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**TWO WAYS TO INTERPRET THE WORLD – TH. R. MALTHUS AND
„L'ABBÉ PIERRE” –**

POPESCU Dan¹

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Abstract:

Both priests, both – but in different ways- interested by human destiny especially of the poor one. There are 160 years between them. What do they have in common in the way of thinking what was the differences there? Almost nothing in common, almost everything dissimilar. What is interesting to see is that the first one we mentioned, Thomas Robert Malthus – entered long time ago into the economic history thoughts. Sometimes bright, sometimes a visionary... The other „l'abbé Pierre” is about to enter in the universal patrimony leading a current of thinking and acting that is focusing on the brothers that are poor, for the better of those marginalized, ignored and hungered, most of the time humiliated. Taking in consideration nowadays model of development, it seems that the future is imperious necessary. I wrote about both, but more about Malthus (see for example the chapter from my book, „Istoria gândirii economice de la fiziocrați la sfârșitul secolului XX”, Edit. Continent, Sibiu-București, 1999) and less than “l'abbé Pierre” (see Dan Popescu „Jurnal economic” Edit. Continent, Sibiu-București, 2007) in a way of economic history of thought, a way based on acting and facts.

Keywords: *human destiny, classical school, economic thought*

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Writing about the abbe Pierre in Romania before 1989 was very hard. However, writing in a neuter manner about Malthus was possible. And after that moment, the (incorrect) haste towards ultraliberal profit schemes, the

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unjustified and absurd critique of the state institutions which helped the cunning, the corrupt, the cynical „fish” huge wealth in „dark waters”, all these combined with a barely visible, neglected, minimized social, with lack of information- „he was not and still is not worth the effort” not few have said- have placed abbot Pierre outside the scope of most researchers’ study. Given the aforementioned circumstances it was actually not possible for him to be placed in the „a le une” of economic research. I have never adhered to such a trend of brutal, visceral repudiation of the social only because we were coming from „socialism” and wanted something many of us did not even know what it was. As a proof, I have included the abbe Pierre together with Malthus in the scope of my present day research. It is natural for Malthus to deserve this. And so much more for abbe Pierre. And I am doing this in a year marking the 246th anniversary of Malthus’ birth and 58 years since „l’abbe Pierre” launched his dramatic and touching appeal which was so full of hope. The French magazine „Historia” has recently commemorated both researchers with two succinct and isolated articles. This is how I got the idea. But my enquiries and the association I have made were and still are different from the lines in the prestigious French publication. In addition to this, my considerations are naturally closer to the economic realm...

So, Thomas Robert Malthus (1766 - 1834), an important name and chapter in my textbook of economic doctrines and in my related research papers. Together with David Ricardo he belongs to the pessimistic faction of the classical liberal school of economic thought. As I was saying, he was born in February 1766 in a middle class family from Surrey, England. The sixth of eight children, he himself having many children. A situation which makes us look at his words attentively and point out, together with the late academician professor Vladimir Trebici, the the good can be separated from the rest. And reconsider what not few doctrinaires from our country and from other places have considered as being a bad thing, or at best, an exaggeration. Let’s consider these things as a warning, perfectly valid then and nowadays. Le’s see.

Malthus will be highly educated at Cambridge, where, in 1793 he will even receive tenure. However, he will become an Anglican clergyman in 1789. A generous and wise priest, but also an attentive researcher, trying to be- although not always with success- cautious, lucid. Malthus will stand out as a researcher, among others, through his empirical research and the conclusions drawn- so valuable through their content and scope, through their realism and

importance. At that time - the end of the 18th century- England had been for several decades at the forefront of the industrial revolution, but there were still many obstacles to the emergence of a large mechanistic, capitalist industry. In particular, from a human point of view we are talking about the large concentration of workers living in misery, sending their 6-7 year old children and 7-8 month pregnant wives to work in mines and factories, being constantly threatened by unemployment (though most often cyclical), under specific economic dynamics. These urban crowds, usually less adapted and poorly educated, would also become addicted to alcohol, prone to rage and violence, posing the danger of extensive social unrest. Not very concerned with the capitalist mechanisms which triggered such behaviour, although I do not believe he could have understood them, Th. R. Malthus will embrace the concept of „dangerous classes” in vogue then, but to a certain extent also now among the wealthy. He will shift the blame to the poor and the marginalized. As they own no assets, they are to blame for the the evils of society. Moreover, Malthus believes somehow correctly, poverty and its companions - ignorance, alcoholism, violence- „arouse the fecundity of couples”. As compared to any living body constantly seeking to propagate its species more than the amount of food it has at its disposal, man as a rational being should check such an instinct. Almost impossible

... So other motivations are found for misery, but its victims continue to remain the culprits. In this direction, in 1798 the researcher-priest will publish „An Essay on the Principle of Population”, without signing the paper. It didn't „agree” at all with his ecclesiastical status. The book will spark extensive debate, and in 1803 Th. R. Malthus will republish an expanded variant of the 1798 volume with ample comments on pages, this time with his signature. He was already on the path to his vocation as a researcher, a vocation surely stronger than that of priesthood; a year later he will get married and become professor of political economy at the important East India Company College. A position he will hold until his death in 1834. He will bring out two more editions of his book, resigning more and more from the moral side of his considerations to the sometimes relatively scientific one. The book will be soon translated into French, at Geneva, and then into several other languages.

Since then, and probably, most probably from now on, there has been and will be an extensive debate among researchers: for or against Malthus' ideas? And we must complement these ideas regarding the „population law” as

the English researcher called it, with those which reinforce his considerations about the population status (the poor one in particular, actually the largest part of the population). This population increases numerically much more quickly- by geometric progression- as compared to the production of goods necessary for living, which increases in an arithmetic progression. The researcher looks only at the level of production and technology from his time, does not „look up” any further into the future. And for Malthus, the only preventive check which can break such a „population law” was the „moral restraint”, especially for the poor, destitute ones, chastity in celibacy and sexual abstinence in marriage. Going to the sterilization of poor women or those from poor couples.

Here is a theory which, from my point of view, is not so much flawed in the parallel Malthus makes between the population dynamics and the comparative dynamics of food resources. How deeply vulnerable are the meanings and implications the former priest is thus revealing. He is more of a photographer of reality than an analyst, an examiner of its mechanisms and evolution. Let me explain. On the basis of some empirical studies conducted mainly in England, studies which he generalizes starting from the demographic structure of a country which consists of more than 90% poor people, couples or not, but extremely prolific, while the food supply he is also analysing is seen to increase at a much lower rate, Th. R. Malthus is strongly against procreation in any family, official or not, which does not own any resources. So he will write: „A man who is born into a world already possessed, if he cannot get subsistence from his parents on whom he has a just demand, and if the society do not want his labour, has no claim of right to the smallest portion of food, and, in fact, has no business to be where he is.” However, Malthus, the „moralist” will not request that the state should restrict the poor’s right to get married. They may get married but they may not have children...

There are several positive elements at Malthus: a) the fact that the researcher-priest notices this dysfunction, which can be generalized given the aforementioned demographic structures, between the rapid growth in the poor population, so in population in general, and the much slower growth in the necessary food resources. Sequential, but a real discrepancy. A serious alarm signal still valid today, from which various authorities could have learned and can still learn, and from the perspective of which they could have taken action and still can. As a matter of fact, various judicious policies of birth control

from different countries prove that Malthus' ideas have not been useless. What is happening in the present as regards the libertarian measures of birth control proves that what we are dealing with is more a way of living, a type of individual sexuality than a „population law”. Which does not mean that at a national, community or global level measures shouldn't be taken to increase food production and reduce starvation in the world. b) Malthus is one of the first economic thinkers to introduce the biological factor into the development equation, thus launching, from his perspective, the concepts so extensively discussed today, especially bio-economy, eco-economy, durable development, sustainable development. And many more others ...

However, I note, we note that Malthus does not conceive of poverty, of famine, of misery as an economic-social, socio-economic disease with detailed genesis and emergence mechanisms at a national and global level. He regards them as something „given”, which the world can get rid of by physically reducing the number of the poor, by eliminating them literally. Or this idea has been and still is outside the current norms of human civilization, of human behaviour and practice. Can we, could we, will we be able to eliminate poverty by physically eliminating the poor, as Malthus forecast, together with abstinence, sterilization, by promoting repressive methods such as wars? Or have the poverty and misery generating mechanisms which stem from the economic and the social, from the social and the economic, (as the two areas reinforce each other), continued „to produce themselves” and will continue to do so in the future? Obviously, this is what happened in the past, is happening, will be happening. It is clear today- and it has been clear for some time- that there is an individual responsibility for poverty, ignorance, humiliation, marginalization, but there is also a social one. The pro-natality policies, be they relative or absolute, in several developed countries, based precisely on an increase in production, on development, have strongly infirmed and are infirming Malthus in his last considerations. Let me point out another aspect. More than 100 years before Malthus, the great French Enlightenment philosopher Montesquieu wrote: „If I know of something that is useful to me but detrimental to my family, I remove it from my spirit. If I know of something that is useful to my family but detrimental to my country, I try to forget it. And if I know of something that is useful to my country but detrimental to Europe, to humankind, I look upon that „something” as a crime.” How suggestive. To a large extent, this is how the world with all it has had good was constituted- when it was constituted- and is still being

constituted. How far Malthus was from such deep thoughts. In total contrast to the Malthusian and Neomalthusian ideas (Malthus has had and continues to have followers in modern times) stand abbot Pierre's thoughts.

... So, the abbe Pierre. His name was Henry Groues. Born in 1912. A monk, ordained priest in 1938. With a strong, active and brave involvement in the French Resistance against the Nazis. In the Resistance he was known as „l'abbe Pierre". Decorated after the liberation with the „Cross of War with Palms", a high distinction, and elected deputy in the first post-war French National Assembly, between 1945-1951. He had already made himself a mission of honour- especially from the perspective of his ecclesiastical position- he said he had to fulfil this position in this way, too- to help the poor, to support them, to lift them up, to offer them hope, a different horizon. This was the man, loyal to God, to his fellow human beings, modest, helpful ...

... We are in Paris, in January 1954. Siberian cold weather, thermometers often „going" below -15C, and even more severe frost being forecast for the whole month of February. Fulfilling the mission he had undertaken, together with a few friends, fellows in the „Emmaus" charity, and with journalist friends, the abbe Pierre would walk the frozen streets of the Capital every night, bringing the poor, through their words and the small packages offered, a little comfort and much human warmth. There were very many people who needed it. In the whole France, and so much more in Paris, there was an unprecedented housing shortage. There had been several decades of inactivity in this respect, and there had been the large destructions of the Second World War. There had been a strong rural exodus, but also a slight improvement in birth rates. There was a lot of poverty and housing was expensive. As a matter of fact, on those days in late January 1954 temperatures started to drop towards -30C. The price for lodgings was going up, those who did not pay the rent or the mortgage were evicted from their houses without much talk, and very many people could not even dream of a dwelling place to give them some shelter. So the streets were full in the night- most markedly at that time- by the „sans logis". The problem had been evident for several years, but now, under the circumstances described above, it had acquired terrifying dimensions. Abbe Pierre had been for some years the leader of a small social organization, of cotton, dressings and construction to help these people- the „Emmaus". Things were moving slowly. At the start of that January 1954, when problems were „overflowing", he tried first to take political action, by introducing in Parliament an amendment bill for the rapid, emergency building

of some dwellings. On the same night the bill was rejected by the deputies-writes Axelle Brodiez-Dolino, the author of a remarkable book „Emmaüs et l'abbé Pierre”, Presses de Sciences Po, 2009 from which I took over some of my information- a small child died of cold in one of the Emmaüs locations, where they were already doing what could be done at that time, with the means they had available. L'abbé Pierre published in „Le Figaro” an open letter to the minister. In the absence of a political answer- the minister did not answer- he acted as he saw fit. On the one hand, he appealed to the journalists, and at the same time, at night, on the streets of Paris he would distribute soup, coffee, bread and blankets to those who spent the night in the street. „Once you had distributed the aid, you could not say „have a nice evening” or „good night” to people who were dying on the frozen asphalt” abbot Pierre remarks.

So, we are just at the beginning. As a result of l'abbé Pierre's efforts, which made a strong appeal to the public opinion, his association was offered a vacant plot of land at the „foot” of the Paris Pantheon. There, on Friday, 29 January 1954 in the afternoon, the priest and his friends put up a large size military tent, with insulating straw on the floor, and equipped with catalytic stoves which could prepare large quantities of tea. Together with his friend Rober Buron, minister of Overseas Territories- so some politicians were „answering”- abbot Pierre welcomed the first homeless people who arrived to the tent. And one day later, Saturday 30 January, madame Larmier, the owner of the Rochester Hotel, announced l'abbé Pierre that, under the circumstances, she was able to offer the „sans logis”, the „couche-dehors”, the vacant rooms in her hotel, rooms which she made sure would not be few.

... It was already a first-time event: the first steps which proved that Emmaüs and l'abbé Pierre were starting to mobilise society in its entirety in order to help the poor. On Sunday 31 January, l'abbé Pierre together with the journalist George Varpraet, will give seven lectures on the situation of the „street people”, and on the very same evening, with the help of the Cityhall, the first Committee of emergency help for homeless people will be formed in Paris, a fraternal aid center will be opened and many nocturnal tours will be made in order to collect the homeless and take them to shelter. However, things were not by far solved. On the same night, in front of the „du Chatelet” theater, a 66 year old woman was found almost frozen, and died shortly after being taken to a police station. She had been evicted on the previous evening for not paying the rent, as the prefect was reminding the police to continue evicting those who did not pay. Here is Victor Hugo and his *Les Misérables*,

so close. On the same night, 8 more adults and 3 babies died of cold in France.

So far away from Th.R.Malthus, who coldly concluded that „we must simply eliminate the poor”, on the next day l’abbe Pierre together with the journalist Verpraet will draft a touching appeal to the French public opinion, and read it at the central radio station. An appeal to solidarity and help. Here are a few fragments: „Dear friends, come help. A woman froze to death last night on the sidewalk of Sevastopol boulevard, clutching the notice through which, the day before, she had been evicted from her house for not paying the rent. Every night there are more than 2,000 people shivering in the cold, without shelter, without bread, almost naked. In front of this horror, the creation of emergency shelters is imperatively necessary. Hear me: in the last 3 hours, the first 2 aid centers have been created. They are filled to overflowing, we must open others everywhere. Tonight, in every town in France, in every quarter of Paris we must hang out lighted placards in the dark, at the door of every place where there are blankets, mattresses, soup, placards on which, under the title „Fraternal aid center”, these simple words should be written: „You who suffer, whoever you may be, come in, sleep, eat, regain your hope, here are people who love you, here we love you”.... In front of their brothers who die of misery, people should be united by one will: the will to do the impossible so that such misery will not last. Please, let’s love one another enough to build this as soon as possible. So much pain has given and continues to give us the wonderful thing which is: the shared spirit of France.

Each of us can help the homeless. We need tonight and at the latest tomorrow 5,000 blankets, 300 large American tents, 200 catalytic stoves. Bring them quickly to 2 Rochester Hotel rue la Boétie. The meeting with the volunteers and the trucks which will collect the homeless is tonight at 11 p.m. in front of the tent in Saint-Geneviève. Thanks to you no man or woman, no child will sleep on the asphalt or on the waterfronts of Paris tonight. Thank you.”

It was the priest’s Christian entreaty not to let his fellow human being die, to give him love and hope. It was the plea of the Resistance and of the political man to revive the „shared spirit of France”. Finally, it was the pragmatism of the former scout and of the journalist at l’abbe Pierre’s side. Shortly, the Rochester Hotel was inundated with donations: packages with warm clothes, quilts, pots, money, banknotes and even jewelry. „The generous spirit of France”, of the French had become to be felt. Many packages will

then be stored in several locations belonging to the administration, to the municipality, or to different associations. The idle railway station at Orsay will also be turned into a huge storeroom, in addition to four other idle underground stations: Saint-Martin, Liège, Rennes and Champ-de-Mars. The Cityhall of Paris will also offer places in schools and highschools. All these will be operational for almost one month and a half. Beds will be brought in, new shelters will be opened which will operate on an almost permanent basis.

The expected political answer will come, though late. On 4 February the Parliament will vote a program worth 10 billion old francs for the emergency building of 12 thousand dwellings... It was, the press said at that time and afterwards, a „genuine uprising of kindness”... In 1961, l’abbe Pierre was still known by 98% of the people randomly asked about him. He will come back in the spotlight after 1998, when the „new poor” and homeless appeared. He will travel all over the world, his viewpoints becoming, generating, developing into real institutions: in London, Brussels, Zurich, the United States and Canada, in Koln, in the Netherlands, India, Lybia, Africa, South America, Austria, etc. He will meet with president Eisenhower, Pandit Nehru, Indira Gandhi, Mother Teresa, Josua de Castro, Albert Schweitzer, and many more others. It was no longer only about doing generous deeds for the poor. It was more and more about creating the societal mechanisms to stimulate their integration, reinsertion, to help them become „employed”, regain their once lost identity. L’abbe Pierre was no longer only a name. He was also an institution, a way of thinking, of being, of acting. What a huge difference from Thomas Robert Malthus’ way of thinking and being. Millions and millions of people regained their hope- and many of them fulfilled it- thanks to l’abbe Pierre and those like him ...

I’m closing these notes thinking about Romania: I don’t think any political force will have any chance of succeeding without meeting at least two requirements: a) the development and reorganization of industrial production, the development of infrastructure, of job creating activities, the best therapy to reduce poverty, the physical and moral misery which is closing in on us; b) the obligation to hold accountable those explicitly or implicitly guilty for this terrible disaster of the country. Especially, in this way, „the money back to the people” from those who have stolen from all of us, with the factories, the fleet, the land, etc. And who, in 23 years have built nothing, have brought us to the state we are in now, with such low hopes, while a few, in sheer opposition to the collapse of the country and of the economy, have

accumulated huge fortunes at our expense, with almost no constructive effort on their side, based on corruption and favouritism. In this way, by not doing what we are supposed to do, in a few years' time we will not be very far from the poverty and misery of some countries in Africa ...

STUDY REGARDING OCCUPATIONAL STRESS MANAGEMENT IN THE LOCAL PUBLIC ADMINISTRATION WITH THE PURPOSE OF IMPROVING THE QUALITY OF THE SERVICES RENDERED

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Abstract

The paper aims at highlighting the implications of a certain psycho-social factor in a chosen unit – local public administration. The case study for the analyzed public institution has been elaborated based on different problems which come up during working hours and after several discussions with public employees from within several of the institution's structures. In the current context, one places emphasis more and more on the study of occupational stress, so that we have considered opportune the elaboration of an adequate study with distinctiveness on the local administration type of organization, with emphasis on improving the services rendered with the purpose of increasing citizen satisfaction. With this paper we started from the hypothesis that, regardless of the working place, the human resource is subject to several risk factors thus, they must be managed and, as much as possible, removed in order to not affect the services rendered, including private life. Objectives such as: increasing responsibility towards the services rendered to the citizens, because we are talking about the local public administration, finding a balance in the life-work ratio, changing the organizational culture with emphasis on making top management more responsible in taking full value of the human resource with the purpose of increasing the quality of the services rendered, will be taken into consideration.

Keywords: *public administration, stress, quality, management, customers.*

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1. Introduction

Occupational stress can affect all employees within any level of the organization. Stress does not affect only the security and health of the persons, but the “health” of organizations and national economies, too.

The labour world, a world constantly changing, overstrains the employees from any level. Personnel cuts, services’ sourcing, the need for more flexibility, increasing the number of temporary labour contracts, the uncertainty of the job and labour intensification (high work volume and pressure) and a continuous imbalance in the life-work ratio, all these contribute to the increase of occupational stress risks amongst active population (Oprean, 2011).

Stress can cause health problems and suffering, both at the working place and in the personal life.

Reducing occupational stress and other psycho-social risks does not only constitute a moral obligation but one imposed by law, too.

Ensuring quality of the services in a local public administration type of organization largely depends on the quality of the human resource’s quality of work which makes up the organization’s structure.

Maintaining the stress level at minimum levels would lead to the continuous improvement of the parameters of the service rendered, both considering efficiency and effectiveness and the needs and expectations of citizens, as customers of a local public administration (Băban, 1998).

