressed. For example, William Easterly, an important critic of AID politics, said in a recent study that, at least for poor countries, the recipe of education as growth factor does not work. He noticed that most of the states that have consistently invested in the educational system between 1960 and 2000 have experienced a decrease in the economic growth rate, suggesting that the effect would have been different if the resources had been diverted to infrastructure. A similar example would be the communist countries, including Romania, which, although they allocated considerable amounts to education and health, have widened the gap towards the developed states.

We do believe that a nuanced analysis would have been here absolutely necessary, the selected correlations being uninspired. In these cases, the determinants of the precarious evolutions were completely different, in the area of the institutions' instability, of not participating at the international flows and of the absence of market economies, able to exploit and reward the benefits of a higher education. From the individuals' point of view, the need to receive education is closely linked with the higher rewards that can be obtained by taking advantages of the acquired knowledge. Or, in the poor countries and in the communist ones, these opportunities did not exist. A prerequisite would have been the free movement of the factors of production, in order to identify the best allocation, and also the existence of some productive capacities that enable their use. The individuals are pride and, as Nietzsche underlined (Nietzsche, 1999), they are eager for being acknowledged by the others, acknowledgement that would bring them power. Therefore, they can not be treated equally. The ambition, the desire for advancement, the avarice, all these are familiar to them, as Keynes remarked. Therefore, they try to identify the best solutions to achieve their goals. And if the environment in which they act is conceived in such a way that rewards their value, then the individual resources will be directed towards the accumulation of the value-generator factors. We do believe that here education plays also an important role. Instead, in the case of the countries mentioned above, the approaches differ substantially, being inspired by Marx, who, wanting a standardization, said that *"in order to simplify the things, we consider ... any kind of work a simple labour force"* (Marx, 1960, 84). Therefore, no matter what is the level of education, the jobs are equal, measured with the help of the working time and, consequently, the rewards are equal. And then where could be identified the stimulus for the accumulation of higher knowledge, for the disutility of some additional years of study? Here it is a part of the answer that could receive Easterly, in order to explain the failure of the education policies in the poor countries (mostly with Marxist influences, in the analyzed period) and in the socialist states.

2. The Relationship between the Investments in Education and the Economic Growth

Considering Smith analysis, we must say that not only the opponents of the determination relationship between human capital and economic growth find arguments in *Wealth of Nations*. Due to the attempts specific to a beginner, we want to emphasize Smith's extraordinary intuitions regarding the role of formal and informal education in increasing the productivity. When he said that *"an untrained worker for this occupation who doesn't know the usage of the machinery could make, with all his diligence, only one needle per day and definitely he could not make twenty"* (Smith, 1992, 7), he was referring, for sure, to that concept that later the economists of human capital will call vocational education. And, in order to fully explain us his fantastical insights, four pages later the author states: *"in the development of the society, the thinking or the intellectual speculation becomes the main or the sole occupation and profession for a certain category of citizens and ... it increases the wisdom and saves time, just as any other industry"* (Smith, 1992, 11). Here it is a clear recognition of the role of tertiary education in inducing the growth and development, from positions at least equal to the traditional factors of production. It is a tremendous anticipation of the conclusions of Romer's model, in which the technology created by the trained ones becomes an endogenous factor in the act of production, as well as the labour or the capital.

Speaking of classics and of their source of inspiration for the critics of human capital theory, we can not mention Malthus, with his famous *Essay on the Principle of Population*. From a strictly quantitative view, from a demographic perspective, the evolution of the population, he legitimized as implacable the laws of nature, considering that the destiny of the humankind is sealed by a much more rapid evolution of the population than the expansion of the surviving resources. Although there were not fewer, the Malthus' adepts had to face, in their turn, some extremely harsh criticisms that question the accuracy of Malthus' results. Although he was right regarding the increase of the population during his time, the reverend Thomas Malthus was not as inspired as his teacher, A. Smith, who took into account the effect of the education on changing the way of acting both in society and in the production act. He did not realized, as Condorcet, a contemporary of his, did that fertility rates are influenced by *"the progress of the rationality"* and not by the natural laws, that the

individuals, as they become more educated and with a better material situation, are stopping their reproductive instincts. The explanation lies, as Gary Becker showed us more than a century later, in the rational calculation of the production function of a family and in the opportunity costs.

We were previously talking about two conflicting ways of approaching the relationship between education and human capital, on one hand, and the economic growth, on the other hand. The second point of view, according to which the economic growth is largely influenced by the human capital accumulation (which is achieved by increasing the level of education and the stock of health), is the one that we also agree with and it comes from the direction opened by Gary Becker, Paul Romer, Lucas, Krueger and others. The work of these researchers has been facilitated by a study of Robert Solow and Trevor Swan who, analyzing the emphasized growth of the labour productivity from the beginning of the twentieth century, have found out that, not considering the technological progress, they can not find out the explanation of four-fifths of it. Therefore, they deduced that the technological progress substantially influences the increase of the output per worker. Following on the idea, J. Mincer, P. Romer, G. Becker, Th. Schultz, Krueger, Phelps and others have focused on the role of technological progress and on the factors that determine it, noticing, unlike Solow, that it is an endogenous factor in the production act and that depends very much on the ability of learning, adaptation and of the implementation of knowledge acquired by workers. In an article written in 1961, Th. Schultz argued that the individuals can invest in their own education in the same way that companies invest in capital in order to generate additional earnings in the future (Schultz, 1961). These arguments, added to the concept of human capital developed by Arthur Cecil Pigou in 1928 and, then, undertaken by Mincer in 1958 and G. Becker in 1964 from a neoclassical perspective, were about to raise a new dispute among the economists: *does the economic growth cause the increase of the stock of human capital (and therefore of education) or vice versa?*

The answer is not simple and can not be unilateral. Even Becker, who is considered to be the most known and authoritarian personality in this field, believes that there is a variety of ways to respond to it. What it can not be challenged, he says, is that there is a clear causal link between the quantity and the quality of education received by an individual and his labour productivity, on one hand, and between the educational policies and the growth economic rate, on the other hand. As Becker considered, the amount of the researches and of the arguments came from both directions. Trying to make peace, an annual study published by OCDE in 2005 - *Education at a glance* - stated that "*in practice, the causal relationship operates in both directions*". Not even the authors of the Human Capital theories argue this thing, existing, in a logical dependency, a relationship of material determination of the volume and quality of education, according to the available resources.

Trying to direct our discussion towards the proposed way, we have to mention that, in terms of endogenous growth theories, there are two parallel lines of analysis that approach the link between education and economic growth. According to Aghion et Howitt (Aghion, Howitt 1998), the first direction is based on the contributions of Nelson and Phelps (1966) and the subsequent researches from a Schumpeterian perspective. The economic growth is based on human capital stock that, in its turn, is influencing the ability of innovation. The countries that are able to innovate are surpassing more quickly the development gaps, because of the competitive advantages which they create. It is the case of the Asian tigers that have succeeded to become, in the '80s and '90s, from technology importers, exporters, under the circumstances in which they paid a special attention to financing the education, especially the technical vocational one, starting with the '70s. Nowadays, China is passing through the same stages, because, starting with the '80s, it has changed the view and the attitude towards education and its role in inducing the economic growth rates.

The second direction is opened by Lucas' research that, building on the ideas of Gary Becker, argues that the economic growth process is determined by the human capital accumulation and, therefore, the differences between the growth rates occur due to the different rates in which countries are accumulating the human capital stock. As in the case of the technical capital, the human capital stock depends not only on the present investment but also by the past ones. Therefore, Lucas points out that there are cases when the great investments in education do not

offer the desired effect, just because an insufficient resource allocation in the past discourages the acquisition of new skills. We may say that they also generate the emergence of appearance of some severe discontinuities in the quality of the trainers, which will be reflected in the educational output, both qualitatively and quantitatively. It is also the case of Romania, where the lack of adequate funding of education in the last 20 years determined a negative selection of trainers, which critically affected the quality of education, especially at the secondary level. The decrease in the quality of the graduates has generated difficulties in finding a job, educational certificates being nothing else than a necessary but not sufficient condition for acquiring an appropriate level of knowledge and abilities. But it is not only the case of Romania. The United States are facing the same problem in the primary and secondary public education. Poor funding of these educational sectors during 1970-1980 and the low salaries of the teachers have hindered the attraction or the retention in the system of the best prepared persons. Thus, the quality of the teaching act has greatly declined, creating the discontinuity that Lucas talked about. However, if in the case of the U.S.A. there is a solid alternative through the existence of a high quality private educational system, in Romania this option does not exist. Therefore, the desire to accumulate a larger number of school years is decreasing. According to the official statistics (INSS, 2005), we find out that only 53.2% of the students that are enrolled into the primary and secondary classes will be tempted to follow a superior level of education. If we analyze how many of the young people that have 22 years old have graduated the high school, we discover an average of 66,5%, smaller than the European average (77,3%) with 11 percentage. In 2006, from an enrolled population of 4,34 millions, there were only 185255 high school graduates, plus 150187 graduates of the vocational schools, which means a rate of 7,71%, well below the European average that was exceeding 10%. Not even in the case of the continuous training we can say that there is a comparable situation with what we would like to be, only 1,6% of the Romanian adults following professional training courses, while the EU target is 12,5% (INSSE, 2005). If we try to place Romania in the global context, according to a more complex index, such as the combined rate of enrolment, in 2007 we were on the 68th position, close to some countries like South Africa or Egypt.

Although we do believe that this direction of analysis is important to identify the causes that determine the lack of performance of the Romanian educational system's graduates, we will focus our attention on other issues. It is currently debated the need for a reform in the Romanian educational process. We do subscribe to such a trend, being aware of the fact that, if it continues in this way, the highly skilled labour supply will drastically narrow, reducing the future chances of economic growth. There is more and more argued the importance of education's effects on innovation. We saw before that countless researchers have subscribed to the analysis initiated by Nelson and Phelps, demonstrating how defining for a country the innovation capacity is and what extraordinary benefits are brought by innovators to the economic act. However, we believe that we should think from the economists' perspective, in terms of opportunity costs, and not to be captured by some beautiful desires and ambitions, which are unlikely to be achieved.

We want to emphasize a very important aspect that should be considered in determining the educational policies: **not any kind of human capital accumulation, by increasing the level and the quality of education, generates economic growth.** We are not the first to say this thing; there are a large number of quantitative studies that demonstrate the hypothesis. In an article published in 1998, R. Judson noticed that the way in which the resources are allocated between the primary, secondary and tertiary education is even more important, for the process of economic growth, than the size of these resources (Judson, 1998). We have mentioned in the introduction some countries that, despite their great efforts to improve the level of education, did not achieved the desired effect in terms of growth rate. It is a warning signal that has to be analyzed before taking decisions of restructuring the Romanian educational system.

Broadly, we can say that the recent history provides us two alternative examples. The first one is that of the South-East Asia which, like Germany and USA in the nineteenth century, has developed a system of mass education for primary and secondary levels. Singapore and South Korea, for example, have initiated in the '70s intensive literacy programs. In two studies conducted

by Lee and Lall (2001), they stated that, before paying attention to the secondary and tertiary education, the two countries focused on the primary level, until the literacy rate reached 100%, thus creating a strong basis of selection for the higher levels. Subsequently, after reaching a higher level of development and following some strong industrialization steps, the two states have shifted the educational resources to the tertiary level.

The second example, which comes from the opposite direction, is that of India. Neglecting the primary and secondary level, this country has selectively invested in strong universities that offer the academic and research environment leading experts. Studying the problem, Self and Grabowschi (2004) found that, unlike South-East Asia, India's literacy rate is much lower, around 60%. However, what is the secret of success of India in the '90s? The answer could be found in the numerous populations that can generate an intense competition for the access towards the higher levels of education. The number of the competitors for a place in universities often surpasses 200, especially in high technology and computer fields. Initially, India did not have the ability to use this highly skilled workforce, many of the graduates subsequently choosing to emigrate, especially towards the U.S.A. The lucky chance of India, from this point of view, was, as Thomas Friedman said in *The World is Flat*, the dotcom crisis, which has made accessible the information technology for the developing countries and which determined a large number of specialists return into their origin countries, especially in India, where they were encouraged to develop their own business. Therefore, a certain conjuncture has created an opportunity for India. We can even speak about luck. Or, the economic development strategies can not be left in the care of the Destiny.

Sianesi and Van Reenen (2000) noticed that, usually, the countries who inefficiently directed their educational resources would not benefit from positive effects; on the contrary. However, if the developing countries adopt a strategy for strengthening the educational base, then they can get an average of 2% increase in the GDP for each additional percentage of the population brought in the educational process. The more interesting aspect, from what they have found, is that this average is composed from very different results on levels of education. Thus, an increase of 1% in the secondary school enrolments generates an increase of 2,5-3% in the GDP per capita. It should be mentioned, in order to understand how useful it is to properly direct the resources to various levels of education, that in the case of the OECD countries, most of them being developed or emergent, the effect is much reduced, up to 1,5% increase in the GDP/capita.

In other words**, the developing countries will obtain a substantially higher advantage if they direct their attention towards the primary and secondary educational levels,** where the basic, general skills are acquired. Why does this happen? There are at least **two possible answers**. **First of all**, the less developed countries have a low rate of incorporating the technology in the production act and, consequently, they will have to rely on technology imitation. The technologies they use are, usually, from the second generation and the engine sectors of the economy belong to the technological environment. From the experience of the nowadays developed countries there are a lot of things to be learned. Economies such as those of South Korea, Singapore had a spectacular evolution during the '70s and the '80s through the technological imitation, through introduction in the production act of some less revolutionary products in terms of technology, but that is why cheaper and more competitive in terms of price. Japan did the same thing, before and between the two world wars, taking Western technology from the metallurgical, naval or mechanical engineering field, succeeding in this way to develop these branches with minimal effort and with a medium quality of the workers. Later, it started the so-called spill-over effect, when knowledge became a priority, as the first step towards innovation. Moreover, the technologies from the second generation, although they are not the best, have a great advantage: the ratio price/quality is very good. They can be bought quickly and cheaply from the developed countries, being known that they invest more in innovation and have a more rapid rate of the technology's replacement. In the '70s, Romania took also advantages of this phenomenon, when the industrialized countries have switched to a structural change of the industries, getting rid of the energy-consuming branches, such as the metallurgical one, the chemical one or the machine-equipment building one. This is how there were purchased the technologies for Dacia Piteşti, for the metallurgical factories in Galați and Reșița, and for many chemical plants. There were used domestic workers that were trained by foreign specialists in order to do the strictly necessary, imitative, operations which could be very quickly assimilated. Later, when the simple imitation was not enough, there

have been developed new specializations in the technical universities, the 'production' of the specialists becoming a priority. Unfortunately for Romania, the lack of investments in capital and in research has stopped a process that seemed to be promising for the country's economic and technological development.

In fact, an argument for the technological imitation can be also sought in terms of production function. The neoclassical theory teaches us that any production process initially goes through increasing outturn phase, when low inputs generate multiplied outputs. If we correlate this statement with the budgetary restriction, usually very urgent for the less developed countries, we get a solution that, although it does not offer the best performance on long-term, may be a good start for the economic growth process. The budgetary constraint would require a cost rationalization. In terms of our analysis, this also has an impact on the training costs. Therefore, optimization is required, by using some less expensive inputs for achieving the highest possible output. To be more clear, in the neoclassical production function there are two alternatives for determining the optimum. In the case of those that have enough resources and are able to exploit any quantity of output, as it is the case of the developed countries with large markets and a good integration in the world trade, the restriction of minimizing the budget disappears and it is required the condition of output maximization. Therefore, there will be used the best inputs, with the highest productivity, but which are not cheap. However, the problem of the final cost per unit of product will be largely solved by obtaining some scale economies. But, in the case of the countries that do not have abundant resources, minimizing the costs becomes a priority issue. Who would not want to use the best physical capital, meaning the best machineries and equipments, with very high productivities? But these, including a great amount of innovation, are also very expensive. It is the same thing in the case of the workers. Those who are highly educated are more expensive, thanks to the investments made in their education. Therefore, for example, a medium-technology vehicle can be made in robotic warehouses, supervised by highly qualified engineers, as it happens inside the Renault's factory - Douai, from France, but also manually, with average trained workers as it happens into the Renault's plant – Dacia, from Pitești. The difference lies in the volume of the investments and, of course, in the innovation ability. The French engineers, knowing very well the whole production process, will be able to innovate and improve the product. Dacia's workers, who are trained to do only one or two routine operations, cannot have this ability. But, as we learn from the very first lesson of Economics, any choice is marked by the opportunity trade-off.

Secondly, as it results from Nelson and Phelps (1966) researches, the countries that are located furthest from the technological frontier will be able to move faster than the developed countries. This, of course, will happen with the help of the technology. Vandenbussche, Aghion and Meghir (2004) mentioned, in a recent study, that technological progress is the result of combining the innovation with the imitation. Indeed, it is true and linking to what Nelson and Phelps argued, we can say that the proportions in which these terms are combining vary, depending on the development stage. For lower stages, more imitation, thanks to lower costs, and for advanced stages greater innovation due to higher productivity and to the increase of the competitiveness. A developing country can achieve high growth rates even if it does not create technology, the absorption capacity of the internal markets surpassing this inconvenient. The increasing need for goods and services, large investments' opportunities, permanently creating new jobs, reduced costs, all these are enough enablers for an economy that is still developing, in order to be enough levers for economic growth. Therefore, why would a developing country try to invest in training highly skilled specialists, if it cannot use them and, moreover, it should sacrifice other investment directions, such as those from infrastructure? In order to see how expensive it is the tertiary education, we are quoting an OECD study that shows that, on average, the spending for a student in a tertiary level, per year, is about 12208 $, while for those in the secondary education it is spent only 6939 $ (OECD, 2004). The argument that it is also provided by the two authors cited above, Nelson and Phelps, according to which the education fosters the adoption of new technologies by increasing the innovation ability, is mostly valid, in our opinion, for the closed economies. Why? We have to remember that we live in an open economy in which the mobility of the production factors is very high. Therefore, there is the danger that the highly trained individuals migrate in

search of a better reward of their contribution to the productive act. Moreover, his thing happened in India, as well as in all the other developing countries. For example, more than half of the Indian doctors in Science are working abroad. During the last 20 years, in Romania the rate of emigration among those with higher education was also very high. It is great for the productivity that workers possess superior skills and knowledge. They can be valued if they are combined with higher and higher investments in capital, in order to be an optimum knowledge / technology ratio. Otherwise, only with the help of knowledge, it is as if you put under test the best race pilot on a 20 years old and underperforming car, with a normal driver, but with a latest generation BMW. Does anyone think that the pilot will win? We do not! All his skills could not be fully used as long as he does not have all the technology he needs. If the pilot is not pleased with the results and implicitly with the rewards, and seeks another sponsor to give him the proper car, the highly qualified worker will start looking for a company that offers him the opportunity to sell what he has, meaning his abilities, skills and knowledge, or in a word the human capital, on a fair price. But this kind of employer will not be found in a low or medium developed country, which has no capacity of investing in appropriate superior technology, the individuals will migrate towards the more developed economies. If we were to remind our comparative example, this is why an ordinary company, with ordinary machinery, does not require Formula 1 pilots. They would be far too expensive compared with the results that they could obtain with the cars they have. Their training, keeping them in fit, their reward, would be extremely expensive efforts considering the fact that they could not return anything of these costs through competitions and awards. The same thing happens with the specialists. Why would a country that can not afford to develop the aerospace industry invest in the creation of academic specializations in this area? Why does it have to be spent money for research in nano-physics, as long as the research's results can not be used at industrial level? In order not to be misunderstood, we want to underline that there are many advantages of the research, of the investments in training the specialists. Actually, we have highlighted this aspect in our previous studies. But, in the context of extremely limited resources, it must be done an optimization calculation between inputs and outputs, between costs and results. And, under the circumstances that the financing possibilities are reduced, as in the case of the Romanian economy, then the shortest and the best way to make the educational process be efficient, from the perspective of the economic effects, would be to direct the attention and also the funding especially to the adequate level for the current stage of development, for the requirements of the national economy and for reaching up the targets on short and medium term.

3. Conclusions

In conclusion, it is less expensive and more economically advantageous for a developing country to imitate the technology, this process bringing two major benefits: one from the point of view of the time, being limited the periods of technological accumulation, rather long and relatively unpredictable in terms of the results, enabling in this way a faster pass through some development stages. And the second advantage refers to the costs, the imitation being much cheaper than the innovation itself, because it does not require major investments in research centres and in specialists. In terms of the specialists, it is known that, for imitation, the need of knowledge and skills is much lower and so much cheaper.

The decisional process regarding the best way of restructuring the educational system is difficult. However, it should be thought logically and pragmatically. What is the current state of development? It is that of a developing country. What is the distance to the stage of a developed country? On an average growth rate of 4-5%, we would need about 15-20 years. It is a period of time equal to the period in which the individuals who now accede to the primary education will reach their professional maturity, as medium or highly trained professionals. All the others, and especially those who are now in secondary phases of education, will not find a suitable use in the production act in the next 10 years, as long as they accede to tertiary education, as we demonstrated above. What is to be done? The solutions would converge towards discouraging the access to the tertiary level and to raising the quality of the secondary one. To all who will say that this will cause

a gap in the continuity of the educational process, we are telling them this is not going to happen. Reducing the public funding for the tertiary level would lead to a more rigorous selection at the level of the tertiary education that could improve the quality of the graduates, even if they will be less. Considering the fact that among them there will be future trainers, we can say that although the selection base will quantitatively decrease, it will definitely increase in terms of value. Thus, it will be possible that the current level of knowledge and skills to be transmitted, in the future, through the trainers. Of course, it is necessary to keep them into the system, fact that can be done only through a reward corresponding to their value. This thing can occur if their number would not be very large. Therefore, the problem of the quality and of the continuity being resolved, all the attention can be directed towards the lower levels. The student funding should be increased, on one side from the resources redirected from the higher education, and secondly by restructuring the secondary education. Probably the best thing would be to introduce the competition between the schools in a system similar to that described by the followers of the Chicago school – that based on vouchers. In this way, it would take place a selection in which the participants would be the State, through its authorized institutions, and also the children and the parents who will have to take a rational decision for the allocation of the available resources in a competitive framework. The responsibility of all the involved parts would undoubtedly generate an increase in the quality of curricula, an adaptation to the requirements of the economy and also a more drastic selection of trainers, whether individuals or educational institutions, regardless of the organizational form - public or private.

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CIVILIZATIONS FROM «CLASHES» TO EVOLUTION

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Abstract: *It has been almost 14 years since then, in 1996 a book literally shocked the world of economics, but especially that of sociology, political science, history, the philosophy of the time. The volume was called "The Clash of Civilizations and the Remaking of World Order" by Samuel Hungtington. Until his death, on 24 December 2008 but also after that moment, he will remain the author of one book.*

Key words: globalization, Huntington, clash, evolution

JEL classification: F01

It has been almost 14 years since then, in 1996 a book literally shocked the world of economics, but especially that of sociology, political science, history, the philosophy of the time. The volume was called "The Clash of Civilizations and the Remaking of World Order" (in short "The Clash of Civilizations"...), New York, Simon and Schuster, a few months or a year later numerous translations of the book appearing, among which the French translation „Le choc des civilisations et la refondation de l'ordre mondial", but also one or even several Romanian translations. The author, Samuel Huntington. He was born in New York, in April 1927, completed part of his studies at the University of Yale, at less than 25 he was already part of the teaching staff of the famous American university of Harvard, and at 30 years old his first book will appear, which will make waves and trigger heated debates: "The Soldier and the State". Oriented towards democracies and international problems, he will enter politics, in 1968 becoming a diplomatic advisor for the democrat presidential candidate Hubert H.Humphrey. Ten years later, he will be a member of the National Council of Security under Jim Carter's presidency. He will not give up the academic environment, being one of the founders of the famous magazine Foreign Policy, holding conferences and publishing many papers, articles, etc.

Until his death, on 24 December 2008 but also after that moment, he will remain the author of one book. The one quoted above « The clash of civilizations ». Beyond the waves and reverberations triggered by this volume, not few researchers are claiming that the ideas put forth in this volume have fueled mainly the neoconservatives' theses, of similar political orientations and that the errors they contained are becoming increasingly obvious. And opinions to contradict such statements are- it seems- fewer and fewer and increasingly diluted ...

So, the shock, the clash of civilizations. In his work, S. Huntington shows that in the post- cold war world conflicts will no longer place nations and ideologies into opposition, but cultural and religious groups. « A thesis taken over by the American neoconservatives and by all those who tried to account for the incompatibility existing between Western countries and the rest of the world », this is how Professor Bruno Cabanes, from the Yale University summarized the main message and impact of the book. According to Huntington, the world is divided into cultural spheres which he calls civilizations, the clash of which is at the basis of present and future conflicts. S.H. distinguishes 8 such types of civilizations, namely the West, the Latin-American civilizations, Islamism, Orthodoxism (around Russia), Hinduism, Nipponism, the Chinese civilization, and finally, the African one. This is the assumed area of clashes, of present and possibly future conflicts. However, his book puts forth something else, something which contradicts many of his claims before and after that. Namely « the Western belief (conviction, n.n.) in the universal vocation of its culture presents three major flaws : it is false, it is immoral, it is dangerous. ». In other words, while remaining in the American zone, Huntington points out that the United States have erred and are still erring when they want to force their values and culture upon the others. Tensions may escalate resulting into a serious inter-civilization conflict. Which, as Bruno Cananes was writing « has not been in line with George Bush's and Dick Cheeney's policy in Afganistan and Irak. ». Let us now watch Obama, of a different extraction, a genuine intellectual, who according to many is rather promising in his actions.

Actually, we would like to add to what Huntington wrote and the Yale professor interpreted, with more wisdom the United States do not even need or would not even need armed conflicts in order to impose their interests, values and culture. With more wisdom they can do this by seduction, and history, more exactly, the world's economic history irrefutably proves the effectiveness of such « technologies ». Economic « seduction » and not only, obviously peaceful, and not armed constriction. It is on such a basis that the world has been going forward, a perfectly founded claim even if we think about what the Western culture- not necessarily and exclusively the American one- has represented for other civilizations in S.H.'s acceptation.

Although sometimes interpreted as such, Huntington has not represented and is not representing the « zealot » of American expansion by force, the « zealot » as such of- what he sometimes calls- American imperialism. The intellectual world has also been puzzled by the way in which S.H. defined civilizations, thus largely ignoring cultural exchanges, cultural interferences and the « creoleness » as such of civilizations. The American politologist also overrated religious confrontations at the expense of national confrontations, rather frequent and bloody too, and being intertwined with the religious ones. It is true, the shock of « 11 September 2001 » seemed to confirm most of Huntington's ideas, but one should not stop here in evaluating the present and the future, as many other leads exist in the area on co-work and collaboration. Yet, Bruno Cabanes writes that Huntington's texts are most dangerously relevant for the internal policy of some large states. Because these defend a certain turning of the Western civilization towards itself and an extremely rigorous immigration policy. Which can generate obstacles not so much as regards the general desirable evolution of the world, but against it.

What is obviously remarkable is the way the perspective of "shock", of "clashes" is examined and the way in which Huntington sets the elements of the equation. However, the vision regarding the "clash" of civilizations mainly from the perspective of religious differences and divergences, is rather limited. How about the "rich-poor clash" within states and outside them? How about the "clashes" between philosophies, evaluation criteria and values within states and outside them? Huntington is actually bringing to our attention not so much an exclusive problem as a working method that we can only appreciate.

... The true "shock", the true "clashes" in today's world are fundamentally those with ignorance, as another American, Edward Said, a critic of Huntington, too, shows in one of its studies "The clash with ignorance". And one cannot fail to agree with him. Ignorance, more than anything else, seems to be the most perfidious evil undermining the foundation of a world that, anyway, should become better ...

OPENING TOWARDS EUROPE: REGIONAL DEVELOPMENT BETWEEN STRATEGIC APPROACH AND PRIORITY POLICY

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Abstract: *As the European Union manifests itself as a factor of progress and stability on the global stage, given the more and more acute interdependence between states, the social and economic gap between the 27 member countries and the 271 regions is considerable*[1]*. Regional policy aims fundamentally at strengthening the economic, social and territorial cohesion by reducing the disparities between the levels of development of the European Union regions and countries, which would implicitly lead to improving the overall economic results. Convergence, competitiveness and territorial cooperation are the key concepts that define and outline the strategic priorities of the European Union over the next period of time.*

Keywords: EU, regional development, cohesion policy

JEL classification: R

A doctrinal and missionary programme which requires immediate and joint action on part of all the actors involved, funding and continuous investments in infrastructure, the development of an information society, the acceleration of the transfer of know-how and stimulation of cross-border cooperation. A more or less visible orientation of the European Community started with the Rome Treaty (1957/8) which signaled in its Preamble the necessity on part of the signatories to strengthen "the unity of their economies" and to ensure "their harmonious development by reducing the differences between the various regions and the backwardness of the less favoured regions" (see the Treaty establishing the European Economic Community)[2]. The regional dimension evolved further at Maastricht (1993) when the concept of "economic and social cohesion" claimed the attention of the member countries, at that time 12 in number (TUE, title XIV, article 130a). Thus, "regional diversity", "regional development", "regional imbalance and issues" or "specific regional interests" are formulas capable of reflecting the heightened interest toward the regional development on part of the European leaders. The Committee of the Regions is set up as an advisory body composed of representatives of Europe's regional and local authorities and the Cohesion Fund comes into being in order to contribute to implementing projects involving the environment and the Trans-European transport network.

As an expression of European Unity and solidarity due to the systematic appeal to structural funds which would favour the continuing improvement of competitiveness, economic growth and employment at the level of countries and regions and which, therefore, would bring benefits to all European citizens, the concept of regional development goes hand in hand with the process of European integration. As a matter of fact, the regional policy constitutes the cornerstone of the reforms stipulated in "Agenda 2000". Its priority objectives reassert the new vision transmitted by the European Commission "for a stronger and wider Union" on the threshold of the 21st century as a response to the problems occasioned by the future enlargement: the aid given to regions whose development is lagging behind, the economic and social conversion of regions experiencing structural difficulties, as well as the adjustment and modernization of the education, training and employment policies and systems[3]. The biggest enlargement wave, in May 2004, which led to the accession of Romania and Bulgaria on 1st January 2007, places the Central and Eastern European countries in direct relation with the developed Western countries. Foreseeing this situation meant adjusting the legal framework of the communitary institutions and policies to an enlarged configuration of countries, but, at the same time, it meant an imminent need to lessen the social and economic gap between regions, which became more marked after the accession of the 12 new member countries.

[1] Cf. Eurostat, the most prosperous region of the EU, London is seven times wealthier than the poorest EU region, Severozapaden, in Bulgaria (2007 data), "Le Palmarès des 271 régions de l'Union", *Eurostat*, Press Release, 18.02.2010, http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/1-18022010-AP/FR/1-18022010-AP-FR.PDF.