2. Theoretical considerations

There are many factors that can have a negative impact on the physical state of the human resources and implicitly on the quality of the services rendered by the organization, related to:

- work environment (excessive noise, vibrations, high/low temperature, humidity, etc.);
- organizing the work place and the content of the work task (overloading the employees, unwanted extra-hours, monotonous and repetitive tasks, unpredictable changes, etc.);
- climate at the working place (tensioned relationships between colleagues, between bosses and inferiors, accidents at the working place, the death of a colleague, lack of communication, fear of loosing the job, etc.);

- factors related to the individual (physical and emotional structure, etc.).

Starting from the concept of stress, term belonging to Hans Hugo Bruno Selye, one considers that stress is connected to the adaptation syndrome; the reaction to stress which the individual makes based on the environment's actions.

Hans Selye defines stress as *“the total of reactions of the human body to external action of certain causal agents (physical, chemical, biological and psychological) consisting in morpho-functional modifications, more than often endocrine”*. In the case in which the stress agent has a lasting action we are talking about the general adaptation syndrome which implies a stage-like evolution (Selye, c1974).

The term stress was introduced by Hans Selye in 1950. From his point of view, stress manifests as a “general adaptation syndrome” in order to mark an ensemble of adaptive reactions of the body to the unspecific action of certain “physical aggressors”. Different stress agents produce not only a specific effect (injuries, burns, immunity reactions, infectious disease), but a non-specific effect, too, common to all these agents: the stress state (Floru, 1978).

According to the author, this general syndrome has three stages:

- alarm;
- resistance and
- exhaustion.

The monotony of work, very tight deadlines (29% of the personnel states that they work under these conditions, according to the study done), and the un-corresponding treatment at the working place are factors which cause professional stress.

Stress represents a total of emotional, cognitive, behavioural and psychological reactions to the noxious and adverse aspects of content, work organization and work environment (Floru, 1978).

In the public institutions where the law is the work basis, bureaucracy is at a very high level. Thus, the identification of measures for ensuring the modernization of public administration in order to optimize the decisional process, improve human resources management, public services quality management by promoting and introducing quality management elements, and occupational stress management plays an important role in ensuring quality services aliened to European standards.

3. Case study regarding occupational stress management applied in local public administration with emphasis on quality.

In literature the following are known as stress agents: Oprean, 2011; Oprean, 2008; Selye, c1974;

a. Work content: too much work, fast pace, difficult work, monotonous work or with short cycles, too many or too little responsibilities, requirements not well defined.

b. Conditions of the work place (ergonomics, security): dangerous work (chemical substances, etc.), noise, vibrations, inadequate lighting, temperature, ventilation, posture (body posture) at the work place.

c. Labour contract conditions: schedule, breaks (if any), low perspectives regarding the career, salary, bonuses system (if any), insufficient security of the work place, type of contract, type of status.

d. Work relationships: the manner of receiving tasks, the insufficient support at the work place, harassment (including sexual), and discriminations.

e. Type of leadership:

- lack of clear objectives;
- deficient communication and lack of information within the organization;
- no consultation and no involvement of the employees in the changes and modifications in the work place;
- lack of support from management.

f. Status, role in the organization:

- uncertainty in career evolution;
- frustrations in career development;
- uncertain status and lack of acknowledgement;
- the uncertainty of the job;
- the insufficiency of the training programs;
- status modification within the organization.

g. Decision and control:

- low participation in decision taking;
- lack of control over one's own work.

h. Relationships at the work place:

- physical or social isolation;
- weak relationships with the superiors, lack of communication;
- inter-personal conflicts;

- different types of harassments.

i. Designing the Work Place:

- repetitive and monotonous work tasks;
- significant accidents and professional sicknesses risks;
- fear of technology in relation to responsibility;
- lack of competence.

j. Work task and work pace:

- lack of control over work pace;
- over- or underloaded work tasks;
- lack of activity prioritization.

k. Work hours:

- the unpredictable occurrence of work task overloading;
- unplanned extra hours;
- work in shifts;
- excessive additional work.

Actual stress sources at work:

- recent events at work;
- major changes of instructions and procedures;
- working over-time;
- major re-organizations;
- too much to do, in too little time;
- criticising the employee when doing wrong and lack of reward for when doing good;
- conflicts between employees who work on joint projects;
- lack of or confused standards (lack of job description, ambiguous roles or role conflicts, lack of a Human Resources Management office, lack of communication, etc.

Stress related to the professional activity appears when the demands of the work environment surpass the capacity of the employees to cope or keep under control.

Stress is not in itself a disease, but if it is intense and long lasting, can lead to the appearance of certain mental and physical diseases.

The state of pressure can improve performances and bring a certain work satisfaction by reaching the aimed objectives. But when demands and pressures surpass certain limits, they lead to stress. And this situation is not favourable to the employees, or to the organization.

Anyone of us can be the victim of stress related to the professional activity, regardless of the field of activity or the size of the firm in which we work.

Work related stress can be avoided and the actions of reducing it can pay off. Evaluating work related stress implies the same principles and basic processes as the evaluation of other work related risks.

Including employees and top management in the evaluation process is indispensable for its success; they need to be consulted in order to identify the causes for stress, of the groups that fall victim to it, as well as the solutions that need to be adopted in order to help and to lead to quality work.

With this paper we have tried to identify the stress factors within a local public administration of average sizes taking into consideration the fact that this institution has a quality management system implemented, namely ISO 9000:2008, as well as several means of narrowing them in order to increase the quality of the services rendered (Oprean, 2008).

This study was done based on questionnaires applied to public servants from within a local public administration type of institution.

The questionnaire had several questions referring to identifying stress factors at the work place.

Thus, several factors which were given a certain score have been enumerated.

Table 1: Stress factors (Selye, c1974)

	STRESS FACTOR	SCORE
1	Work climate	
2	Salary	
3	Going to and coming from work	
4	Work conditions (available facilities, psychological environment)	
5	Organization's policy	
6	Organizational culture/organization's ethics	
7	Financial situation of the organization	
8	Budget and resources available at work	
9	Weight of time allocated for work and other activities	
10	Type of obligation at work	
11	Obligations load	
12	Taking part in decision making	

13	Clarity of work demands	
14	My relationships with the direct or indirect bosses	
15	Trust in management	
16	Your belief in the organization's purposes	
17	Discontinuances from work obligations	
18	Perspectives for you career	
19	Clarity of your work's goals and objectives	
20	Relationships with other colleagues	
21	Relationships with the team or department you work with	
22	Objectives and work planning	
23	Monitoring projects found under development	
24	Attitude, behaviour and connections with the citizens outside the institution	
25	The limit or variety of job obligations	
26	Relationships with fellow workers	
27	Result obtained at work	
28	Personal needs in the free time	
29	The results obtained by the work of people working under you	
30	Deadlines for meetings/works	
31	Team work	

The persons analysed have been asked to give a grade for each stress factor in the table according to how much it affects them.

The persons subject for this test work in the city hall. They have been tested in order to cast aside top management's convictions regarding employees' lack of professionalism in creating quality and in order to see the impact of the stress level which affects their work.

The persons who were tested were found during working hours in order to detect as precisely as possible the stress level. The score was done before the personnel returned the tests in order to make a hierarchy.

Interpretation:

- Between 1 and 70 points – normal stress level.

You show a low stress level. This can be because of a calm and satisfied nature in a calm and comfortable environment. However, you may

not work at full capacity in the moments in which you are required to because your body is used to the state of calm and relaxation.

- Between 71 and 41 point – average stress level.

This area is a normal one. Most persons are found at this level. Sometimes there are tensions, other times there are relaxation moments. A certain tension is required in order to reach certain goals, yet the stress does not have to be permanent, it has to compensate with the calm periods. These alternations form part of the human balance. Because this score area is very large, the score can be close to the limits. If your score is very close to the superior limit, as a caution measure, you should consider yourself more stressed.

- between 142 and 346 points – maxim stress level.

This score area is very dangerous. You find yourself in the middle of a group of people already stressed with different and emphasised problems. That is why you should consider the problem of getting out of the situation before it overwhelms you. Seek help. There are situations we cannot face alone, turn to family, close friends, if possible change your activity or just your entourage, try to remove the main stress factor.

List of stress factors

In the present research we wanted to analyse the influence stress factors have on the members of the local public administration institution.

That is why we have considered as necessary the study of a group of public servants from within an average size public institution.

Taking into consideration the implications of the public servant's work we have considered that by determining the stress factors with importance to most of the public servants and elaborating a strategy of reducing/eliminating these stress factors we can optimize activity, as well as the psychological comfort of employees.

The analyzed group is made out of 53 public servants with specific studies of at least 3 years, and a minimum experience of at least 2 year. The average age is 28.6 (at least 28, at most 58 years).

The working day has 8 hours. The public servants are both women and men. All employees are of the same nationality.

They are part of a single unit, the entire institution apparatus having 5 such services. On a superior hierarchical line they are subordinated to the mayor, vice-mayor, Directors and Office Heads. The served unit is mixed. For

studying stress factors and shaping the personality dominants within this group we used the questionnaire method and a list of the stress factors.

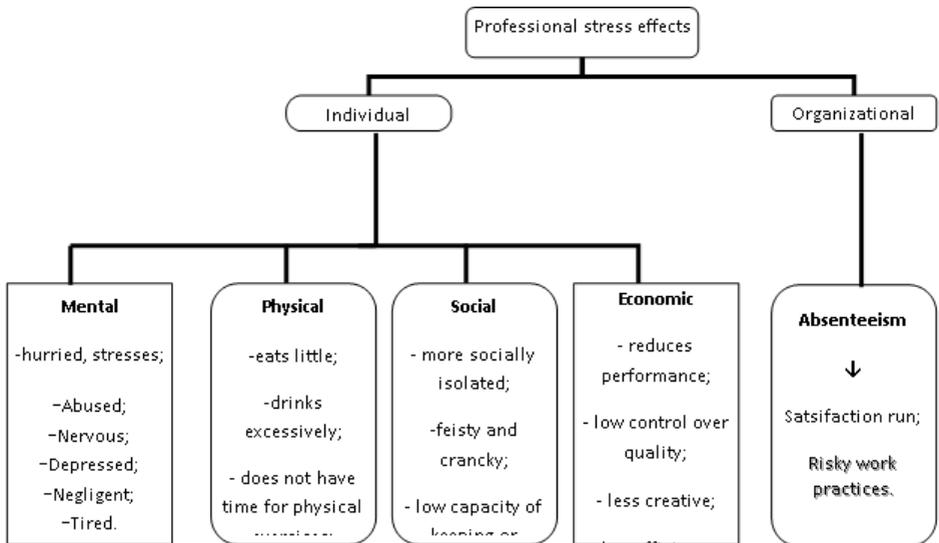
These methods have been chosen as a consequence of a careful observation of the mentioned group and of the conditions and activities imposed at the working place, observation which took place over 30 days. The observation was accompanied by informal discussions.

Following this undertaking factors have been identified with influence on the majority of employees: work routine, behaviour pattern of superiors, working over-hours and communication with superiors, state of mind of civil servants.

The solution we suggested represents a combination of stress management with organizational change.

As effects of professional stress, the following conclusions have been reached (figure 1.):

Figure 1: Effects of professional stress (Selye, c1974)



As a consequence of what was presented so far I will mention next the main stress factors:

- a. lack of control over one's own work;
- b. lack of control over the work pace;
- c. over- or underloaded work tasks;
- d. the unpredictable appearance of certain overloadings of the work task;
- e. the climate of the work place – daily stress;
- f. work load;
- g. salary;
- h. taking part in decision making;
- i. interruptions from work obligations;
- j. repetitive daily work.

Thus, stress at the working place appears when the work demands are higher than the employee's capacities.

When demands and pressures surpass certain limits, they lead to stress.

Stress symptoms are depression, fatigue, anxiety, headaches, and the consequences of stress at the working place can be: decrease of productivity, a high risk of having a work related accident, deterioration of personal relationships, a high risk of having health problems.

Stress is a state of tension which takes place when a person responds to the demands of the work place and more. There are also external sources as if these were generated by its internal needs, obligations and self-criticism (Bălban, 1998).

According to the results, some employees consider the stressful work conditions as being a necessary evil - as an institution the city hall needs to cope with the employees; pressures and to assure satisfaction or satisfaction of citizens' requests or of different institutions with which it interacts (Clarke, 2002).

Another conclusion which comes out from the analysis was the fact that overloading the role takes place when somebody needs to handle too many responsibilities, in a period of time that is too short. This situation creates anxiety, one has to keep in mind the fact that the lack of time and identifying it as being a stress factor is found with civil servants in management positions (Floru, 1978).

It was observed that all employees have stipulated in their job description a series of responsibilities, tasks, activities and specific actions. Just that, in the situation in which the employee is found to simultaneously undertake several tasks, each having a special importance and requiring special attention and/or much effort, that person has high chances of being confronted with a state of stress generated by the fear of not committing an error in any of his/her activities (Floru, 1978).

Stress represents the reaction of the individual exposed to an excessive pressure or other types of demands of his/her environment. The level of work appreciation represents a stress factor objective as well as subjective, psychological and financial.

Also, one has to take into consideration the level of self-appreciation of each individual. In this case one can distinguish several options namely, persons who over-evaluate, evaluate correctly or in rare occasions, under-evaluate the work they make, in parallel with evaluating the decisions factors from within the institution.

If these two factors are not in balance, the feeling of frustration appears, especially from the employee's part, which creates an important stress factor, the employee feeling disadvantaged, from his/her point of view feeling that he/she was not appreciated at his/her real worth, thus giving birth to dissatisfaction which can reflect on the quality of the work done in the situation in which the employee considers that his/her worth was not correctly evaluated.

The stress felt at the place of work depends on the type of activity and the nature of the individual. Some activities are more stressful than others however, the reaction of each individual to it differing.

A working day that is too long, an irrational rate of breaks, the interruptions from the working time can determine the body to overload, the accumulation in time of the effects determined by the recovering from daily fatigue can lead to chronic fatigue or, in the worst case, to exhaustion.

Taking into consideration the fact that, as should happen in any organization, the employees should not be limited in the decision making process related to their field of activity, meaning, taking into consideration that each civil servant has been assigned to positions according to his/her training, one concludes that they are capable and informed regarding the specific field of work.

All these results represent an undertaking in accomplishing a diagnosis of the occupational stress in a public administration which is mainly concerned with increasing citizen's satisfaction.

The introduction in the quality procedures which already exist at the level of the analyzed institution of certain management measures of occupational stress such as:

- Taking part in specialization courses which offer the possibility of interacting with other professional environments can lead to the re-evaluation of the perception of one's own professional activity;
- keeping the performant personnel, optimizing motivation and results and developing the individual from a professional point of view so that the individual can occupy key positions in the organization, based on knowledge;
- removing repetitive tasks which through their monotony lead to boredom, monotony and dissatisfaction, leaving at the appreciation of the individual a certain degree of decision;
- acknowledging the results obtained by the organization's personnel regarding continuously improving the quality of the services;
- can be a measure which top management should consider in its undertakings of ensuring the quality of the services in the institution.

4. Conclusions

A normal stress level can even be a motivational factor or even better, it can be a tool in acquiring a dynamic adaptation in order to cope with new situations.

That is why, certain types of stress are indicated and normal both at work and outside it. In the case in which stress is intense, continuous or repeated, only then it can become a negative phenomenon which leads to physical illness or psychological disturbances.

In the organizational context, it frequently generates inadequate adaptations to the different situations that the employees are subject to.

There are persons to whom stress is a powerful energizing factor. These persons have a natural inclination or have developed through continuous training the ability to resist stress and they can be identified by certain features, such as: self-assurance in different situations.

For these persons one can say that change is considered not as a threat, but as a challenge to competition; the capacity to take risks; deep involvement in the professional and private life; flexibility in opinions and actions; awareness of the fact that they cannot change the stressful situations but they can accept and surpass them, etc.

A healthy work environment has the capacity to intensify people's ability to develop humanity, and handling stress is part of humanity.

What we all have to understand is that light stress can be positive if we allow it to stimulate us and incite us to new accomplishments.

Some stress management methods which can ensure success on professional and personal level:

- a. Change of perspective – the attempt to see where the problem which causes stress is: with me or with the employer? Possibly, one can turn to a career counsel who can help by creating a new way of looking at things;
- b. Reality in expectations – unrealistic expectations can create negative feelings. High stress level affects motivation and negatively influences professional results;
- c. Keeping a positive spirit – creating a positive climate around the people with whom the person interacts and the environment in which the person works;
- d. Changing the perspective;
- e. Appreciating personal life;
- f. Fighting chaos;
- g. Sharing thoughts and feelings;
- h. Seeking help;
- i. Handling the situation with realism, humour and keeping a positive spirit.

We believe that, in order to get in line with European standards according to the current trends of society, any public institution needs to develop and capitalize its human resource.

Without professionalism and without quality of the services rendered in the local public administration, with a society continuously changing and with increasing demands from a qualitative point of view, lasting public institutions, customer focused, which are based on knowledge can no longer be created (Oprean, 2011)

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EURO ZONE CRISIS. FROM “OPTIMUM” TO COLLAPSE?

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Abstract

The European leaders adopted a series of measures so that the Euro zone could come out of the crisis. This study demonstrates that the fiscal Treaty, as the other solutions proposed by the European leaders, represents necessary conditions, which are far from being sufficient to surpass the crisis from the actual monetary union. On the background of the critical structural problems, the lack of competitiveness has constituted the main factor leading to a severe aggravation of the public finances. Consequently, the problem of the public finances represents the effect and not the cause of the actual crisis. Moreover, from a technical point of view, the latest economic studies have demonstrated that not even the structural budget balance indicator is enough to correctly assess a country's fiscal position (its limiting to 0.5% being proposed in the fiscal treaty). It has been shown that the structural budget balance indicator should be improved, in order to also take into consideration the deviation of the current account balance from its sustainable level, particularly during the stage of the economic cycle characterized by high absorption. This study has empirically demonstrated this in the case of the Romanian economy.

Keywords: *Euro zone, financial crisis, fiscal treaty, structural deficit, structural deficit corrected for absorption*

1. Introduction

Since from the beginning of its creation, The European Economic and Monetary Union (EMU) has not been what the literature identifies as an *optimum currency area*. The nowadays EMU has been built on a complex frame of economic policies, consisting of a single monetary policy and

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national fiscal policies. Having such a base, the Euro zone seems to assign the role of macroeconomic adjustment to the *national* fiscal policies, as far as it is not an optimum currency area itself, so it does not have adjustment instruments in critical situations. Even though, Euro zone appears in 1999 with the argument that all that is present in the literature is called *endogenous approach* of the optimum currency area theory. The endogenous approach shows that a monetary union can be achieved *even if all the conditions* specified in Mundell's optimum currency area theory *are not fulfilled*, demonstrating that some of them may also be reached *after* the unification. (Socol, 2013)

When the Economic and Monetary Union was launched, people have been appreciated that the fiscal health is an essential condition for the stability of the monetary union. The coordination of the fiscal policies remains essential in order to ensure the macroeconomic stability of all, as a country's fiscal policy actions may help or prejudice other countries. When a country makes a decision, it cannot ignore the effect upon its partners, and vice-versa, taking into account the other countries' political decisions. If a country from a monetary union encounters problems related to the sustainability of the budget deficit, then it generates negative externalities within the monetary union. In case a country allows the increase of the current budget deficit so that the interest rate for the governmental debt exceeds the economic growth rate, then it will have to appeal more and more often to the capital markets from the space of the monetary union, thus generating pressures in terms of the interest rate's increases. Hence, the increase of the interest rates results in the increase of the debt burden for the other countries from that monetary union. (de Grauwe, 2003)

Provided the lack of the national monetary policy or the rigidity conditions of the other instruments (rigidity of the labor market, of wages and of prices, low synchronization of the business cycle), the fiscal policy should thus assume the role of macroeconomic adjustment instrument. Giving up the instrument of the rate of exchange within EMU has involved the granting of a more important role to the fiscal stabilizers at the national level in order to help economies to adjust themselves to the asymmetric shocks. Within the Euro zone, the Stability and Growth Pact wished to be a modality through which the fiscal discipline is supported and induced. Its rules have not succeeded in ensuring enough flexibility so as to cope with the cyclical crises.

2. Solutions proposed to come out of the Euro crisis

Until 2008, when the crisis appeared in USA, the Euro zone recorded pretty good progress. The Euro zone specific problem was that several constituent economies could not finalize the convergence process started before 1999. Moreover, some of them even recorded significant deviations from the levels considered as sustainable. First of all, the competitiveness of the participant states has been extremely heterogeneous, which resulted in unsustainable current account deficits and external debts. Secondly, the deficits in the public sector and, consequently, the levels of the public debt, have not been sustainable in some of the countries. Thirdly, also the deficits in the private sector and, consequently, the levels of the private debts proved to be unsustainable.