[2] The signatories appear to be „anxious to strengthen the unity of their economies and to ensure their harmonious development by reducing the differences existing between the various regions and the backwardness of the less favoured regions" (cf. *The consolidated version of the Treaty on the functioning of the European Union*).

[3] Agenda 2000, http://europa.eu/legislation_summaries/enlargement/2004_and_2007_enlargement/l60001_fr.htm

The structural instruments for pre-accession (for 2000-2006, namely Phare, ISPA, SAPARD)[1], a form of aid for financial and technical cooperation, attempt not only to facilitate the access of the applicant countries to the communitary objectives, procedures and regulations, but also to support their effort in the field of economic and social cohesion.

On 17 May 2006, the European Parliament, Council and Commission signed an interinstitutional Agreement which comprises the general regulations concerning the structural funds for the current financial cycle, namely 2007-2013[2]. These represent over a third of the European Union budget, approximately 385 billion euros allotted to objectives of competitiveness, cohesion, sustainable development and employment[3]. The new framework aims at stimulating research, education, innovation and mobility, the harmonious development of the European Union, adapting the local economies to global competition and inter-regional cooperation. In November 2009, because of the influence of the world financial crisis and the social-economic challenges ensuing, the European commission sets out a new vision of strategic partnership between member countries in order to achieve positive results over the following decade. Like any other strategy, this, too, has to be an ambitious one. Furthermore, it is formulated as a compromise to meet the expectations of the various members of the Union[4]. Since the objectives of the new programme were launched for public consultation, a series of essential contributions to the proposals of the Commission can be remarked: improving communication between different levels of governance (for a full and equal partnership), an increased role attributed to regions, a better and more enhanced cooperation between the actions of the local and regional authorities, who have the competences and the resources in vital areas, and the European strategies through the cohesion policy and the deployment of its instruments[5].

On 11 February 2010 an informal meeting of the heads of state and government of the 27 member countries was held, the first summit presided by Herman Van Rompuy, illustrious political personality recently risen to fame, the latest president of the European Council, the first president after the ratification of the Lisbon Treaty. Mr. Jose Manuel Barroso, during his second mandate as the leader of the European Commission, recommends that "Europe react to avoid decline" and makes an appeal for a sustainable recovery based on a new vision of the future on a medium term (2020): growth based on knowledge and innovation, a competitive and sustainable economy with a high employment rate and an energetic and ecological policy that is efficient and convergent[6]. Shared responsibility and ambitious objectives set out against the background of disturbing data: the lowest level of the GDP since the 30s (-4% in 2009), decrease of the industrial production and productivity, increase of unemployment to 10%[7], estimated for 2010 (which represents a lapse to the level in the '90s), demographic ageing[8] and the diminishing of European Union's international role[9].

As European leaders in Brussels discuss the issue of "financial stability in the euro area"[10] and the proposals of "Europe 2020" strategy of revamping the economy, territorial regions and collectivities succeed in presenting viable solutions to exit the economic crisis. That is because Europe's economic programmes can only work if they take into consideration the existing local and regional visions and strategies. This background is also the slogan used by the Committee of Regions to launch, at the beginning of October 2009, the label "European

[1] Structural Policy Reform, archives, http://europa.eu/legislation_summaries/regional_policy/provisions_and_instruments/l60013_en.htm

[2] The section dedicated to documents related to the financial framework 2007-2013, http://ec.europa.eu/budget/documents/multiannual_framework_en.htm#table-1_1.

[3] European Commission, "A Financial Framework for the enlarged Union (2007-2013)", http://ec.europa.eu/budget/prior_future/fin_framework_en.htm; lated amended, as follows: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:132:0008:0009:RO:PDF.

[4] See the comments of Dragoş Pâslaru, *Newsletter I.E.R.*, II, issue 13, Jan. 2010, p. 2.

[5] European Commission, Commission Staff Working Document, *Europe 2020 – public consultation. First overview of responses*, http://ec.europa.eu/commission_barroso/president/pdf/Overview_of_responses_to_the_public_consultation.pdf.

[6] "Europa 2020", Presentation of Mr. J. M. Barroso, president of the European Commission, during the informal meeting of the European Council on 11 February 2010, http://ec.europa.eu/commission_2010-2014/president/news/statements/pdf/20102010_2_ro.pdf.

[7] 20% among young people, "En Europe, un jeune sur cinq au chômage", *Courrier international*, No 983, http://www.courrierinternational.com/article/2009/09/03/en-europe-un-jeune-sur-cinq-au-chomage.

[8] According to the Demography Report 2008, the population of Europe is ageing rapidly, the ratio between people of working age and people of retirement age could go from the current 1:4 to 1:2 (2050 prospects), European Commission, Employment, Social Affairs and Equal Opportunities, http://ec.europa.eu/social/main.jsp?catId=611&langId=fr.

[9] *Ibid*.

[10] Cf. "Statement by the Heads of State or Government of the European Union", Brussels, 11.02.2010, http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/fr/ec/112857.pdf.

Entrepreneurial Region". Once more, the increased role of territorial regions and collectivities within the strategic plans of development of the European Union is brought into discussion, the whole endeavour aims at rewarding annually several European regions with outstanding performance in envisaging and implementing innovative policies for sustaining and developing the local economic environment. The first edition had six regional champions on the podium[1], each promoting an entrepreneurial policy capable of creating jobs and boosting the local economies.

Maintaining the fundamental reference of subsidiarity and proportionality[2], the now famous Lisbon Treaty consolidates two other principles, namely attributing competences and solidarity, which will lie at the foundation of the new development policies of the European Union. Recently entered into force on 1December 2009 after a long process of ratification[3], the treaty brings about a progressive vision on the policy of economic, social and territorial cohesion included in the area of shared competences between the Union and the member countries (Title I, article 4)[4]. This aims at acting in the spirit of reducing the differences between the levels of development of various regions and of the backwardness of less favoured regions (Title XVIII, article 174)[5], reasserting that "promoting economic, social and territorial cohesion is vital for a full development and the sustainable success of the European Union" (Protocol 28 regarding economic, social and territorial cohesion).

The next decade will be decisive as concerns the role of the regional policy and the future of the European Union. The two aspects are interdependent and inseparable. Defining a multilevel (multi-layered) governance system only comes to support the concept of European integration under the impact of the current crisis and the given environmental, demographic and social-economic challenges. Globalization created an imperative need for coherent and joint action between the various levels of power, requiring the enlargement of the circle of actors involved in devising public policies. Only by including the local and regional factor within the communitary programme and strategies, as well as by emphasizing the importance of coordination between levels, one can ensure the functioning of Europe's decision making process[6], thus, aiming at the harmonious development and the sustainable progress of the European Union, enlarged to 27 member countries.

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[1] Brandeburg (DE), County Kerry (IE), Murcia (ES), Catalonia (ES), Trnava (SK) and Uusimaa/Helsinki (FI). These regions were awarded the EER (*European Entrepreneurial Region*/*Région européenne entreprenante*) distinction during a special ceremony at the headquarters of the Committee of Regions in Brussels, "Driving Europe out of economic crisis: CoR rewards six European Entrepreneurial Regions blazing a trail for the Europe 2020 strategy", Committee of the Regions, press release (11.02.2010), http://www.cor.europa.eu/pages/PressTemplate.aspx?view=detail&id=4df9fc21-4693-48ef-8bf9-80c1dcf0db6bn.

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[3] See „Europe in the XXIst century", link dedicated to the Lisbon Treaty, http://europa.eu/lisbon_treaty/index_ro.htm.

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THE ROMANIAN VILLAGE: ORIGINS AND CURRENT MANIFESTATIONS OF A PERPETUAL CRISIS

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Abstract: *Lately people have been discussing …, one might say, obsessively… the crisis. In fact, the crisis has become an ordinary topic: the crisis of values, the crisis of role models, the crisis of resources, the financial crisis, failure of the economy. The specter of crisis has undoubtedly impacted upon the field of rural economy. Thus, the Romanian village, defined amongst others by its main activity: agriculture, was, is and seem destined for a perpetual crisis. The origins of the current situation are well-known: the beginning of the modern era coincided with a new way of distributing property that resulted in a polarization of the Romanian society and rural areas, which led to wide disparities. We are referring to the "peasant issue", the issue of land and yield, as well as its manifestations: poor yield, poverty of the peasants, bloody uprisings such as the 1907 one. Furthermore, we also know the attempts that have been made to address this key issue of the Romanian society: the 1921 reform and its subsequent amendments. However, the issue persists and, at present, we are still discussing agriculture/village/rural in terms of crisis. Moreover, the effects of the centuries-long village crisis overlapped with the equally negative effects of the current financial-economic crisis. The situation is all the more so delicate since, at the outbreak of the crisis, we had already been talking about a crisis of resources, which is responsible amongst others for the onset of an acute food crisis.*

Key words: crisis, agriculture, rural economy

JEL classification: B, N, O13, O52, Q15

Far from being an exhaustively researched theme from the point of view of scientific approach and having acquired profound meanings since its development outlines the current evolutions, the issue of the Romanian village is remarkable through the complexity of aspects and the multitude of dimensions. Undeniably, throughout their millenary existence, the Romanian people have been defined, by the involvement in agriculture.

Besides the fact that this constitutes a defining argument for the withstanding and continuity of the Romanian people on these lands, it has also imparted a specific character both to the national economic evolution and also to the Romanian society.

The importance of agriculture within the economic system, the wide involvement of the predominantly rural population, for whom the land was/still is a tool and the unique source of livelihood, are just some of the reasons which fully justify the constant interest shown to this issue throughout centuries.

At the end of the 19th century and the beginning of the 20th century the need to efficiently resolve this issue became ever more stringent since its deepening led to desperate gestures that caused serious social crises. This explains the importance of identifying the causes that contributed to maintaining this sector at an inferior level of development, as well as of applying corrective measures.

The present moment sees the Romanian village being confronted with the same problems: the deficient distribution of agricultural property, the limited character of the agricultural implements capable of performance, which leads to low efficiency and the lack of funding for agriculture.

1. On the origins of the crisis in agriculture. The Romanian village and the crisis of land.

The issue of land, of property and its distribution stirred controversial discussions throughout the modern history of the Romanian society, being a recurring theme of social, economic and political debates. Peasants painfully felt the effects of the issue of land, which became a source of intense disputes and acquired new connotations on the background of profound social conflicts which saw peasants claiming their right to property; their ardent desire was suggestively expressed by the phrase "We want land!"

In fact, the peasants' claim was a perfectly justified one since the lack of land represented an essential aspect of the complex peasant issue and was often invoked as a fundamental cause of the difficult situation that characterized Romanian agriculture.

The above stated problem was all the more so complicated since Romania was predominantly an agricultural country, the national economy had an agricultural characteristic and most of the population

involved in agriculture could barely afford sustenance, and it required finding immediate and efficient solutions.

Definitely, neither the 1864 land reform, nor its subsequent amendments managed to resolve this controversial issue, which was proven by the statistics of those times, as well as the perpetuation and deepening of the feeling of discontent among peasants for whom land remained a constant demand.

As far as the total arable land is concerned, the area was relatively generous; according to a study published in 1907, the arable land covered 7,826,796 hectares of arable land and pastures (59.58% of the country's area) to which plum tree orchards and vineyards were added with a resulting arable area of 7,998,890 hectares representing 60.90% of Romania's area[1].

Table representing the categories of real property, their number and area[2]

Category of real property	Number of properties	Proportion in %	Area in hectares	Proportion in %
până la ½ ha	62.832	6,60	26.426	0,34
între ½ şi 1 ha	81.039	8,50	72.757	0,93
1 – 2 ha	147.900	15,20	237.029	3,01
2 – 3 ha	131.630	13,60	337.000	4,30
3 – 4 ha	172.446	17,90	631.964	8,08
4 – 5 ha	148.717	15,40	711.033	9,08
5 – 7 ha	131.145	13,50	743.486	9,50
7 – 10 ha	45.230	4,70	393.950	5,05
Total - 10 ha	**920.939**	**95,40**	**3.153.645**	**40,29**
10 – 50 ha	36.318	3,70	695.953	8,89
50 – 100 ha	2.405	0,26	166.847	2,13
Total 10 - 100 ha	**38.723**	**3,96**	**862.800**	**11,02**
100 – 500 ha	3.314	0,41	816.385	10,43
500 – 1000 ha	1.122	0,13	803.084	10,26
1000 – 3000 ha	771	0,09	1.236.420	15,80
3000 – 5000 ha	112	0,01	434.367	5,55
Peste 5000 ha	66	0,00	520.095	6,65
Total 100 - peste 500 ha	**5.385**	**0,64**	**3.810.351**	**48,69**
Total general	**965.047**	**100**	**7.826.796**	**100**

What is significant is not the size of this area, but the way in which it was distributed at the level of real property and the percentage that it represented within the small (peasant-owned), medium-sized and large real property.

In this respect, out of the total arable area, the most important percentage was represented by small real property (40.29% occupying an area of 3,153,645 hectares) and large real property (48.69%, namely 3,810,351 hectares) in comparison to a rather insignificant percentage in the case of medium-sized real property (11.02%, comprising 862,800 hectares). Land ownership was virtually concentrated around two poles: peasant ownership and major landowners, an antagonistic situation, given the absence of an intermediate category that was supposed to ensure a certain balance.

The imbalance of land distribution was not confined to the general aspect of the ratio of agricultural land owned by the three categories. In fact, the more marked disparities became apparent as the phenomenon was analyzed in detail by studying the issue of land from the point of view of properties/land owners, namely the actual areas owned, which revealed huge disparities between the three categories.

1.1. Peasant-owned small real property.

Owing to the unjust distribution, small real property owned by peasants was affected[3]. Related to the total number of properties, this benefited from an overwhelming proportion, out of the 965.047 properties, small properties owned by peasants, totaling 920,939, represented a major coefficient of 95.4%.

[1] G. D. Creangă, *Proprietatea rurală în România*, Institutul de Arte Grafice Carol Göbl, Bucureşti, 1907, pp. 43-44.
[2] Ibidem, p. 46
[3] We refer to small real properties as those land exploitations of up to 10 hectares.

Illustrative was also the percentage that the various categories of small real property occupied related to the total amount of properties. Thus, properties below ½ hectares (62,832) constituted 6.6 % of this total, those comprised between ½ hectares and 1 hectare (81,039) amounted to a percentage de 8.5%. A much more consistent representation could be noticed in the case of real properties of 1-2 hectares (147,900), these forming 15.2% of land exploitations, the real properties of 2-3 hectares (131,630), amounted to 13.6 % and especially land exploitations between 3-4 hectares (172,446), representing 17.9 %. Real properties of 4-5 hectares (148,717) constituted 15.4% of the total, whereas exploitations between 5-7 hectares (131,145) reached a percentage of 13.5 %. Extremely small was the coefficient of peasant owned real properties of 7-10 hectares (45,230), this segment occupied only 4.7%[1].

The above mentioned data revealed a profound paradox. From the point of view of numbers, exploitations of up to10 hectares were prevalent (920,939 properties), reaching a majority percentage of 95.4%. From the point of view of area (3,153,645 hectares) however, they only represented 40.29% of the national arable land. The issue acquired new dimensions since the 920,939 peasant properties were actually owned by an equally big number of landowners.

In this respect, the much debated lack of land was acutely felt on the background of co-owners, the areas allotted to real properties established by the land reform of 1864 and its subsequent amendments changed, leading to a dramatic improvement, on the basis of the right to inherit real property. Moreover, the number of peasants who did not own land was evaluated to approximately 250,000-300,000 persons.

Doubtless was the fact that according to the number of taxpayers who owned land, approximately 291,771 peasants heads of family, respectively 31.68% of the total number of peasants, owned arable land below 2 hectares, an area that was insufficient for a family to obtain the basics such as dry nourishment (hominy, bread), without taking into consideration the need for other types of food, as well as the various needs related to clothing, paying taxes, etc.

Furthermore, if one considered the area of real property in this category (336,212 hectares), as well as the number of 4.5 members per family of peasants, what resulted was that the 291,771 tax payers actually represented a further number of 1,312,969 persons; four souls lived off a hectare of land!

The number of peasants who owned insufficient real property, insufficient to supply for their real needs, was completed by those who owned real property between 2-3 hectares, approximately 131,630 heads of family, namely 592,335 persons, exploiting together an area of 337,000 hectares.

In fact, the numbers above proved that, due to the insufficient property they owned, 1,905,304 peasants, forming 39.7% of rural population, were rendered to a state of dependency on major landowners and tenants.

Concerning real property comprising 3-5 hectares, the number of heads of family who owned such property was of 321,163. The 1,445,233 persons referred to, representing 30.2% of rural population, had a better yield off the 1,342,997 hectares; nonetheless, they barely afforded sustenance. A somewhat better situation was that of peasants who owned property of 5-10 hectares. 176,375 tax payers constituted this category with a total number of persons of 793,687, representing 4.24% of rural population and who exploited an area of 1,137,438 hectares.

From the point of view of area, the real property of up to 3 hectares (673,212 hectares) occupied 21.34% of the total area of small real property, the exploitations between 3-5 hectares (1,342,997 hectares) represented the majority: 42.59%, and properties between 5-10 hectares (1,137,810) represented 36.07%.

1.2. Medium-sized real property.

If in other European countries and not only, medium-sized real property[2] was proportionate related to small peasant owned real property and large real property, having an intermediate role, in Romania, this category was quasi-inexistent, which only deepened the disparities between the two major types of exploitation.

Thus, medium-sized real property comprised 38,723 exploitations, most of which, 36,318, had an area of 10-50 hectares. The remaining 2,405 properties belonged to the category of exploitations between 50-100 hectares.

Taking into consideration the total amount of exploitations, these numbers reflected the small percentage of medium-sized real property which represented only 3.96%. Regarding the area it occupied, medium-sized real property was at an inferior level, the 862,800 hectares representing only 11.02 % of the total arable land.

[1] G. D. Creangă, *op. cit.*, p. 46.

[2] By medium-sized real property we understand the property between 10-100 hectares.

1.3. Large real property.

Within the Romanian rural real property, large real property [1] was substantially represented, incorporating a percentage of 48.69% of the arable area of the country. The major significance of large real property was not reflected only in its huge area: 3,810,351 hectares. Extremely suggestive was also the number of exploitations incorporated by the large real property, the arable exploitations over 100 hectares being represented by only 5,385 real properties. Consequently, the most substantial agricultural area was concentrated in the hands of the smallest number of owners!

Representation of large real property, according to the number of properties and their distribution per regions[2]

Category of area	Number of properties				Total	%
	Moldavia	Wallachia	Oltenia	Dobrogea		
100-500	949	1.439	643	283	3.314	61,5
500-1.000	440	487	135	60	1.122	20,8
1.000-.3000	290	360	91	30	771	14,3
3.000-5.000	34	74	3	1	112	2,1
Peste 5.000	9	50	7	-	66	1,3
Total	**1.722**	**2.410**	**879**	**374**	**5.385**	**100**

According to data, the most important percentage within this type of property, more exactly 61.5% of the total, was represented by the segment of exploitations between 100-500 hectares, totaling 3,314. At the opposite end, the land exploitations over 5,000 hectares, 66 properties, represented a modest percentage of 1.3%. Relatively similar was the representation of exploitations between 3,000-5,000 hectares: 112 properties, only 2.1%. At the same time, the 1,122 exploitations between 500-1,000 hectares formed 20.8%, and 771 other properties between 1,000-3,000 hectares represented 14.3% of large real property.

Referiing to the total amount of arable land of large real property, the categories with the best representation were the exploitations between 1,000-3,000 hectares: 32.45%, followed by those between 100-500 hectares: 21.41%, and real property of 500-1,000 hectares: 21.09%, whereas property between 3,000-5,000 hectares represented a percentage of 11.40%, and those above 5,000 hectares 13.64%.

1.4. The tenancy system.

We cannot conclude the chapter on rural property in Romania without tackling the controversial subject of the tenancy system, especially since this was the direct consequence of land distribution. Thus, the unjust character of land distribution led to the appearance of two extremes: the parceling of real property and great land ownership, which made the tenancy system possible.

The main advantage of the tenancy system was that "the tenant, the one with insufficient capital, without cattle, without tools, although lacking experience in agriculture, could always produce and sell produce more cheaply, because he did not sacrifice or risk anything for them: he did not have expenditure for cattle, tools, buildings, and he did not have to take into consideration anything, so that it would not become scarce or damaged"[3]. This is the mechanism that explained and supported the rapid enrichment of this unpopular character, as well as the widespread dimension of the phenomenon of tenancy: "because he does not sacrifice much, only seeds, whereas the cattle, tools and work are the concern of the peasants and landowner. If there is a year of plenty and crops are rich, he earns 100-200% of the capital invested in the exploitation of the land...If the crops are poor, the tenant loses the seeds and the tenancy, whereas peasants lose their work's worth."[4]

In the case of small real property, the tenancy system was almost inexistent; few peasants were willing to grant their property on lease, especially since the insufficient area of land was barely enough to ensure their livelihood. Very different was the situation of the arable exploitations above 50 hectares. Out of the amount of 3,977,198 hectares, 2,333,145 hectares were granted on lease, which represented a percentage of 56.88%.

[1] The exploitations comprising between 100 hectares and over 5,000 hectares were included in the category of large real property.
[2] G. D. Creangă, *op. cit.*, p. 68.
[3] George Maior, *România agricolă. Studiu economic*, Bucharest, 1911, p. 108.
[4] *Ibidem*, p. 109.

Table of lease, according to area and regions[1].

Category of area	Leased area in hectares					Proportion in % of the total area of the category				
	Moldavia	**Wallachia**	**Oltenia**	**Dobrogea**	**Total**	**Moldavia**	**Wallachia**	**Oltenia**	**Dobrogea**	**Total**
50-100	11.350	16.512	7.097	5.225	40.184	28,25	41,09	17,67	12,99	100
100-500	129.058	200.190	61.790	18.570	409.608	31,51	48,87	15,09	4,53	100
500-1.000	185.686	201.761	56.237	24.135	467.819	39,69	43,13	12,02	5,16	100
1.000-3.000	270.650	359.165	78.463	12.920	721.198	37,53	49,80	10,88	1,79	100
3.000-5.000	92.553	219.109	3.800	3.166	318.628	29,05	68,77	1,19	0,99	100
Peste 5.000	56.047	283.493	37.168	-	376.708	14,88	75,25	9,87	-	100
Total	**745.344**	**1.280.230**	**245.555**	**64.016**	**2.334.145**	**31,93**	**54,85**	**10,48**	**2,74**	**100**

Table ilustrating the proportion of tenacy per category of property, depending on the arable area of the category[2]

Category of leased area	Area of leased property/ total area per category	Proportion in % of total arable area of category
50-100 ha	40.184/166.847 ha	24,09
100-500 ha	409.608/816.385 ha	50,17
500-1.000 ha	467.819/803.084 ha	58,23
1.000-3.000 ha	721.198/1.236.420 ha	58,33
3.000-5.000 ha	318.628/434.367 ha	73,36
Peste 5.000 ha	376.708/520.095 ha	72,43
	2.333.145/3.977.198 ha	

By consulting the table it became apparent that the categories of real property that were suited for the tenancy system were, particularly, the real property between 3,000-5,000 hectares and that above 5,000 hectares.

In fact, the proportion of the leased areas depended very much on the total arable area of the respective category; where the proportion of the large real property was small, the coefficient of leased property was also small. This situation is illustrated in the table below, the given numbers support the idea that the bigger the real property was, the more substantial the percentage of real property granted on lease. Within this framework, the areas between 50-100 hectares had a percentage of granting on lease of 24.09%, whereas areas of 3,000-5,000 hectares and those above 5,000 hectares were granted on lease up to 73.36 % and 72.43%, respectively.

As far as the number of tenants was concerned, it reached 3,332 persons, out of which 2,417 so 75.24% were Romanian. What was surprising concerning the other tenants was that out of the 915 persons, a clear distinction was made between the 443 foreigners (13.30%) and 472 Jews (14.16%). Regarding the leased areas, the foreigners and the Jews took on lease 36.66% of the arable land above 50 hectares of the country, whereas Romanian tenants took on lease 63.34% of the total amount granted on lease.

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[2] *Ibidem.*

THE REGIONAL COMPETITIVENESS OF THE WEST REGION OF ROMANIA

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Abstract:
The aim of our paper is to examine the regional competitiveness of the West Region of Romania. The paper is structured to evolve from a "macro" view of economic development, from the West Region of Romania perspective, to a "micro" or business-level view, based on companies.
In terms of research goals, our paper explores issues such as: What are the peculiarities of the West Region of Romania? What approach of regional competitiveness should we choose in order to explore the competitiveness of the West Region of Romania? Which are the characteristics of the enterprises from the West Region of Romania? What conclusions can we draw regarding the regional competitiveness of the West Region of Romania and of the companies from this region?
Our expected results are: to deepen the understanding of regional competitiveness in general, and in particular, with respect to the West Region of Romania, by the contributions brought by our perspective.

Key words: globalization, regional competitiveness, West Region of Romania, euro-enterprises

JEL classification: O11, P25

1. Introduction

The West Region is located on Romania's border with Hungary and Serbia-Montenegro, being composed of four counties: Arad, Caraş-Severin, Hunedoara and Timiş. One of the characteristics of the West Region is the presence of a varied landscape, harmoniously distributed among flatlands, highlands and mountains, which confer to the region a remarkable touristic potential. It is a multicultural, multiethnic, multi-confession area.

The West Region has a surface of 32,034 km2, representing 13.4% of the country's area. The region is comparable from the surface point of view with countries such as the Republic of Moldova or Belgium. The region is crossed by the 45° and 46° parallels Northern latitude and by the meridians of 21°, 22° and 23° Eastern longitude.

On the 1st of July 2007, the population of *the West Region* was of 1,924,442 inhabitants, representing 8.93% of the population of Romania.

The Timiş County has the biggest number of inhabitants from the West Region, followed by the Hunedoara, Arad and Caraş-Severin counties, as it can be noticed in **Table 1**. All the counties from the West Region have been confronted with a decrease in the population size in comparison with the year 2000.

Table 1: The population of the West Region in the period 2003-2007 (persons)

The population on the 1st of July	**2003**	**2004**	**2005**	**2006**	**2007**
The total for Romania	21,733,556	21,673,328	21,623,849	21,484,365	21,537,563
The West Region	**1,946,647**	**1,939,514**	**1,930,458**	**1,927,229**	**1,924,442**
Arad	461,744	460,466	459,286	458,487	457,713
Caraş-Severin	333,860	332,688	331,876	330,517	327,579
Huneadoara	489,872	484,767	480,459	477,259	472,284
Timiş	661,171	661,593	658,837	660,966	666,866

Source: The Statistical Annuary of Romania 2008, The Statistical National Institute, 2009

The cities of Arad and Timişoara are the most developed cities from the region from the economic point of view, genuine poles of growth, and this fact having an influence on the size of the population.

The total population of capital cities of the four counties represent almost a third of the total population of the West Region: 29.01%.

The transition to the market economy has influenced the characteristics of the labour market, determining significant modifications of the level and structure of the main indicators of the labour force: the activity rate, the employment rate, the unemployment rate, etc.).

According to the statistical data, in the West Region, in 2007, there was an active population of 885,000 persons. The employed population was in the same year of 835,000 persons, and the unemployed population was of 50,000 persons (**Table 2**). In the West Region, the employed population has maintained its decrease trend year by year.

Table 2: The population by participation to the economic activity, for the whole region, in 2007 (persons)

Region	**The active population**	The employed population	the employed population
The West Region	885,000	835,000	50,000

Source: The Statistical Annuary of Romania 2008, The Statistical National Institute, 2009

In 2007, the weight of the active population involved in the services sector was of 44% of the employed population of the Timiş County, 40.6% of the employed population of the Hunedoara County, 40.4% of the employed population of the Arad County and 37.6% of the employed population of the Caraş-Severin County, as it can be noticed in **Table 3** bellow:

Table 3: The civil employed population for the whole region, by departments and activities of the national economy, 2007 (thousand persons - %)

	Agriculture		**Industry**		**Commerce**		**Services**		
	Total	**%**	**Total**	**%**	**Total**	**%**	**Total**	**%**	**Total**
Arad	47.5	22.4	68.6	32.4	10.0	4.7	85.5	40.4	211.6
Caraş-Severin	42.0	34.3	27.4	22.3	7.1	5.8	46.1	37.6	122.6
Hunedoara	43.5	21.8	62.0	31.1	13.0	6.5	81.0	40.6	199.5
Timiş	74.1	22.1	92.8	27.7	20.9	6.2	147.7	44.0	335.5
The West Region	**205,9**	**23.7**	**250,8**	**28.9**	**51,0**	**5.9**	**362,3**	**41.7**	**869,2**

Source: The Statistical Annuary of Romania 2008, The Statistical National Institute, 2009

2. The Regional Competitiveness of the West Region of Romania

The accelerated globalization of the last decades, and its cause and effect factors, among which an extremely important one is represented by the internationalization of the company have led to the treatment with an incresed attention of some theoretic aspects and practical aspects of international transactions, which were not previously esentially considered an impact factor within the multinational companies transactions.

Nowadays, *transnational corporations* represent one of the strong forces which act in the economic, financiaal, scientific and tehnological fields. Companies of this type have reached such an extension, that, in a way, they have lost their national character.

Transnational corporations represent main sources of capital, technology and access on the market for almost each country. Their activities have a strong impact on the world distribution of wealth and economic activity, between national economies. They bring benefits both to the consumers, and to the economies from all over the world, representing enormous concentrations of economic power.

Transnational corporations can contribute to the increase of the developing countries' exports competitiveness. Therefore, attracting these export-oriented companies is a competitive activity in itself.

The importance of *transnational corporations* in increasing the volume of exports of the host countries derives from the additional capital and technology, from the implemented managerial know-how, but also from the access to the regional or global markets. In the same time, the local resources can be completed with other resources, which will allow the diversification of the types of products that are consumed on the domestic market or destined to export, which will lead to the increase of the competitiveness and advantages of the host economy.

Transnational corporations have developed in the last decades, because they have exploited at an international level their competitive advantages. These advantages derive from economies of scale, from superior management techniques and/or world sales networks.

This is the world of globalization – a new connection between the economic agents and activities from all over the world. Globalization was possibile due to the fast elimination of the trade barriers and to the capital liberalization.

Competition is much older than *globalization*. But under the conditions of globalization, the first gets an unpreceeded impulse. *Competition* can be considered a true force of progress, its level being a determining factor of the products and services *competitiveness*.

Transnational production has brought global competition to the national markets, so that many companies are forced to produce at the international border of efficiency or to leave the businesses.

By using the term *„euro-enterprise”*, we do not use a recognized, well known economic term. This term has been used in the 7th paper listed at the references of our paper, with the aim of introducing it în the current economic language.

Because the înterpretation of the term can differ, it is necessary to clarify the context in which this term is used. The concept of *euro-enterprise* is circumscribed in the category of the concepts which have occured together with the process of the European construction, such as: *euro*institutions, *euro*management, *euro*region, *euro*parliamentary, *euro*diplomacy, *euro*optimism, *euro*scepticism, etc. These notions are characterized by the fact that their number increases continuously with other new ones, which derive from the „Europeanization” process, notions which occur instantly and enter the daily language.

We have used the concept of *euro-enterprise* to designate all enterprises whose activity or market goes beyond the borders of the national economy from which the respective enterprise is a part of.

These enterprises, by their presence at the European level, become *euro-enterprises*. *Euro-enterprises*, by their activity, deepen the process of European integration, undertaking this step by action and not by decisions. They have a tendency to ”abandon” the national identity, in exchange for a *European identity*. On the European Single Market, there are already ”Made in EU” products, without having specified their origin country from the European Union. Europroducts are made by euroentrprises. The increase in their number will lead to a diminish of the importance of the origine country, what will truely matter being the firm’s competitiveness on the whole Single Market, irrespective of the regional disparities. The existence and functioning of these euroenterprises leads to the formation of the oligopolistical type competition.

The regional competitiveness of a region represent the potential of the respective region to maintain and/or to attract those economic agents who master the key knowledge factors for the success of the economic development, and the potential of the region to exploit in production those knowledge factors. From this point of view, the region must supply the appropriate mechanisms, in order to allow companies to develop infrastructures of innovation, as well as mechanisms for overcoming the problems which innovation brings, such as: investments, risk etc. The region must contribute to the development of the communication infrastructure between companies, encourage the dynamism of the business environment, support investments in research and development, and encourage the labour force education and instruction.

So, *regional competitiveness* refers to the relationship between companies’ competitiveness and the effect of this competitiveness on the competitiveness of the region in which the respective companies are.

In the approach of *regional competitiveness*, two aspects must be taken into account, as it follows:

a) The idea according to which *regional competitiveness* results from aggregating the competitiveness of the *companies* from the region: the existence of companies in the region, which are capable able to constantly and profitably make products/services capable of satisfying the requirements of a free market with respect to: price, quality, delivery time, differentiation etc. From this point of view, regional competitiveness is seen as: the capacity of the regional economy to optimize its assets and domestic capital, in order to compete and be prosperous on the national and global markets, in order to adjust to the changes from these markets.

b) The idea according to which *regional competitiveness* derives from macroeconomic competitiveness: interregional migration of the mobile factors, of capital and labour force represent threats for regional development. From this point of view, regional competitiveness consists of: the capacity of the region to create mechanisms of macroeconomic adjustment for the control of the factors which influence interregional competitiveness.

In our opinion, the main element of the competitiveness of the region is represented by the *euro-enterprises from the region*, which bring dynamism and economic power to the region, by the production volume, by the turn-over, by the weight of their contribution to the Gross Domestic Product of the region, the interconnection of the economy of the region with that of the European Single Market, substantially contributing to the economic integration of the region. We could say that *euro-enterprises* represent “the engine” of the region’s development, which direct the region towards the Single Market and the pillar which

supports the economy of the region by the massive weight in its results. In the same time, *euro-enterprises* lead to progress by introducing efficient techniques and methods, by their characteristic innovation process, by the superior use of resources, by introducing the European quality and environment standards. The Europeanization of the region is made through *euro-enterprises*' activity, by its alignment to the European norms, standards and values.

The existence of *euro-enterprises* is a necessity, as they are the only ones which succeed to extend their activity beyond the limits of the local market, to take advantage of the business opportunities provided by the Single Market and to contribute to the European building process by strengthening the power of the European Single Market.

By their size and economic power**,** *euro-enterprises* can compete with the American and Japanese multinational and transnational companies, representing an advantage of the European Union in the process of globalization and interconnection of world's economies. Global competitiveness is a *necessity* for the euro-enterprises from the Single Market, because on a long run being competitive only on the Single Market is not enough, they must extend their limits and compete with the most powerful multinational and transnational companies in the world for conquering an as big as possible share from the world market.

The West Region is a growing region, with economic results that are above the national average. In the West Region, the economic indicators have had significant evolutions, both the Total Gross Domestic Product, and the Gross Domestic Product per inhabitant, rising from one year to another, in harmony with the national trend, but in a much higher rhythm. The positive evolution of the economic indicators is, first of all, due to the activity of the euro-enterprises from the region, which bring most of the revenues of the region.

The increase of the Gross Domestic Product is visible both for the whole West Region and at the level of each department from the region, but with big differences between its four departments, highlighting the intraregional development disparities. The most eloquent indicator for determining the level of economic development is the Gross Domestic Product per inhabitant. Yet, we can state that the region exceeds the average of the country, as can be seen from the Table 4:

Table 4: the Gross Domestic Product per inhabitant 2001-2006 in lei (RON) in current prices

The year/Region	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Romania	5,210.94	6,950.06	9,090.30	11,372.00	13,326.8	15,967.6
The West Region	**5,521.16**	**7,527.41**	**10,265.19**	**13,042.91**	**14,960.4**	**18,570.1**

Source: The National Regional Accounts 2001-2005, the Statistical National Institute, 2008 and the Statistical Annuary of Romania 2008, the Statistical National Institute, 2009

Regarding the sectors' contribution to the creation of the gross added value, we can state that the region undertakes a process of change of the structure of the economy, services clearly prevailing, as it can be observed from the **Table 5** bellow:

Table 5: The evolution of the gross added value structure in the West Region (%)

	1996	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**
Agriculture/ Silviculture	23.2	18.40	16.9	14.7	13.6	18.3	15.0	15.2	15.56
Industry/ Constructions	36.4	31.2	28.2	36.6	37.0	36.4	36.8	33.6	34.31
Services	40.4	50.4	54.9	48.7	49.4	45.3	48.2	51.2	50.13

Source: The Statistical Annuary of Romania 2006, the Statistical National Institute, 2006

The high weight of services is due especially to the euro-enterprises from the trade sector, where the famous supermarkets and hypermarkets are active: *Real, Metro, Selgros, Billa, Praktiker, Carrfour, Profi, Plus, Auchan*, etc., each of them having more units in the region, but also to the famous financial-banking units (*HVB-Tiriac is a typical* euro-enterprise, being also registered as a *European enterprise, Banca Comerciala Romana, ABN AMRO Bank, Societe Generale - BRD, ING Barings Bank, Banca Italo-Romena, Volksbank Romania, Raiffeisen Bank, Banca Anglo-Romana, Bancpost, Banca Romaneasca, Alpha Bank, Banca Transilvania, EXIMBANK, Piraeus Bank, Banca Millenium, OTP Bank, Romanian International Bank, ProCredit Bank, CEC Bank, etc.* In the field of services there are also consultancy euro-enterprises, such as: *Lugera&Makler*, a consultancy company activating in the field of human resources, its shareholders being from Holland, Slovakia and Romania, *Manpower*, another human resources company of world

importance, *Adecco*, human resources company, as well, but consultancy companies such as: *Pricewaterhousecooper*, *KPMG Romania*, etc. are also present. There are also numerous insurance companies in the region.

In 2007, services have reached a weight of 50% in the structure of the added value of the West Region.

Regarding the counties' contribution to the creation of the Gross Domestic Product of the region, we can notice significant differences between the contribution of the four counties: the Timiş County contributes with 42% at the creation of the Gross Domestic Product of the West Region, the Arad County contributes with 24%, the Hunedoara County contributes with 21%, while the Caraş-Severin County contributes only with 13% to the creation of the regional Gross Domestic Product. The Timiş County presents another significant advantage besides being close to the border: Timişoara, a city with over 300,000 inhabitants, a more developed infrastructure and o an important metropolitan area.

In conclusion, in the West Region, there is an attractive and dynamic business environment and a well developed entrepreneurial spirit, which leads to superior economic results in comparison with other regions from the country and to the as fast as possible recovery of the economy from the economic crisis.

3. The Characteristics of the Enterprises from the West Region of Romania

Enterprises can be classified in: small and medium enterprises (SMEs) and big enterprises. In the SMEs's category, there are: microenterprises, small enterprises and medium (average) enterprises.

It must be mentioned that enterprises are classified as following:

1. microenterprises (less than 10 employees),
2. small enterprises (10-49 employees),
3. medium (average) enterprises (50-249 employess) and
4. big enterprises (over 250 employees).

Regarding the repartition of enterprises by size categories, as well as all over the country, in the West Region of Romania microenterprises are prevailing, as well, with a weight of 86.8% of the total number of enterprises from the West Region.

Despite the decline that some of the well represented in the region industrial branches have registered since 1989, the industrial sector continues to have a significant weight in the industrial production of the country, including the contribution of some sub-branches with tradition – such as light industry, textiles and shoes - but also of some new, dynamic and modern ones – software industry, telecommunications, or the production of auto components. In the last decades, industrial areas have developed themselves across the major circulation routes, on the main road or railway routes, especially as a result of the creation and development of *euro-enterprises*, which, have generally preferred the proximity of the border with the European Union to reduce the transport expenses and the necessary time for delivering products on the territory of the Single Market. In the region, there are also a significant number of *euro- enterprises*, representing the economic force of the region.

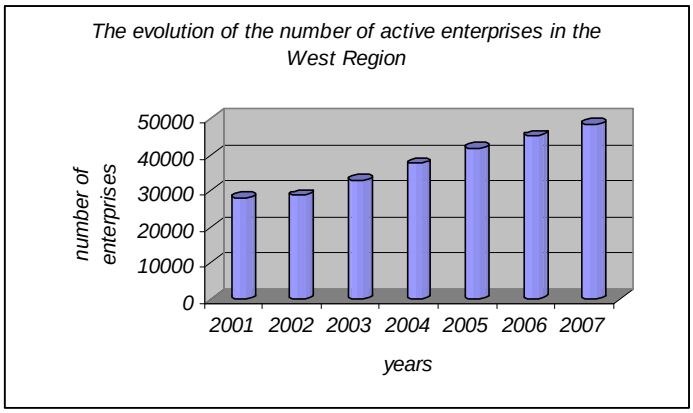
In the last decades, industrial areas have developed themselves across the major circulation routes, on the main road or railway routes, especially as a result of the creation and development of these *euro-enterprises*, which, have generally preferred the proximity of the border with the European Union to reduce the transport expenses and the necessary time for delivering products on the territory of the Single Market.

These enterprises have had the great merit to develop the whole business environment from the region by attracting the financial-banking, logistic, transport, services, specialized consultancy, etc fields. The absorption capacity of the European funds is much bigger in the case of *euro-enterprises*, which have implemented procedures, norms, standards, etc. and dispose of qualified personnel for administrating the documentation writing and for managing projects. All these have completed *the competitive advantages of the region* and to contribute to a large development of the region, especially in the Western side, the Timişoara-Arad axis, but also the integration of the Deva-Hunedoara-Resita area in the Single Market has started. In this economic integration process, *euro-enterprises* have the main role, by taking advantage of the economic opportunities of each area.

In 2005, in the West Region, there were 41,818 firms in industry, constructions and services, representing 9% of the total number of enterprises from Romania.

In 2007, in the West Region, there were 48,460 firms in industry, constructions and services, representing 9.5% of the total number of enterprises from Romania, continuing the ascending trend from the previous period, as it can also be seen in the **Figure 1** bellow:

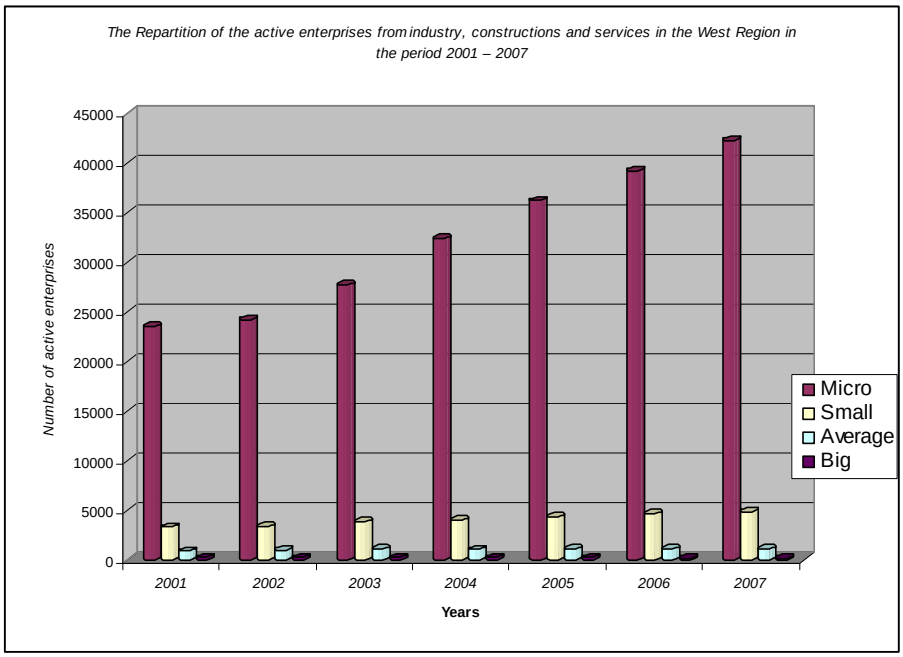
Figure 1: The evolution of the number of active enterprises in the West Region in the period 2001-2007



Source: The Statistical Annuary of Romania 2008, The Statistical National Institute, 2009

By size categories, in the West Region, there are 9% of the microenterprises from the country, 10% of the small enterprises, 11% of the medium (average) enterprises and 10% of the big enterprises from Romania, as it can also be noticed in the **Figure 2** bellow:

Figure 2: The repartition of the active enterprises from industry, trade and services in the West Region in the period 2001-2007



Source: The Statistical Annuary of Romania 2008, The Statistical National Institute, 2009

Inside the West Region, there is a strong differentiation with regard to the repartition of enterprises, in the sense of the polarization of development in certain areas. By the point of view of the repartition of the enterprises from the West Region by its counties, în 2004, in the Timiş County there were 42.95% of the enterprises, in the Arad County 23.31% of them, in the Hunedoara County 22.59% of them, on the last place being placed the Caraş-Severin County, with only 11.15% of the active enterprises from the West Region, a new evidence of the development disparities existing at intraregional level.

The difference between the counties of the West Region can also be noticed in the case of the euro-enterprises from the region, which are more concentrated in Timiş County's area, following Arad County's area and, at a big gap, the other two counties. So, the Timiş County is almost saturated with these enterprises, which absorb human resources, in such a way that many enterprises from the Timiş County, especially from Timişoara, its capital city, and not only, need to organize daily bus transportation from the rural area to cover the labour force demand. The counties of Hunedoara and Caraş-Severin have the handicap of more *monoindustrial cities*, presently seriously affected by the decline of these industries, especially from the

mining and metalurgy fields; such cities are: Hunedoara, Reşiţa, Călan, Oţelul Roşu, Moldova Nouă, etc. Even the capital cities of these two counties are affected by this phenomenon.

The restructuring of the economy of the region is still an on-going process, the very strong competition and the economic crisis affecting many enterprises, some of them being considered as solid and stable. Companies such as: Flanco, Flamingo, Ultra Pro Computers, Leonardo, Spar, etc have been confronted with big problems. All these companies have been considered emblematic for the economy of Romania. The phenomenon has not come to an end yet, numerous enterprises being presently „at the edge", facing big problems with regard to their liquidity and solvability, especially many enterprises from the constructions field, which should receive money from the state. The economic crisis that has started at the end of 2008 affects the majority of the active enterprises, eliminating the non-viable ones and maintaining the viable ones act as a complementary phenomenon in the autoselection process from the market.

4. Conclusions

The accelerated globalization of the last decades, and its cause and effect factors, among which an extremely important one is represented by the internationalization of the company have led to the treatment with an incresed attention of some theoretic aspects and practical aspects of international transactions, which were not previously esentially considered an impact factor within the multinational companies transactions.

In our opinion, the main element of the competitiveness of the region is represented by the *euro-enterprises from the region*, which bring dynamism and economic power to the region, by the production volume, by the turn-over, by the weight of their contribution to the Gross Domestic Product of the region, the interconnection of the economy of the region with that of the European Single Market, substantially contributing to the economic integration of the region. We could say that *euro-enterprises* represent "the engine" of the region's development, which direct the region towards the Single Market and the pillar which supports the economy of the region by the massive weight in its results. In the same time, *euro-enterprises* lead to progress by introducing efficient techniques and methods, by their characteristic innovation process, by the superior use of resources, by introducing the European quality and environment standards. The Europeanization of the region is made through *euro-enterprises*' activity, by its alignment to the European norms, standards and values.

The West Region represents an area which attracts numerous businesses by its favourable location, by its proximity to most of the European states, by the qualified labour force, by the stronger urbanization degree, by the stronger development of the region, especially on the axis Timişoara-Arad.

There are numerous industrial units, which are dispersed over the whole area of the region, especially in the Timiş and Arad Counties, which facilities the labour force movement.

Despite the decline that some of the well represented in the region industrial branches have registered since 1989, the industrial sector continues to have a significant weight in the industrial production of the country.

In the last decades, industrial areas have developed themselves especially as a result of the creation and development of *euro-enterprises*, which have generally preferred the proximity of the border with the European Union to reduce the transport expenses and the necessary time for delivering products on the territory of the Single Market.

These enterprises have had the great merit to develop the whole business environment from the region by attracting the financial-banking, logistic, transport, services, specialized consultancy, etc fields. The absorption capacity of the European funds is much bigger in the case of *euro-enterprises*, which have implemented procedures, norms, standards, etc. and dispose of qualified personnel for administrating the documentation writing and for managing projects. All these have completed *the competitive advantages of the region* and to contribute to a large development of the region, especially in the Western side, the Timişoara-Arad axis, but also the integration of the Deva-Hunedoara-Resita area in the Single Market has started. In this economic integration process, *euro-enterprises* have the main role, by taking advantage of the economic opportunities of each area.

In the West Region of Romania, there is an attractive and dynamic business environment and a well developed entrepreneurial spirit, which leads to superior economic results in comparison with other regions from the country and to the as fast as possible recovery of the economy from the economic crisis.

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USING TOURISM STATISTICS: A CASE STUDY OF SIBIU, ROMANIA

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Abstract: *the initial results of a survey carried out for the city of Sibiu has revealed some waeknesses in the local tourism statistics system. The data for accommodation units in Sibiu County have indicated several areas of the sector that are not included in official statistics, which may have a significant impact on policy-making. Field research involving questionnaires and stakeholder interviews enabled allowed new conclusions to be drawn about the long term effect of European Cultural Capital Program on the local tourism industry that would not have being possible using only official statistics.*

Key words: tourism statistics, official statistics, inventory statistics

JEL classification: L83

1. Introduction

Contemporary tourism is both an effect and a conduit for globalisation. Not only has the rapid growth of tourism in recent decades generated a significant growth in the economic significance of tourism activity worldwide, but it has also stimulated qualitative changes in the nature of tourism itself. As consumers become more skilled tourists, so they have begun to demand more from their tourism experiences, also putting more pressure on destinations and tourism suppliers to be more innivative and creative (Richards and Wilson, 2006).

We measure economic life by using statistics. Classical statistics used to count how many pieces or how many kilos or tonnes. This purely quantitative approach was fine for an industrial economy engaged in mass production. It was also valid for mass tourism when national borders facilitated counting the number of people entering or leaving a country.

When the marginal elasticity for goods or services became inelastic in the post WWII economy, a new system was set up to enlarge demand and therefore profitability. Tourism is the perfect example: it has allowed profits to be generated even on Sunday - the free day when work was forbidden and capital rested – and enlarged the demand in new fields as services and later experiences in creative economies (Rotariu 2002).

As compulsory border checks have disappeared in the EU, the tourism industry has started to count its clients by collecting data at reception desks, travel agencies, banks, shops, transport companies etc. But all of these sources only measure the quantity. To sell services and experiences the qualitative aspects of demand also has to be counted. This is very difficult for statistical agencies to do. This is one of the reasons why the global tourism industry has developed a uniform treatment of data through the Tourism Satelitte Accounts (TSA) to facilitate decision-making for public sector and other bodies.

2. The Sibiu case: using statistics for tourism

The European Capital of Culture (ECOC) staged in Sibiu in 2007 was analysed, and the longer-term impacts of the event were monitored through a research programme established in January 2007. The research was designed to provide comparisons with earlier surveys conducted in Sibiu by the “Lucian Blaga” University in the framework of the ATLAS Cultural Tourism Research Project (Richards, 2007). These surveys provide a useful benchmark for the period before the ECOC, with data collection having started in 2001. This research, which is still in progress, has revealed some particular methodological problems that

arose in comparing field research with official or officious statistical data. Most of these issues are related to accommodation data.

Romania has implemented uniform EU rules for statistics for tourism. However, field research is rare, and to collect qualitative data on their clients, economic actors in Romanian economy have to collect them by themselves: public research is limited and un-systematic. Our research in Sibiu has highlighted some particular problems of collecting data about tourism in Romania, particularly in the area of accommodation supply and demand, which is one of the major economic elements of the tourism system.

The main area of data that can be found in the Romanian Statistics Year Book concerns tourist circulation and accommodation facilities, for which there are compulsory rules guidelines of data collection. Hotel statistics present considerable problems of analysis, because of different categorizations and a lack of coverage of certain types of accommodation. The Master Plan for tourism in Sibiu County presented in November 2009 by Marketscope shows that Sibiu County has a total of 518 accommodation units, of which most are rural tourist pensions (159), followed by general category of pensions (124) and urban tourist pensions (66)(Table 1).

Table 1

Sibiu County: synthesis parameters of accommodation capacity
BY TYPE OF UNIT, CLASSIFIATION OR AS ASSUMED BY THE UNITS

Types units	Classified				Inventory (total tourist)			
	Number of units	% Of total units	Capacity (capacity)	% Of total capacity	Number of units	% Of total units	Capacity (capacity)	% Of total capacity
Apartments for rent	1	0.3%	2	0.02%	18	3.5%	117	0.9%
	11	3.3%	464	5.2%	36	7.0%	1,173	9.1%
Rooms for rent	14	4.2%	152	1.7%	17	3.3%	176	1.4%
Camping	2	0.6%	120	1.3%	2	0.4%	120	0.9%
Hostel	8	2.4%	389	4.3%	18	3.5%	984	7.6%
Hotel	32	9.5%	3,107	34.6%	39	7.5%	3,584	27.8%
Motel	7	2.1%	257	2.9%	8	1.5%	281	2.2%
Pensions	69	20.6%	1,218	13.6%	124	23.9%	2,144	16.6%
Rural Tourist Pension	125	37.3%	1,865	20.8%	159	30.7%	2,332	18.1%
ourist town Pensions	61	18.2%	1,173	13.0%	66	12.7%	1,278	9.9%
Villas	5	1.5%	236	2.6%	31	6.0%	704	5.5%
TOTAL	335	100%	8,983	100%	518	100%	12,893	100%

Source: Marketscope (2009)

However, hostels and camp sites are not counted either by the Statistics Department of Sibiu or the National Institute of Statistics. The data as presented in Annex 2 of the Master plan also show that some of the listed units are excluded from the statistics, as accommodation units of less than 5 bedspaces were not taken into account by official statistics, and from January 2009 all units with less than 10 places were excluded.

In spite of these omissions, Tourism Ministry data show that Sibiu County had 2315 rooms with 7399 places (3,2 places / unit) in 2006, and 4354 units with 11882 places (2,96 places / unit) by 2009. Sibiu itself had 1029 units with 3756 places (3, 65 places / unit) in 2206, 1322 units with 4493 places (3,4 places / unit) in 2007 and 2062 units with 6106 places (2,96 places / unit) in 2009. This indicates an increase of 100% in terms of units and 69% in terms of bedspaces for the city. In spite of the growth of major chain hotels hotels in Sibiu, smaller units have grown faster in order to satisfy the market for budget accommodation. Under these circumstances it is hard to analyse the tourism market as long as the accommodation capacity is so flexible.

Comparing the data from available sources the differences in the estimates f accommodation supply are significant (Table 2).

Table 2

	2005	2006	2006	2007	2007	2009	2009	2009	2009
	statistics	statistics	licensed	statistics	licensed	statistics	AJTS	licensed	inventory
total county									
units	111	120	273	137	359	172	481	335	518
rooms			2315		3057		5039	3335	5417
places			7399		6352	6013	12083	8983	12893
average places/room			3.20		2.08		2.40	2.69	24.89
average places/unit			27.10		17.69		25.12	26.81	24.89
sibiu town									
units			62		82		162	108	148
rooms			1029		1321		2284		2284
places			3756		2453		4633	3785	4584
average places/room			3.65		1.86		2.03		2.01
average places/unit			60.58		29.91		28.60	35.05	30.97
around sibiu									
units			170		221		189	no data	189
rooms			852		1305		1289		2284
places			2199		2487		3919		4663
average places/room			2.58		1.91		3.04		
sibiu and sourrondings									
units			232		303		351	no data	
rooms			1881		2626		3573		4568
places			5955		4940		8552		9247
other locations									
units			41		56		130	no data	
rooms			434		431		1466		849
places			1444		1412		3531		3646
% of sibiu in county									
units			44.45		43.21			0.00	440.93
places			50.76		38.62			42.14	35.55

It is notable that the surrounding regions have a large number of units, of small capacity (most of them pensions) that practically double the capacity of the city of Sibiu itself. Field research has shown that the prices in this area are much lower than in Sibiu and that clients choose them not only on the basis of lower price, but also as a distinct experience; living in a village gives another type of holiday experience than staying in the city.

Field research has also shown that small business owners have no real strategy for the future, and they do not undertake market studies. Most of them just took advantage of the increase in tourism, and few of them have developed their own website. Most promotion is still on the basis of word of mouth.

The most surprising findings relate to the influence that the town has in the surrounding areas. These areas have seen an increase in the number of accommodation units of 116% between 2006 and 2009, and a growth of 98,4% in bedspaces over the same period. This is much faster than in the city of Sibiu itself, which has actually lost market share in terms of accommodation supply, in spite of being the host city for the ECOC. This indicates that the city has generated tourism flows in the surrounding region, an impression which is confirmed by our surveys in Sibiu itself, which show that visitors are increasingly visiting the surrounding regions. This effect is likely to be underestimated in the official statistics, since the Sibiu region

consists predominantly of smaller accommodation operations, many of which are too small to be included in the tourism statistics.

The tourist arrivals and overnights for the whole county in 2009 as per official statistics are shown in Tables 3 and 4.

Table 3

Arrivals	2009											
	ian.	feb.	mar.	apr.	mai	iun.	iul.	aug.	sep.	oct.	nov.	dec.***
Total county	13200	12891	15472	15237	24198	24217	25002	29652	21621	23408	20945	14366
From which												
Hotels	9796	9521	11711	10523	17251	16079	15441	19061	14816	18067	15965	9302
Motels	810	729	722	625	1382	1709	1918	1819	986	1097	872	768
Touristic Villas	269	427	560	882	1047	1062	952	1239	1278	1091	1322	298
Touristic Chalets	446	269	396	266	454	690	1168	1424	1053	528	610	509
Touristic boarding houses (pensions)	698	619	1150	1153	1562	1604	1535	1571	1227	1062	919	1391
Agro-tourist boarding houses (pension)	991	1085	739	1496	1778	2001	2835	3222	1963	1392	1083	1787

*) Urban pensions were redefined as touristic pensions
**) Rural pensions were redefined as agro touristic
*** estimated

Table 4

Overnights	2009											
	ian.	feb.	mar.	apr.	mai	iun.	iul.	aug.	sep.	oct.	nov.	dec.***
Total county	19825	18516	22841	24272	37141	38159	45164	47598	36924	32165	29420	23950
From which												
Hotels	13756	12547	15560	14930	22817	21214	21559	24886	22878	22808	20088	12987
Motels	946	893	932	1076	1832	1886	2390	2117	1208	1383	1146	985
Touristic Villas	487	750	1689	1731	3515	3400	3897	3076	2930	2512	2766	1571
Touristic Chalets	623	381	565	363	670	1792	3339	3007	1456	816	875	1288
Touristic boarding houses (pensions)	1296	1172	1909	2075	3770	3055	2939	2575	2827	1675	1809	2000
Agro-tourist boarding houses (pension)	2527	2110	1906	3656	3582	4455	5718	6289	4732	2780	2552	4129

These figures indicate a total of 375975 overnights in Sibiu County in 2009. We can also add to these figures the approximate number of visitors staying with friends and relatives, who are not recorded in the accommodation statistics. In 2009 surveys indicated that about 31% of visitors had stayed with friends and relatives. This would suggest a total tourist volume of around 492500 overnights in 2009. Although the official figures indicate a substantial decline in tourism in 2009, our research shows that the quantitative change in tourist numbers was not as significant as the shift of customers from the formal to the informal (i.e. not counted in official statistics) sector.

The official figures of Sibiu Department for Statistics are calculated using a sample of the licensed touristic units. For any estimations or decision based on them the composition of this sample must be taken into consideration. Because of the ECOC the sample for Sibiu is larger than those for other counties as stated by officials from Sibiu Direction for Statistics. The area covered by the sample is also of importance for detailed conclusions. It is very expensive to use detailed data from the Statistics Department as they use customized software which can only be analyzed by the Department itself.

There are also no available data on the turnover of the tourism industry in Sibiu. No statistics are available. Direct observation has shown that the restaurants are well developed in the town and in the neighborhoods. They are not only serving local residents but also contribute to the animation of the areas where they are located. During January 2007 the students of the ATLAS Winter University found out that 84% of people leaving the main Square were looking for a general ambiance in the city. The large numbers of terraces in the city centre have changed the situation mainly during spring - autumn time. Moreover, direct observations have indicated that locals are increasingly eating in town, which means changing their eating habits. This summer restaurants owners have declared an increase of sales. However, the development of such 'leisure activities' also remains below the radar of official statistics. There is a need to collect more detailed data on turnover by type of activity in order to capture the full effects of economic and social change in the city.

3. Conclusions

The statistics system for tourism has changed. The former East European countries have implemented the unified UE rules. This Romanian case based on Sibiu has revealed that the official figures do not cover the whole tourism space. In order to have an accutate and realistic quantitative picture of the tourism reality the existing system of data collection must be reinforced and independent studies must be encouraged. For qualitative data a local system must be organised including: a local DMO with an appropriate and accepted research plan with the necessary funding. Our research has indicated that these change s are needed because the current statistical system is underrecording tourism activity, gives insufficient information on the value of tourism activity and is insufficient to measure the growing flexibility of supply in the 'informal' sector.

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CRISIS – ELEMENT OF ECONOMIC CYCLICITY. RETROSPECTIVE LOOK OVER A FEW FINANCIAL CRISIS OF THE TWENTIETH CENTURY

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Abstract: *Contemporary economic realities have brought to our attention a complex of phenomena and processes caused by a wide variety of macroeconomic factors. Those factors generated a negative macro and mondoeconomic phenomenon, known as economic crisis. Although, at a first sight, major crises do not occur with a very high frequency, these are specific moments in the evolution of economy. This paper attempts to summarize such moments that have marked the twentieth century, supporting the idea that crisis is not an accident but a permanent occurrence of the economic life.*

Key words: economi cycle, cyclicity, financial crisis

JEL classification: G01, N1, N10

1. Introduction

Economic cyclicity is an evolving trend specific to economic activities, characterized by alternation, in a certain sequence, of expansion and contraction of the economy as a whole. Unlike random fluctuations, a specific trait of economic cyclicity is the fact that expansion or recession in a particular area spreads to others, due to interdependencies generated by macroeconomic monetary and real flows.