When the crisis appeared, the states recording unsustainable positions in terms of what we previously mentioned proved to be extremely vulnerable, with all the risks deriving from here. When the crisis hit the economy of the whole world, it has shaken even the most solid European economies, so that, until the end of 2009, the Euro zone entered the first stage of a strong public debt crisis. The first consolidated form of the undertakings to improve the economic governance in the European Union was “Six Pack”, a mix of measures meant to prevent the possibility of occurrence of new crises by means of a cautious fiscal policy and of consolidation in terms of prudential survey and macroeconomic unbalances.

Six Pack has introduced a higher constraint in terms of the public expenditure. It provided the implementation of a rules regarding the expenditure, referring to the fact that it cannot exceed the potential GDP increase reference rate (*in case of significant deviations from the fiscal rule – 0.5% of the GDP in a year or 0.25% of the GDP in 2 consecutive years*), and the European Commission will provide recommendations and, in case these recommendations are not complied with, it will settle sanctions. The Pack also provides requirements regarding large fiscal adjustments under the terms of a public debt exceeding 60% of the GDP and also exoneration clauses in case of a pronounced recession. A major innovation introduced by this pack of measures is the materialization of the adjustment procedure in case of non-fulfillment of the criterion related to the share of the public debt in the GDP. Piana (2012) shows that the operationalizing of the debt criterion has been made by means of settling a numerical target through which the decrease of

the debt up to the reference level of 60% of the GDP should be achieved within the next 3 years with a minimum average speed of 1/20 a part per year.

$$bb_t = 60\% + \frac{0.95}{3}(b_{t-1} - 60\%) + \frac{0.95^2}{3}(b_{t-2} - 60\%) + \frac{0.95^3}{3}(b_{t-3} - 60\%)$$

Moreover, there has been another proposal to take into account the calculations for the economic cycle in order to accurately measure the public debt related adjustment, this measurement taking into account the dynamics of the denominator in relation with the position of the economy in the economic cycle. “As solutions, we have initiated the taking of the cyclical budget component out of the debt, from the numerator and the use of the potential GDP at the denominator, for the considered time period” (Piana, 2012).

$$\left(\frac{B_t}{Y_t}\right)^{adjusted} = \left(\frac{B_t + \sum_{j=0}^2(C_{t-j})}{Y_{t-3} \prod_{h=0}^2(1 + y_{t-h}^{pot})(1 + p_{t-h})}\right)$$

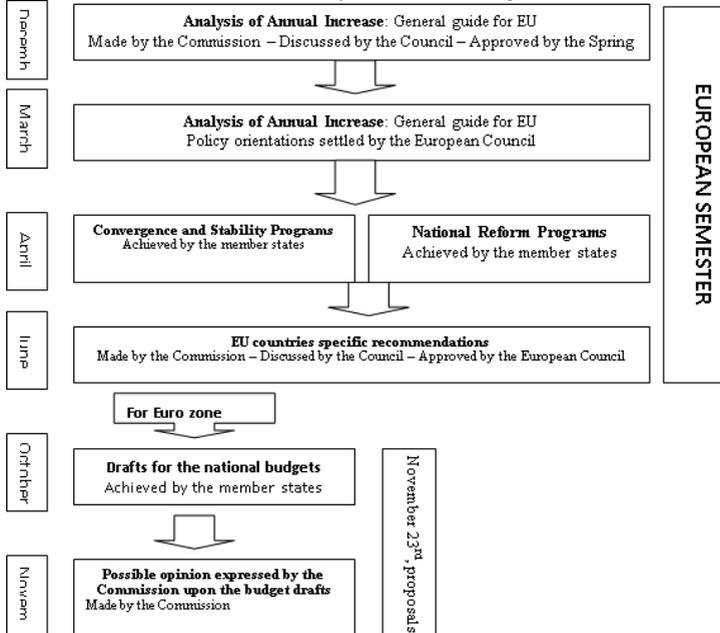
The sanctions for non-compliance with the provisions mentioned in the Six Pack and with the European Commission’s recommendations regarding the required adjustment may go up to 0.2% of the GDP, in certain conditions.

The Euro Plus Pact actually represents the Competitiveness Pact required by Germany and France. It provides a series of measures for economic coordination between its signers. Among them, there are six states outside of the Euro zone: Romania, Bulgaria, Denmark, Poland, Lithuania and Latvia. Great Britain, Sweden, Hungary and the Czech Republic decided to remain out of this pact, at least for the moment. The pact has been developed on four main principles:

1. Macroeconomic competitiveness – measured by means of the price competitiveness’ indicators (e.g., the stability of the labor’s real cost, the compliance with the correlation between the increase of the labor cost with the increase of productivity);
2. Stability of the public finances (settlement of a fiscal rule regarding the stabilization of the public debt’s share in the GDP and mentioning this rule in Constitution or in another important law);

3. Financial stability – stress tests for the banking system; consolidated norms regarding the prudential survey;
4. Minimum thresholds for the share in the GDP granted from the public budget for investments in research, development, education and infrastructure.

Chart 1. The new schedule for economic governance in EU



Source: Piana, 2012

Some measures have been proposed, such as: elimination of the wage indexing with the inflation rate; increase of labor mobility by mutually recognizing the diplomas; increase of the retirement age in order to reduce the demographic pressure upon the social budgets and the obligation to implement a *protocol debt* mechanism and also a crisis cell for the management of the crisis in the banking system. The pact also mentions the consolidation of the European Stability Mechanism. Starting from 2013, the European Stability Mechanism will replace the Financial Stability Facility, by means of which Greece and Ireland received funds. The total value of this mechanism will be

of 700 billions euro, out of which 80 billions euro cash and the rest will be available capital, under the form of guarantees. The New Schedule for Economic Governance in EU is shown in the chart above.

3. The European Fiscal Compact, an optimum solution?

A debated and extremely propagated through the media solution has been the European Fiscal Compact (the Fiscal Treaty). It includes provisions confirming the financial discipline in the Economic and Monetary Union. The European Fiscal Compact is a component of the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union, which was completed in January 2012 and signed by 25 EU member countries (the Czech republic and the Great Britain did not sign it). It includes the provision that the national budgets should be either balanced or in surplus and this constraint will be complied with if the annual structural deficits do not exceed 0.5% of the GDP. The member states will undertake to introduce this “norm on a balanced budget” in their national legal systems, preferably in the Constitution.

The term for fulfilling this obligation is at least one year since the coming into force of the treaty. If a member country has a sustainable public debt, which is significantly below the level of 60% of the GDP and low vulnerabilities in terms of sustainability of the public finances on a long term, its structural deficit may be higher than 0.5% of the GDP, but not exceeding 1% of the GDP (given the macroeconomic conditions of Romania, the target of the structural budget deficit is 0.7% of the GDP until 2014). However, the next priority step in the European development is to create the premises of the fiscal union. Otherwise, the efforts made so far will be useless.

Why does the structural budget deficit become an essential instrument, its limiting being included in a country's Constitution? What is its role, why is it that important? The structural component provides a clear image of the fiscal situation in economy, not distorted by the influence of the economic cycle. How? First of all, during expansion periods, when the analysis of the real budget deficit may mislead us. Here is an illustrative example encountered in the case of the Romanian economy. In 2006, in Romania, the current budget deficit was -2.2% of the GDP, and in 2007 we were proud to record a budget deficit of only - 2.9%. If we put aside the influence of the economic cycle –

the cyclical component which is highly positive during expansion periods – in reality the budget deficit was -4.4% of the GDP in 2006, -5.9% in 2007 and in 2008 it even reached -8.28% of the GDP (the officially estimated values of the structural deficit).

How could this happen? Automatically benefiting from the increase of the budget revenues during the expansion period, the “necessary” budget expenditure could have been increased (administration’s expenses, costs with goods and services, expenses with grants), instead of accumulating financial resources for hard times / recession, as it would have been appropriately. As long as the current deficit is the sum of the two components, the highly positive cyclical component “concealed” an increasing structural deficit and, consequently, the real values of the consolidated budget deficit.

Thus, the structural budget deficit is used for the purpose of removing the short-term influence of fluctuations and especially of assessing the fiscal policy’s real performance. Under these circumstances, the current budget component ranges between its two components: the *cyclical component* and the *structural component*. It is necessary to calculate this variable as the current budget balance reflects the influence of the cyclical factors (temporary) as well as of the structural ones (permanent). The cyclical component refers to the variations generated by the cyclical evolutions of the gross domestic product (GDP), while the structural component takes into consideration the modification of the budget balance if the economy produced to the level of the potential GDP. Also, the structural deficit may be regarded as an indicator measuring the discretion degree occurred in the adopted fiscal and budgetary policies.

Moreover, the latest economic studies demonstrated that not even the budget balance indicator is enough to correctly assess a country’s fiscal position in terms of sustainability of the public finance, this indicator being obtained by means of adjustment according to the position of an economy at a given moment on the economic cycle. Based on the results of the researches previously made by Jaeger and Klemm (2007) and Lendvai et al (2011), it has been shown that the structural budget balance indicator should be improved, in order to also take into consideration the deviation of the current account balance from its sustainable level, particularly in the stage of the economic cycle characterized by high absorption. We will give details for Romania’s case, emphasizing the difference between the analysis made for the structural budget balance (cyclically-adjusted budget balance CAB) and the absorption-

adjusted budget balance (cyclically and absorption-adjusted budget balance CAAB).

3.1. The Romanian”s case. Results of the estimates

The estimate of the structural deficit is made following three stages, as follows (Hagemann, 1999):

- (1) estimate of the gap between the really achieved gross domestic product and the potential gross domestic product (potential GDP) (output-gap);
- (2) estimate of the cyclical component according to the output gap and the sensitivity of the budget deficit (in its turn, it will be obtained by means of revenues’ elasticities, and of the budget expenditure according to the GDP);
- (3) estimate of the structural component by eliminating the cyclical component out of the current budget component.

Lendvai et al (2011) calculate the cyclically and absorption-adjusted budget balance CAAB by using the following sequence of equations:

$$CAB_t = \left(\frac{b}{y} \right)_t - \lambda_t (ygap)_t$$

where λ_t represents the standard budget elasticity (used in the EU studies UE)

$$CAAB_t = \left(\frac{b}{y} \right)_t - \beta_t (ygap)_t - \gamma_t (agap)_t$$

where γ_t absorption elasticity (given by the share of the indirect fees and taxes in the GDP). Considering the unitary elasticity of the indirect taxes in relation to absorption and linearity of CAB in relation with the output, we obtain as follows

$$\beta_t = \lambda_t - \gamma_t$$

Notations: b real budget balance; y and y^* real output and potential output; $ygap$ and $agap$ output gap and absorption gap; a and a^* absorption and potential absorption; ca^* *current account norm* (sustainable current account); it sum of the values from abroad and the net transfers.

Lendvai et al (2011) consider that, based on the equations from above, we may obtain the following relation

$$CAAB_t = CAB_t - \gamma_t (agap_t - ygap_t)$$

This relation is obtained starting from the hypotheses referring to the unitary elasticity of the indirect taxes according to absorption and linear relation of CAB related to output.

$$\text{Results } CAAB = CAB_t - \gamma_t (agap_t - ygap_t)$$

According to this formula, authors reach the conclusion that “CAAB differs from CAB especially when the share of the indirect taxes in the output is high and when the dynamics of absorption significantly deviates from this output”.

The obtained results are presented in the table below:

*Table 1. Estimates for CAB and CAAB in Romania
– %GDP*

YEARS	BD	CAB	CAAB
2005	-1,2	-2.70	-5.25
2006	-2,2	-4.36	-6.26
2007	-2,9	-5.90	-6.45
2008	-5,7	-8.28	-7.68
2009	-9	-9.45	-9.09
2010	-6,8	-5.20	-8.09
2011	-5,5	-3.89	-7.24
2012	-4,9	-1.93	-6.04

Source: Author's calculations

The difference between the consolidated budget deficit (DB) and the structural one (CAB) is considerable, this demonstrating the significance of the structural balance's use in order to have a clear image of the Romanian finances. Even though, the results of the previous estimates empirically validate what the above-mentioned studies have demonstrated. In order to correctly assess a country's fiscal position regarding the sustainability of the public finances, not even the structural budget balance indicator is not enough, this indicator being obtained by adjustment according to the position in which the economy is at a given moment on the economic cycle.

The structural budget balance indicator should be improved so as to also take into consideration the deviation of the current account balance from its sustainable level, particularly during the stage of the economic cycle characterized by high absorption. As we can notice, we may say that, during

the boom period (absorption gap), there are pretty high differences between CAB and CAAB in Romania, this meaning that the signaling capacity of the structural budget balance indicator CAB seems to be more lower than that of CAAB. The correction of the macroeconomic unbalances would have been less tough than that recorded during the last years, the recession would have been less pronounced, Romania could, probably, avoid entering the Treasury liquidity crisis during the first semester of 2009, a minimum fiscal space would have existed, the losses of competitiveness would have been lower and so on.

4. Conclusions

The fiscal treaty, as the other solutions proposed by the European leaders, represents necessary conditions, which are far from being sufficient. And this is because this fiscal treaty “treats” the effect and not the cause of the crisis encountered by the Euro zone. In my opinion, the main cause of what happens today in the Euro zone may be attributed to the significant development differences between the member states, with all the implications deriving from here. When I say development differences I mean particularly the productivity differences, which subsequently have been explained as competitiveness differences. And there has been only one step from this point up to significant macroeconomic unbalances. On the background of the critical structural problems, the lack of competitiveness has constituted the main factor leading to a severe aggravation of the public finances.

Consequently, the problem of the public finances represents the effect and not the cause of the actual crisis. Moreover, from a technical point of view, the latest economic studies have demonstrated that not even the structural budget balance indicator is enough to correctly assess a country’s fiscal position (its limiting to 0.5% being proposed in the fiscal treaty). It has been shown that the structural budget balance indicator should be improved, in order to also take into consideration the deviation of the current account balance from its sustainable level, particularly during the stage of the economic cycle characterized by high absorption. This study has empirically demonstrated this in the case of the Romanian economy.

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**CLASSIFICATION OF EUROPEAN UNION
COUNTRIES ACCORDING TO NATIONAL
COMPETITIVENESS AND SOVEREIGN DEBT LEVELS**

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Abstract

National competitiveness is defined by World Economic Forum as “the set of institutions, policies, and factors that determine the level of productivity of a country”. Therefore, the competitiveness of the European Union member states will be analyzed in the context of the governments’ economic policies implemented in the previous period that had as main effects an increased public debt and an exposure of European Union to sovereign debt crisis. This paper attempts to examine how public debt takes its toll on the competitiveness of the EU member countries. So, the researchers will explore the strength of the connection between the percentage of public debt in GDP and the national competitiveness, aiming to a further segmentation of the European Union member countries according to the results.

JEL Classification: F15

Keywords: competitiveness, public debt, correlation, cluster

1. Literature review

Term “competitiveness” derives basically from competition; that is why, over time, the idea of national competitiveness lead to a series of reactions, both favorable and unfavorable. Currently, national competitiveness is seen as a major objective of any State, thus different studies and international organizations are deeply analyzing it and they are developing

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detailed hierarchies. The most established reports about national competitiveness belong to the international organization World Economic Forum, which annually publishes the Global Competitiveness Index for 139 economies.

There is not a unified definition of the term national competitiveness, and its influence factors are continuously expanding, as globalization deepens. So, the most common word used to define the competitiveness is “elusive”. The word was first use by Krugman in 1994: “The bottom line for corporation is literally its bottom line: if a corporation cannot afford to pay its workers, suppliers and bondholders it will go out of business. Countries have no well define bottom line. As a result, the concept of national competitiveness is elusive”. (Margeian, 2006)

The same Paul Krugman (1994) names competitiveness “a dangerous obsession”. “Competitiveness is a meaningless word when applied to national economies. And the obsession with competitiveness is both wrong and dangerous”. Trying to define the competitiveness of a nation is much more problematic than defining that of a corporation, and the national competitiveness objective can give rise to some risks, namely:

- the wasteful spending of government money supposedly to enhance competitiveness;
- a more serious risk is that the obsession with competitiveness will lead to protectionism and trade conflicts;
- the most serious risk from the obsession with competitiveness, however, is its subtle indirect effect on the quality of economic discussion and policymaking. (Krugman, 1994)

Michael Porter explains national competitiveness as a result of microeconomic competitiveness: “competitiveness is rooted in a nation’s microeconomic fundamentals, manifested in the sophistication of its companies and the quality of its microeconomic business environment” (Ogrean, 2010), and he further elaborated, in order to sustain his theory, The Competitiveness Diamond. Porter’s Competitiveness Diamond consists in two parts:

- endogenous variables: factor conditions; firm’s strategy, structure, and rivalry; related and supporting industries, and demand conditions.

- exogenous variables consist of government and chances. (Cho and all, 2008)

Karl Aiginger, summarizing the definitions assigned to national competitiveness, sustains the idea that “competitiveness is the ability of a country or location to create welfare; but, in order to measure the level of competitiveness it should be undertaken an output evaluation and a process evaluation. The output evaluation (competitiveness achieved) is closely related to a welfare assessment, with a specific slant and stepwise operationalizations. Process evaluation (investigating the ability) is related to the analysis of production and technology functions, adding qualitative elements like strategies, and the strengths and weaknesses of a country”. (Aiginger, 2006)

National competitiveness is defined by World Economic Forum as “the set of institutions, policies, and factors that determine the level of productivity of a country”. (Schwab, 2011)

The National competitiveness Center of the Kingdom of Saudi Arabia defines competitiveness as “the ability of a nation to create sustainable value through its enterprises and to maintain a high standard of living for its citizens. Competitiveness is primarily driven by productivity – the level of output per input used, including labor and capital goods”. That definition reflects the point of view of *Stéphane Garelli - Institute for Management Development, about national competitiveness: “Competitiveness of Nations is a field of economic theory which analyzes the facts and policies that shape the ability of a nation to create and maintain an environment that sustains more value creation for its enterprises and more prosperity for its people”. S. Garelli had elaborated The Competitiveness Cube – “the Cube theory defines four competitiveness forces: aggressiveness vs. attractiveness, assets vs. processes, globality vs. proximity, and social responsibility vs. risk taking. The frontal face of the cube describes how competitiveness is generated within one given year. The depth of the cube introduces the time dimension and illustrates competitiveness accumulated over time, and thus the wealth of a nation.”* The same author, S. Garelli offers *The Golden Rules of Competitiveness*. (Garelli, 2011)

However, despite so many disputes, national competitiveness remains a major objective of nations and researchers. Dong-Sung Cho, Hwy-Chang Moon, Min-Young Kim have elaborated in 2008 *The Dual Double Diamond (DDD) model for measuring national competitiveness* [1], as an improvement

brought to Porter's model (the Diamond model), to Cho and Moon's model (2000, The Nine Factor Model), and to Rugman's model (The Double Diamond Model).

Currently, this topic is amply discussed because national competitiveness is seen as the solution to overcome the effects left by the economic crisis on national economies, and especially it is the way to avoid another critical moment. Most European countries cross the hard times of recovery, their economies are pressed by burdensome debt. The development of public debt and budget deficits has become a crucial policy problem in most European countries. (Neck and Sturm, 2008)

The issue of public debt was, and continues to be topical. Numerous studies have examined the sustainability of public debt (further reading: Afonso, A. - Fiscal sustainability: the unpleasant European case. *Finanzarchiv*, 61, 2005; the work of Bohn, H. - The sustainability of fiscal policy in the United States. in R. Neck & J.E. Sturm editors of the *Sustainability of Public Debt*, Cambridge: MIT Press, 2008), but also the impact of public debt on economic growth (further reading: A. Greiner, B. Fincke - *Public Debt and Economic Growth, Dynamic Modelling and Econometrics in Economics and Finance 11*, Springer-Verlag Berlin Heidelberg, 2009).

2. Methodology and empirical study

In this paper, it is further analyzed the relationship between the level of indebtedness of EU countries and the level of their competitiveness. Thus, the indebtedness is expressed through the percentage of public debt in GDP, with Eurostat as the data source, and the competitiveness level of countries covered by this study is given by the Competitiveness Index calculated annually by the World Economic Forum.

By processing the data using SPSS software, the following situation was obtained and presented in Table 1, regarding the correlation between the two indicators, calculated using the Pearson and Spearman correlation coefficients.