From the historical perspective we can consider that the appearance of economic cyclicity coincides with the beginning of the industrial revolution, getting stronger with maturation of the productive apparatus, showing different and multiple forms and intensities, and the induced consequences on the economic environment are also widely varied.

For this reason we consider that the temporal existence of humanity, although ascendant and continuous, can not be perceived as linear, because the prosperity phases coexist with the economic downturns. So, we can say that the human society evolution is cyclical. In the context of commodity production the ciclicity of the economic activity became a more common reality.

The economic cycle - the unit of economic cyclicity - highlights the economic results achieved by human society for a certain period of time. Certainly the economic results obtained are not constant, but their levels give, ultimately, the structure or the form of an economic cycle.

We will define the economic cycle as a period between the beginning of a crisis and the end of the next one. But we must keep in mind that within its structure the economic cycle includes two different trends and four distinctive phases.

The first development of the economic cycle is the recession one, encompasing two large distinct moments: the crisis and the depression; the second development of the economic cycle is the expansion one, characterized by recovery and prosperity.

We consider cyclicity as a sum of phenomena and economic processes, and studying it may only be realized by considering it a whole.The nonlinear evolution of the economic life can be attributed to some phenomena that affect it adversely: economic crises. What must be underline here is that economic crises are not natural or inevitable phenomenon. Crises should not necessarily be perceived as spontaneous or sudden events of the economic life, but can be regarded as normal phases of the cyclical economic development. When studying the economic crisis the whole economic context that generates them should be considered not just the moment of the crisis.

"Crises are simply just points of intersection between prosperity and depression moment of the economic conjunctures. Therefore, to study them an examination of the entire cycle is necessary ". (G.N. Leon, 1943)

In order to support our opinion we recall the findings of Arthur Spiethoff,on the economic cyclicity perspective. Using as a start point the work of Clement Juglar, Spiethoff s approach has focused on highlighting three issues regarding the economic cyclicity:

1. In studying economic cyclicity the exclusive focus on crisis and overproduction is not relevant, an analysis of cyclical fluctuations as a whole is necessary.

2. In explaining economic cyclicity a primary role should be given to the study of capital investments.

3. The boom and depression could not be accepted as incidental elements of the economic life, but must be understood as essential manifestation form of the capitalist society.

Crisis, not a natural phenomenon, was produced or triggered - by or due to some causes. The causes should not be necessarily sought within an economic system, but can be imported from outside the economic system in question.

Cyclicity and crises' causes could be endogenous and / or exogenous ones. We consider, although, that cyclicity has mainly exogenous factors as triggering factors.

Foreign capital investments can be considered a possible cause of cyclicity. Overinvestments can increase the production, significantly over consumption possibilities, and that constitutes itself as a favorable factor to the appearance of stocks, and they generate, in a first phase, the overproduction crisis. Migrating capital may leave some national economy without the possibility of purchasing new inputs, or no capacity to invest, situation that can lead to a widespread economic crisis.

Cyclicity's causes must be sought not only within an economic system, but must be identified outside the economic system in question. By external factors we mean those elements that came from outside, unfamiliar to the system, and that are not specific to the structure of economic space under discussion. Among exogenous factors, we can mention as possible causes of crisis: war, political and economic blockades, scientifical discoveries, manufacturing technology innovations, etc.

The economic crisis is, ultimately, a state of difficulty, of sudden change of economic activities, a serious juncture for the overall economy, characterized by stagnation or decline of macroeconomic performances, the emergence of serious economic imbalances between supply and demand, production and consumption.

Strictly, the crisis is the turning point of the business cycle when the economic ascent phase is replaced by the depression one. A negative macroeconomic situation generates a decrease in the employment rate, a reduction/decrease of the revenue at the society level, and also changes in economic structures and institutions, aimed to economic recovery.

If we must find a correlation between economic crisis and economic cyclicity, we believe that crisis appears when the ascending phase, the expansion one, reaches its climax leaving place to the downward phase of depression.

The triggering of an economic crisis requires economic entities to work towards inducing amendment in the economic structures and the economic mode of action, amendments that are intended to lead to the elimination of imbalances, behaviors and even institutions that prove themselves as being exceeded by daily realities. All these represent the premises for the transition to a new ascendant phase for the whole economic life.

Even though economic crises are a particularly difficult phase of the economic life, having negative effects on a large number of operators, it can be understood as the input for the outbreak, at a large scale, of the phenomena called „creative destruction".

For the purposes of the statements above, to support the idea that economic crises are an integral part of the economic life we will present chronologically some of these moments that marked the economy of the twentieth century.

2. A retrospective look over a few financial crisis of the twentieth century

2.1 The crisis of the U.S. dollar (Nixon - De Gaulle)

The Bretton Woods system, established in 1944, conferred the U.S economy a high power position on the world market, through its currency, because the new system was based on the fact that nations could only enforce gold convertibility on the anchor currency—the United States' dollar. We must state that the U.S. gold reserve at the end of W.W. II was about 26 billion dollars of a total of approximately 40 billion dollars, representing about 60%.

About 40 years ago, in 1968, the United States experienced the difficult times of financial crisis. The economies all over the world had their reserves and carried out their international transactions in a currency over which only one state had the issuing right.

Speculation and rumors about the existence in circulation outside the U.S. of a great amount of dollars, considered by ones to big of an amount, led to global concern about the fact that the Federal Reserve System's gold resources were insufficient to cover a possible spot demand on the market, for converting Eurodollars.

In the 60s, gold was bought on the market at an artificially low price of 35 U.S. dollars per ounce. Considering that the U.S. was issuing banknotes without coverage in gold, the French government, represented at that time by Charles de Gaulle, began to ask for gold bullion in exchange of its reserves and its input dollars. Thus, only in 1965 the gold equivalent of 150 million U.S. dollars was called. In this manner, France has increased its gold reserves in the Banque de France (which in 1968 increased from 71.4% to 91.9% of the total amount of foreign currency in their reserves) throwing dollars on the market. (Ash, 2007)

The attempts to stabilize the dollar exchange rate have not had positive results, especially because they manifested in a context in which the gold reserve decreased below 10 billion U.S. dollars. Above all this a sharp increase in deficit was registered, because previous accumulations resulted from supporting the costs of the Vietnam conflict and the increased demand for conversion of dollars on the international market. Therefore, on August 15th, 1971, President Nixon took the shocking measure of suppressing the gold dollar parity.

At that time the U.S. experienced, for 3 months (90 days), a period, known as „the Nixon Shock", in which wages and prices were frozen, surcharges on imports (10%) were adopted, and until August 23rd currency exchange markets were closed („the gold window"), making the dollar inconvertible for gold directly, exceptions were accepted only on the open market.

In December 1971, thru the Smithsonian Agreement, a 7.9% devaluation of the dollar against gold was imposed, at 38 U.S. dollars per ounce, with a dollar fluctuation margin against major currencies increased from ± 1% to ± 2.25% and attempted to balance the world financial system using SDRs alone. And so, the Bretton Woods system collapsed. (Popa, 2007)

In 1972, in response to the Smithsonian Agreement provisions, the European Economic Community was trying to protect itself against unpredictable dollar fluctuations. The result was the introduction of the „monetary snake" system and the establishment of the European Monetary Cooperation Fund, EMCF (1973). Through this system the participating countries committed to maintain, based on principles of cooperation and mutuality, a margin of fluctuation between their currencies of ± 2.25%, which meant a reduction of 4.5% margin against dollar, provided by the agreement signed a year before.

In the absence of market confidence, the situation of U.S. balance of payments knew no improvement; the dollar continued its free fall. Suspension of the market and successive currency devaluation (February 9, March 2, 1973) followed. Resumption of trading, on March 19th, 1973, did not bring a new official devaluation of the dollar, but surprised as the monetary authorities' decided to abandon the Gold Exchange Standard for the floating rate regime, not only for the dollar, but by default for all currencies. Depreciation continued, reaching in 1980 the value of 800 U.S. dollars per ounce.

Long and serious efforts were required to restore world confidence in the U.S. currency. (Ash, 2007)

2.2 Latin American debt crisis (80s)

The debt crisis was the crisis that marked the early '80s in Latin America, when countries belonging to this region reached a point when their foreign debt exceeded their ability to honor them.

In decades 7 and 8 of the last century, many Latin American countries, notably Brazil, Argentina and Mexico, borrowed large sums of money from international lenders to support the process of industrialization and infrastructure programs. The impetus experienced by these economies during that period, led lenders to continue to offer these loans, which increased by 4 times the level of their external debt from 75 billion U.S. dollars in 1975 to over 315 billion U.S. dollars in 1983, which represented 50% of the region's GDP.

When in the 70s and 80s the world economy entered a recession phase, and oil prices increased, developing states have found themselves facing a desperate cash crisis. Oil exporting countries, rich from the rise of prices in 1973-1974, invested their liquidities in international banks, which have drained much of this capital in the form of loans towards Latin American governments.

Globally, in this period, there were some signs of improvement of the U.S. dollar situation, after the convertibility crisis during the Nixon administration. Fed policy of strictly controlling the supply of money, the boost of economic growth and the decrease of inflation had as a side effect the first system liquidity crisis, through reaction of creditors and the explosive increase of interest. The debt of Latin American countries has become, suddenly, huge, hard to be payed, and the failure to respect the deadlines exponentially amplified the interest that had to be paid or reimbursed .

The crisis began when the international capital markets began to become aware of the insolvency of the Latin American countries. This happened in August 1982, when Mexico has ceased its payment service, causing blockage of external funding for all Latin American countries. The effects had propagated in chain, affecting even some African countries such as Ethiopia and Mozambique.

In response to the crisis, most countries have addressed an export-oriented industrialization strategy. From that time onwards, the region has experienced tensions in economic development and has initiated debt management programs.

One consequence of the crisis represented the collapse of the dictatorial-authoritarian regimes of Brazil and Argentina.

Debt crisis was resolved on the basis of international cooperation by setting up a relay credit by central banks through the Bank for International Settlements. However it continued to have effects even after 2000. One of them was the total amount of Latin America and the Caribbean debt in 2004, of 2.94 trillion dollars, represented 63.2% of the total debt of the emerging market worldwide.

2.3 "Savings and Loans" Crisis in the U.S. (1989-1991)

"S&L" Crisis in the late '80s and early '90s meant the collapse of 747 U.S. savings and loans associations. Those savings and loan associations were operating in the U.S. market since 1800 and served, at first, as the savings and mortgage institutions. In the 1970s, many banks, particularly those savings and loans associations, have faced major problems due to low interest rates on deposits and inflation. Other favorizing factors were the migration of money savers toward monetary funds, and that many long-term mortgage loans had a fixed interest rate. Moreover, legislation limited them to only a few types of credits and loans that were allowed to offer.

Among the causes of this crisis the imprudent lending towards real estate market can be mentioned, and also keeping open the unsolvable saving banks.

As a consequence, many other banks were affected by bankruptcy. Concomitant decline in the financial industry and the real estate market were the causes of economic recession in 1990-1991. The cost of this crisis is estimated to a total of 160.1 billion U.S. dollars, of which 124.6 billion U.S. dollars were paid directly by the U.S. government, which led to the deficit recorded in the early 1990s. (Curry, Shibut, 2000)

2.4 The Mexican Peso crisis (1994)

The 1994 economic crisis in Mexico, known as the Mexican peso crisis, was generated by currency depreciation in early time of Mexican President Ernesto Zedillo governance. In Spanish, the crisis is called, *el error de diciembre*, (the December error), and its effect on the southern part of the country and on Brazil was labeled as the *Tequila Effect*. Anyway, many previous events, especially political ones, had their share on this situation (rebellion in the southern province of Chiapas, the assassination of the ruling party's presidential candidate, Luis Donaldo Colosio and so on).

The collapse of the Mexican peso in the fall of 1994, revealed the fragile financial state of Mexico that was based on speculative actions to finance the budgetary deficit on increasingly shorter terms. Mexico's country risk grew as a result of the breakdown in negotiations with the rebels in Chiapas, causing a slowdown in foreign investment. The state's ability to cope with the shock was sabotaged by the need to reimburse previous financial commitments that covered the past expenditures. Previous government's policy of Carlos Salinas Gortari has made its mark by increasing budgetary deficit and issuing credit instruments called t*esobono,* dollar-denominated short-term securities.

Concerned about the degradation of the financial situation of the state, investors became worried about the stability of *tesobonos* securities owned. So, they decided to sell them. The result was another reduction of the Central Bank reserves.

Peso plummeted from a rating system of 4 pesos for 1 U.S. dollar to 7.45 pesos for 1 U.S. dollar. Initially, the United States got involved by buying pesos and then providing financial assistance in the form of credit amounting to 50 trillion dollars. The exchange rate has stabilized at 6 pesos for one U.S. dollar. At the end of the crisis, the United States made a profit of 500 billion dollars from the loan.

2.5 The Asian financial crisis (1997-1998)

The Asian financial crisis was a major decline that swept most of Asia since July 199, sparking deep fears at global level. Only a decade earlier, Southeast Asian countries, Thailand, Malaysia, Singapore, Indonesia, Hong Kong and South Korea, recorded some of the most impressive growth rates in the world. The starting point of the crisis was in Thailand, and was marked by the collapse of Thailand's bath against the U.S. dollar, after the failure of numerous attempts to support it. At that time, Thailand was under the burden of external debt, largely caused by movements in the real estate sector, which brought the country close to bankruptcy just before the currency collapsed.

Taking the form of an epidemic, the phenomenon spread to all Southeast Asian states and Japan. One after another, the currencies of the Asian tigers depreciated against currencies of major western powers, a

phenomenon accompanied by the fall of the securities on exchange markets and deepening of private debt. The most affected economies were Indonesia, South Korea and Thailand, followed by Hong Kong, Malaysia, Laos and Philippines. The consequences suffered by China, India, Taiwan, Singapore, Brunei and Vietnam are not to be neglected, as they experienced a shrinking of external demand and loss of external confidence.

ASEAN economies external debt increased between 1993 and 1996 from 100% to 167% of GDP, reaching 180% at the climax of the crisis. Along with the solid fiscal policies of these countries, came the intervention of the International Monetary Fund, which allocated 40 billion U.S. dollars to initiate a program that aimed to stabilize the currencies of South Korea, Thailand and Indonesia, the most affected states. (Karunatilleka, 1999) Efforts were directed primarily to avoid a global economic crisis as a result of the Asian situation, so policies have little contribution into stabilizing the internal situation of the affected countries. The effects of the crisis were felt up to 1998, when growth in the region reached the threshold of zero (the Philippines). Only Singapore and Taiwan appeared to be isolated from the shock, but suffered bruises caused by geographical location between Malaysia and Indonesia. (Radelet, Sachs, 1998)

Signs of rehabilitation of the Asian economies were felt only from 1999 on.

2.6 The financial crisis in Russia (1998)

The Russian financial crisis, known as the "Ruble crisis" hit Russia on August 17th, 1998, as a result of the spread of the Asian financial crisis that has started the previous year. An important cause were the significant commodity price decline on the world market of raw materials, goods whose export the Russian economy was dependent on. 80% of total exports of this country were oil, gas and metals. So, prices falling for these items heavily affected the state budget. However, the major cause invoked by authorities was not the fall in oil prices, but taxes that were not paid to the state budget by energy and production industries.

Like other similar cases of crisis, Russia's financial crisis substance was given by the decline in productivity, by the artificially high exchange fixed rate for ruble against Western currencies and by a chronic fiscal deficit. The economic cost of Chechnya war can be added to the previous mentioned factors, estimated at 5.5 billion U.S. dollars, a figure that does not include the costs of the rehabilitation of that area. (Bihdai, Blinov, Blinov, 2003)

Inflation has reached alarming levels, 84%, food prices have doubled, while the prices of imported goods have become up to 4 times more than their initial value. The whole country was shaken by deep social unrest and political changes. In order to rehabilitate the situation in the Russian economy, the IMF and World Bank have established a grant program of 22.6 billion U.S. dollars.

It is remarkable the extremely rapid rehabilitation of Russia after this crisis. One reason for this favorable development was a rise in oil prices on the world market in the next few years (1999-2000), which allowed the Russia's budget to recover. More so it can be added the development of the domestic food industries due to massive increases in prices of imported products. Russia's economy was supported also by the use of non monetary exchange instruments, a widespread practice, which made the impact of currency collapse less pronounced than it was for an economy dependent on the banking system. Booming industries allowed the reduction of unemployment and restoring the living standards of the population. All these factors led to a financial infusion that enabled the removal of social and political pressures and, thus, a rapid and dramatic economic rehabilitation. (Kotz, 1999)

2.7 Argentine economic crisis (1999-2002)

The Argentine economic crisis is part of the negative situation manifested in Argentina in the late 1990s and early 2000s. From the macroeconomic perspective, the beginning of the critical period is marked by the reduction of the GDP in 1999 and the end of it by its return in 2002. However, the origins of the collapse of the Argentine economy, and its effects on the population must be sought in previous actions.

Since 1998, Argentina's economy has declined significantly, recording the most major financial crisis in its history and a period marked by severe social problems evidenced by high rates of unemployment and poverty. The economic downturn that Argentina has met in the late '90s come to continue a heavy trial period which the state has experienced, such as the military dictatorship from 1976 to 1983, disasters caused by the 1982 Falklands war and traumatic hyperinflation that marked the year 1989. During this period, successive governments were operating under the sign of corruption, which led to loss of public confidence, but also of external donors.

What came to deepen even stronger the crisis, experienced by Argentina at the beginning of the new millennium, was that in 2001, the IMF has refused to pay an installment loan worth $ 1.3 billion, vital for an economy that find itself in recession for four years and a public debt worth 141 billion. After this refusal,

Argentina was shattered by a wave of violent protests that had as consequence three successive presidents and three governments. (IMF, 2003)

Domestically and worldwide, this crisis has been mainly placed on mistakes accounted to the IMF. The new Argentine government accused the IMF of negligence in prescribing policies for implementation and the submission of inaccurate reports on the internal situation in the years preceding the crisis. Lending institution representatives argue that the basic reason for the crisis is the use of a fixed exchange rate system. On the other hand, such situations arise when governments are borrowing to finance current expenditure and not the investments.

Internationally expert advice argues that the IMF mistake was that it continued to borrow a bankrupt government, in order to allow big U.S investment funds to recover their investments. When, however, IMF warns about unwise macroeconomic policy mix, usually it's right. For example, the IMF warned about the Asian crisis of 1997, 8 months before it started.

Between 2003 and 2005, Argentina experienced a period of recovery. The crisis led to the emergence of huge costs both economically and socially, but after two and a half years, the huge economy growth brought the economy to a level close to that before the crisis. The macroeconomic indicators were improved, the labor market conditions were also improved, financial market was stabilized, steps have been taken to reduce poverty, and authorities have made significant progress towards normalizing relations with creditors.

In early 2006, three years before maturity, Argentina has managed to fully pay the IMF debt, whose value amounted to SDR 6.876 billion, equivalent to 9.9 billion U.S. dollars. To escape the IMF, Argentine government has used an almost desperate gesture, debt payments have been made through a loan to the Central Bank of Venezuela, with an interest rate two times higher than that given by the IMF, respectively 9%.

3. Conclusions

Although significant advancements have been registered, challenges are yet to be faced in order to achieve sustained and sustainable growth. This implies that the authorities operate on several fronts: to continue responsible macroeconomic policies to counter the adverse impact of inflation, to undertake structural reforms to enhance factor productivity, to strengthen financial intermediation, to normalize relations with creditors, to create a climate favorable for local and foreign investments, to ensure that growth results are equally distributed and that vulnerable sectors of the community are adequately protected.

Without pretending to present an exhaustive paper on the subject, the present elaborate wants to be a overview picture of issues that marked the moments of crisis over time, and consequently marked the economy and the human society as a whole. As we tried to demonstrate, crises have multiple causes and effects, so the obvious conclusion is that the current financial crisis, too, is nothing but part of a general typology of crisis.

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MANAGING CULTURAL DIVERSITY IN INTERNATIONAL TOURISM

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Abstract: *Globalization marks the world economy in an increasingly visible manner, and tourism makes no exception. Actually, the tourism is the most visible expression of globalization, involving one of the greatest flows of goods, services and people in the world. One of the issues that arise in this context is evaluating if international tourism enhances understanding among people from different cultures or by contrary increases the likelihood of cultural misunderstanding/conflict. This paper will focus on analyzing how culture of the home/host country influences the experiences of expatriate managers in international hospitality. To conclude will realize a SWOT analysis of their behavior.*

Key words: international tourism, globalization, cultural diversity, expatriates

JEL classification: L83, M12, O15, M16

1. Globalization at a glimpse

The concept of globalization is a very complex one and should be viewed from different perspectives.

The simplest and the most used definition of globalization, from an economic point of view, could be that globalization is a process that merges national economies into an interdependent global economic system.

Tabel 1 Dimension of globalization

Economic dimension	*Cultural dimension*
From the economic point of view, globalization is the process whereby the world economies are becoming increasingly integrated and interdependent, market-oriented approaches to development are spreading, the notion of state provision of privatization and deregulation are being withdrawn, trade and investment are being liberalized, and increased penetration of transnational corporations in life is being encouraged.	From the cultural point of view, globalization is the process of increasing homogeneity of lifestyles and aspirations via media, TV, films, tourism, etc., combined with the rapid spread of different views and greater opportunities for marginalized voices to be heard.
Technological dimension	*Social dimension*
From the technological point of view, globalization is the process of rapid innovation and increasing inter-connectivity, particularly for information and communication services, and biotechnologies. This is the process in which knowledge is the most important factor determining the standard of living, more than capital or labor. Today's most technologically advanced economies are truly knowledge-based (World Bank, 1998).	From the sociological point of view, globalization is the process of incorporating people into a single world society. The world is becoming a "global village."
Political dimension	*Environmental dimension*
From the political point of view, globalization is the new process of shifting the power from national governments in directing and influencing their economies, to global institutions, such as the World Bank, the European Union, the European Central Bank, the World Trade Organization, the World Health Organization, and the World Tourism Organization. In order to survive, national governments that can no longer manage their national economies must increasingly manage national politics by adapting them to the pressures of transnational market forces.	From the environmental point of view, globalization is the process of increasing inter-linkages between ecosystems, accelerating biological invasions, simplifying and homogenizing natural systems, and intensifying pressure on global commons.

Source-. Saee, J. (2004). *Managing organizations in a global economy: An intercultural perspective.*, Thomson.

In order to create that interdependent global economic system, the steps are:

- forming regional economic trading blocks,
- growing local internationalizations through economic developing ties
- deepening multinationalizations by multinational firms
- introducing global norms and standards
- developing global markets and strategies
- growing firms with no specific national operational base. (Reisinger; 2009)

All these led to an increased interconnectiviness between societies, covering numerous areas of life.

The multiple dimensions of globalization are the economic, cultural, social, environmental, political and technological ones. Briefly, those dimensions of globalization can be presented and explained in the table that follows.

Having this as a start point, we will try to present strictly the impact of globalization on tourism.

2. Globalization and the tourism industry

The influence of globalization on tourism touches at least the fields we will talk about next.

First of all, and one that really concerns us in this paper, is the *cultural* one. It can take various forms, such as: creation of global villages; globalization of culture; global uniform culture; global tourist and uniform tourist behavior; culture change; resistance to change in culture; emergence of local identity; emergence of local consumer behavior; glocalization.

Another one, also very important for this paper is *tourist behavior*. Here, we can mention: global orientation; dependence on information technology; use of self-service and personal reservation tools; demand and desire for new experiences; increased uncertainty and fear; new intrinsic travel motivations; wait-and-see attitude; sensitivity to price; travel cost-cutting; individual travel, do it yourself; travel by car/coach/train instead of plane; accommodation other than hotel; visiting family and relatives.

Technology, one of the most important tools of globalization, cannot be ignored in the tourism field either, especially if we are talking about: global booking systems; global distribution networks; Web 2.0 tools; mobile phone technology; standardized technologies in transport systems.

Tourism, being one of the world's largest multinational economic activities, and globalization's main dimension being the economic one, is inevitable that the *economic* aspect of globalization influences tourism. It forms of manifestation are: horizontal and vertical integration strategies of tourism enterprises; foreign investments in hotels and tourist attractions; global players and strategic alliances; global tourism management; global competition of vacation resorts.

In the globalization context, politics cannot be separate from tourism. So the influence of *politics* can be related to: increasing importance of international tourism organizations; necessity for global coordination and regulation of passenger circulation; sustainable development as quality is a dominant idea.

At last, but not the least, especially now, is the *ecological dimension*. Here we can mention ecological degradation; climate changes and their effect on destinations; global warming and its effect on tourism businesses. (Reisinger; 2009)

As we already stated globalization has an increasing impact on the tourism environment. More and more tourism organizations are now global organizations that operate across national borders. From the multiple aspects of this issue, we will analyze in this paper just how these organizations are managing cultural diversity in their international activities.

3. Managing cultural diversity in tourism industry

Like globalization, the concept of cultural diversity has a lot of definitions and approaches too. More often, when we refer to cultural diversity, we refer to differences in race, ethnicity, nationality, religion or language among various groups within a community, organization or nation. But, cultural diversity is more than that. Is about the diversity of human groups, societies and cultures in a specific area, region or even the whole world. It is also about the mixture of individuals and even groups with different backgrounds, characteristics, values, beliefs, customs and traditions. And, from the paper's perspective, it refers to the

existing variety of human social structures, belief systems and strategies for adapting to situations in different parts of the world.

So, managing cultural diversity by companies operating in the global tourism and hospitality industry is not a very easy task. The management of these companies might have trouble relating their corporate culture to their employees' work style, ethics and even expectations. The reasons are very simple, is either ethnocentrism or limited knowledge about another's culture. Even if the reasons are simple the consequences for the work environment can be very serious and may preclude objective assessment and understanding of culturally different people.

In the international tourism and hospitality industry, cultural misunderstandings are often an important factor in the quality of staff service and most of the time occurs when delivering services to the customers. The way staff acts and the expectations of customers are based on their cultural bias.

If the industry professionals, locals and tourists are aware of these aspects of cultural differences, many of the cultural misunderstandings and mistakes can be avoided. Since quality of the social contact between customers and employees influences customers' perception of service quality and their ultimate satisfaction with the product, tourism and hospitality representatives should pay increasing attention to managing cultural differences in personal relations between providers and customers. Being aware of the cultural differences and learning how to face and manage them will be one of the keys to success in the future tourism marketplace. (Reisinger; 2009)

The enterprises acting in the hospitality industry are usually multinational organizations, but a truly multinational organization can be considered one that is able to use cultural diversity in its benefit as its competitive advantage. As we stated before, cultural diversity derives from human resources of different backgrounds, with different values and expectations. From this perspective, a multinational organization can improve its levels of comfort and capitalize on employees' different skills and abilities as a major asset to the company's productivity simply by paying attention to the cultural differences in their workforce. Actually, the practice proved that the wider the range of cultural differences in the workplace, the richer the organization and the more excellent its performance. (Reisinger; 2009)

In this changing environment, due to globalization, we cannot deny that cultural diversity stimulates greater innovation, creativity, and responsiveness to consumer demands and changing environments and that it also contributes to the reputation of the work place and more effective competition.

The reputation of an international hotel chain, but not only, depends a great deal on their executive manager, and the class of such a hotel is defined by the professionalism of its staff and consequently by its standards of service. In order to achieve these aspirations, a multinational hotel company makes use of a special category or class of managers, the expatriate ones. These are qualified, seasoned managers that are transferred or rotated from one property to another one, within the same company, but in other countries than their own.

The use of expatriate managers is a very useful process for the company and most of time a necessary one. Why? Because the transfer or rotation of executives provides training, experience and career opportunities for them. On the other hand, using expatriates is a way to deploy talented managers where they are needed. Furthermore, most of the times there will be organizational development and growth for the company.

We talked before about cultural diversity. In this context, the best expatriate managers are those who understand the importance of local culture, and even more significant, the importance of local staff development training.

Usually the managers, depending on the circumstances, may perform various roles, such as: leading; acting as a figurehead; communicating information; negotiating; allocating resources; handling disturbances; planning; overseeing implementation of plans; and evaluating. (Clark, 2007)

Unlike a manager in its home country, an expatriate manager must have something more, a special capability to adapt himself or herself to a foreign environment and also he or her must be very flexible, especially if the host country can be characterized as being politically volatile. Being an expatriate manager presumes more time, more expertise and much more diplomacy that is needed for a manager that is performing in his home country or in a domestic property.

The preparation or the development of an expatriate manager is a long-term task and involves frequent transfers, rotations on different positions, and individual career tracking. All these make the process a costly one, but in the same time, as we stated before a necessary one. A well prepared international manager is one that has been groomed through years of experience, has experienced different types and

different levels of acculturation to different countries. The importance of a qualified manager in order to be successful is recognized both by the host country and the hotel owner. (Rocco &Andy, 2007)

For the international hotel chain, an expatriate manager is the one that represents it in dealing with the locals, from businesspeople, to suppliers, government officials and, of course customers. Because the local community cannot be ignored and because it is very important to be an active part in the community life, in order to be integrated, when asked by government, the expatriate manager must use his or her foreign expertise and the hotel's resources to participate in the country or community's pet projects. These involvements in local community's life make from the expatriate manager more than a simple representative of the international hotel chain, more likely an ambassador-at-large from the home country.

Unfortunately most of the time, these expatriate managers are sent in foreign countries, especially in the developing ones, without being properly prepared. Not necessarily from the professional point of view, but with very little understanding of what they will encounter there or without knowing exactly what the ramifications of their actions and behavior are. Even if they are well prepared about the culture of their foreign environment, there is at least one more aspect that should be known and also to be prepared to deal with: practical ethic. They might encounter some difficulties in dealing with this aspect based on their own cultural biases. For example, under-the-table payment for favors is a gray area in some cultures, perhaps questionable but not illegal. Hotel managers in developing countries may actually be seen as a party to a "contract" in which the host country tacitly agrees to accept some of the negative consequences of hotel development in order to gain its benefits. The hotel manager's style and the policies established will affect both the benefits accrued to the community and any adverse social impacts. (Gee, 2008)

In order to improve the relationships with local community, even if there is a wish to hire local managers, the expatriate managers are the only solution. Why? Because most of the time local residents have limited access to training in hospitality industry and even if they do they may be not properly prepared for this kind of positions. And of course it is about personal prestige. So the only solution left is to hire qualified local nationals for junior management positions. Most of the time, the international hotel companies have training programs for the most talented local nationals to qualify them for eventual senior management positions. Additionally, those locals are sent to different properties, as seasoned managers, to become more familiar with the company's system and culture.