Table 1: Pearson Correlation & Spearman Correlation

<i>Pearson Correlation</i>			<i>gci2010</i>	<i>pd2010</i>
gci2010		Pearson Correlation	1	-0,030
		Sig. (2-tailed)		0,881
		N	27	27
pd2010		Pearson Correlation	-0,030	1
		Sig. (2-tailed)	0,881	
		N	27	27
<i>Spearman Correlation</i>			<i>gci2010</i>	<i>pd2010</i>
Spearman's rho	gci2010	Correlation Coefficient	1,000	0,082
		Sig. (2-tailed)	.	0,684
		N	27	27
	pd2010	Correlation Coefficient	0,082	1,000
		Sig. (2-tailed)	0,684	.
		N	27	27

Source: Author's own computation

After analyzing the correlation between the two factors considered, it can be seen that both Pearson coefficient (-0.030) and Spearman coefficient (0.082) have values close to zero, which shows that the competitiveness level is not directly related to the level of public debt in the whole EU and the relationship between the two variables cannot be expressed by a regression function.

In these circumstances, we move forward to the next stage of the research, namely the EU segmentation based on two indicators considered, and further, the evolution of groups of EU countries in 2008-2010 period will be analyzed; that period was marked by changes in terms of structure and competitiveness of the economies.

The main objective of the research is the segmentation of EU countries according to the economic competitiveness, namely macroeconomic stability given by the weight of public debt in GDP.

Segmentation involves grouping the states according to a certain rating determined by the degree of competitiveness (coded with the letters A, B and C), and by the indebtedness level, expressed by the percentage of public

debt in GDP (marked by signs "+" and "-" which are designed to show a positive or negative perspective).

Thus, after the study, EU countries will be classified into the following clusters:

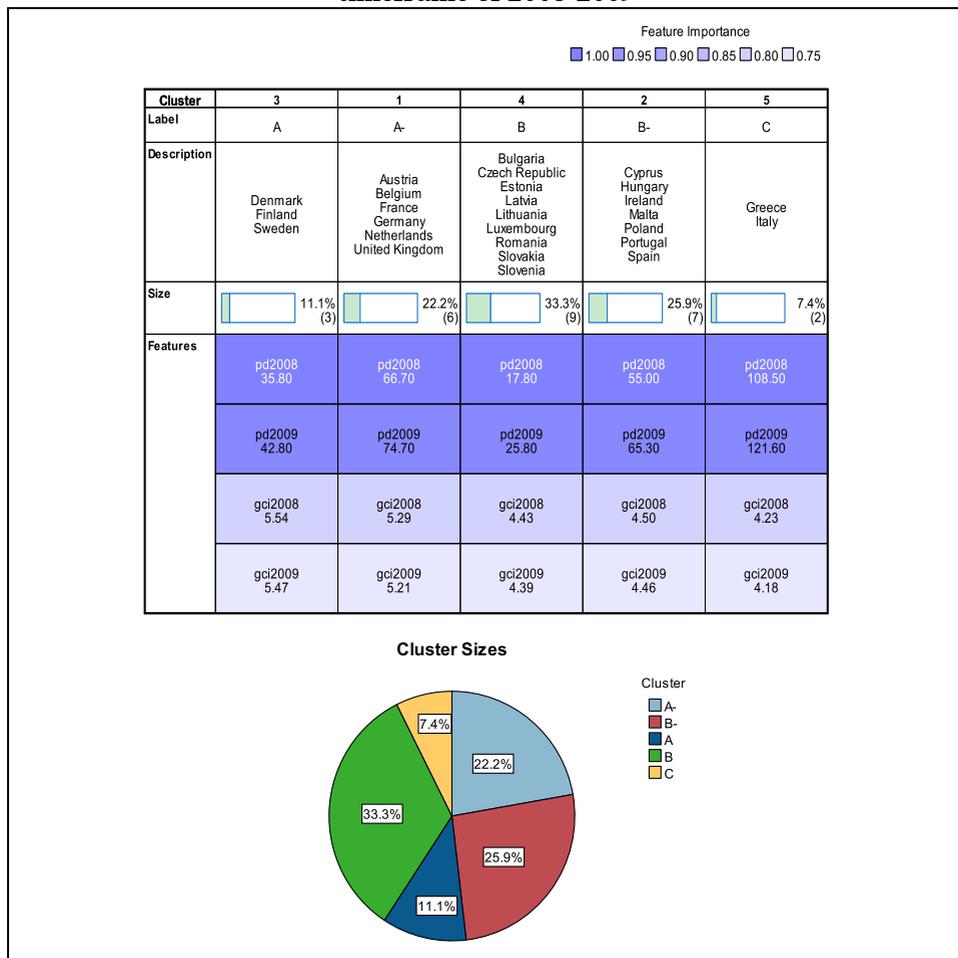
Table 2: Clusters of EU countries by competitiveness index and public debt degree

<i>Rating</i>	<i>Characterization</i>	<i>Features</i>
A	High competitiveness	High competitiveness index Low degree of debt
A-	Highly competitive, with negative perspective of macroeconomic stability	High competitiveness index High degree of debt
B+	Medium competitiveness with positive perspective	Medium competitiveness index Very low degree of debt
B	Medium competitiveness	Medium competitiveness index Low degree of debt
B-	Medium competitiveness with negative perspective	Medium competitiveness index Medium degree of debt
C	Medium competitiveness with negative perspective of macroeconomic stability	Medium competitiveness index with negative perspective Very high degree of debt (more than 100% of GDP)

Source: Author's own computation

Using the Two Step Cluster method with SPSS software, the first segmentation is conducted in the years 2008 and 2009 and targets the situation in the tumultuous period of the economic crisis. The analysis is focused on the segmentation of the EU countries based on the competitiveness level and macroeconomic stability in the context of the European Union threatened by a debt crisis. Thus, the following situation was obtained for the period 2008-2009:

Figure 1: Clusters of EU countries according to established rating, in the timeframe of 2008-2009



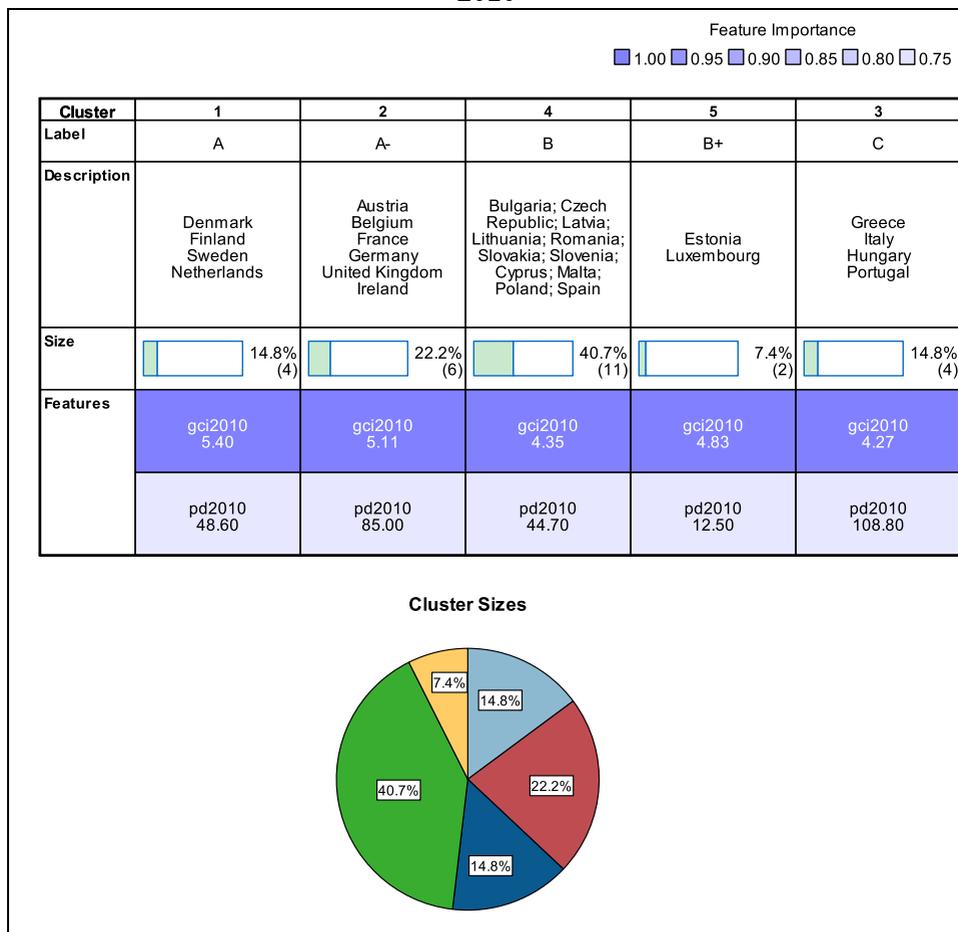
Source: Author's own computation

It can be noticed that in cluster A, with a high competitiveness index and a low degree of public debt, we can find Denmark, Sweden and Finland; and in cluster C – with a medium competitiveness index with negative perspective and a very high degree of debt (more than 100% of GDP) - is Greece and

Italy. Romania is in cluster B which implies a medium competitiveness index and low degree of public debt.

Developing the same analysis in 2010, the following results were achieved

Figure 2: Clusters of EU countries according to established rating, in 2010



Source: Author's own computation

It may be noted that the Netherlands has improved its position, going from A- to A, while Hungary and Portugal have moved from B- to C. Romania has maintained its position in cluster B.

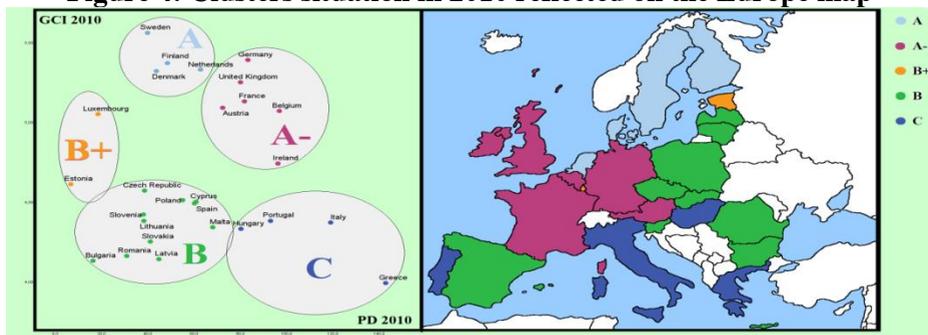
Table 3: Table summarizing the situation of clusters and evolution of the EU member states

<i>Country</i>	<i>pd2010</i>	<i>gci2010</i>	<i>2010</i>	<i>Evolution</i>	<i>2008-2009</i>
Sweden	39,8	5,56	A	↔	A
Finland	48,4	5,37	A	↔	A
Netherlands	62,7	5,33	A	↑	A-
Denmark	43,6	5,32	A	↔	A
Germany	83,2	5,39	A-	↔	A-
United Kingdom	80	5,25	A-	↔	A-
France	81,7	5,13	A-	↔	A-
Austria	72,3	5,09	A-	↔	A-
Belgium	96,8	5,07	A-	↔	A-
Ireland	96,2	4,74	A-	↑	B
Luxembourg	18,4	5,05	B+	↑	B
Estonia	6,6	4,61	B+	↑	B
Czech Republic	38,5	4,57	B	↔	B
Poland	55	4,51	B	↑	B-
Cyprus	60,8	4,5	B	↑	B-
Spain	60,1	4,49	B	↑	B-
Slovenia	38	4,42	B	↔	B
Lithuania	38,2	4,38	B	↔	B
Malta	68	4,34	B	↑	B-
Slovakia	41	4,25	B	↔	B
Romania	30,8	4,16	B	↔	B
Latvia	44,7	4,14	B	↔	B
Bulgaria	16,2	4,13	B	↔	B

Portugal	93	4,38	C	↓	B-
Italy	119	4,37	C	↔	C
Hungary	80,2	4,33	C	↓	B-
Greece	142,8	3,99	C	↔	C

Source: Author's own computation

Figure 4: Clusters situation in 2010 reflected on the Europe map



Source: Author's own computation

3. Conclusions and implications

As presented in the chart above, five clusters have been identified that grouped the EU countries. Thus, one important issue is the value of 70% in terms of public debt to GDP. States which have exceeded this value (clusters A- and C) were identified as economies with a negative perspective regarding the current situation, caused by the too high level of debt. In the chart above you can see how Greece, mainly, but also other components of cluster C (characterized by medium degree of competitiveness with negative perspective of economic stability) is at a considerable distance from the cluster A, for example, and these are the countries most exposed to a debt crisis.

Furthermore, economies with a very low value of public debt (6.6% of GDP, Estonia and Luxembourg with 18.4% of GDP), distance themselves from cluster B (which were part of in 2008-2009) and have positive outlook in terms of raising economic competitiveness, especially because of confidence from investors.

As for countries that have a degree of debt between 20% and 70%, they fall into two categories, namely cluster rated A (high degree of economic competitiveness) and B rating (average degree of economic competitiveness). As it can be seen, in cluster B, from 11 states, 10 have joined the EU after 2004, and members of cluster A based their policies on economic discipline and sustainable growth, which has caused them to become the most competitive economies in the European Union.

In the future, Luxembourg is expected to approach the cluster A and even to be integrated into this group of countries with high competitiveness and with a reduced risk of exposure to a debt crisis.

From a geographically point of view, we see that countries in northern Europe are highly competitive, and as we move to southern Europe, the competitiveness decreases and the risk of occurrence of a debt crisis with negative effects on economic competitiveness is increasingly higher.

In conclusion, we can state that the economic competitiveness of a country rises as public debt degree increases to a level of approximately 60% of GDP, then the degree of competitiveness decreases as increases sovereign debt over that limit.

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THOMAS THEOREM APPLICATIONS IN ECONOMICS

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Abstract:

The study presents a history of Thomas's theorem formulation and points on its up to dateness. At the same time it pays homage to William Thomas, whom we celebrate at the occasion of his 150th birthday. There are analyzed the implications of Thomas's theorem starting from a real situation in America, which was triggered by a broadcasted drama that caused panic in New York. Finally, there are reviewed implications of Thomas's theorem in post-communist Romania, when a number of banks got bankrupted on the principles of this theorem.

Keywords: *Thomas theorem, rumor, situational analysis*

We celebrate the 150th anniversary of the birth of William Isaac Thomas (13 August 1863 - 5th December 1947), American sociologist, former president of the American Sociological Society (now ASA), professor at the University of Chicago. His work, not very large in size, remains valuable in content. The paper "Polish Peasant in Europe and America", written in cooperation with Florian Znaniecki, is a monumental work, classical, which is studied today in American universities. Another important work is "The child in America: behavior problems and programs" (New York: Knopf, 1928), written with his wife Dorothy Swaine Thomas. In this paper appears for the first time, what later will be called the Thomas Theorem (Op. cit p 572): "If men define situations as real, they are real in their consequences". Although the book was written by both spouses, today it is known exactly that the formulation of the theorem belongs to William Thomas (in a large article

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entitled "The Thomas Theorem and The Matthew Effect" published in *Social Forces* No 74 December 1995, Robert K Merton undertook a thorough analysis of the history and connotations with which the theorem circulated, - and after he corresponded with Dorothy Swaine Thomas – concluded that it belongs solely to William Thomas). Thomas started developing the theorem from the analysis of situation in various contexts. Situational analysis was used mainly in the sociology of migration, where he develops a typology of immigrants in America (The Settler, The Political Idealist, The Intellectual, etc.). Many events, happened in America and around the world, have proven the viability of Thomas's theorem. 10 years later, after the publication of the work, in 1938, a broadcasted theatre play, produced chaos in New York and reminded of the force of Thomas theorem.

Orson Welles (1915-1985) actor, writer, film director, worked in theater, radio and film. He gained international fame in 1938 when, as director and narrator of the radio play "War of the Worlds", created real panic in the audience, caused by the realism of the play. It was an adaptation of the novel with the same name by H.G. Wells, published in 1898 and considered to be the first story detailing the conflict between humans and aliens. The author of the novel, Herbert George Wells (1866-1946), English writer, is known as the father of science-fiction genre. Among his most famous literary works from this category are: "War of the Worlds", "The Time Machine" and "The Invisible Man".

The drama was broadcasted between 8.15 and 9.30 p.m. and its subject was an interplanetary war started in New Jersey and New York. Two-thirds of the first hour of radio play was devoted to the presentation of information in the form of a news bulletin, telling how a kind of "meteor", a "metal cylinder", from which dropped out some strange beings, landed on Earth and triggered a gas attack.

This broadcast contributed to the building of a wrong perception, as the listeners believed the events were real. Although before the play started, the following announcement was made: Columbia Broadcasting System and partner stations presents Orson Welles and the Mercury Theatre in "War of the Worlds" by HG Wells), it seems that the listeners have lost information or considered it irrelevant in context of authenticity of the action staged by Welles. The omission can be explained by the fact that in that period the broadcasts were often interrupted to transmit news about military events that took place in Czechoslovakia. These series of "news" was not associated with

the drama but with a newsletter, a kind of breaking news, which transmitted information of interest to the public. The style of the play was so alive that the content seemed real and not fiction.

The narrator's inflection, the authenticity of his behavior made the listeners to take information seriously and act in consequence. A number of people needed medical care because of the shock they suffered. Some people tried to verify the information and called the police, newspapers and radio, where it was explained that it was fiction and there was no reason for concern. In response, these institutions have sent information through their specific channels such that it is a drama, a fantasy story, nothing real. However, many of the residents have considered that it is no time to check the data and better take into account the advice of so-called "newscast". Therefore, they left their homes and went somewhere to be safe. "News" has quickly spread on the rumor principle. Two women, whose husbands were at the theater, called the director of the institution and asked him to tell their husbands to leave the building immediately (The New York Times October 31, 1938).

Some people even said they have seen the invasion, and therefore fueled their cars, took their families and went to the police in order to tell them where to go to be safe. In the campus of Brevard University/college five students fainted and their colleagues lived half an hour of panic, while struggling on the phones to call their parents to pick them up.

The New York Times received 875 calls in a very short time. 42 inhabitants of the town of Harlem went to the police station and said they had packed their belongings and were ready to leave the place. The only thing they needed was to be told where to go. One of them insisted that he heard the president on the radio urging them to leave the city.

In Westchester the authorities thought that they were victims of some bad jokes. They were insistently called by residents who asked "where the 40 policemen were killed" (part of the play). In some hospitals and prisons it was decided to close the radio because people in these institutions believed information and there was the risk of triggering a state of panic.

In some areas teams of volunteers were mobilized in order to help coping the situation, especially to take care of the wounded. Even when people were told that the situation was not real they were quite confused, not knowing whom to believe.

In New Jersey a large number of people fled their homes staying in the street and staring fearfully at the sky. Meanwhile, a police patrol arrived and tried to calm them, explaining what it was about. In Newark the traffic was blocked by approximately 20 families who went to the streets and called the police because "they were threatened by a gas attack." An ambulance, three police cars and an intervention car with eight specialists who brought gas masks and inhalers arrived and found people with wet handkerchiefs on their faces uploading stuff from their houses to the cars in order to leave the city. In the center of the same locality fifteen people needed medical intervention due to the shock they suffered. Three other people who had children under treatment in hospital called and announced that they would go to take them in order to leave the city, but were calmed down by the authorities (The New York Times October 31, 1938).

A member of Baptist Community entered a church during the Mass and shouted that a meteorite fell and caused great destruction and therefore they are in danger. At that moment all the people began to pray for salvation from the "catastrophe."

An unidentified man tried to enter the building of a theater to warn spectators that a meteorite fell near New Brunswick and spread toxic gases everywhere. He was stopped by the theater manager who called the police. Then they explained him that it was fiction. Managing the situation was aggravated by the fact that the phone lines were blocked so that the authorities could no longer communicate with each other to ask information about the situation in different cities.

Later, The Columbia Broadcasting System explained that the drama was an adaptation of Wells's novel, and that director Orson Welles replaced the English locations of the play's plot with locations from the U.S. Doing so, he intended to make the details more attractive to the American public. They also said that the imaginary character of the show was mentioned four times before starting to broadcast it, but apparently this information was not received. The director expressed his deep regret for the incident and said that he probably he would broadcast it never again. He also said that he had thought that listeners would have got bored listening something that unreal, therefore he tried to make the transmission more active and more real.