Occasionally, there is a possibility to hire locals for senior management positions, due to vary reasons, sometimes for political ones. But even in these situations is better to use expatriate managers for technical assistance in pre-opening and organizing activities for the new property. The lack of exposure to the company's operating system, procedures and standards make the inexperienced managers unable to cope successfully with the multiples decisions needed to be taken in the start-up of a new hotel. So it is desirable to use expatriates in the pre-opening and most of the times even in the first years of hotel operation. When the hotel operates well and the local staff becomes better trained, they can move into senior management positions.

Irrespective if the international hotel chain use expatriates for pre-opening or for the effective operation of the property a very important aspect is the skill transfer. This practice supposes the explicit understanding that the expatriate technician or manager will help develop his or her local counterpart and that eventually the job will be filled by a local replacement.

We can imagine that the skill transfer could be easier for some hotel positions than for others, if formalized training or education is required. To be a successful transfer, a major commitment must be made to giving local hotel workers ongoing training and assistance. There are different degrees of commitment to the task of local personnel development, some companies are sympathetic to the community goals of maximizing local employment and placing local nationals into higher positions to serve as role models, some companies are reluctant to yield totally to community pressures. Even under favorable circumstances, locally trained personnel will usually be constrained by their lack of experience and international exposure. (Gee, 2008)

4. Instead of conclusions

There are many more aspects concerning the employ of expatriate managers. We will stop here, but not before making a SWOT analysis of filling the executive manager position by an expatriate. The analysis will be made from two different perspectives: one from the expatriate point of view and one from the hotel company perspective.

Table 2. SWOT analysis from the expatriate manager point of view.

Strengths	***Weaknesses***
The expatriate managers are much better paid then the domestic ones. Their revenues include high salaries, the compensation package and adjustments for hardship and other allowances They are offered high living standards afforded by perquisites: - possibly company-owned and -furnished housing, - a chauffeur-driven company car, - company-paid domestic help, - cost of living allowances, - incentive compensations. A foreign assignment means: - new connections, - meting other cultures and business climate or environment; - working with new and different people, - new ideas - an improving experience.	The manager might face the shortage of appropriate accommodations and educational facilities to support family life. There will be worries about health needs, appropriate schools for children and religious needs. A special attention should be paid to health considerations: poor standards of hygiene and medical service; the absence of medical staff who speak expatriate's language; cautions in using or consuming water, fresh fruits and vegetables. Managers tend to have a disadvantage in dealing with relationships between the hotel property and local suppliers and businesses, the community, and governmental bodies. The expatriate managers may not be accepted by the employees or other managers. Expatriate managers can make serious errors in judgment if they fail to make the necessary adjustments in their styles of leadership and control.
Opportunities	***Threats***
The managers have the possibility: - to act autonomously within the company s policies especially during emergencies; - to change or influence organizational strategies; - to gain a wealth of different kind of knowledge; - to get a more "international" view or perspective; - to keep improving the management with new ideas and cultural features. The managers can transfer knowledge to junior managers who, as a rule, are from local qualified individuals. The expatriate managers can use their expertise in offering technical assistance either in pre-opening and organizing processes for a new property or in effective running of the hotel.	The main threat is *cultural shock*, resulting from being immersed in an unfamiliar environment. Due to the lack of contact with, and by geographic separation from their own country and culture their frame of reference may become increasingly localized – *excessive acculturation.* There is a potential to fail and the result will be *early repatriation*. Such a manager who fails in a foreign assignment: - may become less effective upon reassignment to a domestic property, - may suffer a loss of self-esteem and confidence and possibly a loss of prestige among peers. Even if the *repatriation* is made when contract expires, there could be a difficult one. It is not easy to: find a suitable position for a repatriated manager; find an equally prestigious job; find an assignment that allow as much latitude or autonomy as the last one. Sometimes the managers and their families suffer a *reverse cultural shock.* Another problem that might occur is the *financial readjustment*.

The hospitality industry and the whole tourism sector is people based, meaning that is run by *people* and for *people.* The real potential for this sector lies in its people and culture differences among employees and customers can make or break the industry.

Table 3. SWOT analysis from the hotel company point of view.

Strengths	***Weaknesses***
The expatriate managers know and understand the organizational culture, strategies and goals. They are coming with know-how, experience and most of the time international expertise. Their previous experience in domestic or other international facilities is already proved. An expatriate manager can offer experience, skills transfer, and even a new vision for the company. The manager is seen as an "ambassador- at -large" for the company and for home country. The expatriate managers usually have a solid educational background. They have a positive impact and induce more respect in the company than a local manager.	The main weakness for the hotel company is the *high cost*. Expatriates employee will cost the company a minimum of three times as much as a local national filling the same position. The elements that make the cost so high are: - the size of the allowance or differential package required, - relocation expenses - compensation for the inconveniences or hardships caused by the foreign assignment, - the cost of tax reimbursement programs. They also need long pre-departure and cross-cultural training that can be expensive too. They are not as efficient as local managers in dealing with local suppliers, businesspersons, community or governmental organizations.
Opportunities	***Threats***
The expatriate managers can transfer knowledge to junior manager who will fill up the senior management positions, which are cheaper and after that the expatriate can be relocated where needed. Bringing an expatriate manager can contribute to the expansion of international tourism in the host country. They can contribute to the diversification of the products offered by the company If the expatriate proves to be the proper one, he or she could improve the relations with local workforce and community.	The cost of poorly selected or poorly trained manager : - actual cost, including training, relocation costs, salary and non-salary expensive, eventual early repatriation costs - opportunities missed, related to inefficiency, guest dissatisfaction, damage to the company's image, and eventual strained relations with the owners and the local government Labor laws and other host country's regulations, in many countries, might limit the number of hotel expatriates who can be employed and might pose problems in obtaining visas or work permits for them.

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THE IMPLICATIONS OF FINANCIAL CRISIS ON LOCAL PUBLIC FINANCES FROM EUROPEAN UNION COUNTRIES IN A GLOBALIZATION WORLD

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Abstract:
The influence of the international financial crisis have effects even at the local level because in all EU countries an important part of economic activity is conducted under the responsibility of administrative, financial and legal local authorities as a result of the decentralization of decisions at the administrative-territorial units. This study is primarily intended to present the implications of financial crises on local public finances in the EU countries, to identify the controversy ideas of globalization as effects on local public finances, to see the connection between them reflecting European Union reality and to offer some solutions to attenuate the negative impact of this global financial crises.

The framework of this paper is based on a set of research programs and papers made by institutions as European Commission, European Union Council, Central and Local public administrations, International Monetary Fund, Romanian Institute for Public Policies, National Institute of Statistics, Federation of Romanian Local Authorities, Universities, Regional development institutions, Organization for Economic Cooperation and Development (OECD) and others.

Key words: financial crisis, local public finances, globalization, European Union countries

JEL classification: G01, H7

1. Introduction

The financial crisis affected the global economy at all levels, also felt on towns and regions of European Union because an important part of economic activity is conducted under the responsibility of administrative, financial and legal local authorities.

The question is how close is the relationship between financial crisis and local government level, and the link between globalization and the local level of Government. In this sense, the paper aims to find related items, which in fact will mean that local public finance should be viewed in relation to two phenomena (the financial crisis and globalization), as part of the whole.

Thus, only from the definition of globalization, “the process of transformation of local or regional things or phenomena into global ones” (Voinea, G., Rusu, E., 2008, p. 74-81), taking into consideration the expression “local or regional things or phenomena”, it is evident that a role in the globalization process belongs to the local public finances. And vice versa, globalization, as a complex process, has impact on each its component elements, and so that, on local public finances, also.

Data on the causes and effects of the global financial crises are still being gathered, and thorough research in this area is still lacking.

Council of European Municipalities and Regions has discussed the impact of the financial and economic crisis and stated that the potential contribution of local and regional governments in combating the crisis has not been fully harnessed by the EU or most states (Council of European Municipalities and Regions, 2009, p. 5). It has proposed a “local and regional new deal” to strengthen Europe’s economy which calls on national governments to ensure that local and regional governments be involved as partners in addressing the crisis and be empowered, especially in their financial situation, to carry out their responsibilities towards Europe’s citizens, especially the victims of the crisis. Romania didn’t participate to the discussion.

This paper is a rapid assessment of the implications of financial crisis on local public finance in all member states of European Union. The forecasts presented in the paper are based on a number of simplifying assumptions and results should be interpreted as indicative and not as precise estimates.

The framework of this paper is based on a set of research programs and papers made by different Romanian and foreign institutions as European Commission, Council of the European Union, Central and Local public administrations, International Monetary Fund, Romanian Institute for Public Policies, National Institute of Statistics, Federation of Romanian Local Authorities, Universities and others.

2. Controversy ideas regarding the relationship between globalization and local public finances

There are specialists who consider globalization does not affect government expenditure and revenue (Hajer, J., 2007; Axel, D.; Sturm J.E.; Ursprung H.W., 2006) and studies which try to demonstrate globalization does not affect budget composition (Potrafke, N., 2007).

Regarding public expenditures, according to the disciplining hypothesis, globalization restrains governments by inducing increased budgetary pressure. As a consequence, governments shift their expenditures in favor of transfers and subsidies and away from capital expenditures. This expenditure shift is potentially enhanced by citizens' preferences to be compensated for the risks of globalization ("compensation hypothesis"). Being made an analysis whether globalization has indeed influenced the composition of government expenditures, there were examined the development of four broad expenditure categories for the period 1970-2001: capital expenditures; expenditures for goods and services; interest payments; and subsidies and other current transfers. A second dataset provided a much more detailed classification: public expenditures, expenditures for defense, order, economic environment, housing, health, recreation, education, and social expenditures. The results showed that globalization did not influence the composition of government expenditures.

The results on the relationship between taxation and globalization are more ambiguous: tax revenues as a proportion of GDP are only significantly (and negatively) correlated with globalization in the growth model when proxies by total trade.

Some specialists consider globalization does not affect economic growth (Bergh, A.; Martin K., 2007), but others demonstrate that countries with higher globalization have higher steady state growth rates (Bhaskara, R.B., Tamazian, A.; Vadlamannati, K.C., 2008; Axel, D, 2006, p. 769-788; Axel, D, 2006, p. 1091-1110). The first opinion is made examining the hypothesis that big welfare states compensate negative effects of big government through economic freedom and globalization by including the economic freedom index. The study was made on the countries with the biggest government sectors – the Scandinavian welfare states – which are also the countries where economic freedom and globalization have increased the most in the 1980s and the 1990s. Results indicated that government size has a negative growth effect when measured by expenditure, but not when measured by taxes.

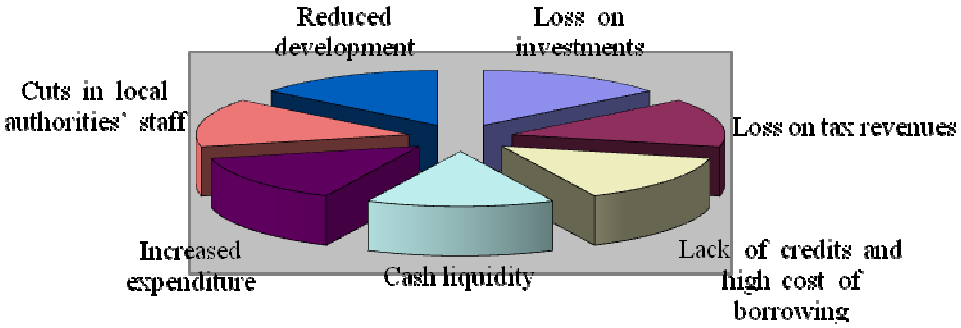
The second opinion was developed by many specialists, globalization being measured with a few economic variables, ignoring its social and political dimensions but, in 2006, Dreher has developed a comprehensive measure of globalization with several variables from the economic, political and social sectors. He showed, with the panel data methods, that globalization has positive growth effect implying that countries with higher globalization grow faster. Axel Dreher shows globalization indeed promotes growth using an index of globalization covering its three main dimensions: economic integration, social integration, and political integration.

The divergences of opinions are very strong and each of them has arguments to sustain their theories. An opinion more philosophical, considering local public finances as a part of a whole and its implication is very strong, if is take into consideration the expression "little by little to fill the cup". In a pragmatic opinion, the impact of globalization makes two points of view. First, the actual evidence on the predicted effects of globalization – its impact upon narrow issue of local taxes and upon broader issues of local government autonomy – is suggestive, but is also quite preliminary and somewhat mixed. Second, and more important, while globalization obviously limits the choices that local governments can make in some areas, it also creates the opportunities that local governments can exploit in other areas. Local governments that succeeded in their choices will be the ones that have well-grounded and credible institutions, that are better able to match taxes with expenditures, and that are better able to give taxpayers the services that they wish for the taxes they pay.

3. The implication of the global financial crisis on local public finances from EU countries

The impact of the financial crises can be felt in all European Union countries, some of theme with a direct impact (e.g. Austria, Belgium), and other, until now, its effect on the local government is merely of indirect nature (e.g. Romania). However, the negative impact of the worldwide financial crises (***Council of European Municipalities and Regions, 2009, p. 62-63) can be highlighted, as figure 1 shows:

Figure 1: Negative impact of global financial crises on local public finances



Source: processing of the author by Council of European Municipalities and Regions, *The Economic and Financial Crisis. Impact on local and regional authorities*, March 2009, p. 62-63

Loss on local tax revenues is one of the most important consequences of the global financial crises in the light of local public finances. Regarding local taxes, in general the impact was delayed for a year, since the economic slowdown has reduced activity in 2009 and was established at the beginning of 2010. Therefore, year 2010 is more difficult than the previous year as regards local economy balance.

Actual loss volume depends on the type of tax levied or shared by the local or regional government in the respective countries (personal income tax, company income tax, etc.), and the proportion of this income in total budget revenues. The stagnating economy will affect the construction industry, which may result in significant reduction of the own revenue of municipalities due the stagnation of the property market and in particular of local property tax, local tax revenue to the acquisition of property for consideration, on sales of facilities and municipal property rentals.

The decrease of salaries (e.g. in Romania, the Government has decided that the wages and salaries in the public system to be limited to 9% of GDP as it is currently at 6.2% of GDP until 2015) and the increase of unemployment generate lower revenues to the state budget as income tax, which means that municipalities will receive lower revenues as quotas from income tax even the percentage of quotas are the same (e.g. Romania).

Increased local expenditure is the other one important consequence of the global financial crises in the light of local public finances. The main source of worries, as expected by the authorities, is labor market translated in more unemployment means more expenditure for the municipalities due to the fact that they contribute to financing of the most social allowances.

So that, *cuts in local authorities' staff* is another consequence of the financial crises. The municipalities and councils are in the situation to cut back on the number of employees in order to facilitate savings and decrease the personnel expenditure ((e.g. France will reduce the number of budgetary with 34.000 in 2010 and Romania between 100.000 and 150.000). Higher unemployment results in urban to rural migration. De-urbanization increases pressure on the provision of local services in rural sectors. Urban to rural migration, moreover, implies a movement of workers to lower productivity areas, which will have long term effects for a country's economic development (World Bank, 2009).

Loss on investments and reduce development. The credit crisis is affecting ongoing investments in infrastructure and development projects. The reduce rate of investments by both the private and the public sectors will result in a general slow-down of local and regional development (e.g. Germany).

The heaviest direct loss occurred in the United Kingdom, where due to bankruptcy cases of Icelandic banks the local governments lost € 1 billion in financial investments, with further loss in unrealised income from interests. Some municipalities suffered a substantial loss, due to their high investment share in Dexia and/or the Communal Holding. Besides Belgium, loss on value of financial securities is also reported from Norway.

Lack of credits and high cost of borrowing - The global financial crisis and financial difficulties in the banking sector affect the availability of credits. Even if the municipal sector has generally high ratings as borrower, the requested volumes of credits are not available, or are available only at high cost, due to liquidity shortage on the market. It should be noted, that in some countries especially banks, which

traditionally provided loans to the municipal sector, have been affected by the crisis (e.g. Kommunalkredit in Austria, Kommunekreditt in Norway, Dexia in Belgium, France and Luxembourg).

Cash liquidity is another consequence of the financial crises which affect local budget, but is a secondary effect, due to poor payment discipline by the national authorities in the transfers of grants or compensations for transferred competencies (e.g. Ukraine, Lithuania, Greece).

The financial crisis has a negative impact on local public finances, but specialists try to find if there are some positive consequences, also. First off all, there is the global cool-down of prices. Thus not only has a positive effect on the evolution of personnel costs, but also on what authorities have to foresee in terms of operating costs. The decrease in raw material prices also seems to have an impact on what will have to be paid for investments.

Another optimistic pot of view is the crisis is seen as an opportunity to create more efficient, more integrated and more ethical public sector as a result of a good public management in the crisis situation.

4. Solution to attenuate the negative impact of the financial crisis on local public finances

To avoid crises, a country needs both sound macroeconomic policies and a strong financial system (Fischer, S. 1997**)**. A sound macroeconomic policy framework is one that promotes growth by keeping inflation low, the budget deficit small, and the current account sustainable. Large current account deficits—depending on the growth rate of the economy, in the range of 5-8% of GDP, and certainly any higher—should be cause for concern. Current account deficits financed by longer-term borrowing and in particular by foreign direct investment are more sustainable; sizable deficits financed in large part by short-term capital flows are a cause for alarm.

A strong financial system is the preoccupation of the international institutions (Folkerts-Landau, D.; Lindgren, C., 1997) as the IMF, the World Bank and the Basle Committee, which realized what needs to be done to strengthen financial systems, as: improving supervision and prudential standards, ensuring that banks meet capital requirements, provision for bad loans, limit connected lending, publish informative financial information, and ensuring that insolvent institutions are dealt with rapidly. Implementing those changes, particularly in a banking system already in trouble, is frequently difficult, especially where political pressures hamper the supervisory authorities.

Experiences with previous and actual financial crises have left a variety of lessons to be heeded by local governments to attenuate the negative consequences of the financial crisis on local public finances as following:

- application of conservative policies and approaches in planning their own income and lift limits on municipal loans, for providing sufficient reserves;
- application of restrictive approach to forecasting and execution of the expenditures of the budget;
- simplify or adjust budgetary rules for municipalities to compensate for expected deficits.

These measures must be taken under the improving public financial management, even greater involvement of citizens and businesses in the management of public finances and control in the performance of public finances.

One of the action can be harder because supposes the restructuring of operations and closure of inefficient units.

In relation with national and the European Union authorities, local authorities must include municipal projects in the national anti-crisis investment package and must negotiate with the government and relevant institutions of the program to include municipalities in the absorption of funds from European and national investment program and funds.

Other recommended actions are as following:

- justification and protection of municipalities to provide the full amount of state transfers;
- provide guarantees for local/regional governments in access to funding;
- provide grants to cover partially or fully the increased cost of funding (loan interests);
- provide extra grants to help balance the municipal budgets or cash flow, or to cover directly the co-financing requirement for EU funds;
- introduce support programmes in view of expected growing unemployment;
- simplify public procurement regulations;
- simplify or adjust budgetary rules for municipalities to compensate for expected deficits;
- submission of the necessary changes in legislation, reflecting the activities of local authorities in terms of the global crisis.

Certainly, Romania must be in accord with European Economic Recovery Plan (European Commission, European Council, 2008), proposed by the European Commission and approved by the Council of the European Union on 12th December 2008, which consists two interlinked elements:

- short-term measures to support demand, project jobs and restore confidence;
- "smart investments" towards long-term growth.

The plan envisions a package of ca. € 200 billion (1.5 % GDP of the EU), of which € 170 billion at Member State and € 30 billion at EU level, within the EU budget and through the European Investment Bank. The Plan proposed to accelerate payments of up to € 6.3 billion under the structural and social funds. For energy and broadband infrastructure projects the Commission proposes to spend € 5 billion in the period of 2009–2010.

The European Central Bank and other central banks have considerably reduced their interest rates to support non-inflationary growth. (ECB from 4.25 % in September 2008 through 2 % in January 2009 to 1.5 % in March 2009).

The Council Plan (European Commission, European Council, 2008) approved in particular: an increase in intervention by the European Investment Bank of € 30 billion in 2009–2010; simplification of procedures and faster implementation of programmes financed by the Cohesion Fund, Structural Funds and the European Agricultural Fund for Rural Development; support for a list of specific priority projects presented by the Commission, for investments in energy (€ 3.5 billion) and broadband access in rural areas (€ 1 billion), as well as help to rural areas for climate change, renewable energy, water management and dairy sector restructuring projects (€ 500 million); additional action by the European Social Fund to support employment, especially for the benefit of vulnerable groups and smallest undertakings by reducing non-wage labour costs; mobilisation to promote employment in key sectors of the European economy.

The Council also approved the possibility to apply reduced VAT in certain sectors, as following: repairing of bicycles, shoes and leather goods, clothing and linen, cleaning of windows and private households, domestic help and care services, hairdressing, private home renovation and repair, restaurant services, books.

Of particular importance for local and regional authorities, the proposed remedies for the financial and economic crisis include the mechanisms and rules of public procurement.

In the general public procurement framework, the Commission and the Council both consider it justified for local authorities to use the accelerated procedure - under Article 38(8) of the Public Procurement Directive (Directive 2004/18/EC) - as a general rule during the crisis. Under this procedure, contracting authorities may, in case of urgency, reduce considerably the overall time limit of the procedure (including the standstill period under the Remedies Directive (Directive 2007/66/EC) between decision and signing of the contract) from 87 days to 30 days. The Commission recognised that such presumption of urgency should apply throughout 2009 and 2010 for all major public projects.

5. Conclusions

Financial crises add another layer of complexity, altering the balance of the economy (e.g. the strong inflationary tendency, the crises in the banking and financial sectors, the general slowdown in economic growth) and creating fiscal pressure for both central and local governments. This climate is affecting local public finances, both in terms of income and expenditures, as reduction of income from municipal taxes due to reduce the demand; increasing difficulties of individuals to pay municipal taxes and fees in due time; increased demand of citizens for social assistance from the municipalities due the growing unemployment; increased difficulties of the municipalities to serve loans from banks and other financial institutions; limited sources and costs of municipal investments projects.

The effects of a crisis on local public finances will vary according to the nature of the crisis and the economy's structure; thus creating appropriate policies requires detailed, grounded research. General patterns from previous and actual crises in a globalization world have shown the importance of supporting countries' investment on long-term growth and the need to seek a balance between central and local governments, and, also, between countries, a balanced based on solid communication and mutual support, to maximize the strength of local governments and use these strengths to support countries' struggle out of crises.

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TRADE BALANCE AND REAL EXCHANGE RATE CHANGES: A REVISIT

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Abstract: *This study explores relationship between changes in real exchange rate and trade balance indicators for Pakistan for the period of 1980 to 2006. The Auto Regressive Distributed Lag (ARDL) model is used to establish long run relationship and to obtain long run elasticities. The article finds that a) there exists a long run relationship between real exchange rate and trade balance; b) statistical significance and negative elasticities show that depreciation will lead to deterioration in trade balance and J-curve theory does not hold in the case of Pakistan. The study suggests that Pakistan should not rely on the depreciation of exchange rate to improve its trade balance.*

Key words: real exchange rates, trade balance indicators, J-curve theory

JEL classification: F1, G3

Introduction

The economy of Pakistan faces negative trade balance along with depreciation of exchange rate since long. On one hand, exchange rate is depreciating since its delinking from dollar in 1973. On the other hand, trade balance is on negative side since the inception of Pakistan except for some years in 1990s. The empirical evidences suggest that higher exchange rate leads to worse trade account at the initial stages, and after a certain level of depreciation it leads to improvement in the trade account. This is called J-type relationship. The paper explores whether J-type relationship exists between two variables in the case of Pakistan or not. If J-type relationship holds, then the depreciation of exchange rate may be effective as a policy. Despite its importance, this relationship is not well researched in Pakistan.

Therefore, one of the objectives of this article is toil to fill this gap. The present paper provides empirical evidences on the linkages between trade balance and exchange rate changes from 1980 to 2006, not only in long run but also in the short run. The paper uses bound testing approach to investigate long run relation between trade balance and exchange rate. ARDL model popularized by Pesaran et al. (2001) is used for long run as well as short run elasticities. The impact of shocks on exchange rate and on trade balance is checked through impulse response functions.

The rest of the article is divided into five sections. Literature review is presented in section II. Section III deals with model and estimation strategy. Impulse response function is discussed in section IV, and section V concludes the article.

II. Literature Review

Literature about international finance endorse that trade balance is directly influenced by movements in exchange rate in long run[1]. And, now, there is almost general consensus among the researchers that currency devaluation leads to improve the trade balance in long run[2]. However, some relevant literature also concludes unfavorable impact of exchange rate devaluation, especially in the case of country specific studies, on trade balance [Bahmani-Oskooee, (1985); Upadhyaya and Dhakal, (1997); and Kale, (2001)]. On contrary, Ferda, (2007) concludes that a change in the value of Turkish Lira has positive impact on Turkey's trade balance. Shahbaz et al (2009), seem to document that real exchange rate devaluation deteriorates trade balance for Pakistan. In addition to mixed evidences for J-curve phenomenon, Marwah and Klein (1996) have found S-curve for Canada and United States[3]. Furthermore, Akbostanci (2002) has also favored an S-

[1] Haimarios, (1989); Rawlins and Praveen, (2000); Bahmani-Oskooee, (1992, 2001); Aftab and Aurangzeb, (2002); Musila and Newark, (2003); Bahmani-Oskooee & Ratha, (2004); Tochitskaya, (2005) and Shahbaz et al (2009)

[2] Rincon, (2000); Baharumshah, (2001); Bahmani-Oskooee, (2001); Brahmasrene, (2002); Lal and Lowinger, (2003); Onafowora (2003); Stucka, (2004); & Tochitskaya, (2005)

[3] The theory of S-curve states that trade balance initially declines after depreciation followed by a trade balance improvement, i.e., the typical J-curve effect. However, after several quarters when trade balance improvement reaches its limits it then starts to deteriorate.

shaped trade balance response to devaluation in short span of time and J-curve effect in the case of Turkey. Agbola, (2004), indicates M-curve relationship between devaluation and trade balance of Ghana. Jung and Doroodian (1998) seem to support the existence of J-curve effect in the case of Japan. Narayan and Narayan (2004) find evidence on the J-curve type adjustment of the trade balance for Fiji. Agbola, (2004); Bhattarai and Armah, (2005); and Damoense and Agbola, (2004) find no J-curve prevalence and long run positive impact of exchange rate depreciation on trade balance.

Very few evidences are available for Pakistan, especially in the context of testing the Marshal Lerner (ML) condition[1]. For example, Hassan and Khan (1992) show that devaluation may be successful in improving the trade balance and ML condition is fulfilled. However, the sum of exports- imports elasticities is close to unity and that is the negation of ML condition. Similarly, Akhtar and Malik (2000) examine the ML condition in Pakistan with its four major trading partners. The results seem to suggest that real devaluation is likely to worsen the trade balance with USA and Germany while it has favorable impact on trade balance with UK and Japan. Bahmani-Oskooee (1992) has also investigated the J-curve phenomenon by including lags of the real effective exchange rate for Pakistan. However, Aftab and Aurangzeb (2002) seem to confirm the existence of ML condition in long run and J-curve for short span of time for Pakistan. Recently, Aftab and Khan (2008) and Shahbaz et al. (2009) find no evidence for standard J-curve phenomenon for Pakistan.

The inconclusive research on the J-curve is an empirical phenomenon is a motivation for researchers to investigate this theory in the case of Pakistan. The present article is toil to investigate the link between Pakistan's trade balance and exchange rate changes.

III. Model and Estimation Strategy

The discussion in literature review section allows us to construct model:

$$Tradebalance = f(exchangerate) \qquad (1)$$

We use ratio of real exports to real imports as a measure of trade balance instead of traditional measure for trade balance (net exports) as dependent variable. This measure enables us to transform the variables in logarithmic form which gives direct elasticities for interpretations. The econometrically estimatable regression is being specified as:

$$LTOT = \alpha_1 + \alpha_2 LREER + \mu_t \qquad (2)$$

Where *LTOT* is the logarithm of the real exports to real imports ratio, *LREER* is the logarithm of the real exchange rate[2], α_1 is a constant term; and μ is an error term. According to J-curve hypothesis, exchange rate depreciation initially deteriorates trade balance due to the belief that imports in local currency are increased more than the increase in exports after a change in price. However, as export and import volumes adjust to price changes over time, the trade balance improves. Therefore, theoretically, we are expecting that $\alpha_2 > 0$.

This study prefers ARDL approach, popularized by Pesaran et al. (2001). ARDL framework of equation-2 is as follows:

:

$$\Delta LTOT = \varphi_\circ + \phi_{TOT} LTOT_{t-1} + \phi_{REER} LREER_{t-1} + \sum_{i=1}^{q} \gamma_{TOT} \Delta LTOT_{t-1} + \sum_{j=0}^{p} \gamma_{REER} \Delta LREER_{t-j} + \mu_t \qquad (3)$$

Where φ_0 is drift component and μ_t is white noised. Furthermore the terms with summation signs represent the error correction dynamics. While the second part of equation-3 with ϕ_{TOT} and ϕ_{REER} corresponds to long run relationship.

[1] This condition says that, for a currency devaluation to have a positive impact in trade balance, the sum of price elasticity of exports and imports (in absolute value) must be greater than 1.
[2] Parity is defined as PKR/ USD.

The ARDL bounds test for investigation of equilibrium long-run relationships can be conducted using either the F-test or the t-test. The F-test examines the pooled (joint) significance of the estimates on the one period lagged level of the variables in equation-3. Null hypothesis to investigate F-statistics is $H_{\circ}: \phi_{TOT} = \phi_{REER} = 0$. Critical values for F-test have been given in Pesaran et al (2001). The asymptotic distribution of critical values is obtained for cases if regressors are either *I(1)* or *I(0)* or mutually integrated. To carry out our task, we take the quarterly data from 1980 to 2006. The data for exports and imports has been obtained from monthly statistical bulletins of State Bank of Pakistan (SBP)[1]. Economic survey of Pakistan (various issues) has been used to collect the data for real effective exchange rate.

III.1 Unit Root Test

Correlation matrix and descriptive statistics are shown in Table-1. The priori expectation is that real effective exchange rate is negatively correlated with trade balance.

Table-1: Correlation Matrix and Statistics Descriptive | **Correlation Matrix**

Variables	Mean	Median	Maximum	Minimum	Std. dev.	LTOT	LREER
LTOT	-0.373	-0.3218	0.0391	-1.1033	0.2541	1.0000	0.7807
LREER	4.8292	4.7196	5.4319	4.4951	0.2764	0.7807	1.0000

We use a relatively newly developed technique, i.e., Ng-Perron (2001) test, to check the integrating order for the under consideration variables in our model. It is evident that both variables are integrated at *I*(1) [see Table 02]

Table-2: Unit Root Test

Variables	MZa	MZt	MSB	MPT
LREER	-5.1169	-1.5062	0.2943	17.4176
LTOT	-11.9956	-2.4152	0.2013	7.7819
DLREER	-49.5118***	-4.9434	0.0998	2.0016
DLTOT	-41.0434***	-4.5216	0.1101	2.2655

Note: *** shows significance at 1 percent level of significance

III.2 Cointegration Test

The next step is to choose the possible optimal number of lags. We divide our data set into two sub samples. The first sub-sample represents the pre-financial liberalization period, i.e., from 1980 to 1990. This was a regime of fixed exchange rate. The second sub-sample consists of post-financial liberalization period that is the floating exchange rate regime, from 1991 to 2006. The rationality behind using different sample periods is to test the robustness of our results. The ARDL model selects, based on Akaike Information Criteria (AIC), optimal lag 5, 2 and 3 for 1980-2006, 1980-1990 and 1991-2006 samples. The calculated F-statistics, when trade balance is dependent variable, are much higher than the critical bounds (see Table 3). It posits that we cannot accept the null hypothesis of no cointegration and conclude that there exists a cointegration relationship between both variables in our model.