Today, Thomas's theorem has many applications in Romania (after December 1990). A number of Romanian banks, including Dacia Felix Bank, Bankcoop, Religions Bank have assumed this theorem. For sure some of the

financial engineers made these banks vulnerable, but the greatest impact was the rumor that they are insolvent. When customers rushed to withdraw their money, the banks collapsed. They defined a situation as real (the bank has no money!) that became real in its consequences. The same happened with BCR in 2000 when a similar rumor created panic among depositors and the people rushed to withdraw the money they had deposited to the bank. In Sibiu a window of the bank was broken and people come out with bags of money. Finally proved that the bank was solvent, and those who initiated this action failed: their goal was to show that the bank is vulnerable and to purchase it for nothing! Finally the sale of BCR was a great success, but those who started the rumor were never found.

Messages coming from credible persons such as the Governor of the National Bank, Mugur Isarescu, can influence the behavior of individuals: when they say that Romanian currency is strong (to keep savings in Romanian currency). The economist Mugur Isarescu is doubled by a fine psychosociologist that add its own power (symbolic) to national currency functionality.

Contemporary research on consciousness shows that we can change the world in which we participate through an awareness of the objectives that we want to achieve. In this context, theorem of Thomas may have positive applications in socio-economic life.

Today an important desiderate of any society is building confidence, from the institutional level to the individual one (the sociologists systematically measured the confidence level). The degree of complexity of the societies increased while the trust level decreased. Francis Fukuyama stressed that in America there is a significant decline in confidence. If around 1900 business partners were shaking hands and saying "deal" the business was completed, today things have changed dramatically. Take any contract with an insurance company or a bank and see how many pages you have to read in order to understand the terms of it. Most of the customers give up to do so! Mistrust is mutual! Decreased confidence or lack of confidence reduces the dynamics of society.

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**PROJECT TEAM – BASIC ELEMENT FOR PROJECT
MANAGEMENT IMPLEMENTATION**

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Abstract

Often it was found that, when people face uncertainty, no matter the field, they turn to others for advice on how to respond, on the same time, demonstrating a tendency to imitate the behavior others, especially of their superiors. This is why, a certain behavior of the project manager indicate how other people have to work on the project. By his behavior, the project manager can influence others to act and determine others to respond to a variety of issues related to the project. To be effective, project managers must also work with the project team and discuss all the existing or potential problems.

JEL classification: M21

Key words: leadership, team, project, project management.

1. Introduction

According to Armenia Androniceanu and others, a project involves following main elements: start and completion dates; a necessary budget; quality specifications; activities; objective realities to be identified, delimited, defined and developed; the project team; the purpose that is a sustainable change; the project life cycle (Androniceanu, A., et al., 2006).

A project team can be defined as a group of individuals assembled together to perform certain activities that contribute toward achieving a

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common task or goal. A project team may be consisting of skilled workers from the same or different function areas to work on an important project.

The project manager works with his project members to prepare a calendar for organizing the project team, to track work progress and to coordinate the activities of the members. The project team responds direct to the project manager and this demonstrates that the project team needs close supervision.

2. The research's objectives

This research is the fourth part of a long cycle aimed to determine the knowledge and application of the leadership concept in the Romanian organizations under conditions imposed by the external environment which is characterized by frequent changes and variations with both positive and negative effects on organizations, and also to determine the response of the organizations to these changes (Văcar, A., Dumitrașcu, D.D., 2012).

We consider important for this research to determine the degree of involvement of leadership in enhancing team performance, as a basis for implementation of project management from the perspective of managers in Romanian organizations.

To achieve this objective there was performed a research at a national level with the aid of a market research company with national coverage, using the Internet as a research collection tool. The identification data of the subjects, namely the independent variables of the research are: the position of the subject within the company, the professional training of the subject, the subject's age and sex, the work field of the organization and its turnover, all of these are necessary in the observation of the knowledge mode and implementation of the concepts under analysis.

3. The results of the research

Knowing how project teams are set up of internal or external sources, in the opinion of the researched managers in most cases the team that will implement the project consists of internal members of the organization (57%), then by combining the two sources, both internal and external members of the organization (33%) and only in 10% of cases the team is constituted by the external members of the organization (figure 1).

In terms of human resources involved in the project, how is most commonly comprised the project team?

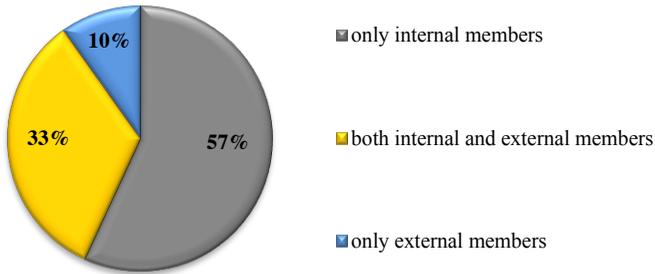


Figure 1. The structure of project teams in terms of managers

For a better understanding of the tasks submitted in organizations in the process of passing information from the sender to the receiver, the most common way of communication is oral communication between individuals, in 44% of cases with the advantages of better understanding of the assigned tasks, providing additional clarification if necessary, but also the disadvantage of overloading and blocking manager from other activities he needs to carry out. Depending on frequency, the following way of communication in organizations is the oral communication from individual to group and vice versa, is the meetings, in 33% of cases. This form of passing information is efficient too, because in this way tasks are outlined and explained to all the meeting participants and any misunderstandings are analyzed, but this method does not have to be the only way of communication in the organization. Written communication is used to a lesser extent (23%) but we consider it necessary to be combined with other forms of communication for a better understanding and transmission of information which is necessary to achieve organizational goals (Figure 2).

What is the most common form of communication in your organization?



Figure 2. Methods of passing information in organizations in managers' perspective

Regarding the relationship with employees, interviewed managers believe they have a good relationship, most giving grades over 5. The largest share has grade 8 (31%) followed by grade 7 indicating a relative satisfaction (20%), and grade 9 (19%) and grade 5 (11%) (figure 3).

How satisfied or dissatisfied you are in terms of the relationship you have with your employees?

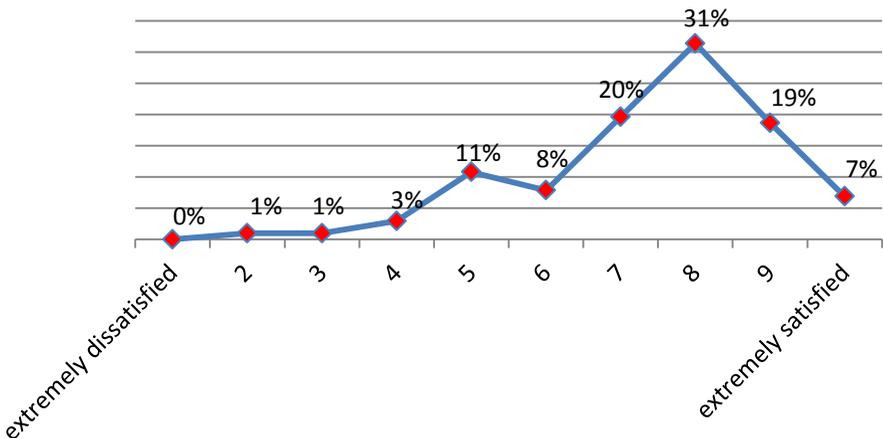


Figure 3. The level of managers' satisfaction in terms of the relationship with employees

Most managers (61%) believe that the performance of the project team in a great extend depends on the satisfaction of its members and 31% of those surveyed consider it depends to a large extend (Figure 4).

How much do you consider that team performance is directly dependent on the satisfaction of its component members?

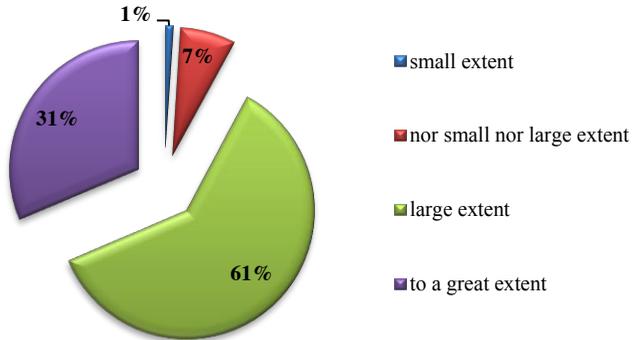


Figure 4. The relationship between team performance and satisfaction of the component members in managers' perspective

Analyzing the qualities required for a leader in shaping the team he leads, qualities analyzed by John Maxwell, managers considered the most important ones, and in order of hierarchy made by them are the following: communication (71%), competence (71%), responsibility (68%), initiative (57%), positive attitude (56%), problem solving (55%), vision (51%), self-confidence (49%), passion (47%), discernment (45%), self-discipline (44%), concentration (42%), desire for knowledge (41%), devotion (40%), courage (35%), charisma (33%) and generosity (16%) (Figure 5).

How important are the following qualities in your vision, for a person in order to be an effective leader in shaping the team?

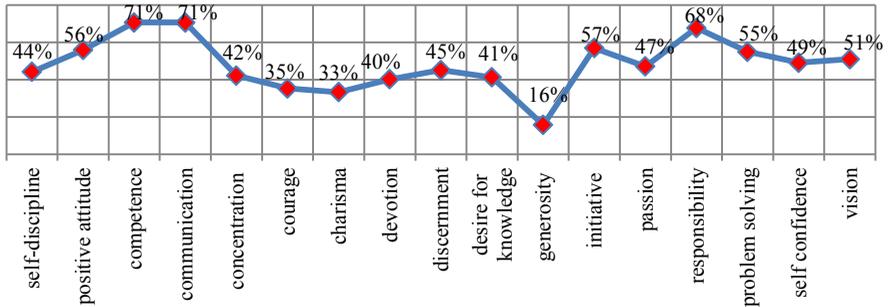


Figure 5. The hierarchy of the qualities required from a leader in the process of shaping the team, depending on the importance of each, from the perspective of the managers

The analysis and ranking of the personality features necessary for a leader to coordinate and manage a team, made by the interviewed managers according to the importance of each feature, is the following: intelligence (65%), integrity (61%) self-confidence (59%), stability (54%), flexibility (50%), optimism (48%), charisma (28%), dominance (22%) and sensitivity (14%) (Figure 6).

How important is, in your opinion, the following personality features necessary for a leader to coordinate and manage a team?

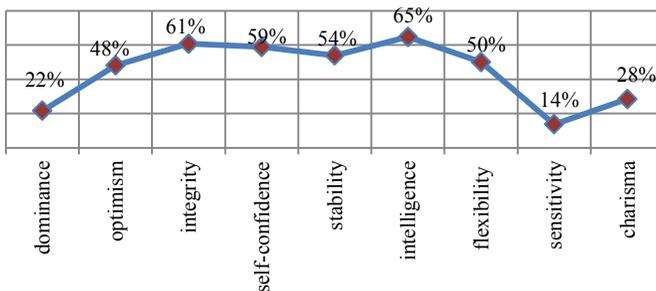


Figure 6. The importance of the required personality features of a leader, from the perspective of managers

Analyzing the techniques used by leaders for supporting and fostering the creativity of team members, the most important, from the point of view of managers, are to create an organizational climate conducive to development (50%), ensuring recognition and an encouraging reward (48%), ensuring adequate and high quality resources (48%) and assurance of leisure time for the team (31%) (Figure 7).

How important is your opinion the main techniques used by leaders for supporting and fostering the creativity of team members, which are used in your organization:



Figure 7. The techniques used by the leaders to support and foster the creativity of team members regarding the managers

The most common ways of training team members used by managers in organizations where they work are: education and training by the manager, the most commonly used technique (56%), followed by learning from feedback and previous experience (45%), then group discussions (44%), and learning from courses (41%) (Figure 8).

Taking into account the process of education and training of the team within your organization, what are the most common ways of training team members?

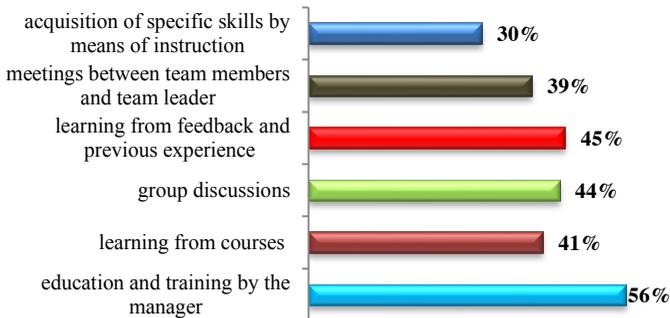


Figure 8. Training methods used by managers for team members

Although the ability to communicate is considered by 71% of managers as the most important quality of an effective leader, according to the results shown in Figure 5 (leadership qualities), in practice, in the opinion of the interviewed managers, it is the main problem that generate malfunctions in the management of the project team. From the list of proposed issues, managers frequently face all of them, in the following proportions: lack of communication or poor communication within the team (75% of the managers consider it as the main problem encountered), then issues regarding relationships and interactions of team members (42% of the managers identified this issue in the organization), then issues related to the assuming and the exercise of authority (40%) and the last is the lack of practice of delegation or empowerment (35%) (Figure 9).

Choose from the following list those options that you consider generating problems in the management of the project team and are found most frequently in your organization.

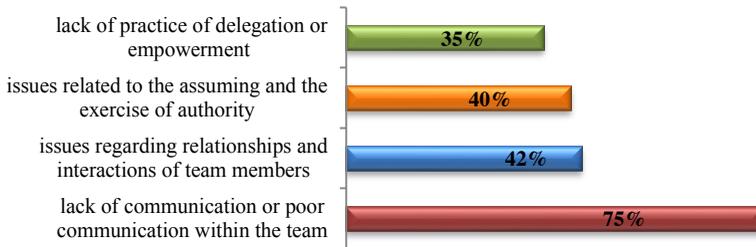


Figure 9. Issues that project managers are facing within the teams

As a concluding question, which connects the points previously discussed and also argues and strengthening the present research, that most managers (94%) considered necessary to involve leadership, in terms of characteristics, qualities and benefits of that are generated by its application, in project management (Figure 10).

Do you consider that the involvement of leadership in project management in terms of its characteristics is necessary or not?

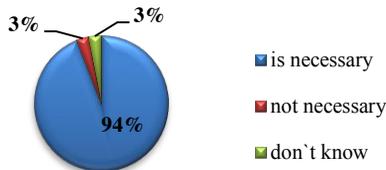


Figure 10. The necessity for involving leadership in project management

4. Conclusions

In conclusion, we can say that according to the view of the researched managers, most of them believe that performance of the projects largely depends on the satisfaction of the project team members. In terms of relationship with employees, interviewed managers believe they have a good relationship with them, the majority of them giving a 8 grade on a scale from 1 to 10. The most common way of communication in the analyzed organizations is the oral communication between individuals, in 44% of cases, with the advantages of better understanding assigned tasks and provide additional

information, if necessary. Because, according to the results of the analysis, oral communication from individual to individual is the main way of transmitting information and tasks, the most common training method used by managers for team members in the organizations they work is education and training by manager.

In most cases, the team that will implement the project consists of internal members of the organization (57%), which is considered a good aspect because members already know each other and the welding and adaptation period for the team is shorter, they all understand better the specific objectives that fall within the general objectives of the organization.

Analyzing the qualities required for leader to influence the team he leads, the interviewed managers considered as the three most important qualities: communication, competence and responsibility. The hierarchy of personality features that are necessary for a leader to coordinate and manage a team, depending on the importance of each feature separately, ranks the top three: intelligence, integrity and self-confidence.

Analyzing the techniques used by leaders for supporting and encouraging the creativity of team members, the most important according to the managers interviewed, is creating an organizational climate which is conducive to the development, technique that can be found in over half the cases.

Although communication ability is considered by 71% of managers as the most important quality of an effective leader, in practice, according to the managers surveyed (75%), lack of communication or poor communication within the team is the main problem that generates dysfunctions in the management of the project team.

And in conclusion, most managers, in the overwhelming percentage of 94%, deemed as necessary the leadership involvement in project management, in terms of characteristics, qualities and benefits that are generated by applying it.

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MODELING TRUST TO STUDY CONSUMERS' ACCEPTANCE OF ONLINE SHOPPING

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Abstract

The Internet has unique characteristics that provide ever-changing opportunities for online companies. Due to this technology, nowadays consumers are always on the verge of accepting new online applications or using the web to substitute traditional activities, such as purchasing by switching to online shopping. This paper theoretically develops and empirically validates a research model that predicts consumer acceptance of e-commerce, by incorporating trust in the well-known technology acceptance model.

Keywords: *online consumer behavior, perceived ease of use, perceived usefulness, technology acceptance, intention, trust, structural equation model.*

JEL Classification: *F15*

1. Introduction

The World Wide Web, the first and current networked global implementation of a hypermedia computer-mediated environment (CME), is increasingly being recognized as an important emerging commercial medium

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and marketing environment (Hoffman and Novak, 1996). Kelly (2006) defined the web as a “platform for the delivery of engaging services and experiences”.

Hoffman and Novak (1997) argued that successful Web marketing efforts will require an evolution in the marketing concept to where the firm not only attempts to discover and meet customer needs profitably, but also engages in marketing activities that are consistent with the new metaphors that are arising in this emerging medium.

The outlook for business-to-consumer (B2C) electronic commerce depends not only on consumer acceptance of Internet technologies as viable transaction means, but on consumer recognition of Web retailers as reliable merchants (Pavlou, 2003). Moreover, the use of social software opens a window of opportunity for Web 2.0 “social commerce”, creating virtual places where people can collaborate, get advice from trusted peers, find goods and services and then purchase them with virtual currency (Shin, 2008).

This paper theoretically and empirically validates a research model that predicts consumer acceptance of e-commerce by employing trust in an uncertain online context.

2. Consumer online transaction process

Electronic commerce acceptance is broadly described as the consumer’s engagement in electronic exchange relationships with Web retailers. Hence, online transactions can be viewed as instances of interactive marketing communications (Pavlou, 2003).

Pavlou (2003) described how consumers engage in an online shopping transaction. This process consists of three phases:

(1) Information retrieval – this phase implies an exchange of information, as the consumer browses the website, gathers information about the available products, compares products and prices, and learns about each offering to feel reassured and make an informed purchasing decision;

(2) Information transfer – the second step implies that the consumer has to provide personal information in order to register on the website (usually with his/her email address). This phase also involves automatic information exchange through cookies, log-data, data-mining tools.

(3) Product purchase – the final step also implies the provision of private and sensitive information (such as credit card information or physical

address) in order to complete the purchase of a product or service in an e-setting.

This new paradigm for electronic commerce constructed from considering the Web as an important trading place, where consumers can interact with each other and influence the way they perceive a particular web supplier. For companies it is essential to acknowledge that the consumer retains ownership of his or her personal information and chooses how and if they engage in certain online activities, from which they expect benefits.

3. Technology Acceptance Model in E-commerce

Technology acceptance model (TAM) represents an extension of Fishbein and Ajzen's Theory of Reasoned Action (TRA, 1975). This latter theory argued that both the attitude towards a particular action and a consumer's subjective norm (i.e. the social pressure he/she experiences to achieve or not a certain behavior) have a direct impact on behavioral intention, which in turn determines how consumers perform an action, which in marketing and commercial terms implies acquisition of a marketing object.

TAM was proposed in 1989, through Davis' Ph.D. thesis and the original model was aimed at discovering users' acceptance of technology (which referred to information systems and computer adaptation) through four dimensions: perceived usefulness, perceived ease of use, attitude, and behavioral intention. More specifically, TAM assumes that a user primarily experiences two types of perception regarding the use of a new technology, namely perceived usefulness and perceived ease of use. These two perceptions represent major influences on an individual's attitude towards using a particular technology and, ultimately, on actual use or intention to use in the near future (Davis, 1989).

Researchers have given particular attention to this theory and proposed various different versions of it by adding new dimensions. In marketing, TAM is particularly useful because it can be extended to predict and study consumer behavior in an e-setting, whether it is used to reflect adoption of a new social network or a new type of e-commerce.

This paper aims at proposing a modified TAM in the context of consumers' adoption of online shopping services, by keeping the traditional and well-known variables of TAM, but adding the trust dimension. Given the uncertainty experienced online, trust is posited as a key driver of perceived

usefulness of online shopping and consumers' perceived ease of use of this e-commerce environment. All of the dimensions and their proposed relationships are further examined in the next sections.

3.1. Attitude and Intention for Online Shopping

Attitude refers to "the degree of a person's positive or negative feelings about performing the target behavior (Davis et al., 1989, p. 984)." By definition, behavioral intention is a measure of the strength of one's willingness to try and exert while performing certain behavior (Ajzen, 1991).

Attitude and behavioral intention are two internal psychological variables that have direct effects on user behavior. In this model, it is hypothesized that attitude has a positive influence on consumer intention to use and accept the web as a shopping channel.