Table-3: F-Statistics for Cointegration

Time Period	Calculated F-Statistics[2]	Wald Test Statistics
1980Q1-2006Q4	7.6402	7.1908
1980Q1-1990Q4	5.3329	5.1204
1991Q1-2006Q4	4.1781	3.9547

[1] Various issues

[2] In case-III (unrestricted trend and no trend), critical values for lower and upper bounds (3.725 & 5.163, 4.133 & 5.260 and 2.843 & 3.920) are obtained from Paresh N. Kumar (2005, pp: 1988) at 1%, 5% & 10% level of significance with lag 5, 2 & 3.

After establishing long run relationship between the variables, equation-3 is estimated using the following ARDL (q, p) specification given below:

$$\Delta LTOT = \varphi_{\circ} \sum_{i=1}^{q} \gamma_1 \Delta LTOT_{t-1} + \sum_{j=0}^{p} \gamma_2 \Delta LREER_{t-j} + \mu_t \qquad (4)$$

According to the time span, maximum lag for each model is used such that $(i_{\max} = 5,2,3)$ respectively. The estimates of model are presented here on the basis of AIC (Table 4).

Empirical results show that in the long run, 1 percent devaluation leads to 0.7677 percent deterioration in the trade balance indicator. We have sub-divided the data into two different time periods regarding fixed exchange rate and flexible exchange rate regimes. This shows that an increase in real effective exchange rate impacts trade balance negatively at 1 percent and 5 percent in both periods but more in fixed exchange rate rather than in flexible exchange rate regime. This seems to imply that depreciation in real exchange rate is ineffective to improve the trade balance in the country[1]. Our findings are in line with what Arora et al. (2003) find in the case of India. There may be several reasons but the most apparent reason is the less elastic imports. Inflation has been more speedy than the depreciation and always necessitating 'do more' for correction. It is important to mention that the depreciation has rarely been done 'completely', i.e., rarely been done as much as needed to do the needful for the correction of imbalances in the current account.

Table-4: Long Run Elasticities of Trade Balance

Regressors	Coefficient	T-Statistics
Panel-A Sample Period 1980Q1-2006Q4		
LREER	-0.7677	-15.1867a
Constant	3.3337	13.6331a
Panel-B Sample Period 1980Q1-1990Q4		
LREER	-0.8429	-7.3968a
Constant	3.7178	6.4037a
Panel-C Sample Period 1991Q1-2006Q4		
LREER	-0.4107	-2.1222b
Constant	1.6792	1.8730c

Note: a, b & c show significance at 1%, 5% & 10%

Table-5: Short Run Relationship

Regressors	Coefficient	T-Statistics
Panel-A Sample Period 1980Q1-2006Q4		
ΔLRER	-0.2842	-0.7267
Constant	-0.0005	-0.0396
ecm_{t-1}	-0.7654	-8.0062[a]
Panel-B Sample Period 1980Q1-1990Q4		
ΔLRER	-0.0026	-0.0033
Constant	0.0021	0.0823
ecm_{t-1}	-0.9773	-6.3222[a]
Panel-C Sample Period 1991Q1-2006Q4		
ΔLRER	-0.0058	-0.0139
Constant	-0.0009	-0.0712
ecm_{t-1}	-0.5126	-4.1606[a]

Note: a indicates significance at 1%

In short-run, we find that real devaluation leads to deteriorate the trade balance in three cases. However, the results are statistically insignificant. The error correction terms $ecm_{t\text{-}1s}$ that measure the speed of adjustment to re-establish equilibrium in the short run dynamic model. The coefficients of $ecm_{t\text{-}1s}$ have

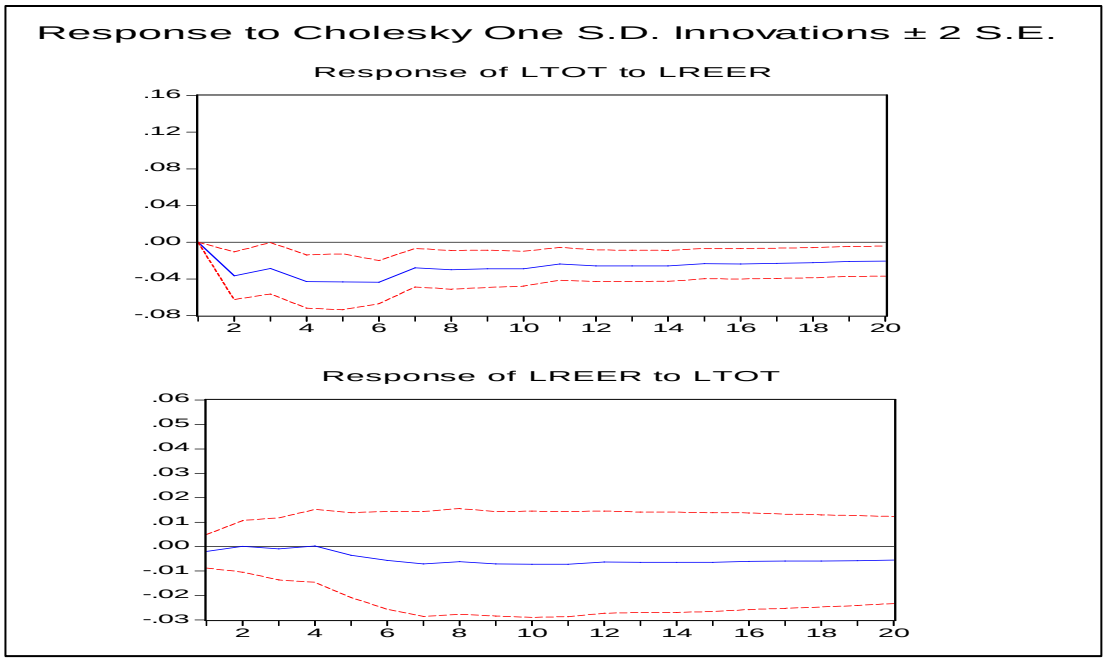
[1] Shahbaz, Awam and Ahmd, (2009)

negative signs and are statistically significant at 1 percent level. It ensures that the series are conclusive and that long-run equilibrium is within reach for each model. The coefficients of $ecm_{t\text{-}1s}$ imply that a deviation from the long-run trade balance indicator during the different periods in our sample are corrected by about 76.54 percent, 97.73 percent and 51.26 percent in each quarter. It indicates a speedy adjustment process towards long run equilibrium.

IV. Impulse Response Function

Studies by Lal and Lowinger, (2002); Narayan, (2004) and Narayan, (2006) on the J-curve suggest that J-curve phenomenon can be observed by using the impulse-response function as well. The response of trade balance to one standard deviation shock to real exchange rate is shown in Figure-1. The response of exchange rate to one standard deviation shock to the trade balance is indicated in Figure-1. Graphical representation of impulse-response function shows that a one standard deviation shock to the real exchange rate (or devaluation of the Pakistani currency) deteriorates response of trade balance from 4 time horizons and continues to 20 time horizons. It can be concluded that there is no evidence of J-curve in the case of Pakistan. It has been evidenced that major reason of no existence of J-curve is less elastic imports. Second, inflation in Pakistan is eating up the positive impacts of devaluation of local currency. The third and important reason is that less depreciation has been done which is insufficient for the correction of imbalances in trade and current account (see for more details, Arora et al, 2003).

Figure-1 Impulse Response Function



V. Conclusions

There are three main findings of this study. First, there exists a long run relationship between real exchange rate changes and trade balance for all three samples. Second, the statistical significant and negative elasticities show that depreciation will lead to deterioration in the trade balance for all three samples. Third, one standard deviation shock to the real exchange rate deteriorates response of trade balance from 4 time horizons and continues to 20 time horizons. This also suggests that J-curve theory does not hold in the case of Pakistan.

In the light of our results we suggest that Pakistan should not rely on the depreciation of exchange rate to improve its trade balance. The depreciation will further deteriorate the trade balance due to constant increase in the imports of the country. Therefore Pakistan should adopt other strategies to improve its trade balance.

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INNOVATION, RESEARCH AND DEVELOPMENT IN ROMANIAN SME'S

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Abstract: *The SME sector represents one of the important actors in the dynamic development of the economy and export, and also in what is part of the GDP. However, the SME sector is limited when it comes to technical development or science because it cannot play alone and isolated neither from a capital nor a human point of view, but only in collaboration with other subjects (including state or local). The major problem which SME's face are connected to the insufficient liquidity and own funds for development and also to a more difficult access to credits. The paper aims to offer a presentation of the overall situation n the research-development and innovation sector, with an overriding focus on aspects like hampering factors, sources of financing and sources of information in the sector. The result should be reconsidering the position of the R&D activities in Romanian economies in order to cope with the European trends and with the need of competitiveness in global economy.*

Key words: research, development, innovation, competitiveness, SME's

JEL classification: D21, D23, D24

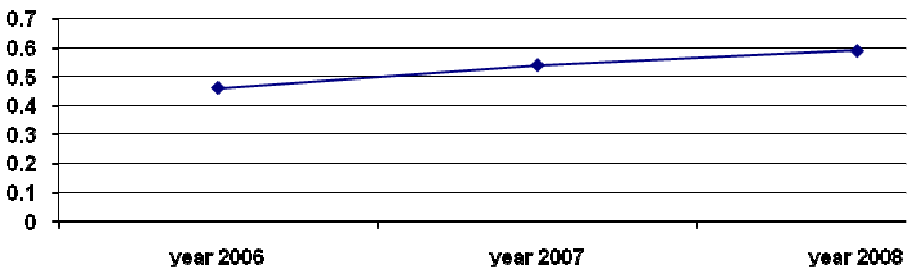
1. Introduction

The SME sector represents one of the important actors in the dynamic development of the economy and export, and also in what is part of the GDP. However, the SME sector is limited when it comes to technical development or science because it cannot play alone and isolated neither from a capital nor a human point of view, but only in collaboration with other subjects (including state or local). The major problem which SME's face are connected to the insufficient liquidity and own funds for development and also to a more difficult access to credits.

2. The activities of research-development in Romanian economy – still far from EU standards

In 2008 and 2009, Romania allocated for Research and Development (R&D) the equivalent to 0.54% of GDP, less than 0.1% more than in previous years. The 3% stipulated in the Treaty of Lisbon is still a long road ahead.

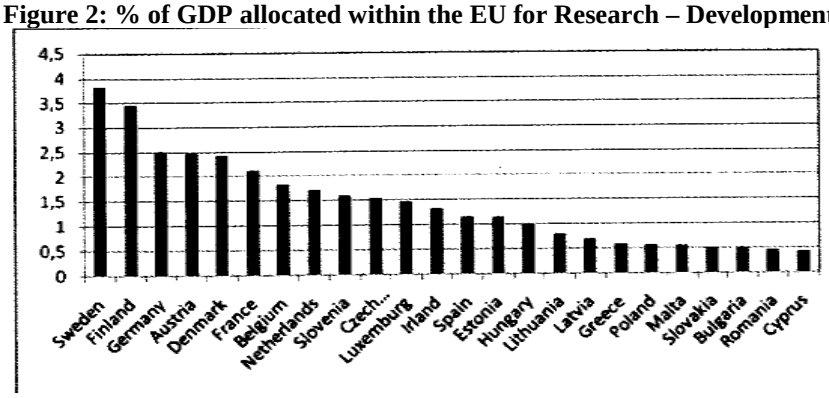
Figure 1: Percentage of GDP allocated to R&D by Romania



Source: NIS

According to Eurostat statistics Romania ranked one place before last in Europe during the period 2006-2008 with expenses dedicated for R&D of only 0,46%-0.54% of its GDP. According to the same statistics, EU states have spent an average of 1,85% of their GDP for R&D activities, with values varying between 0,42% in Cyprus and 3,82% in Sweden. According to Eurostat only 2 EU member states (Sweden and Finland) are above the target of 3%, Germany being the third main investor in the field. In the last places of the score board we find Cyprus, Romania, Bulgaria dn Slovakia (around 0.5% of their GDP). Germany, France and Great Britain have spent together

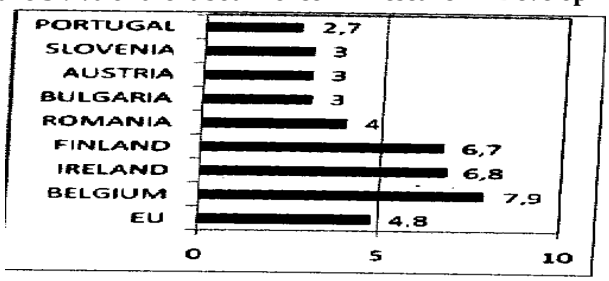
Figure 2: % of GDP allocated within the EU for Research – Development, 2008



Source: Eurostat

The Eurostat study also reveals that in 2008 4.8% of the total labour force at EU level was made up from scientist and engineers. Belgium (7.9%), Ireland (6.8%) and Finland (6.7%) are in the top of this score board while the last places are held by Portugal (2.7%), Bulgaria, Austria and Slovakia (3%). Romania is situated in the middle of this ranking board with 4%.

Figure 3 : % of the labour force in Research – Development, 2008



Source: Eurostat

At the end of 2008, the private sector had 544 units with research-development activity employing 13, 410 people (representing 61.5% of the total number of units and 22.5% of the total number of employees in R&D filed). The total expenditure of the private sector for the research and development activity at current prices amounted 446,6 million RON in 2008.

Table 1: Main indicators of the research-development activity

	2001	2002	2003	2004	2005	2006	2007	2008
Number of units with research development activity (at the end of the year)	626	601	609	607	719	753	806	884
Out of which: private sector	182	201	204	205	311	377	457	544
%	29.1	33.4	33.5	33.8	43.3	50.1	56.7	61.5
No. of employees in the units with research-development activity								
No of people of the end of the year	76,744	62,572	58,453	58,081	57,297	57,725	57,915	59,491
Out of which: private sector	14,285	10,001	10,267	10,198	10,668	10,592	14,315	13,410
%	18.6	16.0	17.6	17.6	18.6	18.3	24.7	22.5
No. of employees in the research – development activity								
Number of people (at the end of the year)	48,113	37,241	37696	38,433	39,985	40,725	41,035	42,220
Out of which : private sector	10,687	7,676	7,764	7,301	7,758	7,889	10,774	9,395
%	22.2	20.6	20.6	19.0	19.4	19.4	26.3	22.3
Total expenses of research-development activity units (million RON at current prices)	593	801	1,026	1,272	1,538	1,710	2,155	2,828
Out of which: private sector	102	129	202	264	327	410	682	971
%	17.3	16.1	19.7	20.7	21.3	24.0	31.7	34.4

Source: NIS: "Evolution of the Romanian private sector – 2009

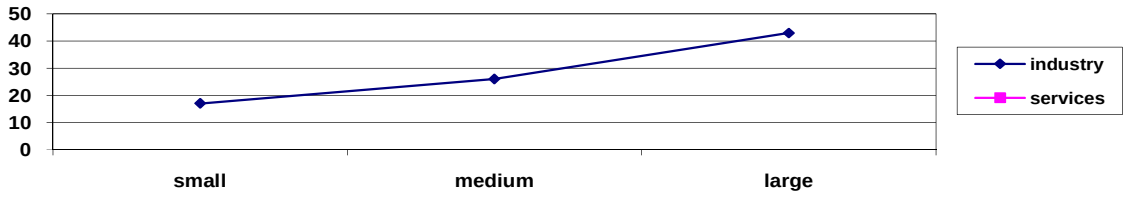
Romania is still far away from an economy based on knowledge and innovation. The causes of this situations are partially explained by the fact that SME's and especially small companies have a large proportion in the economy. A closer look to the innovative behaviour of SME's in Romania may reveal the barriers to innovation.

3. Innovation in the Romanian SME's

Small enterprises (with less than 49 employees) represents almost 90% of the SME's sector.

According to the official statistics, only 18% of the small enterprises make innovation while the percentage raise to around 25% for the medium-sized companies and to 44% for large organizations. No significant differences between industry and services were observed.

Figure 4: The share of innovative enterprises by size classifications and activities in the 2006-2008 period

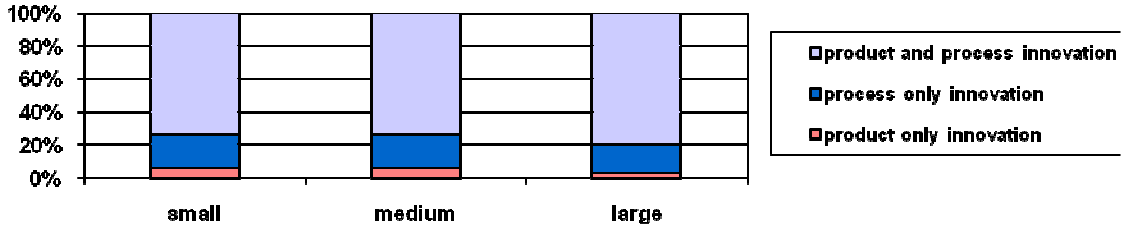


Source: "Innovation in industry and services in 2006-2008 period", NIS 2009

The analyses below is trying to offer an overall image of the innovation in Romanian economy, with focus on four aspects: types of innovations, barriers for innovation sources of financing and sources of financing for innovation

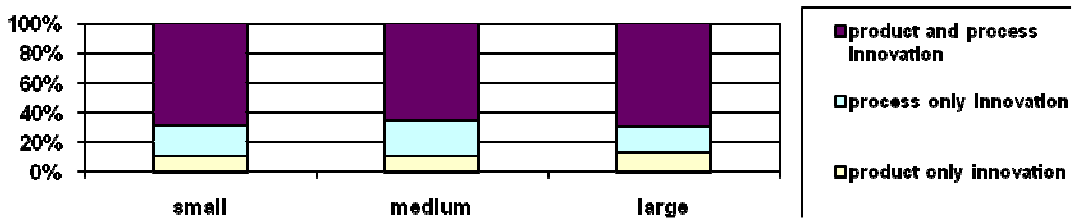
Unlike the large companies, SME's are generally innovating their processes rather than introducing new innovative products, especially due to costs, as shown in the figures below.

Figure 5: Typology of innovators by type of innovation in the processing industry, 2006-2008



Source: "Innovation in industry and services in 2006-2008 period", NIS 2009

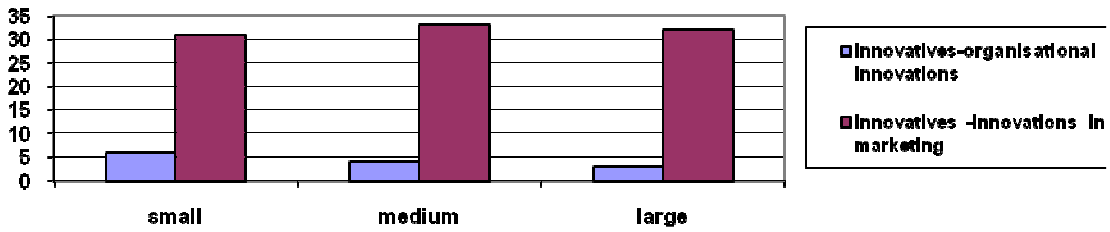
Figure 6: The typology of innovators by type of innovation in the 2006-2008 period in services



Source: "Innovation in industry and services in 2006-2008 period", NIS 2009

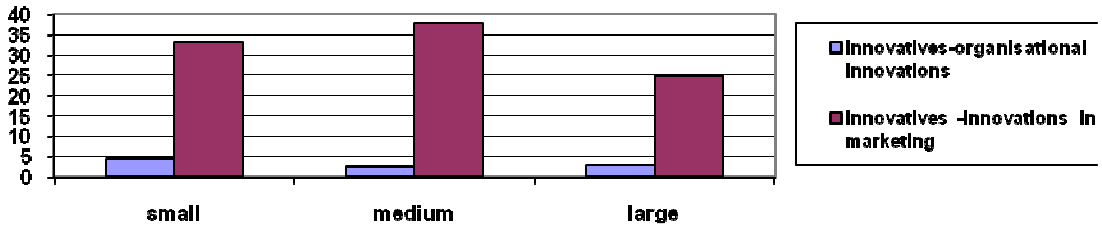
Regarding the type of innovative processes introduced in the companies, it worth to be mentioned that organizational innovations are most commonly realized those in marketing. This can represent a barrier in the development of the company on EU and international markets which requires competitive marketing instruments. The lack of marketing knowledge and skills of the managers and of the staff as well as the lack of marketing consultants, stop the innovative process of Romanian SME's.

Figure 7: The share of innovative companies in the industry that have adopted organisational and marketing innovations, 2006-2008



Source: "Innovation in industry and services in 2006-2008 period", NIS 2009

Figure 8: The share of innovative companies in the services witch have adopted organisational and marketing innovations, 2006-2008



Source: "Innovation in industry and services in 2006-2008 period", NIS 2009

The surveys conducted by the national Institute of Statistics and by the Romanian Association of Management Consulting Companies (AMCOR) during the 2005-2007 period revealed the main factors which hamper innovation within SME's. They can be classified according to the innovative status of the companies and reveal the differences in size when the company has already implemented an innovation.

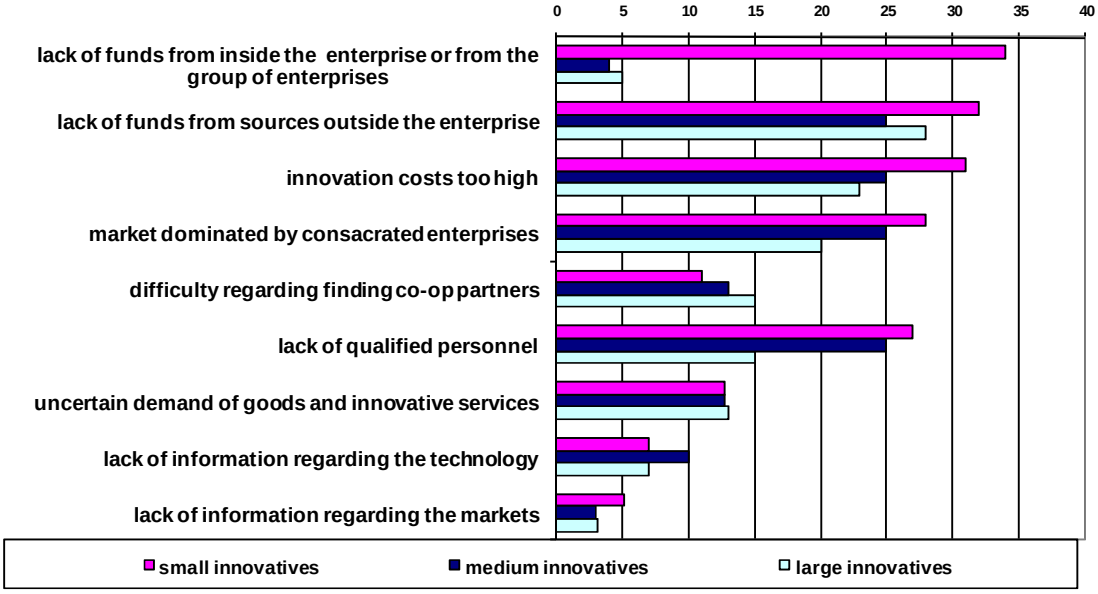
Table 2: Barriers for innovation by size class

Barriers for innovation/ Size class	Barriers for innovation in non-innovative firms	Barriers for innovation in innovative firms
Small enterprises	Market domination by solid firms Lack of qualified personnel High cost of external consulting Lack of external financing High costs of innovation	Lack of own funds Lack of external financing High costs of innovation Market domination by solid firms
Medium and large enterprises		Lack of external financing Market domination by solid firms Lack of qualified personnel

Sources: NIS Survey on Innovation in economy 2005-2007
AMCOR Survey on Consulting market 2005 and 2007

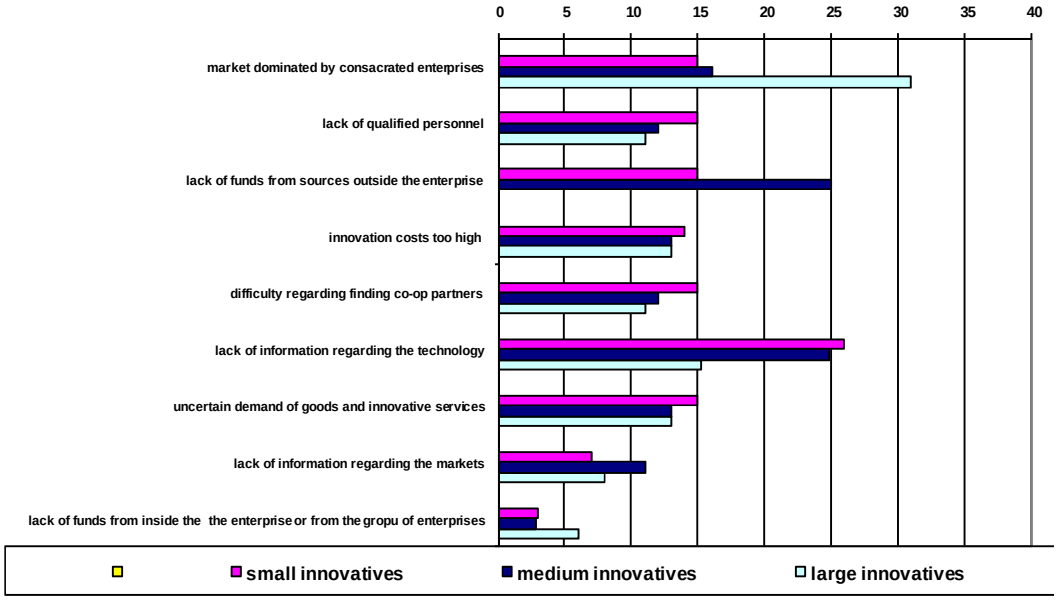
In order to improve their innovation policies small companies should focus on acquiring financing and facilitating access to qualified human resources or external consulting. Successful experiences should be tested such as promoting the creation professional networks, in order to split innovation costs, human resources costs, etc.

Figure 9: Hampering factors with high level of importance by size classes within innovative entreprises, 2006-2008



Source: NIS Survey on Innovation in economy 2005-2007
AMCOR Survey on Consulting market 2005 and 2007

Figure 10: Hampering factors with high level of importance by size classes in non- innovative entreprises, 2006-2008



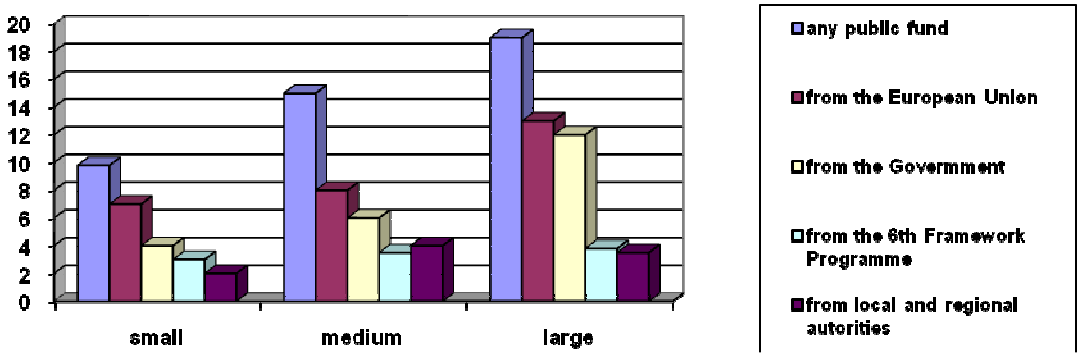
Source: NIS Survey on Innovation in economy 2005-2007
AMCOR Survey on Consulting market 2005 and 2007

The expenditure for innovation represents only 1,4% of the turnover of the SME's and the share of SME's with only organizational innovations is 21.5%. Sales of new products for the market represent 4.9% and those of new products for the company represents 13.7% in the total turnover.

Regarding the financing of innovations, the figures below show that the usage of public funds, either national or European, is fully related with the size of the companies. Small companies manage to access public funds in a proportion of 10% while the middle size companies reach almost 15% and the large companies almost 20%. This situations leads to n even bigger gap in the innovative capacity between large companies and SME's. The funds of the local and regional authorities are addressed to medium-sized companies in a higher proportion. In total, companies which have received public funding for innovation represent almost 3% of the total.

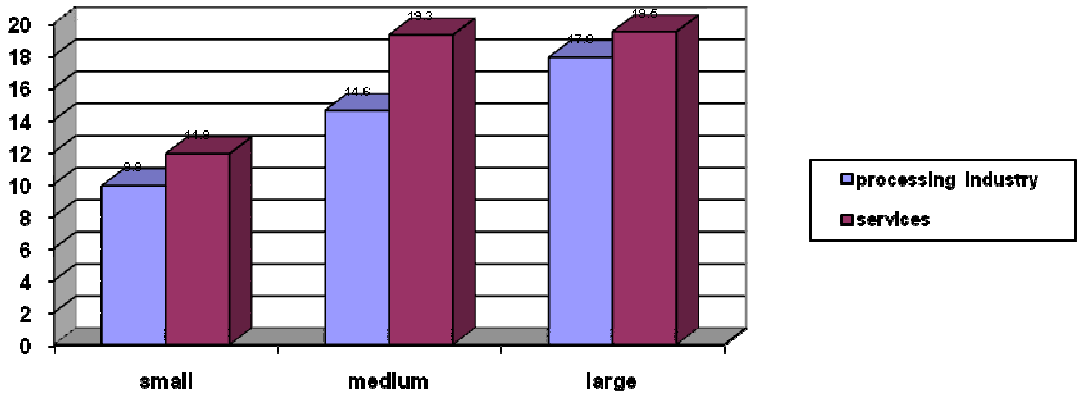
Although the EU and Romanian government offer a wide range of financing opportunities (FP&, Eurostars, SOP Competitiveness, etc) the information related to those programmes is not spread among the SME's.