Hypothesis 1. Attitude will positively affect consumers' intention to use or reuse online shopping.

3.2. Perceived usefulness

Davis (1989) defines perceived usefulness as the degree to which a person believes that using a particular system would enhance his or her job performance. Therefore, this study uses this definition to explain consumers' acceptance and adoption of online shopping would offer them better opportunities. The TAM postulates that perceived usefulness has a direct positive effect on positive attitude and there are various empirical studies applying this hypothesis and verifying it.

Hypothesis 2. Perceived usefulness will positively affect consumer intention to use or reuse online shopping.

Hypothesis 3. Perceived usefulness will positively affect attitude regarding e-commerce.

3.3. Perceived ease of use

Perceived ease of use is defined as the degree to which a consumer believes that using a particular technology will be without effort Davis (1989). Applied to online consumer behavior, a Web-retailer that is perceived as facilitating online shopping as an easy operation is likely to be accepted by consumers. Another important relationship proposed by this examined model implies an internal variable, i.e. attitude and one of the model's external factors, i.e. perceived ease of use.

Hypothesis 4. Perceived ease of use will positively affect attitude.

3.4. Trust

In an online environment, there is a temporal and spatial separation between customers and electronic retailers. Thus, consumers experience a sense of uncertainty that could be decreased if web retailers build a foundation of trust with their potential clients.

As a general accepted definition, trust represents the belief that the other party will behave in a socially responsible manner, and, by so doing, will fulfill the trusting party's expectations without taking advantage of its vulnerabilities (Mayer et al, 1995; Gefen and Straub, 2000). McKnight and Chervany (2002) further developed this concept in an B2C e-commerce context and defined trust as the belief that allows consumers to willingly become vulnerable to Web retailers after having taken the retailers' characteristics into consideration.

Many studies have developed the concept of trust as a crucial factor in influencing consumer behavior, especially in terms of minimizing the uncertainty effect of the internet-based e-commerce context (Jarvenpaa and Tractinsky, 1999; Moon and Kim, 2001). Keen (1999) argued that trust is the foundation of e-commerce, focusing on the strategic implications of trust for consumer-marketer relationships. McKnight et al. (2002) show that trust is the foundation of e-commerce and is the most important factor in the success of online vendors.

In the context of TAM, there are various studies that offer theoretical and empirical support for combining TAM's well-known variables with trust. Gefen (1997) and Gefen and Straub (2000) integrated trust, perceived usefulness, and ease of use in the context of e-services. Pavlou (2003) in his study shows a positive impact of trust on perceived usefulness and perceived ease of use. Chircu, Davis, and Kauffman (21) also examined these relationships in their paper in an adjusted technology acceptance model.

In an online shopping environment, regarding perceived usefulness, Gefen (1997) noted that trust represents an important determinant of perceived usefulness because consumers rely on the people behind the website to achieve their shopping goals and expected utility. In other words, consumers cannot perceive utility from an online retailer if they do not consider that company to be trustworthy by its consumers. Chircu, Davis, and Kauffman (2000) argue that trust positively affects perceived usefulness in that it allows

consumers to become vulnerable to the Web retailer to ensure that they receive the expected useful interaction.

Furthermore, Chircu, Davis, and Kauffman (2000) also argued that trust in an e-commerce website increases perceived ease of use. They explain this assessment by the fact that consumers who trust web retailers do not feel like they have to constantly understand, monitor, and control their online transaction, thus the online shopping process becomes effortless.

Pavlou (2003) stated that trust creates positive attitudes and perceived behavioral control toward transactions with Web retailers, reducing uncertainty and providing expectations for a satisfactory transaction, thus positively influencing consumer behavioral intentions to transact in an e-setting. Also, Jarvenpaa and Tractinsky (1999) empirically showed the favorable effect of trust on consumer purchase intentions.

Consistent with the existing empirical papers, trust can be incorporated in TAM, thus the following hypotheses are proposed:

Hypothesis 5: Consumers' trust in online shopping services will positively affect perceived usefulness.

Hypothesis 6: Consumers' trust in online shopping services will positively affect perceived ease of use.

Hypothesis 7: Consumers' trust in online shopping services will positively affect intention to use or reuse online shopping services.

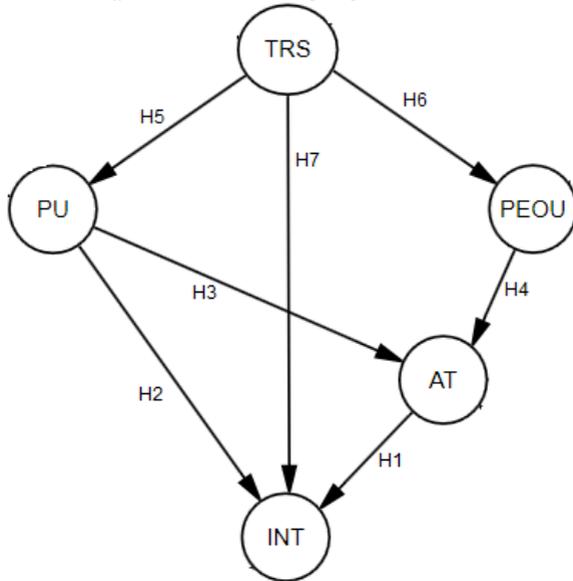
4. Research Methodology

Fig. 1 presents the 'TAM + Trust Model' to be proposed in this study. The utility of considering the TAM model and proposing different forms of this widely used model stems from the fact the Internet relies on an ever-changing technology. Consumers are always on the verge of adopting the result of new technology in the form of products and services, which they purchase primarily from the Internet.

Notably, from the original technology acceptance model a relationship was excluded from this adjusted proposed model, namely the influence of perceived ease of use on perceived usefulness. This hypothesis was excluded from the analysis in order to prevent a recursive set of interrelationships between trust, perceived ease of use, and perceived usefulness.

Figure 1 summarizes these proposed hypotheses for this new model which incorporates trust to examine consumer behavior regarding the acceptance of online shopping services.

Figure 1. Research proposed model



Note: AT = attitude for e-commerce, PU = perceived usefulness, PEOU = perceived ease of use, INT = Intention to use or reuse online shopping services, using online shopping services, TRS = trust

4.1. Research Instrument

The constructs used in this new adjusted TAM model which integrates trust as an important factor influencing consumers' acceptance of online shopping services were extracted from existing papers

The participants indicated their agreement with a set of statements using five-point Likert scales (ranging from "strongly disagree" to "strongly agree") drawn from previously validated instruments, as shown in Table 1.

The scales for perceived usefulness (PU), perceived ease of use (PEOU) and behavioral intention were adapted from existing studies on the technology acceptance model (Venkatesh and Davis (2000); Davis et al., 1989; Bhattacharjee, 2001). Attitude was assessed with five items from Hernández et al. (2010), whereas the measures for trust were adapted from Pavlou (2003).

Table 1. Constructs used in the model

<i>Dimension</i>	<i>Measure items</i>	<i>Research</i>
Attitude for online shopping (AT)	AT1: Shopping online saves me time AT2: The Internet is the best place to find bargains AT3: The Internet is the best place to buy items that are hard to find AT4: My general opinion of e-commerce is positive AT5: Using the internet to make purchases is a good idea	Hernández et al. (2010)
Trust (TRS)	TRS1: This Web retailer is trustworthy TRS2: This Web retailer is one that keeps promises and commitments TRS3: I trust this Web retailer because they keep my best interests in mind	Pavlou (2003)
Perceived usefulness (PU)	PU1: I think that online shopping is very useful to my life in general PU2: I think that online shopping is helpful to improve my performance on the internet. PU3: I think that online shopping is helpful to enhance effectiveness of my life.	Davis et al. (1989)
Perceived ease of use (PEOU)	PEOU1: I find online shopping clear and understandable PEOU2: I find that online shopping does not require a lot of mental effort PEOU3: I find online shopping easy to use	Venkatesh and Davis (2000); Davis et al. (1989)
Intent to use or reuse online shopping services (INT)	INT1: I intend to continue to purchase goods from the Internet shopping site that I regularly use INT2: I intend to use the Internet to get more product information.	Bhattacharjee (2001); Davis et al. (1989)

4.2. Sample and Data Collection

The primary scope of this study is to understand online shopping behavior of consumers who accept this type of e-commerce. From January to April 2013, an online survey was posted on various forums devoted to online shopping, and members were invited to support this survey. The study used primary data, namely data originated specifically to address the research problem.

The online survey generated 107 usable questionnaires. Table 2 presents the profile of the respondents, as well as the screening questions which show high levels of experience regarding the use of internet in general, and online shopping in particular.

Table 2 – Respondents' profile

		Frequency	Percentage (%)
Sex	Male	38	35.5
	Female	69	64.5
	Total	107	100.0
Country	Australia	7	6.5
	Brazil	2	1.9
	Denmark	3	2.8
	France	3	2.8
	Germany	7	6.5
	Greece	1	.9
	India	5	4.7
	Poland	1	.9
	Romania	21	19.6
	Spain	7	6.5
	UK	14	13.1
	USA	36	33.6
	Total	107	100.0
Age	18-25	74	69.2
	26-30	21	19.6
	30-40	6	5.6
	Over 40s	6	5.6
	Total	107	100.0
Experience with Internet	2 - 3 years	5	4.7
	3 - 4 years	1	.9
	4 - 5 years	4	3.7
	5 - 6 years	11	10.3
	Over 6 years	86	80.4
	Total	107	100.0

Experience with online shopping	I usually just search for information on e-commerce sites, but I never bought anything	2	1.9
	I purchased just once from an web retailer	11	10.3
	I purchased more than once from web retailers	94	87.9
	Total	107	100.0
Frequency of online shopping in the last year	Once	16	15.0
	2 or 3 times	17	15.9
	4 or 5 times	31	29.0
	6 or 7 times	16	15.0
	7 or 8 times	8	7.5
	More than 8 times	19	17.8
	Total	107	100.0

5. Empirical Analysis and Results

5.1. Exploratory Factor Analysis

Firstly, the empirical analysis started with an exploratory factor analysis, which was used to reduce the number of scales assigned to each elaborated online behavior dimension. This analysis was achieved using SPSS, and as additional methods we used Principal Components (as the extraction method) and Varimax (as the rotation method, in case more than one factor was extracted for each dimension). The results for the exploratory factor analysis are shown in Table 3.

The first step in the validation process of the exploratory factor analysis was to measure the reliability and dimensionality of the scales used in this analysis. The reliability and validity of the research instrument were evaluated with SPSS, using Cronbach's alpha. The examination of the scales' reliability was meant to reflect the internal consistency of the constructs. Reliability is identified by Cronbach's alpha with a minimum of 0.70 (Cronbach, 1970). As shown in Table 3 all values were above the recommended level of 0.7.

Table 3. Descriptive Statistics and EFA Results

Dimension	Items	Average	Standard deviation	Factor loading	Eigenvalue	% of Variance	KMO	Cronbach's alpha
Attitude (AT)	AT1	4,14	0,995	0,823	3,881	77,621	0,824	0,856
	AT2	3,62	1,121	0,879				
	AT3	4,07	0,993	0,806				
	AT4	4,12	0,855	0,812				
	AT5	4	1,037	0,783				
Perceived usefulness (PU)	PU1	3,87	0,982	0,864	2,151	71,683	0,704	0,802
	PU2	3,21	1,026	0,817				
	PU3	3,50	1,004	0,858				
Perceived ease of use (PEOU)	PEOU1	3,84	0,859	0,773	1,840	71,343	0,750	0,774
	PEOU2	3,55	1,135	0,747				
	PEOU3	4,01	0,837	0,828				
Intent to use or reuse online shopping services (INT)	INT1	4,21	0,877	0,886	1,570	78,505	0,650	0,721
	INT2	4,35	0,756	0,868				

For the adjusted technology acceptance model which incorporates trust in relation to online shopping, one factor was extracted for all the dimensions studied. The criteria used to identify and interpret the factors was that each element should have a factor loading greater than 0.7 and Eigenvalues greater than 1 (Field, 2005). Also, the eligibility of the factors can also be observed in terms of the variance explained by each resulted factor, as the variation exceeds 70%. The validity of the factors can also be noticed in terms of the Kaiser-Meyer-Olkin test with values greater than 0.5, in a range from 0.650 to 0.824.

5.2. Confirmatory Factor Analysis

Confirmatory factor analysis was examined using the maximum likelihood method to further establish that the model is adequate before applying the structural equation model. The modification indices option in AMOS detected certain covariances, which were taken into account for all the latent variables. The structure of the factors obtained through the exploratory factor analysis was confirmed by a first-degree CFA. The measurement model was investigated, obtaining results that show an excellent fit for the proposed model: $\chi^2 = 41.779$, $df = 36$, $p = 0.002$, $\chi^2 / df = 1.161$, GFI (goodness of fit index) = 0.941, NFI (normed fit index) = 0.952, RFI (relative fit index) =

0.912, CFI (comparative fit index) = 0.993, RMSEA (root mean square error of approximation) = 0.039.

In order to validate the first-degree confirmatory factor analysis, the research model's constructs were evaluated in terms of convergence validity, discriminant validity and reliability (Table 4).

Table4. CFA results

<i>Constructs</i>	<i>CR</i>	<i>AVE</i>	<i>Correlations between factors</i>				
			INT	AT	PU	PEOU	TRS
INT	0.787	0.785	0.860				
AT	0.861	0.708	0.790	0.860			
PU	0.855	0.749	0.855	0.830	0.885		
PEOU	0.743	0.791	0.750	0.711	0.708	0.769	
TRS	0.784	0.845	0.790	0.835	0.813	0.747	0.833

Note: CR = Composite Reliability, AVE = Average Variance Extracted; the bolded elements on the diagonal of the matrix reflect the squared AVE

The reliability of the CFA is relevant for the technology acceptance model for consumers who shop online. This feature of the model can be seen in the fact that all composite reliability (CR) values are greater than the acceptable levels of 0.6 proposed by Bagozzi and Phillips (1991) and 0.7 proposed by the Gefen et al. (2000), as the values range from 0.743 to 0.861.

Convergent validity was assessed using Fornell and Larcker's (1981) suggested criteria of factor loadings higher than 0.7 and average variance extracted (AVE) for each construct higher than 0.5. These conditions were met, proving the convergence validity of the model.

To examine discriminant validity, this study compared the shared variance between constructs with the average variance extracted from the individual constructs. The shared variance between constructs was lower than the average variance extracted from the individual constructs, confirming discriminant validity (Table 4). Also, according to Hair et al. (1995), in order to prove discriminant validity, all the factor correlations should be below the 0.9 threshold to avoid multicollinearity, a condition also met and exhibited in Table 4.

Therefore, all constructs in the model had adequate reliability, convergent validity, and discriminant validity.

5.3. Structural Equation Modeling

Structural equation modeling estimates the unknown coefficients in a set of linear structural equations, as it assumes there is causal structure among a set of latent variables, and that the observed variables are indicators of the latent variables. A structural equation model represents a series of hypotheses about how variables in the analysis are generated and related (Hu & Bentler, 1999).

This paper proposes an adaptation of the TAM that consists of trust, along with the traditional components of TAM. In this sense, structural equation modeling was used to test the hypotheses proposed for the model examined. Firstly, the measurement was assessed in accordance with the cutoff criteria proposed by Hu and Bentler (1999) and developed in Table 5.

Table 5. Model accuracy measurement

Measurement	Measurement model result	Recommended values
χ^2	27.308 (p=0.000. 5df)	$p \leq 0.05$
χ^2/df	4.462	≤ 5
GFI	0.907	≥ 0.90
NFI	0.916	≥ 0.90
RFI	0.901	≥ 0.90
CFI	0.929	≥ 0.90
RMSEA	0.096	≤ 0.10

Note: χ^2 = Chi-square, χ^2/df = ratio of Chi-square and degrees of freedom, GFI = Goodness of fit index, NFI = Normed fit index, RFI = Relative fit index, CFI = Comparative fit index, RMSEA = Root mean square error of approximation.

In short, all the indicators have recorded satisfactory values, suggesting adequate model fit.

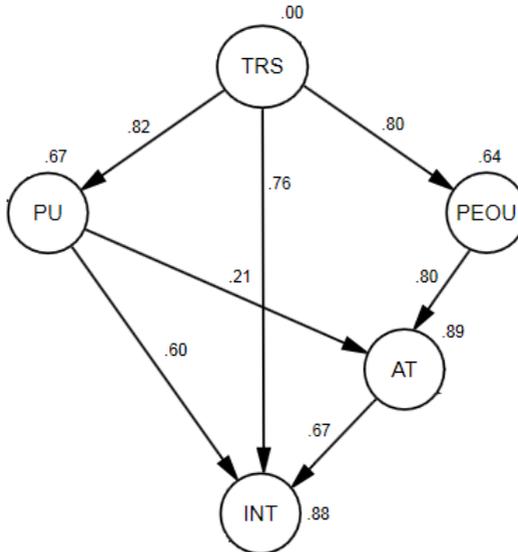
To analyze the adjusted technology acceptance model using the structural equation modeling technique, we analyzed the path coefficients of the hypothetical relationships between the different latent constructs. Table 6 reflects information regarding the unstandardized and standardized coefficients estimates, statistical significance, and standard error of each relationship. Figure 2 presents the information about the model in a visual manner. One hypothesis of the seven associated with this newly proposed extended technology acceptance model is insignificant.

Table6. Summary of the hypotheses testing

Hypotheses	Significance	Unstandardized Regression Weights	Standardized Regression Weights	Standard Error	Hypothesis Result
H1. AT→INT	***	0.667	0.673	0.188	Confirmed
H2. PU→INT	*	0.657	0.604	0.245	Confirmed
H3. PU→AT	0.69	0.225	0.205	0.124	Refuted
H4. PEOU→AT	***	0.864	0.799	0.124	Confirmed
H5. TRS→PU	***	0.901	0.816	0.146	Confirmed
H6. TRS→PEOU	***	0.914	0.799	0.145	Confirmed
H7. TRS→INT	*	0.956	0.762	0.258	Confirmed

*** Significant at a 0.001 level (Two-tailed), ** Significant at a 0.005 level (Two-tailed), * Significant at a 0.010 level (Two-tailed)

Figure2. The standardized results of the research model TAM + Trust



Note: AT = attitude for e-commerce, PU = perceived usefulness, PEOU = perceived ease of use, INT = Intention to use or reuse online shopping services, using online shopping services, TRS = trust

As presented in Figure 2 and Table 6, consumers' behavioral intention to use or reuse online shopping services is positively associated with attitude for e-commerce ($\beta = 0.67$), perceived usefulness ($\beta = 0.60$), and trust ($\beta = 0.76$) as all hypotheses are supported. These findings validate H1, H2, and H7, respectively. Furthermore, the three factors explain for a very large portion of consumer intention's variance ($R^2 = 0.88$).

In accordance with the original TAM, both perceived ease of use and perceived usefulness denote relationships with attitude, causing 89% of the variance in this latent dimension, however perceived ease of use has a higher beta coefficient ($\beta = 0.80$) than perceived usefulness ($\beta = 0.21$). However, this latter relationship was found to have a rather low and insignificant value. Thus, hypothesis 4 is validated, whereas hypothesis 3 is not.

Also, H5 and H6 were supported, since perceived usefulness ($\beta = 0.82$) and perceived ease of use ($\beta = 0.80$) were strongly related to consumers' trust with online shopping. In this model, trust explains much of the variance in both perceived usefulness ($R^2 = 0.67$), and perceived ease of use ($R^2 = 0.64$).

6. Discussion and Conclusion

6.1. Theoretical Contribution

This study adds to the existing and ever-expanding TAM theory, by providing empirical evidence that trust is an essential construct that should be considered in an e-commerce setting. Therefore, a primary contribution of this research is the inclusion of a variable that tries to minimize the uncertainty of the online environment with the traditional constructs of the technology acceptance model into a coherent model that can help predict consumer acceptance of e-commerce.

Marketing research thus far has experimentally and theoretically approached technology acceptance model in various online and offline contexts. However, this model is highly adaptable and can always benefit from adding new dimensions to better understand consumer behavior.

The more trust consumers have in a web retailer, the less they will over-scrutinize every detail of an e-commerce site to assess its eligibility. Once consumers trust a site, they tend to minimize their cognitive effort and focus on the positive aspects of online shopping: perceived usefulness and perceived ease of use. This finding validates how imperative the role of trust in online

shopping services and how it affects other importance factors, i.e. perceived usefulness and perceived ease of use.