Figure11: Share of innovative enterprises which have received public funding by size clases, 2006-2008



Source: "Innovation in industry and services in 2006-2008 period", NIS 2009

Figure 12: Share of innovative enterprises which have received any kind of public funding by sectors, 2006-2008

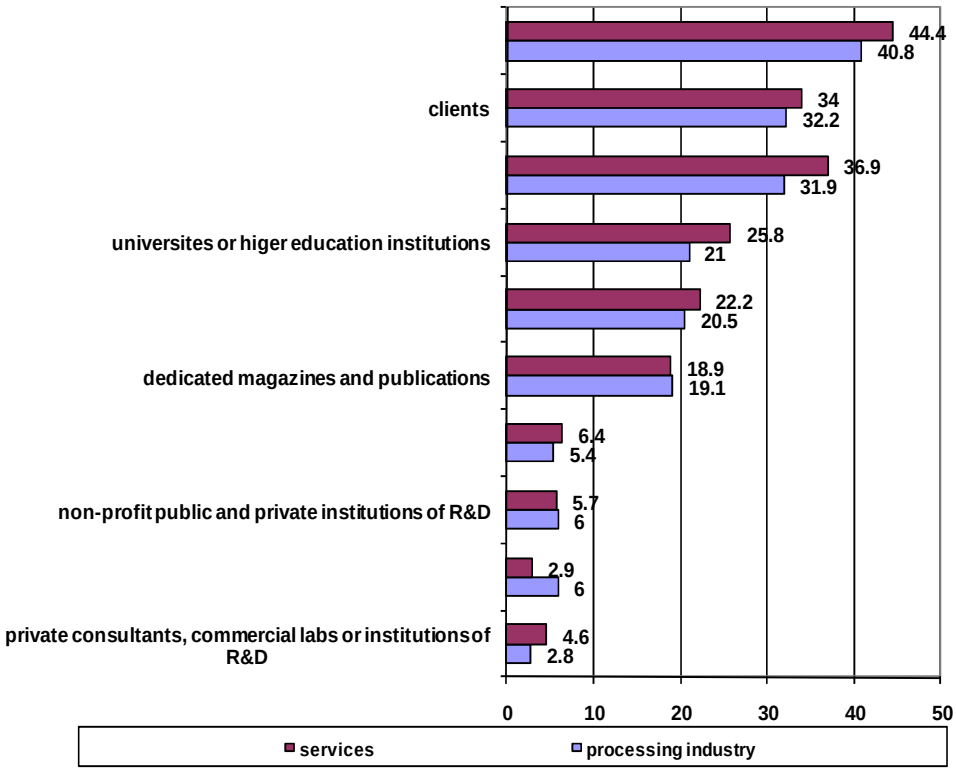


Source: "Innovation in industry and services in 2006-2008 period", NIS 2009

The most important sources of information is the company itself or the group of companies to which the firms belongs, suppliers, clients, fairs and exhibitions and also specialized publications. The sources of information with less impact for the SME's are consultants and private R&D institutions, NGOs dedicated to R&D, higher education institutions and professional associations. This shows the existent deficit in the access of information from these sources or a low level of trust of private enterprises in these institutions. Therefore, public policies targeted to increasing access to information about innovation for entrepreneurs and managers should focus on improving the communication about the results of the researches undertaken by universities and public institutions, on creating sectoral bodies to spread the

information in each branch. Also, iti is important that the consulting companies should be used more in the fields of innovation (examination in technology, marketing and organizational changes).

Figure 13: Share of innovative enterprises in the processing industry which have indicated the most important source for information for innovation, 2006-2008



Source: "Innovation in industry and services in 2006-2008 period", NIS 2009

4. Main conclusions

The level of the expenses for research-development-innovation in Romania is still far from the targets set forth in the Lisbon Strategy: with 0.54% allocated fro RDI in 2008 the country is still under the 3% objectives and the EU average of 1.8%.

Only 18% of Romanian SME's have been involved in innovation between 2005-2008, according to some surveys provided by NIS. The innovative processes in the SMEs are generally more concentrated toward organizational aspects of the company, instead of the marketing aspects, this fact leading to a lack of competitiveness of the enterprises on foreign markets.

The companies which are not innovative complain about the fact that the market is dominated by large companies that they lack qualified personnel and proper resources and consulting. Innovative companies also indicates that the lack of their own resources and of the ones they could attract is a barrier in the path of innovation. Nevertheless, the usage of governmental and European funds fro the sector is very limited.

The R&D sector in Romania is a successful one, being in the highest share integrated in the small companies with a high labour productivity. The specific EU financing programmes (like Eurostars) AND THE Framework Programme 7 should be promoted towards these companies.

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POLICY FAILURES AND CURRENT CRISIS

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Abstract: *The drivers of the current crisis are complex. The crisis has revealed serious failures in the field of macroeconomics as well as in the area of modern finance. Financial deregulation has allowed innovation of financial instruments that are detached from productive activity in the real sector. The build-up of huge risky positions created the emergence of speculative bubbles and their burst after the sub-prime shock. The paper examines these key policy failures.*

Key words: policy failures, macroeconomic imbalances, financial deregulation

JEL classification: G01, G15, G18

1. Introduction

The analysis of financial crises and recessions suggests that the elements of crises prevention have been changed dramatically in last decades: from 1930 to seventies and to market oriented capital requirements today but the factors and mechanisms exhibit very minor changes. Empirical work on the characteristics showed that certain causes have been seen at work in the previous episodes and are again here in recent crises: the inconsistent trinity (a fixed exchange rate, full capital mobility and monetary policy independence), financial markets are subject to serious information asymmetries, phenomenon of multiple equilibrium (self-fulfilling crises and unpredictable financial liberalisation), moral hazard and adverse selection, the role of rating agencies, financial deregulation (it leads to boom-and-burst cycles). The actual global financial crises and recession offers a sobering lesson about the dangers of politics that fuel the rapid build-up of debt across the economy. In recent years, individuals and financial institutions borrowed at unprecedented levels, funnelling such funds into housing and real estate sector, in particular. Asset price booms followed in many countries, particularly in the housing sector when lending expanded rapidly. Investors were encouraged to search for yield to the relative neglect of risk which, it was believed, had been spread throughout the financial system via new financial instruments. Even as the current crisis differs greatly from previous crisis in its origin, depth and reach, lessons from past experience can point to crucial factors in the effectiveness of crisis response. The paper suggests that conventionally, causes of this financial crisis include some or all of the following elements: macroeconomic policies, financial sector supervision and regulation, financial engineering, and the global activities of large private institutions.

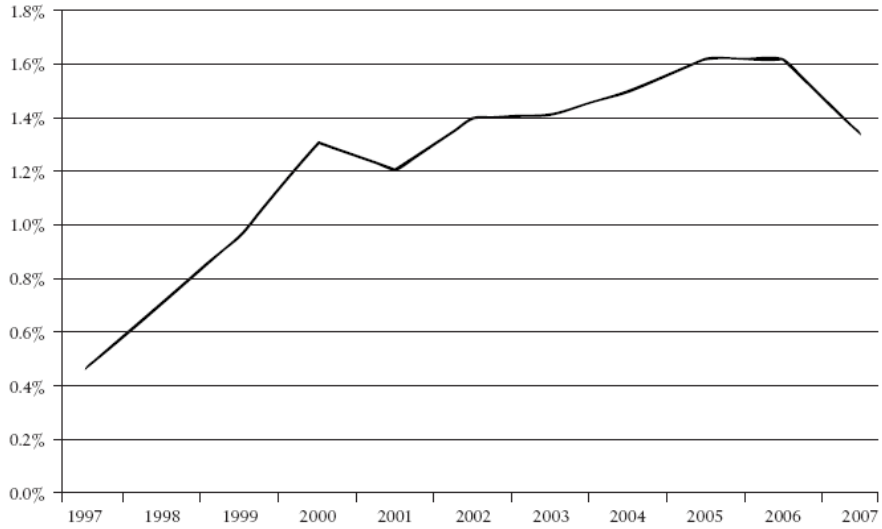
2. Macroeconomic failures

Rather than focus exclusively United States as a generator of a global crisis, there is a need to shift our view first to global imbalances-meaning imbalances between saving and investment in the major world economies, which are reflected in large and growing current account imbalances (Figure 1). We believe, they indeed play a major role in creating the current crisis. Substantial imbalances in saving and investment emerged after 2000, where the saving glut in developing countries (emerging East-Asia, oil-exporting countries of Middle East, Figure 2) gave rise to sizable net flows of capital to advanced countries, produced reduction of world interest rates and finally contributed to scramble for high-yielding assets and financial excesses. The cycle of expanded credit availability to feed sustain consumption and housing boom was opened. The time of turmoil in world financial market seemed to be a matter of time.

Traditional models of financial crises suggest that weak or unsustainable economic policies are the cause of exchange rate instability, volatile capital markets and often lead to arbitrary shifts in market expectations and confidence. The sudden rise of invertors expectations of a crisis can force a policy response that validates the original expectations. In the first generation models (Pesenti and Tille, 2000) a currency crisis is the unavoidable outcome of unsustainable policy stances or structural imbalances. The third

generation questioned explanatory power of first and second generation models and speed up the appearance of new interpretative schemes, which revolve around three basic variants: first version implies a string of investment affected by moral hazard that leads to an excessive growth of foreign debt and afterward to collapse of financial system; second version is created around Diamond and Dybvig's model bankruptcy model applied to an open economy; the third version analyses how financial difficulties undermine domestic companies solvency and macroeconomic fundamentals.

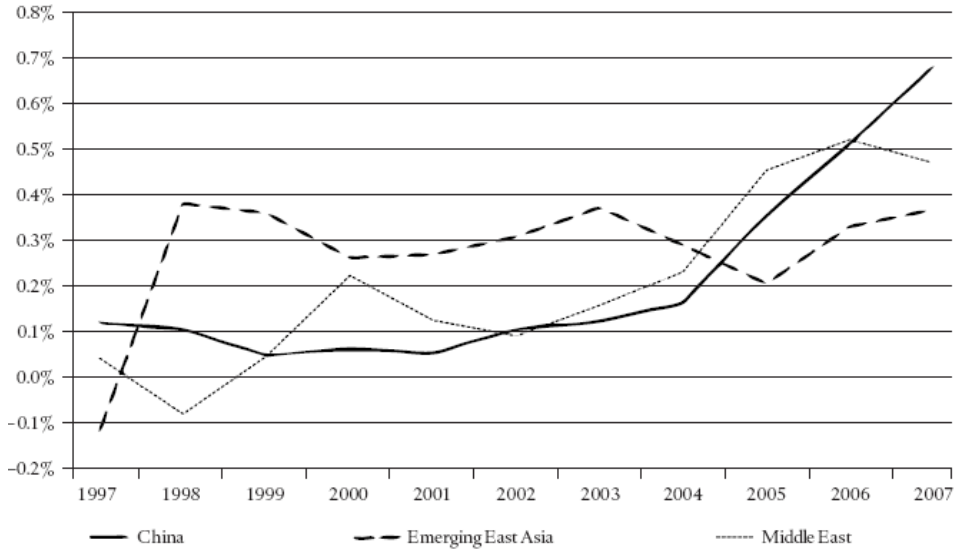
Figure 1: U.S. Current Account Deficit (percentage of world GDP)



Source: International Monetary Fund, 2008.

The global crisis 2007 has both financial and real sector roots. This crisis is unique in the sense that financial and real roots are completely intertwined. Although debate is still raging over the relative weight of the factors that ultimately unleashed the crisis in the U.S., we can identify a list of factors that explain the decline of economic fundamentals. The crisis started in the U.S. with the collapse of the subprime mortgage market in early 2007 and the end of major housing boom. The housing boom was triggered by a long period of abnormally low interest rates, attributed to loose monetary policy from 2001 to 2004.

Figure 2: China, Emerging East Asia, and Middle East Current Account Surpluses (percentage of world GDP)



Source: International Monetary Fund, 2008.

Fed fuelled high levels of liquidity in the financial system and this discouraged aversion to risk among US and international investors, leading to high leverage of households and firms. The negative shock to highly leveraged firms or households causes losses in the financial system with the consequence that highly leveraged banks risk becoming insolvent. After 1980, each U.S. business cycle has seen successively

higher debt/income ratio at end of expansions, and the economy has become increasingly dependent on asset price inflation to spur the growth of aggregate demand.

Table 1 shows the rising household debt service ratio, measured as the ratio of debt service and financial obligations to disposable personal income. That this ratio trended upward despite declining nominal interest rates is evidence of the massively increased reliance on debt by households.

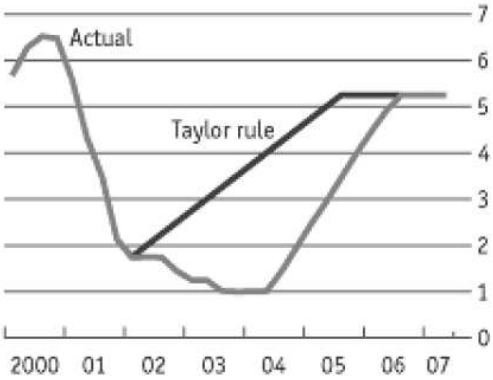
Table 1: Household Debt Service and Financial Obligations Ratio (DSR)

Year	1980.q3	1991.q3	2001.q4	2007.q4
DSR	10.9%	12.0%	14.3%	14.3%

Source: Federal Reserve Board.

We may join to the thesis (Taylor, 2009) that the current crisis could be ascribed to the persistence of large global imbalances, which in turn were the outcome of large periods of excessively loose monetary policy in the major advance economies in the early part of this decade. Taylor documented that there were monetary excesses during the period leading up to the housing boom. An empirical assessment of the U.S. monetary policy namely indicates that the actual policy during the period 2002-2006 was substantially looser that what Taylor rule would have required.

Figure 3: Taylor rule (U.S. 2000-2007)



Source: Taylor, 2009.

Since the start of financial crisis macroeconomics has undergone a great deal of criticism. The crisis has reopened the debate on whether economic policy should be concerned with asset price booms and increase in leverage and also how should economic policy react to asset bubbles and asset bubbles busting. It is now widely recognized (Blanchard, 2009), that due to increasing popularity of inflation targeting among policy makers in the pre-crisis period, the majority policy makers didn't take sufficient account of risks from asset price increases or leverage. The build up of systemic risk was an obvious answer of such policy. The global financial crisis 2007 raises some important issues in relation to macroeconomic imbalances:

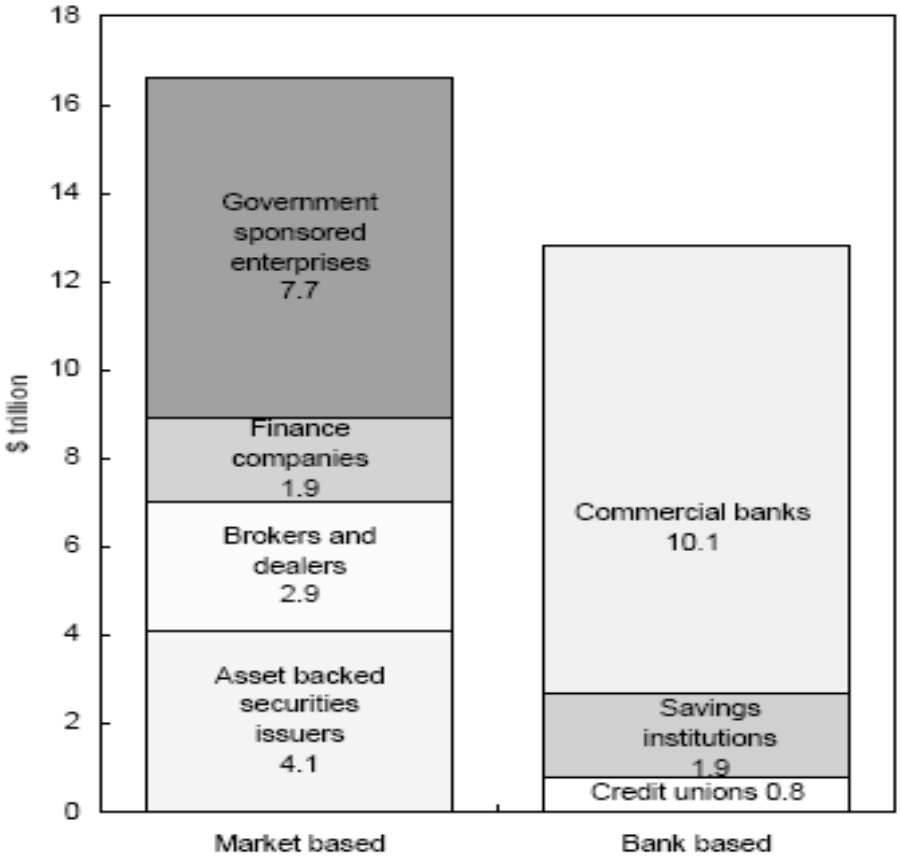
- there is need of a new economic paradigm and a new growth model in some advanced economies. The old growth model adopted after 1980 has a serious flow, since it relied on debt and asset price inflation to drive demand.
- the crisis underscores the need to develop new measures of systemic risk. These measures could complement more firm-centric regulatory variables and could focus on system-wide leverage, aggregate foreign exposure, etc. (Blanchard, 2009).
- monetary policy should take into account macro-financial stability, not just price stability.
- policy markers must avoid large current account deficits financed through short-term, unhedged capital inflows. It is necessary to secure adequate foreign exchange reserves, adopt a viable exchange rate regime, establish orderly capital account liberalization and maintain sound fiscal and monetary policy.
- during the booms budget deficits must be sufficiently reduced to allow more fiscal space when boom is over.
- Akerlof and Shiller (2009) suggest that the problem is also intellectual-a systemic failure of thinking on the part of economists. They argue that what is missing is sufficient attention to »animal spirits« (five distinct elements: confidence, concern of fairness, corruption and other tendencies toward antisocial behavior, money illusion, reliance on stories) by which they mean the psychological and

even irrational elements that figure importantly in so many aspects of personal choices and personal behavior, and that, they believe, pervade economic behavior too. It is necessary, they argue, to incorporate animal spirits into macroeconomic theory in order to know how the economy really works. In this aspect the macroeconomics of the past thirty years has gone in the wrong direction.

3. Financial sector supervision and regulation

Financial crises may result from poor domestic policies or from exogenous factors: in current global crisis they are the outcome of combination of both. The evidence so far is that domestic financial market deregulation leads to boom-and-bust cycles which bring economists (Crotty, 2009) to the thesis that the deep cause on the financial risk is to be found in the flowed institutions and practices of the current financial regime, often referred to as the New Financial Architecture (NFA). The NFA is based on light regulation of commercial banks, even lighter regulation of investment banks and little, if any, regulation of the shadow banking system-hedge and private equity funds and bank created Special Investment Vehicles (SIVs).

Figure 4: Shadow banking system (2007.q2)



Source: Shin, 2009.

Regulators assumed that unlike deposit taking banks, the collapse of large non-bank institutions would not have systemic implications. By moving leverage outside the bank and increasing the leverage ratio of non-bank financial institutions, it was the collapse of the shadow banking system which triggered the current crisis. At the peak, the shadow banking system in the U.S. held assets of more than $ 16 trillion, about $ 4 trillion more then regulated deposit-taking banks.

The NFA has widespread perverse incentives that create excessive risks, since it is rational for top financial firm operatives to take excessive risk in the bubble-they do not have to return their bubble-year bonuses when crisis occurs and as the examples in U.S. show (Merrill, Lynch, AIG) they continue to receive substantial bonuses even in the crisis. We can conclude that the system of compensation of bankers and operators in the financial system is flawed as it is a source of moral hazard in the form of gambling for redemption. Comprehensive and robust reform of pay structures could do a great deal to prevent excessive risk taking in the years preceding the financial crisis.

The next problem area are credit rating agencies. Due to perverse incentives rating agencies rather expose financial risk they systematically disguised it in the way they gave absurdly high ratings to illiquid,

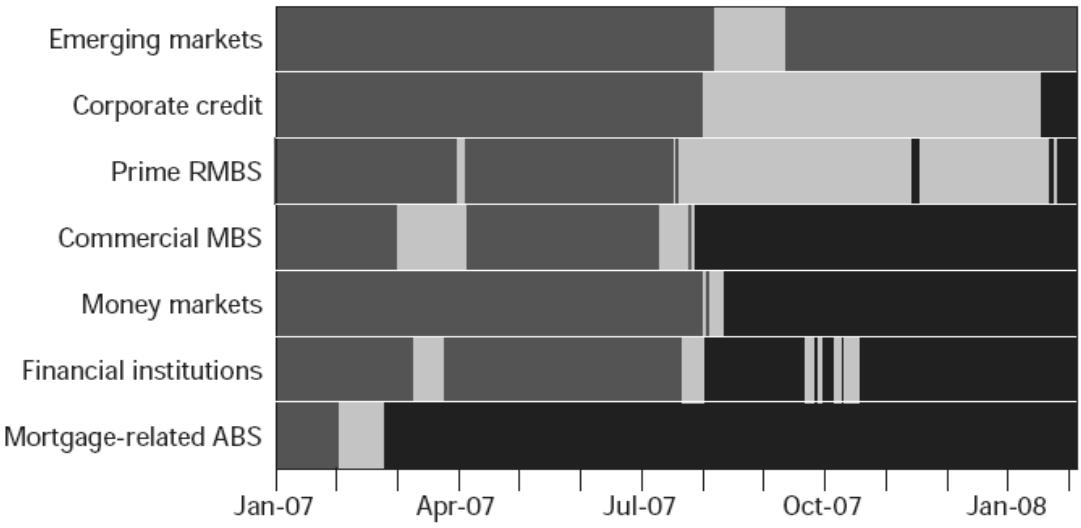
non-transparent, structured financial products such as MBSs, CDOs and collateralized loan obligations. Caprio et al. (2008) argue that a critical failure in the system was the fact that the securitizes were the ones who paid the rates. For many of the credit rating organizations the fees to strongly influenced their evaluations, and the result was a gross undervaluation of the riskiness of the pools of mortgages. Here, the old lesson of conflict of interest was forgotten. »Rating shopping« produced incentives to undervalue the risk. Buiter (2009) suggest rather simple solution to this problem: take the rating agencies out of the regulatory process by eliminating the role of external ratings in the Basel II capital risk-weightings and establish a positive list of Gold-Standard ABS that are acceptable as collateral at the discount window of the central bank and in repos.

In the process of identifying the essential conditions which have shaped the crisis, the high leverage of the system seems to play and important role. Financial institutions financed their portfolios with less and less capital, which was enabled through a number of holes in regulation: banks were allowed to reduce required capital by moving assets off their balance sheets in structure investment vehicles. Blanchard (2009) stresses the forgotten lecture-the implications of high leverage for the crisis were straight ward: if the value of the assets became lower and/or more uncertain, then the higher the leverage, the higher the probability that capital would be wiped out, the higher the probability that institutions would become insolvent.

4. Financial engineering

The massive use of badly controlled innovative financial engineering tools is indentified by many economists as the main cause of the current global financial crisis. The generous low-risk assessment of the rating agencies enabled issuers to transform risky assets (mortgage loans receivables) into apparently low risk securitizations and very convenient funding for the banks. These securitized subprime mortgage loans were then used as underlying assets or collateral of complex and highly volatile structural products and derivatives and sold to institutional investors as low risk (AAA rating) investments with very attractive return rates. Contrarily to the established investment technique principles (low risk/low return and high risk/high return) the financial engineering miracle has created the (low risk/high return) paradigm (Pezzuto, 2008) - the immediate result was strong increase of the use of securitizations, derivatives and SPVs and spread the fog on understanding, how many organizations are exposed to there toxic derivatives.

Figure 4: Heat map: Developments in Systemic Asset Classes



Source: IMF, 2008.

Note: The heat map measures both the level and 1-month volatility of the spreads, prices, and total returns of each asset class in terms of deviation relative to the average during 2004–06 (i.e., wider spreads, lower prices and total returns, and higher volatility). That deviation is expressed in terms of standard deviations. Dark grey signifies a standard deviation under 1, grey signifies 1 to 4 standard deviations, and black signifies greater than 4 standard deviations. ABS = asset-backed security; MBS = mortgage-backed security; RMBS = residential mortgage-backed security.

We can conclude, that financial engineering that co-produced the global crisis, confirms some old lessons (forgotten): (1) that in a world of financial globalization, mobile capital and lack of capital controls and financial intermediation may move to more lightly regulated shores; (2) that interlinking of securities,

structures and derivatives resulted in a loss of information and loss of transparency as where the risks ultimately ended up; (3) to keep alive the incentives to collect information about the creditworthiness of the borrower, the originator of the loan must be forced to hang on sizeable part of the highest-risk tranche of the securitized assets; (4) financial innovations of the past decade turned out to be the transmission mechanism for instability in the global financial system.

5. Global activities of large private institutions

The last decades are marked by a fast process of globalisation in trade, labour and finance, which has tied economies to a much greater extent, but has also produced circumstances, where contagion is more possible and dangerous. There has been not only a much greater volume of flows among industrial countries. An important feature of international capital flows is that component of these floes differ markedly in turns of volatility. In particular, bank borrowing and portfolio flows are substantially more volatile than foreign direct investments, which suggest that composition of capital flows can have a significant influence on a country's vulnerability to financial crises. (Prasad et al., 2003)

In many countries due to lack of financial sector supervision and regulation we saw a rise of shadow financial system and the transformation of traditional bank business models. The fact, that many countries provide a safety net by providing direct support to domestic banks, creates moral hazard incentives for banks to take on great risk. The policy of too-big-to-fail (TBTF) encourages banks to grow in size, which increase risk-taking by banks which increases the likelihood of banking crises but it also leads to resource misallocation. Mishkin (2005) reports, that credit ratings also appear to reflect too-big-to-fail, with larger banks having higher credit ratings when they take account of possible government support.

Events in current crisis show that too-big-to-fail is pervasive problem. As Johnson (2009) notes, six large integrated financial groups has combined assets equal to less than 20 percent of US GDP in the mid-1990s; today, their combined share of GDP is closer to 60 percent.

Stern and Feldman (2004) argue that too-big-to-fail has played an important role in the numerous banking crises in the last decade, events in current crisis clearly show that this problem was getting worse and lead to systemic risk in which the whole financial system was broken. Too big to fail is the cancer of moral hazard in the financial system and in connection with the most fundamental flow in the financial market system, that is its inherent drive towards excess, result always in systemic implosion. Following Schumpeter's creative destruction, market discipline is undermined and competition distorted if governments are expected to protect private institutions from failure. Measures to be taken to tackle seriously the problem of TBTF have to consider at least following areas: filling gaps in financial regulation coverage, making financial failures less costly, improving market incentives for more prudent behaviour, monitoring systemic risk.

The way to discourage TBTF and to internalize the externalities associated with bigness and complexity demand clear policy instruments. Let us mentioned some proposals:

- impose explicit size limits on systemically important financial institutions relative to GDP (Johnson, 2009).
- ensure that special resolution authority exists for all systemically important financial institutions (Goldstein, 2010).
- require all systemically important institutions to have wind down plans that will assure the primary supervisor that it can be resolved without creating unacceptable spillovers.
- require that such institutions to develop a bankruptcy contingency plan that would lay out how they would resolve themselves quickly and efficiently (Rajan, 2009).
- Every systemically important bank or other financial institution should be subject to a special resolution regime (SPR) with prompt corrective action. An SPR is a preventive or anticipatory insolvency regime (Buiter, 2009). The macro-prudential regulator has to be able to force the bank to raise, within the given span, the amount of capital the authorities seem appropriate.
- Separate riskier activities into unrelated institutions whose failure will not have the same direct adverse consequence for the economy and the financial system (Truman, 2009); separate the financial giants deposit taking activities from their investment and trading business.

6. Conclusion

Despite some similarities the last decade financial crises have featured substantial differences between them: the Mexican crisis of 1994 crisis was associated to private overconsumption; the East Asian crisis of 1997 was mainly due to private overinvestment; the Brazilian crisis 1999 was triggered by

unsustainable fiscal policy and overvalued exchange rate; and the U.S. crisis of 2007 was caused by a mix of factors: by current account imbalances - particularly by net flows of savings, from emerging markets to the U.S., by easy monetary policy in the U.S. and by financial innovations. The current global crisis has many similarities to those of the past but also have some important modern twists. The mixture of real and monetary factors in the current crisis is due to a loss of information about location and size of risks of loss due to default on a number of interlinked securities related to subprime mortgages.

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AN APPROACH IN DATING ROMANIAN BUSINESS CYCLE`S TURNING POINTS

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Abstract: *In business cycle measurement, two different but complementary approaches exist. One approach refers to "growth cycle" and relies on detrending procedures to identify the residual cyclical component of output. The other approach, "classic cycles" attempts to identify significant turning points – peaks and troughs – and define a contraction to simply be the time from peak to trough, and an expansion to be the time from trough to peak. With no need of trend modelling. The peak and trough dates for Romania were established by the Bry-Boschan Quaterly algorithm for the sample 2001Q1 to 2009Q4.*

Key words: Business Cycle, turning points, peak, trough

JEL classification: C14 , C63, C87, E32

1. Introduction

Business cycle theories found their way into the economic theories at the beginning of the 20th century. The research in this area was concentrated mainly at the National Bureau of Economic Reasearch (NBER) in United States. There are two different approaches regarding the fluctuations: business cycle (classical view) and growth cycles (deviation cycles).

2. Different Approaches to Business Cycle Analysis – A Brief Description of dating business cycle`s turning points

Before discussing business cycle dating algorithm, we must first define what we mean by the business cycle. Under the business cycle features comparisons framework, "cycle" refers to the classical business cycle (or reference cycle) as described by Burns and Mitchell (1947) rather than the cyclical component of a series obtained after detrending the data series, although the two concepts may be closely related (Morley and Piger 2009). The definition of Burns and Mitchell (1947), lays out various attributes associated with business cycles, which are as follows:

(i) business cycles are fluctuations observed in the aggregate economic activity
(ii) a cycle consists of simultaneous expansions in many economic activities, followed by general recessions
(iii) the sequence of changes is recurrent but not periodic; cycles can last from one year to ten or twelve years. Fluctuations of shorter durations than one year are viewed as seasonal fluctuations or noise.
(iv) they are not divisible into shorter cycles of similar magnitude and character.
(v) The duration of business cycles varies over time and the volatility also varies considerably over time.

To measure the business cycles, it is necessary to observe a benchmark series, termed as the reference series. This reference series represents the overall economic activity and may be represented by a single series or as a combination of several series. (Sanjib Bordoloi and Raj Rajesh, 2007)

The turning points of the phases are indicated as peaks and troughs. The business cycle peak and trough dates in US are determined by the NBER, a private, nonprofit, non-partisan research organization founded in 1920. Within the NBER, the Business Cycle Dating Committee plays the key role in establishing business cycle dates.

Reference dates of business cycle turning points enables policy makers and academics to ask and answer questions such as: has economic policy been successful in achieving stabilization? What events trigger contractions? Are financial market variables affected by the state of the business cycle? How synchronized are recessions across countries? (Peter F. Christoffersen, 2000), The NBER dates have formed

the base for an important strand of academic literature, starting with the seminal work by Burns and Mitchell (1947). More recent work includes Hamilton (1989)(regime switching modelling); Diebold and Rudebusch (1992) and Watson (1994) (duration and postwar stabilization measurement); Stock and Watson (1993) (forecasting); Romer (1994) (consistency of dates pre and post WWII); King and Plosser (1994) (real Business Cycle (RBC) model evaluation); Perez- Quiroz and Timmerman (2000) (riskiness of firms by size over the cycle). Artis, Marcellino, and Proietti (2003) discuss parametric and nonparametric approaches to dating euro area business cycles. In terms of business cycle synchronization, Altug Sumru, Bildirici Melike (2010) find that the business cycle in Europe tends to lag the business cycle in the US. Recessions tend to be milder but slightly more persistent in the EU countries.

Considering a business cycle as a *growth cycle*, dating turning points involves separating cyclical movements of a reference series from its trend. The identification of cyclical movements is usually based on the so-called ”three P s”, i.e., whether the movements are pronounced, pervasive and pronounced: many variables are synchronized cyclically and upturn and downturn regimes can be clearly distinguished. In addition, business cycles are persistent; this means no decline or rise would be recognized as a cyclical movement unless it has lasted for a while (Zhang Wenda and Zhuang J., 2002) .

As a conclusion, in business cycle measurement, two different but complementary approaches exist. One approach refers to ”***growth cycle***” and relies on detrending procedures to identify the residual cyclical component of output. For example, when researchers calibrate real business cycle models, the business cycle is typically found by detrending the data applying a Hodrick- Prescott filter or a similar method. Thus, the cycle is defined relative to a trend, which must first be estimated. The cycle is subsequently defined to be booming when actual output is above the estimated trend, and to be in recession when the actual output is below the estimated trend. In contrast, ”***classic cycles***” attempts to identify significant turning points – peaks and troughs – and define a contraction to simply be the time from peak to trough, and an expansion to be the time from trough to peak. The classical cycles approach has the advantage that no trend modelling is needed.

Romer (1994) and Watson (1994) strongly argue in favour of a systematic, programmed approach to dating turning points. The problem of dating turning points differs from the forecasting problem because turning points are estimated retrospectively (in-sample) and because the turning point estimator is nonlinear, whereas the forecasts considered in the many-series literature are predominantly linear (Stock and Watson, 2010). Stock and Watson (2010) consider two approaches to dating reference cycles. The first (”date then aggregate”) is based on aggregating turning points in a large numer of subaggregates, and the second (”aggregate then date”) is based on the turning points from a single aggregate time series constructed from the subaggregates. In both cases, turning points from the individual time series are based on the algorithm of Gerhard Bry and Charlotte Boschan (1971).

2.1. Bry-Boschan algorithm

Bry and Boschan (1971) provide a nonparametric, intuitive and easily implementable algorithm to determine peaks and troughs in individual time series. The procedure consists of six sequential steps. First, on the basis of some well-specified criterion, extreme observations are identified and replaced by corrected values. Second, troughs (peaks) are determined for a 12-month moving average of the original series as observations whose values are lower (higher) than those of the five preceding and the five following months. In case of two or more consecutive troughs (peaks) are found, only the lowest (highest) is retained. Third, after computing some weighted moving average, the highest and lowest points on this curve in the plus/minus 5 months-neighborhood of the before determined peaks and troughs are selected. If they verify some phase length criteria and the alternation of peaks and troughs, these are chosen as the intermediate turning points. Fourth, the same procedure is repeated using an unweighted short-term moving average of the original series. Finally, in the neighborhood of these intermediate turning points, troughs and peaks are determined in the unsmoothed time series. If these pass a set of duration and amplitude restrictions, they are selected as the final turning points. (Monch E., Uhlig H., 2004)

The standard approach to establishing business cycle turning points in the literature is to use the Bry-Boschan Quaterly (BBQ) algorithm developed by Harding and Pagan (2002). This is a quaterly version of the BB algorithm for monthly data proposed by Bry and Boschan (1971). The specifics of the algorithm can be summarized as follows (Sanjib Bordoloi and Raj Rajesh, 2007**)**:

Step 1: Using the log level of US quaterly real GDP (y), establish candidate dates of peacks and troughs as local maxima and minima in the data such that peak occurs at time t if:

$y_{t-2} - y_t < o;\ y_{t-1} - y_t < o;\ y_{t+1} - y_t < o;\ y_{t+2} - y_t < o;$

And the trough occurs at time t if:

$y_{t-2} - y_t > o;\ y_{t-1} - y_t > o;\ y_{t+1} - y_t > o;\ y_{t+2} - y_t > o;$

Step 2: Censor the turning points to ensure that peaks and troughs alternate. In the case of two consecutive peaks (troughs), eliminate the peak (trough) with the lower (higher) value of

Step 3: Censor the turning points to ensure that each business cycle phase (peak-to-trough and trough-to-peak) lasts a minimum of two quarters, while each complete business cycle (peak-to-peak and trough-to-trough) lasts a minimum of five quarters.

Harding and Pagan (2002) proposed two measures of the depth of expansions and recessions in cycles, the amplitude and the cumulation of expansions and recessions. The amplitude compares the logarithm of the log level of production at the turning points of the phase. In the case of expansions, the amplitude represents the percentage gained in terms of production during the period of expansion, and in case of recessions, the measure may be interpreted as the percentage lost.

2.2. An Approach in Dating Romanian Business Cycle`s Turning Points

The topic of business cycles is very debated within the economic analysis, as it is one on which there is a low degree of consensus, regarding both the shocks the cause them, and the propagation mechanism.

Dating the turning points in countries other than US has been the source of many initiatives that can be broadly classified as non-parametric and parametric. Inside the non-parametric alternatives, the most popular one has been suggested by Bry and Boschan. As we present, they develop an algorithm that isolates the local minima and maxima in time series, subject to reasonable constraints on both length and amplitude of expansions and contractions. Among other authors, Harding and Pagan have suggested alternative refinements of the Bry-Boschan seminal dating algorithm. Choosing a method in dating business cycles does not seem to be an easy task, as none of them is exempt from problems. Non-parametric models have been criticized for using ad-hoc dating rules. Parametric models have the inconvenience of making all the business cycle analysis to rely on the underlying model's assumptions (Camacho Maximo, Perez-Quiros Gabriel, Saiz Lorena, 2008).

Besides the selection of the methodology for dating the turning points, an additional drawback of analyzing business cycles fluctuations comes from the unavailability of sufficiently large samples in European countries time series. This problem is particularly dramatic for the recently acceded countries, for which data are restricted for the beginning of the nineties. This implies that the samples comprehend very few complete cycles (two or three in most cases) making impossible the statistical inference and therefore, not allowing a clear comparison across countries.

Most of the studies were done for the advanced economies, but during the last two decades, especially due to the numerous economic crises in emerging economies, many studies were undertaken for the latter too. A particular case is that of transition economies, and, more specifically, that of Romania. Most of the former socialist economies experienced a so called initial shock, of the falling output, which originated mostly from the disorganization phenomenon. For the case of Romania, not only that this initial shock was highly intense, but a second recession happened during the mid `90`s, on the background of a structural instability and of the delay of the reforms and restructuring process.

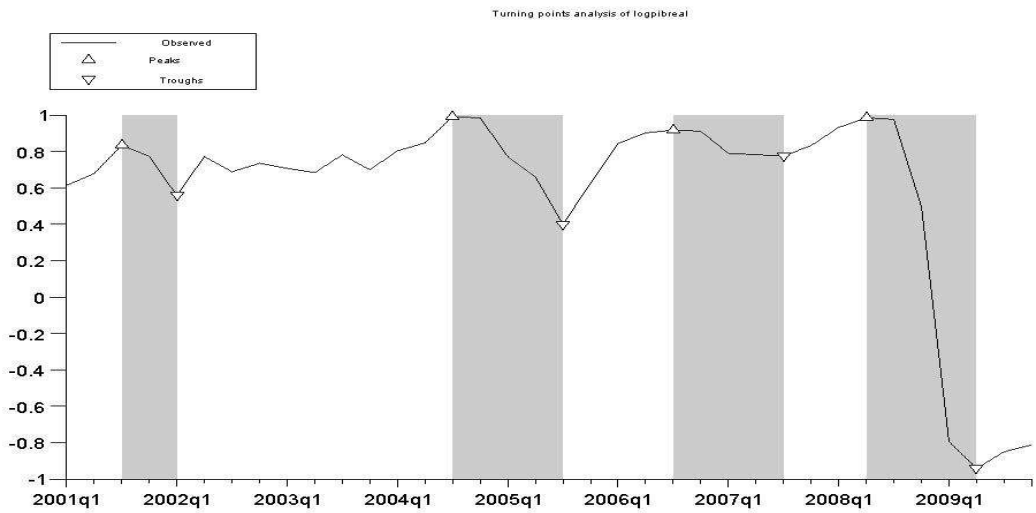
Not so much research has been done in dating romanian business cycles turning points. There are some authors, though, involved in this matter. We can mention Petre Caraiani (2007) , who revealed that, for Romania, the duration of cycles are atypical, that fluctuations last enough to be classified as business cycles, that their duration is bigger that 15 months, and that they last more than in the case of developed economies, which is understandable given the specific of an economy in transition. His study also showed that the phases of the cycles (expansion, respectively the contraction) do fulfil the condition of persistence, as their duration is more than the minimum level of two quarters (six months).

Another feature of the fluctuations in Romanian economy is the smaller duration of the recessions as compared to the expansions. Both cycles, that were registered, were characterized by smaller recessions, but important in intensity, followed by sustained economic growth. At the same time, the asymmetric characteristic of the phases of the economic cycles implies a much bigger uncertainty with respect to the appearance of turning points in economic activity.

Lucian Liviu Albu (2008) tried to build a composite indicator based on virtually monthly data and to use it in order to obtain short-term forecasts for economic activity at national level, because one of the most significant impediments for short-term forecasts is the frequency of publishing GDP (only quaterly).

In this study, we consider classical business cycles, as in Harding and Pagan (2002). This avoid the problem of detrending the series, that we would need if we considered growth cycles. In dating Romanian business cycle`s turning points, we use Bry-Boschan procedure, tested it with Grocer 1.4: an econometric toolbox for Scilab. First, we calculate the logarithm of quaterly real GDP, the time series span from 2001Q1 to 2009Q4.

The peak and trough dates established by the BBQ algorithm for the sample 2001Q1 to 2009Q4, applied to quarterly Romania real GDP are viewed in the next figure. We chose only these reference series, because are the most reliable, published by the Romanian National Institute of Statistics (http://www.insse.ro/cms/rw/pages/PIB-trim.ro).



Turning points dating results of logpibreal
Method: Harding-Pagan
Transformation: none
Estimation period: 2001q1-2009q4

Peaks	Troughs
2001q3	2002q1
2004q3	2005q3
2006q3	2007q3
2008q2	2009q2

Cycle caracteristics:
Average duration from peak to peak: 9
Average duration from trough to trough: 9.6666667
Average duration from peak to trough: 3.5
Average duration from trough to peak: 5.6666667
Average amplitude from peak to trough: -0.7339667
Average amplitude from trough to peak: 0.3870351

As we can see, this algorithm estimates that the average duration from peak to peak is 9 months and the average duration from trough to trough ~ 10 months. As other authors observed, the method indicates a

smaller duration of the recessions as compared to the expansions: the average duration from peak to trough is smaller (3.5 months) than the average duration from trough to peak: 5.6666667 (~6 months).

So, we observe evidence of asymmetries across the phases of the cycle. Expansions are generally wider than the recessions wich leads the gain in terms of production of about 0,387. In case of recessions, even if they are smaller than expansions, the loss suffered from the decline in contractions seems to be considerably higher (0,7339) than the amplitude from trough to peak, i.e. the percentage gained in terms of production during the period of expansion.

3. Conclusions and directions for future research

Cyclical performance of economies in a turbulent environment is forcing researchers to search for early signals of turning points between the phases of slowdowns and accelerations. Besides the selection of the methodology for dating the turning points, an additional drawback of analyzing business cycles fluctuations comes from the unavailability of sufficiently large samples in some European countries time series, like Romania. This problem is particularly dramatic for the recently acceded countries, for which data are restricted for the beginning of the nineties. This implies that the samples comprehend very few complete cycles (two or three in most cases) making impossible the statistical inference and therefore, not allowing a clear comparison across countries. Furthermore, statistical data have been continuously revised as a consequence of the necessity to harmonize the methodology for compilation of the system of national accounts.

Although the detection of turning points is well established in the literature, the modelling and forecasting of turning points is less advanced.

With all these issues, our approach of establishing Romanian business cycle turning points by using the Bry-Boschan Quaterly (BBQ) algorithm developed by Harding and Pagan (2002), seems to be a good estimation, especially when we dispose of a long time series.

Future research could be done on detecting and forecasting business cycle turning points, on development and improvement of leading indicators (very important in forecasting the next recession), efforts in creating a reliable Romanian data bases useful in any kind of economic research. The leading indicator will provide qualitative information of the most probable performance of a reference cycle with a significant lead-time of several months. Future research could be conducted along several lines: for evaluating leading indicators separately for leading peaks and troughs. There are some indicators that may be especially successful in signaling peaks but not troughs and vice versa. The analysis could be extended to monthly frequency as opposed to quarterly frequency, as used in this article.

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THE SOCIAL ASPECTS OF GLOBALIZATION

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Abstract: *Globalization, a phenomenon extended to a planetary scale had reached all the human activity levels, involving both positive and negative effects. The modern form of globalization appears at the end of The Cold War, when the geopolitical restructures imposed a worldwide interdependence and a fast rhythm of social changes. The free movement of the capital engages all the countries in a global competition, but at the same time makes them vulnerable in front of the transactions, which leads to job losses.*

Key words: globalization, social policies, relocations

JEL classification: F0

1. The Content of Globalization.

Globalization is a reality of the contemporary world, with consequences and manifestations, interconnected in all the human levels: economic, social, political, cultural, scientific, technological, ecological, an irreversible and historical process of social development, determined on a lot of factors, such as technology or market economy.

Being already a cliché, the term has different understandings, depending on the one who defines it.In Cambridge Dictionary, globalization is primarily an economic effect, which is "the increase of trade around the world, especially by large companies producing and trading goods in many different countries", and then an extended effect – "when available goods and services, or social and cultural influences, gradually become similar in all parts of the world".

In Blackwell sociologic dictionary, "globalization is a process in which social life within societies is becoming increasingly affected by international influences based on anything – from political and commercial ties, work, style, clothing and media".

The Monetary Fond Investment's experts define this phenomenon as "a historical process, resulting from innovation and technological progress, which refers to the increase of integration of world economies, particularly through trade and trade flows, movement of labor and information (technology) across international borders"

The ex president of the World Bank, J. D. Wolfensohn says that globalization means "international financial crisis and the fear of the workers from the developed countries that they will lose their jobs for lower-cost countries with limited labor rights and the fear of the workers from the countries developing that the decisions which are affecting their life are taken in some other places". (Wolfensohn, 2001)

The globalization is an objective process, which runs with an amazing speed, including all the states of the world.

The globalization has both positive and negative effects. Positive effects: the high speed of trades, knowledge intensity, transnationalisation of firms and processes, competition, resulting lifelong learning, network, trust the firm, the product. Therefore, the firms have faster activities, become more adaptable to what clients require, otherwise they disappear, and the countries are competitive, have an excellent infrastructure, a lifelong learning.

Negative effects:

- Economic crisis and a gap between the poor and the rich countries.
- Social instability, the weakening of the family's role, of the school, of the neighborhood in favor of
- the individual;
- The decay of the social control means and the normative inflation, especially in the transitional societies;
- Media explosion, especially pornography, which spreads violence, ignorance or promiscuity;

- The extension of older behaviors such as alcoholism, smoking, and the appearance of new ones such as drugs, tax evasion;
- The anxiety syndrome, which was generalized because the lack of security in the social environment;
- The weakening of the social system, both intervention and education of the individual;
- The explosion of the geographical mobility, immigrations especially targeted by criminal and mafia groups and foreigners.

2. Features of Globalization

Globalization is a complex process which has left its mark on all the sectors of human activity: economic, political, cultural, scientific and technical, organic.

2.1 From an economical point of view the globalization entails:

- The globalization of supply and demand, the expansion of the global market economy.
- Mobility of capital and the expansion of the international capital flow outside the US-EU-Japan triangle from the 90s.
- Significant share of relocations.
- The tendency of concentrating the capital under the influence of transnational corporations.
- Widening economic differences between countries, causing inequality in income distribution and consumption among individuals.
- Regional economic integration of countries in different structures (EU, NAFTA, ASEAN, etc)

In a global world, the economic game is played on three levels:

2.1.1 Nation level

- The citizens can create higher income with knowledge and skills as good as others.
- The citizens can use a telecommunication infrastructure, means of transport, etc.
- The nation becomes a leader in research – development and has entrepreneurs able to develop the idea of product

2.1.2 Firm level

- Qualified staff, investment, buying and selling products globally.
- Social rules in order to allow industrial flexibility.

2.1.3 Human level

- Knowledge, skills, desire of change

2.2 From a political point of view we can distinguish the extent of the globalization process in various area of the world, a phenomenon accompanied by:

- The resurgence of authoritarian and extremist tendencies (ETA, Hamas, Hezbollah, etc).
- The existence of similar institutional organization systems, shifts in political behavior due to the granting the rights for immigrants and the emergence of new political structures.
- The emergence of new types of threats and their global expansion (terrorism, nuclear weapons, environmental disasters.
- The creation of intergovernmental organizations such as UN, OMC, OMS, OIM, G8, etc.
- Shaping a global system of justice: the European Court of Human Rights, the International Criminal Court for former Yugoslavia, the International Court for Rwanda, but it is circumvented by the states which are not signing different agreements or commitments, such as the one initiated by the U.S with various countries about the refusal to extradite U.S citizens to be tried by the International Criminal Court.
- The unequal distributions of political power in the world, which has the effect of breaking the rules of the superpowers (U.S) “competition is a factor of relations destabilization between civilizations, when the interests become competitive and especially when pressures are exerted by political powers. (Dimitriu, 2002)

2.3 From a cultural point of view, the globalization generates:

- The uniformity of cultural consumption (movies, books, music)
- The formation of certain groups interested by the same products (cloth, music, etc)
- The internalization of the English Language

2.4 In science and technology the globalization contributed to:

- The conquest of land by spreading space vehicles
- Computerization of all areas of activity

- Internet – spread
- The imposition of quality standards in all the areas of quality
- The concern for the intellectual rights and protection of trademarks and investment

2.5 In ecology, the globalization has created the emergence of serious problems affecting the whole world: damages the ozone layer, greenhouse effect, climate change.

2.6 From a social point of view:

- There is a tendency to standardize the product consumption
- Unprecedented human mobility
- Elite- formation and the exclusion of the poor
- Relationships over long distances, some virtual
- Ubiquity of some social problems such as poverty, unemployment, social exclusion, etc.
- Oriented movement against multinational corporations and against global agreements of the most industrialized countries.

The first movements occurred in the mid 90s, when various corporations such as NIKE, GAP have been accused of banning syndication, poor working conditions, low wages and the practice of using children globally. Nowadays, in addition to these charges were added the ones against international institutions: OMC, IMF and the World Bank. "What goes wrong in these institutions? Why they generate protest marches, demonstrations and riots, as happened in Seattle in 1999, in Washington and in Prague in 2000 and in Quebec and in Washington in 2001. What do we find beyond these complaints?

The globalization is a positive process and can be a development resource, even though till now we couldn't see any result. Anti- IMF protests are justified, though I do not agree all the idea promoted by such occasions. But the action gives me the hope that the organizations which are leading the world today will be reformed once."

From the anti-globalization militants' point of view, these institutions paved the way for the transnational corporation power, which will influence the governments become less important than the global economic institutions and their efforts to target and expand economic growth. Nongovernmental organizations criticize G8. They consider that G8 doesn't make enough efforts to save the lives of millions of children who die every year from preventable diseases. Currently, the large number of decisional groups worldwide and their components created confusion. That is why Barack Obama proposed that G8 should open to the emerging economies, such as China.

3 The Consequences of Relocations on the Labor Market

The relocation of the large companies is one of the phenomena that concern the countries with cheap labor practice, with low wages, a tax to encourage multinational and poor social protection. Wizard capital is accompanied by unemployment and bankruptcies in the importing countries.

A significant case is the one of SEB (Color, Rowenta, Tefal), which in 1989 formed its first global network by acquiring well-known German company Rowenta; in 1994, the process is accelerated through the deployment of various branches in Russia, China, Mexico. Taking control of plant Arno, SEB becomes the authoritarian leader in the Mercosur zone (Argentina, Brazil, Paraguay, Uruguay) through other implementations. In almost 30 countries SEB becomes number one provider in many industrial segments.

The worldwide dissemination of the large companies is a nightmare for the local employees because the appearance of new jobs generates the disappearance of a greater number of jobs.

However, the analysis proves the absence of a correlation or global interdependence between the "degree of openness (trade liberalization and globalization) and unemployment as there are countries where unemployment is very limited or does not exist. It's absurd-P. Jacquet wrote-to predict that globalization will lead to rising unemployment or that it will reduce it" (Miftode, 1999)." With or without globalization, unemployment in explained by a system of factors that cannot miss the structure of labor training, labor market performance, the nature of society, social policies and of course, the economic ones." (Miftode, 2002)

The globalization led to important changes in the labor relations. For example, EU, a conservative area in terms of social protection and the working conditions, are accepted employment contracts different than the standard ones on an undetermined period. For about 40% of the population has turned to alternative solutions: part-time contracts, the ones with a limited duration, "zero-hours contracts" (work on various projects, the compensation being made at the end of the project). For example, employment contracts for an indefinite period of time as set by Labor Code in Romania are difficult for employers because the

employment, the dismissal, the change of the working conditions or the payment of the employee take a long time and do not allow more flexible labor market.

The relocations involve redundancies and layoffs, thus unpopular among employees. However, the products obtained and the new locations are cheaper and may return home at lower prices, which is to benefit the consumers.

IT is by far the most affected field by the phenomenon of relocation. In Europe, almost 25% of traditional IT jobs will be transferred to emerging markets by 2010. In the U. S. , figures show that by the end of 2005, one in ten jobs in the IT sector was affected by the relocation. In 2005, 80.000 items were transferred, so that unemployment in this field has reached 7%.

According to various estimates, between 3 and 3,5 million jobs in services and, especially from IT, could be relocated within a decade, of which 500.000 in 2005. This exodus is accompanied by a severe decrease in wages for those who remain to work in the field in USA. In Europe, the situation is similar. By 2010, one quarter of European jobs in IT are likely to be relocated to emerging countries. (Florea, 2007)

4 EU Social Policies for the Limitation of the Negative Consequences of Globalization

The economic globalization involved also the globalization of the social policy, which consists in passing both the problems and the decisions from the national level to the supranational one, reducing thus the influence of the national governments on social policies and increasing the influence of supranational institutions (regional or global) such as EU, NATO, World Bank, FMI, UN.

Also, the economic globalization and the economic competition of states lead to important changes in tax and social policies.

Unemployment “0” as the aim of the Keynesian state’s welfare is no longer possible, because it couldn’t be applied to any country in a global economy.

For example, Sweden, which has maintained its unemployment rate below 3% for 2 years after the oil crisis, dropped after 1994 when it was recorded a rate of 10-11%, falling to 7,2% in 1999.

High unemployment rates were registered in other countries in Europe and Asia, like Germany, that faced with high costs of reunification and South Korea after the crisis caused by FMI.

Free movement of capital, driven by globalization, has considerably strengthened its position in negotiations with governments and unions, so if they have difficulties with them, there is always the chance of moving in a competitive country.

The process of Europeanization and globalization has attracted a number of social consequences, namely:

- Labor migration from one state to another (between subsidiaries of the same company) has created new needs, such as the one of a transnational security system for migrant workers
- Migration of workers from poor to rich countries has created groups of migrants and residents requiring re-replacement of citizenship and civil rights as basic human rights in social policy.
- Social migration of two streams: from poor to rich countries in search of social welfare and vice versa, from the rich to the poor for the so-called “social tourism”.

All these processes require transnational decisions and concerted international actions. The global social policies are no longer operating with poor individuals, but with poor countries, with the redistribution of wealth between countries and groups of states, etc.

The states are contributing with significant amounts to regional or global funds, and those faced with problems such as economic, social, war, natural disasters, receive grants from these funds.

A European fund, called Globalization Adjustment Fund was established by European Community Regulation no. 1927/2006 in order support, in a spirit of solidarity, workers affected by job losses due to changes in world trade patterns.

This fund has an annual budget of 500 million and is designed to help “the victims of globalization: such as: assistance in seeking employment, vocational guidance and retraining, supporting creativity in self-employment, subsidies for participation in ongoing education and training.

This fund will not fund passive social protection measures such as: old age pensions or unemployment benefits, which should be in the care of the Member States. The fund is directed only to those affected by the globalization. It is a single aid, individualized and limited in time. It was created on December, 20 2006 and was improved on June, 28, 2009. According to the European Commission Report adopted on July, 31, 2009, in 2008 the fund helped 10.000 workers who have found a new job.

5 Social Policies to Reduce the Negative Impact of Globalization in Romania

Romania, as a former communist country, with the desire to have a capitalist destiny, has major social problems and feels the need for a coherent institutional approach for the problems, imposing a series of measures for adopting a foreign social policy system, adapting to the imperatives and to the logic of Europeanization and globalization:

5.1 The stability of the internal environment, which is a condition stabilizing the global market

5.2 The shift in emphasis on increasing efficiency and giving up the objectives of reducing social inequalities

5.3 Preparing measures to counter and limit the effects of social problems, such as:

- The disbursements on the labor market
- Aging and its impact on pension
- Emigration of highly skilled labor
- Shift in emphasis from civil rights to civil obligations and individuals for their own welfare
- Increasing the role of communities in managing their own social problems
- Reduce costs and increase competitiveness
- Reducing taxation
- Reduce labor disputes
- Free movement of capital and labor
- Improve the effectiveness of social policies

5.4 The existence of a modern social insurance system to allow the wages replacement and the existence of an effective package of benefits and social services able to protect people from the risk of job loss.

In European politics, labor flexibility is understood as a multidimensional concept that refers to the existence of flexible contractual arrangements and comprehensive strategies for lifelong learning, to favor successful transitions into the labor market: from school at work, from a job to another, from inactivity or unemployment to a job or from a job to retirement. This implies the existence of institutional agents in order to implement flexible forms of employment. Temporary work agencies represent such a tool, which in developed economies play an important role for successful transactions in labor market and especially for youth and vulnerable groups. These agencies appeared in Romania in June, 10 2004, according to H.G. no. 938

The labor market in Romania must also follow the need of the companies to adapt quickly to the competitiveness requirements. Thus, employment policies must include the results of constant collaboration with businesses and professional associations for effectively regulating labor relations.

Changes to the Labor Code after 2005, were taken in order to give flexibility to all the employment relations and to reduce administrative pressure on employers. Legislation on unemployment insurance system and employment stimulation was substantially modified.

Starting with January, 1st, 2006, the unemployment compensation was different, depending on the contributions and the average gross salary in the last 12 months of activity. Thus, it was initiated a fair system of insurance, for the risk of losing the job. The National Agency for Employment, as a public service, will advise Pre services, for those who will be redundant following the restructuring operations carried out by employers.

These services involve outreach, placement on existing vacancies and retraining. Also, collectively redundant workers will receive a complex package of measures to stimulate employment.

For those who want to open a business, there is an employment orientation to economic activities. Also, the National Employment agency will grant financial benefits to the enterprise for organizing training programs for employees and assumed an increase till 2010 of about 10% of the funds allocated annually to ensure access for the ones seeking for a job.

Then, by accessing funds SOPHRD 2007-2013 were allocated financial resources to increase the adaptability of workers and enterprise. These funds are intended to promote an entrepreneurial culture, training and support to enterprises and employees to promote adaptability and development of partnership and initiatives for social partners.

Conclusions

Acclaimed by some and criticized by others, globalization is a reality of contemporary society, in which events unfold with lightning speed, causing mostly economic insecurity and social insecurity default. It is an objective process that takes place at the supranational level resulting in both positive and negative aspects.

According to some authors, globalization suffocates civilizations, interstate relations being of domination and submission, where the industrialized states dispute their priorities.

There are a lot of anti-globalization events with incidents among protesters in confrontations with security forces. It cannot be neglected the extremists forms of expression such as terrorists attacks or nuclear threats, which are the result of poor countries' hate over the rich ones, that are trying to impose their supremacy.

Globalization made relocations increase, the countries entered into a global competition, trying to offer more attractive conditions for the investors.

Relocations can fill the economic "void" from a certain area by attracting investors who will initiate new economic goals, employing local people, even if labor is used at a lower level than home, and contributing to the loss of jobs in the countries where they come from.

Globalization challenges, in a first phase at least, the widening of social inequality and the fear, but there is no turning back. It requires that the states, through social policies they take, to counter the negative consequences of this process and to support this transition to a global world.

The European Globalization Adjustment Fund was created by the European Community with the aim to reconcile global benefits of trade liberalization in the form of long-term growth and employment, with potential adverse effects of globalization in the short term, particularly on employment in terms of most vulnerable and least skilled workers. This fund is for the ones properly informed, knowing that the access to European funds, generally requires a very good documentation and many approvals, which could discourage some people who are less initiated.

After 1989, Romania passes a complex process of economic, social, institutional change, generated by a different political system and adopting the market economy. Labor market policies and associated institutional framework have evolved substantially since 2002. The first National Program of Active Market Policies was developed in 1997, but until recently, the active policies were a goal rather than a reality. Labor market policy expenditure fell from 0.63% of GDP in 2004 to 0.35%of GDP in 2007, and this while the Romanian GDP represents less than 40% of the EU countries.

Spending on labor market policies have had a downward trend in the developed European countries, but the gap between Romania and EU countries increased from a ratio of 3.6 in 2004 to 4.8.in 2006.

In Romania the labor market policies may not be effective and may not be able to face global challenges, because of all the changes which occur in the institutional system. "The degree of flexibility of the market in Romania is high, but the flexibility is "forced", being associated with massive restructuring in industry, agriculture and informal sector. It is not regulated, but spontaneous, it doesn't involve a balance between work and family, but it is associated with precarious employment and poverty" (Preda, 2009).

For developing countries like Romania, the authorities of the other states along with the international community must make a report as varied from economic adjustment and economic development between the costs and the benefits of globalization.

If as country is isolated from the international economy, as did the least developed countries in the early postwar years, the country is likely to fall further and to decline in the international hierarchy. Therefore, every state, especially the developing states as Romania, has to deal with this dilemma and to assess the costs and potential benefits to participate in the global economy. "The serious problem is that Romania failed to form economic elite, to have, in other words, agents specialized in the processes of the integrated countries are likely to lose control over important aspects of their own economy. The past teaches us that such a situation gives rise to strong nationalist reactions, becoming a source of serious political problems.

The German investment in the economies in transition, in Eastern Europe, the US in Latin America, the Japanese in Asia-the Pacific, can trigger extremist attacks against companies and foreign investors.

Such reactions not only affect the economy, but will threaten the very stability of the global economy.

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