Moreover, a trusted site might incite a strong behavioral intention to buy or rebuy, including in this category particularly spontaneous shopping. As trust represents an antecedent of consumer intention to use or reuse online shopping, reducing the uncertainty of this new form of commerce represents a crucial element in consumer acceptance of e-commerce. This idea is consistent with previous work in e-commerce (Pavlou, 2003; Jarvenpaa and Tractinsky, 1999).

6.2. Implications for Managers

This paper has important practical implications for managers, as they can use the finding to influence online consumer purchasing behavior. E-commerce companies should acknowledge that trust is of fundamental importance for adequately capturing consumer behavior in e-commerce.

Therefore, through this parsimonious model companies can predict online consumer behavior and improve their understanding of consumers' acceptance of B2C e-commerce.

This study provides a conceptual depiction for managers to facilitate the right conditions for people to trust a web retailer. Specifically, web retailers should emphasize how reliable their online shopping services and by keeping their promises and commitments.

These aspects are extremely important because in information-intensive environments such as the World Wide Web, attention will be focused less on competitive strategy and more on cooperative strategy (Hoffman and Novak, 1996).

6.3. Research Limitations

This research must also be interpreted in the context of its limitations. Firstly, the data for this study was collected from a limited number of respondents, which should be improved for a broader implementation and validation of the results.

Secondly, limitations of this study include those commonly associated with online questionnaires, including unsystematic sampling procedures and low response rates. While representativeness can always be improved, for the present research great efforts have been made in order to have a higher response rate for the sample.

Thirdly, given the sample, the research did not include in its analysis demographic variables, such as sex, age, social class, and ethnicity. Therefore, this is another area in which the research could be improved and extended, perhaps using these demographic variables as mediation variables.

In conclusion, this study provides various new ways to improve the consumer assessment acceptance of B2C e-commerce and to add another important variable, and thus expand the future research in this direction of observing the drivers of consumer engagement in online shopping.

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**ON THE PREDICTION OF EXCHANGE RATE DOLLAR/EURO
WITH AN SVM MODEL**

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Abstract

Developing new methods for predictive modeling of time series and application of the existing techniques in other areas will be a permanent concern for both researchers and companies that are interested in gaining competitive advantages. In this paper I present the construction of an artificial intelligence model, based on Support Vector Machines that predict the exchange rate DOLLAR/EURO. For simulations I've used Matlab software suite.

Keywords: *Prediction, Exchange Rate, Support Vector Machines, Matlab.*

JEL classification: *C45, C53, C63.*

1. Introduction

Monitoring business processes results in obtaining time series. Analysis of available data in these time series can provide valuable information about the time evolution of the process monitored. A good forecast of future evolutions for economic activities can bring significant improvement to the technological process.

Accurate prediction for the future evolution of financial time series can produce direct gains.

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Under these conditions, the analysis and understanding of economic phenomena are of interest for the researchers and firms wanting highly accurate predictions.

Most companies and organizations from nowadays collect data on a large scale. This huge amount of data can be used to extract knowledge that can represent a real advantage to business managers. Analyzing accurately and timely this large amount of data is a difficult task, in general, not possible with traditional methods. The ability to analyze and use the massive amounts of data remained far behind the possibilities of storing them. This raises new challenges for businessmen and researchers for the purposes of extracting useful information (Wang, Liao & Rees, 2002).

Increasing accuracy for predictions can save significant amount of money for a company and is a major motivation for using the methods of forecasting and systematic investigation for new models and techniques to improve the current results (Zhang, 2003).

If a number of explanatory variables must be identified and predicted, using time series approach has the advantage of easy preparation of data collection and modeling.

In time series prediction, historical data is collected and analyzed to produce models that capture the relationships between observed variables. The model is then used to predict future values of time series. There have been numerous efforts to develop and improve methods for time series prediction.

Linear approach assumes a linear process that characterizes the generation of data. There are a number of linear prediction models such as moving average, exponential smoothing, time series regression and time series decomposition.

One of the most important models is Autoregressive Integrated Moving Average - ARIMA, which was developed by Box and Jenkins (Box & Jenkins, 1976) in the 70s. Often, ARIMA is called Box-Jenkins model.

Although ARIMA models are quite flexible and can be used for a large number of time series the main limitation is given by the assumption of a linear form for the model. This means that an autocorrelated linear structure is supposed to be granted before according the model with data. Therefore, an ARIMA model cannot capture nonlinear behavior that is quite common in economic time series. Approximation with linear models of complex real-world problems is not always satisfactory as was stressed at a publicized M-competition in the early 80 (Makridakis, et al., 1982).

The approach of nonlinear time series modeling is suitable for most real-world problems. The real world is nonlinear and complex rather than linear because there are so many possible nonlinear structures and relationships. Most nonlinear models developed during the last two decades are parametric. In order to use the parametric model, it must be specified before. Therefore, they cannot be used if the data characteristics do not match the model assumptions. Parametric approach is very suitable for nonlinear problems with a complex structure but there is a lack of theories that suggest a specific form for the structure.

Artificial neural networks are algorithms and techniques that can be used for statistical modeling and is an alternative to linear regression models, the most common approach for developing predictive models.

Neural networks have several advantages including less need for formal statistical training, ability to detect, implicitly, complex nonlinear relationships between dependent and independent variables, ability to detect any possible interactions between predictor variables and the existence of a wide variety of training algorithms (Ciobanu, 2012b).

Disadvantages of neural network include the nature of "black box" computing, inclination for memorizing the data (network loses the ability to generalize), and the empirical nature of the model developed.

Another alternative that came from Artificial Intelligence is SVR (Support Vector Regression) that is an adaptation of the SVM (Support Vector Machines) for regression.

Support vector machines are a fairly simple, but very powerful concept, very well behaved in comparative tests with other popular classifiers (Meyer 2002, 2003) and have been successfully applied for problems in many fields.

Some examples of applications in which support vector machines have proven their superiority are: identifying images, medical image classification, face recognition and visually speech recognition.

Besides solving some problems that many learning methods are facing, such as small samples, overtraining, large dimensions and local minimum, support vector machines have shown a power of generalization (in the case of support vector classification - SVC) or prediction (if support vector regression - SVR) better than artificial neural networks (Ciobanu, 2012c).

Unlike neural networks, support vector machines have far fewer parameters to be set which makes it easier to determine a suitable structure for a studied problem.

In this paper, I used Matlab programming environment to create a SVM model capable to predict the following values of the exchange rate dollar/euro series. I used the built model to determine the following predictions of exchange rate and analyzed the evolution of predictions compared with observed data.

2. Support Vector Machines

Machine learning involves designing and developing algorithms that allow computers to simulate the behaviour based on empirical data.

Machine learning uses the learning process and examples to capture the interest features of the unknown probability distribution of data and perform tasks that are difficult or impossible to achieve using classical algorithms.

The problem of machine learning is the need to develop techniques that enable the machine to learn from past experience and to predict the future.

Supervised learning objective is to automatically generate rules from a database of examples already treated to make predictions on new cases. Learning database is a set of input-output pairs (x_n, y_n) with $x_n \in X$ and $y_n \in Y$, which we consider to be prepared in accordance to an unknown law on $X \times Y$.

We have a regression problem when the output values are in a continuous subset of real numbers, $Y \in \mathbb{R}$ and a classification problem when the set has finite cardinal output values $Y = \{y_1, y_2, \dots, y_r\}$.

A Support Vector Machine (SVM) is a learning machine that can be used in classification problems (Cortes & Vapnik, 1995) and regression problems (Smola, 1996).

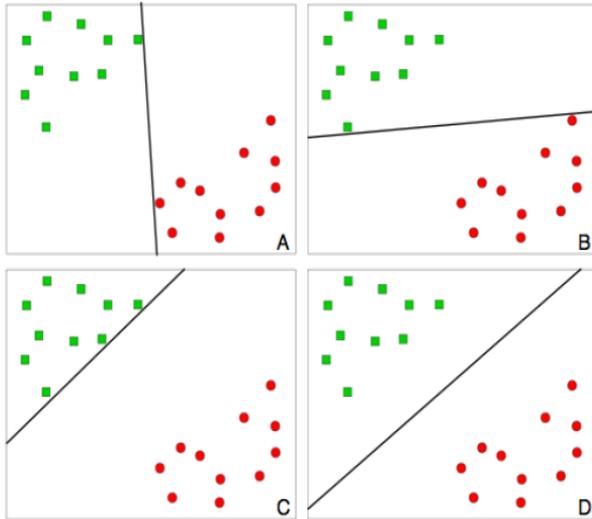
In order to perform classification, SVMs seek an optimal hyperplane that separates data into two classes.

In Figure 1. some possibilities of linear separation of two sets of elements are presented.

Support vector machines are also called classifiers with maximum edge. This means that the resulted hyperplane maximizes the distance between the closest vectors from different classes taking into account the fact that a greater margin provides increased SVM generalization capability.

The elements closest to the optimal separating hyperplane are called support vectors and only they are considered by the SVMs for the classification task. All other vectors are ignored.

Figure 1. Different variants of linear separation of two sets.

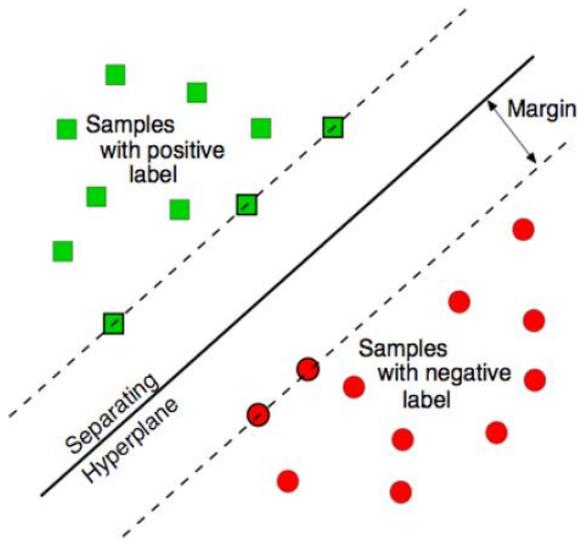


(Guggenberger, 2008)

SVM is one of the most promising algorithms in the machine learning field and there are many examples in which SVMs are successfully used, for example, text classification, face recognition, Optical Character Recognition (OCR), Bioinformatics. SVMs apply very well on these datasets and often exceed the performance of other traditional techniques. Of course, this is not a magic solution as set forth in (Bennett & Campbell, 2000), there are still some open issues, such as incorporation of domain knowledge, a new model selection and interpretation of results produced by SVMs.

Figure 2. illustrates a classifier with maximum margin and support vectors, those located on dotted lines from both sides of the optimal separating hyperplane.

Figure 2 Optimal separating hyperplane. The vectors on dotted lines are support vectors.



SVMs have been used in several real-world problems:

- classification of text (and hypertext);
- image classification;
- in bioinformatics (protein classification, classification of types of cancer);
- classification of music;
- handwritten character recognition.

In (Chen, Jeong & Härdle, 2008), authors propose a method GARCH (Generalised AutoRegressive Conditional Heteroscedasticity) based on recurrent SVR whose performance exceeds other approaches such as moving average (MA), recurrent Neural Networks (NN) and parameterized GARCH in terms of their ability to Forecast financial market volatility.

3. Support Vector Regression

Support Vector Machines have been developed to solve the problem of classification. A problem of regression differs from classification in the sense that observations are associated with numeric values and not a label from a discrete set.

Given this difference we can easily adapt the application of support vector machines to regression problems where we are dealing with numerical observations.

Thus, the regression problem can be formulated as follows:
with data

- A universe of data X ,
- A sample set S , $S \subset X$,
- A target function $f: X \rightarrow \mathbb{R}$,
- A training set D , where $D = \{(x, y) | x \in S \text{ si } y = f(x)\}$.

We need to determine a model $\hat{f} : X \rightarrow \mathbb{R}$ using D so that $\hat{f}(x) \cong f(x)$ for any $x \in X$.

The basic idea of machine learning is retained, namely the determination of a model (function) that fits best with the target function for all data elements in the universe.

As in the case of classification X is a multidimensional real data set that is $X \subset \mathbb{R}^n$ with $n \geq 1$.

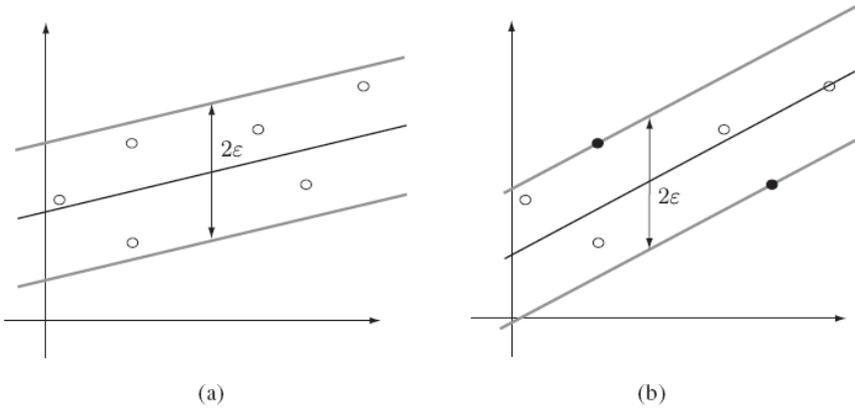
To develop support vector machine in regression context the maximization of the margin is used. The idea used is the same as for classification maximizing the margin.

It gives a hyperplane and maximizes distances from observations to it. For a regression problem where the observations of training set

$$D = \{(\bar{x}_1, y_1), (\bar{x}_2, y_2), \dots, (\bar{x}_l, y_l)\} \subset \mathbb{R}^n \times \mathbb{R}, \quad (1)$$

are contained in a hypertube with width 2ε and $\varepsilon > 0$ (Figure 3.), this can be interpreted as a regression model considering that there is a hyperplane positioned in the center of the hypertube that approximate observations. Usually there are several ways of positioning the hypertube with width 2ε to contain all the training observations. There is one optimal positioning of hypertube so as more observations are pushed closer to the outside of hypertube. Optimal Hypertube alignment is obtained when the distances from the observations to the central hyperplane are maximized. This is illustrated in Figure 3., Where filled circles represent observations that act as constraints in optimization problem.

Figure 3. Linear regression modeling using hypertubes with width 2ε (a) a hypertube containing all observations, (b) optimal regression model with maximum margin.



(Hamel, 2009)

This is very similar to the problem of maximizing the margin of decision area, and we can use the same optimization problem to determine the optimal alignment by adjusting the hyperplane with corresponding constraints.

The primal problem is considered first,

$$\min_{\bar{w}, b} \Phi(\bar{w}, b) = \min_{\bar{w}, b} \frac{1}{2} \bar{w} \cdot \bar{w}, \quad (2)$$

so that constraints

$$\begin{aligned} y_i - \hat{f}(\bar{x}_i) &\leq \varepsilon, \\ \hat{f}(\bar{x}_i) - y_i &\leq \varepsilon, \end{aligned} \quad (3)$$

Are satisfied for $i = 1, \dots, l$ and $\hat{f}(\bar{x}) = \bar{w} \cdot \bar{x} + b$.

The two inequalities (3) can be written as

$$\left| y_i - \hat{f}(\bar{x}_i) \right| \leq \varepsilon. \quad (4)$$

Geometric interpretation of optimization is that of making rotation (updating weights) and shift or displacement (bias update) until the distance from the observations to the central hyperplane is maximized with constraint to maintain the observations inside of hypertube.

4. Creating the SVR model for predicting the dollar/euro exchange rate

The time series used was the euro-dollar exchange rate and was downloaded from the website of European Central Bank at http://sdw.ecb.europa.eu/browseSelection.do?DATASET=0&sf1=4&FREQ=D&sf3=4&CURRENCY=USD&node=2018794&SERIES_KEY=120.EXR.D_USD.EUR.SP00.A.

After the removal of lines, unhelpful to our analysis, the Microsoft Excel file with values of exchange rate between euro and dollar looks like Figure 4.

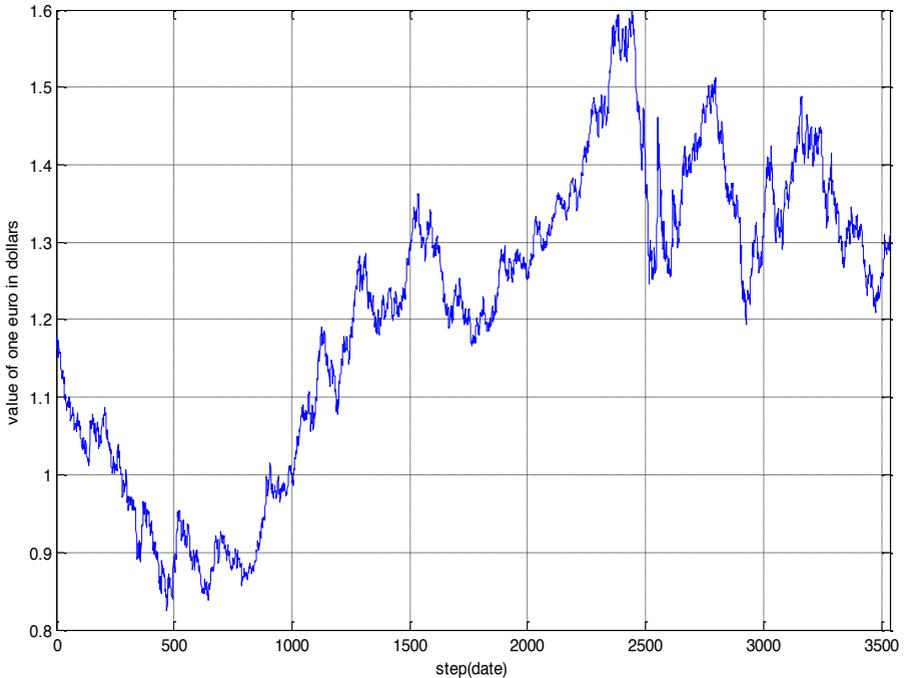
The program used to perform simulations was Matlab version 7.12.0 (R2011a).

Figure 4. A part of the file with the exchange rates between euro and dollar.

	A	B	C	D	E	F	G	H	I
1	Data	dol/eur	Nr_Crt						
2	1999-01-04	1,1789	1						
3	1999-01-05	1,179	2						
4	1999-01-06	1,1743	3						
5	1999-01-07	1,1632	4						
6	1999-01-08	1,1659	5						
7	1999-01-11	1,1569	6						
8	1999-01-12	1,152	7						
9	1999-01-13	1,1744	8						
10	1999-01-14	1,1653	9						
11	1999-01-15	1,1626	10						
12	1999-01-18	1,1612	11						
13	1999-01-19	1,1616	12						
14	1999-01-20	1,1575	13						
15	1999-01-21	1,1572	14						
16	1999-01-22	1,1567	15						
17	1999-01-25	1,1584	16						
18	1999-01-26	1,1582	17						
19	1999-01-27	1,1529	18						
20	1999-01-28	1,141	19						

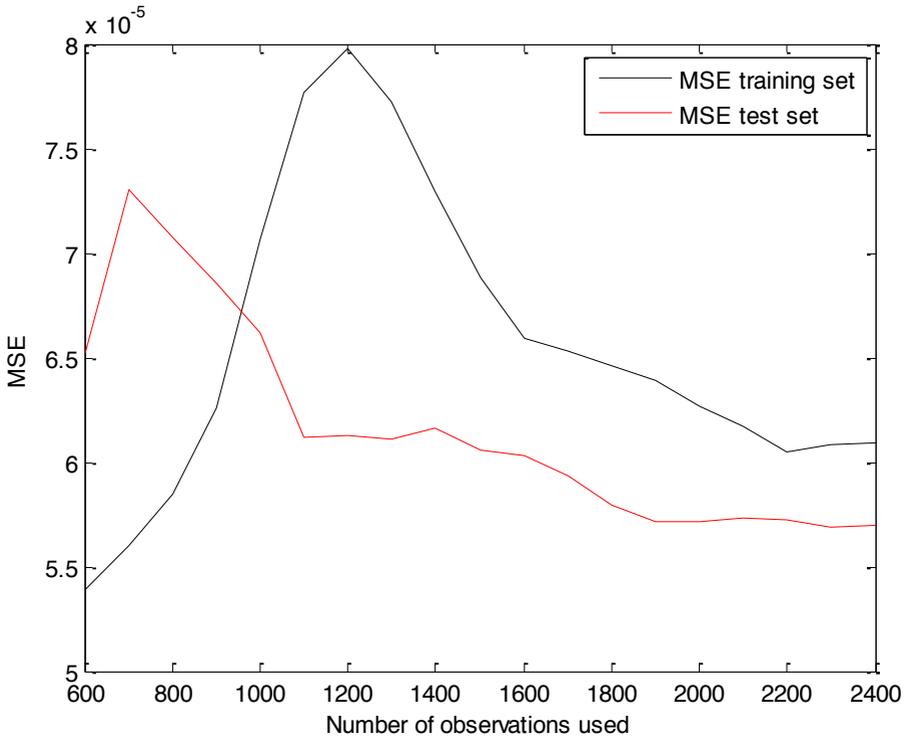
I imported into Matlab data from column 2 of the excel file. The data set consists of 3536 observations between 1999-01-04 and 2012-10-17 with a mean of 1,2093545 and a standard deviation of 0,190516.

Figure 5. The evolution of exchange rate dollar/euro, 3536 observations.



In Figure 5. is shown the evolution of exchange rate between euro and dollar for 3536 observations. From this, I kept 100 observations for verification, 100 for test and use the other for training.

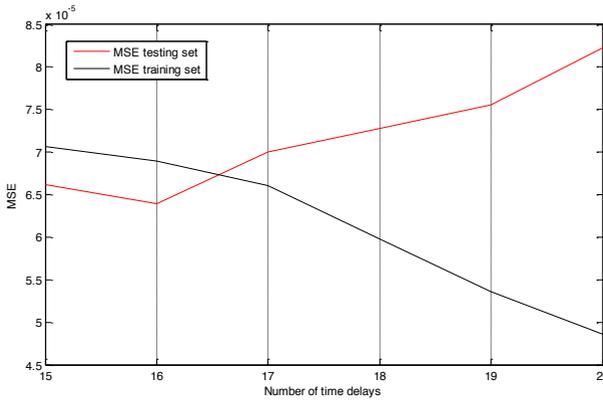
Figure 6. The evolution of MSE for training set and testing set when varying the number of observation used.



I measured the model performance using MSE (Mean Squared Error).

I want that the two MSEs to have approximately the same value so, I will use 1000 observations because the intersection of this graphs is close to this value (Figure 6).

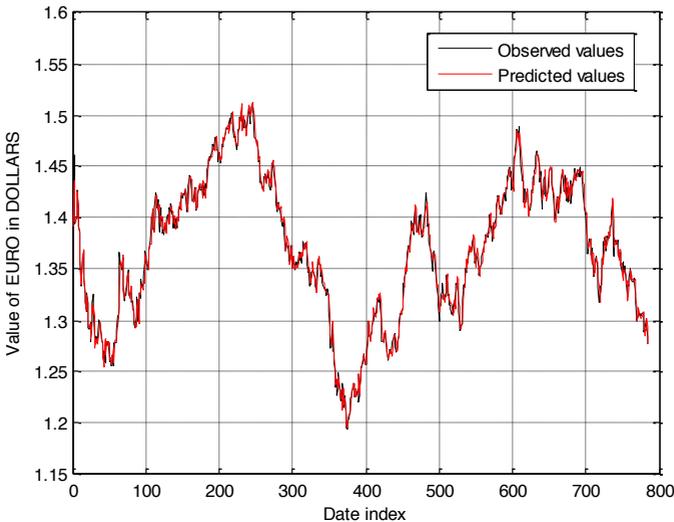
Figure 7. The evolution of MSE for training set and testing set when varying the number of time delays.



Using the same idea I set the number of time delays to 16 (Figure 7).

With these two values for number of observations and time delays I trained a SVM

Figure 8. The observed values and predictions for training set.



For the training data considered in my example I obtained $MSE = 6.8933 \cdot 10^{-5}$. MSE for the testing set was $6.3922 \cdot 10^{-5}$.

Figure 9. *The observed and the predicted values for testing set. Using as inputs 16 measured values the model returns us the next prediction. The case of one step ahead prediction.*

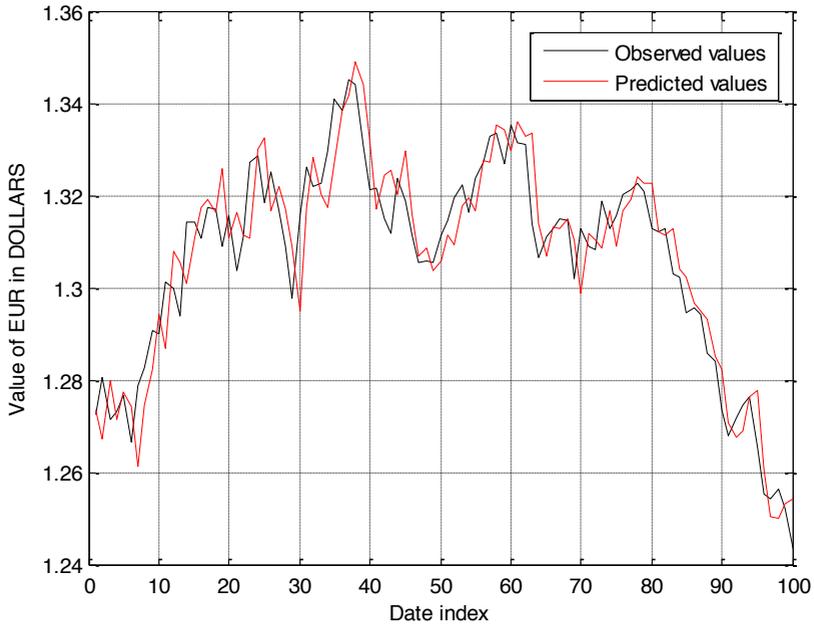
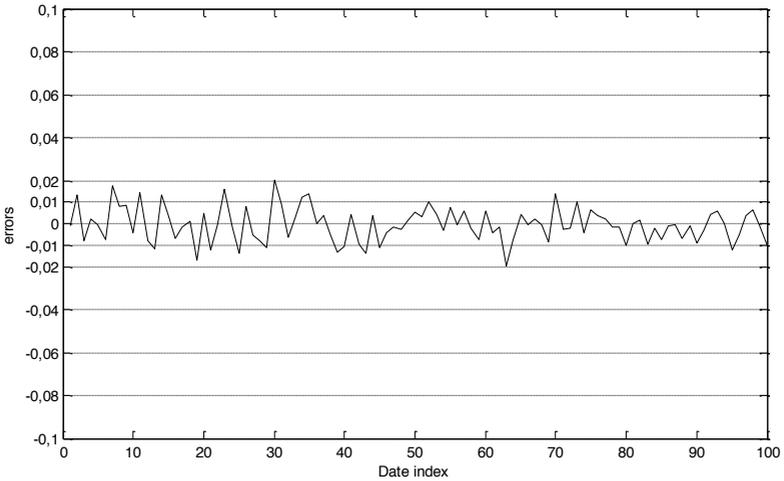


Figure 10. The errors for the testing set. The case of one step ahead prediction.



I used the model to predict the next 100 values (set of verification). First I used the observed values as inputs, introducing 16 measured values and the model provided our next prediction for the exchange rate.

Figure 11. The observed and the predicted values for the set of verification. Using as inputs 16 measured values the model returns us the next prediction. The case of one step ahead prediction.

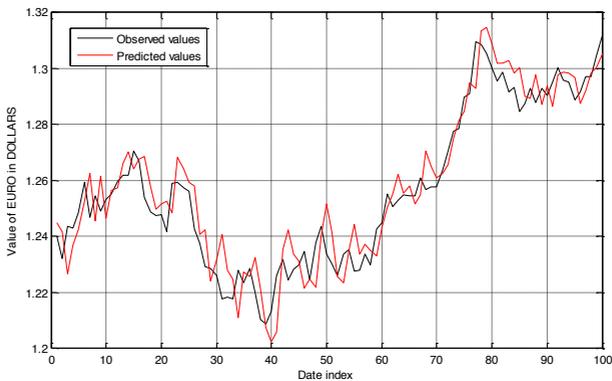
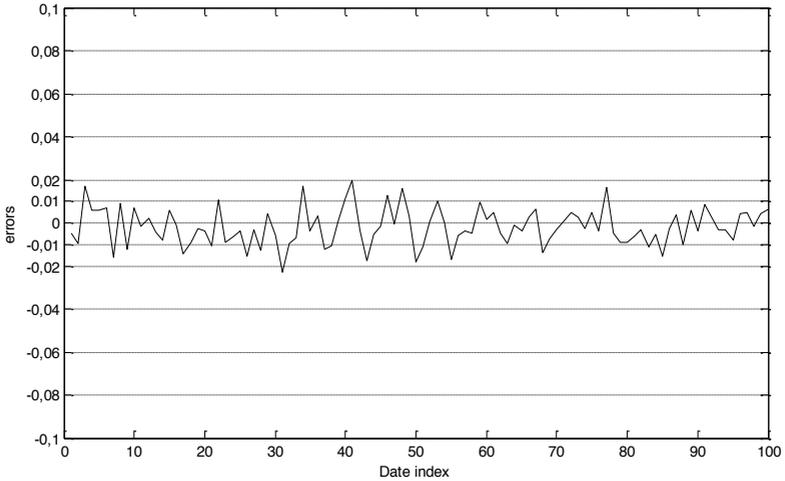


Figure 12. The errors for the set of verification. The case of one step ahead prediction.



Then, I used the model to predict the next 100 values but using as input the predictions obtained, the result can be seen in Figure 13 and Figure 14.

Figure 13. The observed and the predicted values for the set of verification. The case of 100 step ahead prediction

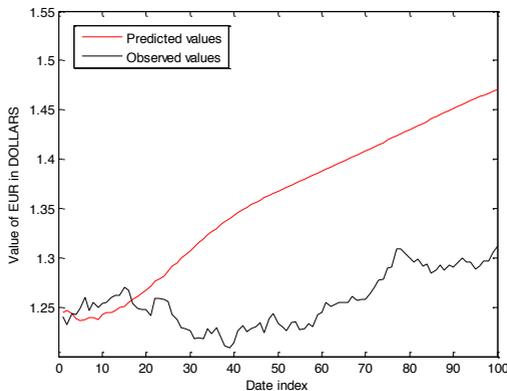
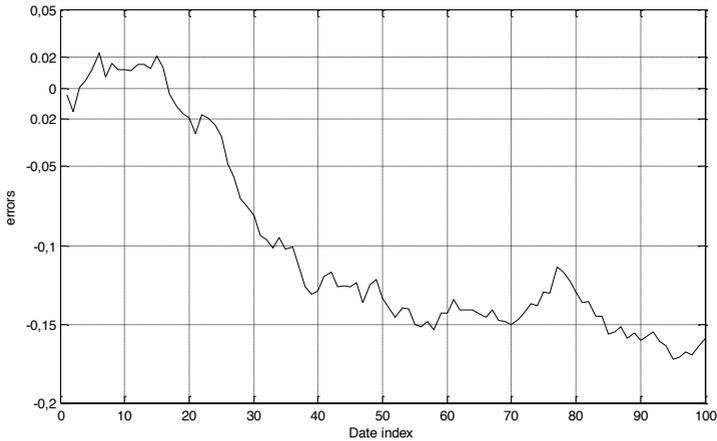


Figure 14. The errors for the set of verification. The case of 100 step ahead prediction.



5. Conclusions

Using SVM for prediction is a good alternative for both traditional methods as well as those methods arising from computational intelligence like Neural Networks (NN). To adjust the model with data we must determine just a few parameters and this represents a major advantage of SVM over NN.

In the case of prediction for many steps ahead I have performed many tests and each time the series of predictions showed large deviations from the observed values after a relatively small number of steps. I concluded that all models obtained using SVM to predict exchange rate shows a chaotic behaviour. The fact that in this case the predictions for a longer period did not work is not a minus for SVM models but underlines the chaotic nature of time series euro-dollar.

Thus, considering the chaotic nature of exchange rate time series, prediction with an acceptable error can be done only for a few steps forward.

In the case of exchange rate euro-leu one of the authors has identified many signs of chaotic behaviour like positive Lyapunov exponents and noninteger correlation dimension (Ciobanu, 2012a).

It remains as a future direction to underlie the chaotic behavior of exchange rate euro-dollar.

Another direction for future works is to identify exogenous variables that influence the exchange rate euro-dollar and use them to improve predictions.

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**2013 ECONOMY MOMENTUM
CHALLENGES FOR NEXT 10 YEARS**

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Abstract

Last 5 years of almost unprecedented financial market turmoil it's still generating comprehensive crisis theories, market paradigms and nevertheless unprecedented situations. The aim of this paper is to explain 2013 milestone momentum for new market rules and regulations implementation – Basel III. The expected immediate cushion factors as well the possible negative impact on financial markets is presented from financial institutions perspective. Finally, the paper seeks for an exploratory after 10 years scenario connected with imminent market evolution and tendencies.

Keywords: *Basel III, systemic risk, sovereign debt crisis, risk capital*

1. Introduction: Is the crisis over?

First target: US economy – the primary source of last global economical disruption. If we take a look at below chart (DJIA) - based on 30 largest publicly owned companies based in the United States (fortunately excepting Apple Inc.) the first answer seem to be **YES**:

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Table 1: DJIA Last 60 years evolution



(source: Bloomberg)

Compared with the historical 2007 maximum, now day's index is already running above. But just let's take a look at several economical factors compared also with October 2007 level:

- Regular Gas Price: Then \$2.75; Now \$3.73
- GDP Growth: Then +2.5%; Now +1.6%
- Americans Unemployed (in Labor Force): Then 6.7 million; Now 13.2 million
- Size of Fed's Balance Sheet: Then \$0.89 trillion; Now \$3.01 trillion
- US Debt as a Percentage of GDP: Then ~38%; Now 74.2%
- US Deficit (LTM): Then \$97 billion; Now \$975.6 billion
- Total US Debt Outstanding: Then \$9.008 trillion; Now \$16.43 trillion
- US Household Debt: Then \$13.5 trillion; Now 12.87 trillion
- Labor Force Participation Rate: Then 65.8%; Now 63.6%
- Consumer Confidence: Then 99.5; Now 69.6

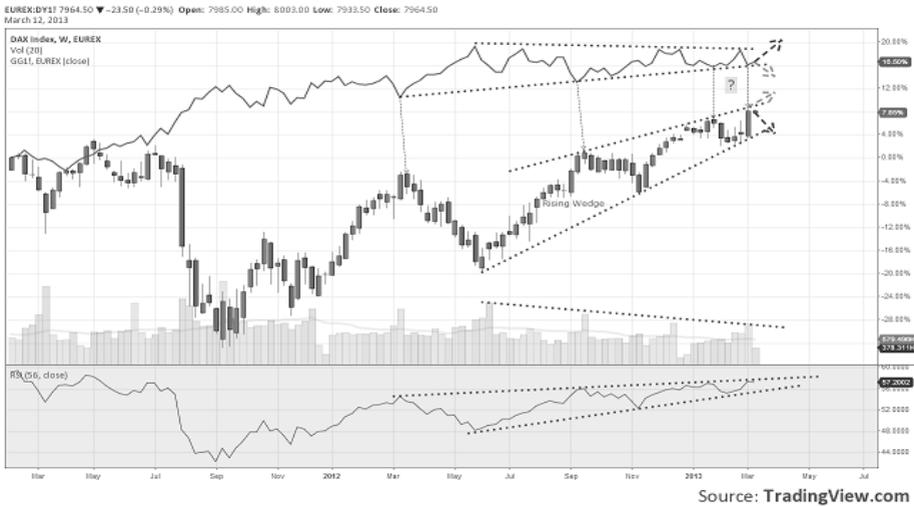
- S&P Rating of the US: Then AAA; Now AA+
- 10 Year Treasury Yield: Then 4.64%; Now 1.89%
- EURUSD: Then 1.4145; Now 1.3050
- Gold: Then \$748; Now \$1583
- NYSE Average LTM Volume (per day): Then 1.3 billion shares; Now 545 million shares

(Source: Zerohedge 3/5/13 for the above synopsis)

The comprehensive picture including above motioned factors is not positive at all and the immediate conclusion is that a long way is still to be done until 2007 economical balance is near.

Second look: EU economy – less affected by financial crisis in 2008-2009 but aggressive influenced by states sovereign crisis in those days.

Table 2: DAX last 2 years evolution



(source: Frankfurt Stock Exchange)

Its main performance analyzer - The DAX (Deutscher Aktien Index), measures the performance of the 30 largest German companies in terms of

order book volume and market capitalization. It is considered the equivalent of the FT 30 and the DJIA.

The above chart showing the index at same momentum like DJIA, illustrate as well a healthy positive trend with a stable and predictable evolution. Strongly supported by auto industry and chemistry/pharmacy it gives us a peaceful image in spite of deep recession still covering Europe.

But, the recent example of Cyprus financial sector corrections combined with a negative rally on all European stock market it the best example of a still expected rock bottom situation.

Up to date situation on Cyprus biggest banking names is just put on screen the radically decisions and their immediate consequences:

Laiki Bank will be split into two sections. The first section will be regarded as the “Good Bank” and will consists of all deposits up to the amount of €100.000 per person (natural or legal) as well as all performing loans. This first section will be absorbed by Bank of Cyprus. The second section, will consists of all deposits above €100.000 as well as all non-performing loans and other business assets. This second section will be restructured and will enter in a process of liquidation. Actions will be taken for the collection of the non-performing loans, liquidation of any collateral on those loans as well as the liquidation of any other business assets that the bank owns. The funds that will be gathered will be used to compensate first of all the depositors and then, if there will be any surplus, the debenture holders and shareholders. The procedure will take some years to be completed and hopefully the end loss of the depositors will be at reasonable levels.

Bank of Cyprus will absorb the “Good Bank” section of Laiki Bank. The agreement with the EU and IMF is that the bank’s Core Tier 1 capital will need to increase from 5% to 9% in order for the bank to be properly capitalized. This will be achieved with a contribution from its depositors. All deposits/balances up to €100.000 are secured and there will no contribution from them. Deposits of more than €100.000 will be subject to a compulsory conversion of a percentage of their deposits into newly issued shares of Bank Of Cyprus. So in exchange for the reduction in the bank balance of each account of above €100.000 the depositors will receive shares. Therefore, from now on the depositors will own the bank. Shares will be publicly traded in the Cyprus Stock Exchange. The percentage of this compulsory investment is not

known yet as this will be determined by the final amount required after the restructuring in order to achieve the requirement of 9% Core Tier 1 Capital.

Not just relying on above reality facts, if we can't agree that the crisis is defined yet as closed and probably we will see new forms of reactions, maybe this moment is the best time to take a look back and try to forecast a new economy. The revelation momentum based on crisis knowledge is to have as primary pillar, the recession "good things":

- "Efficiency era" - now there is no company in the word that doesn't speak about losses management, resources re-allocation, consumption responsibility etc

- "Market sanitary" – hard to be accepted from the perspective of employees that loose their jobs, this process created a perfect competition field from the perspective of market adjusted standards

- "Fly to quality" – an old concept that re-enter "en vogue" at every market disruption

- "New financial standards" – Basel III regulation designed to avoid and prevent the last 10 years financial market anomalies.

In respect with all economics new road maps and rules, Basel III seems to be the "sine qua non" condition for next 7 years in Financial Industry. According to already scheduled time frame for new financial markets policy implementation, "the future begin now" – the next chart provided by Bank for International Settlements show the tight and exactly defined capital and liquidity mandatory requirements:

Nevertheless Basel III is categorically best direct response to the global financial crisis that began in 2007 and culminated in the most severe threat to the worldwide banking system since the Great Depression. But the roots of Basel III can be traced indirectly to the forces that produced Basel I and Basel II, as well as the shortcomings of both of those frameworks in addressing the capital requirements of globally active banks.

In November 2010, after two years of severe financial market turbulences, the member states of the Group of Twenty (G20) officially approved Basel III, which represents a clear exit from the philosophy and substance of Basel I and II. It's not surprising that Basel III seeks for considerable increase in quality and quantity of capital that banks must hold. Beside these mandatory guidelines is the Basel comprehensive reassessment of risk coverage assumptions and administration procedures. But, probably the

most innovative (and controversial from many point of views) component of Basel III, is the creation of a set of system-wide macro prudential measures. While the reforms and rules introduced in Basel I and II were almost exclusively made at a micro prudential or bank-specific level, Basel III introduces, for the very first time a set of tools and standards at the macro prudential level—such as a countercyclical buffer and a universal leverage ratio—to address systemic risk within the global financial system. In addition, the systemic risk players (Banks) were clear defined by measurable standards and unambiguous characteristics. The on going schedule of Basel III is illustrated in next chart:

Table 3: Basel III phases as per Basel Committee schedule

Basel Committee on Banking Supervision
BANK FOR INTERNATIONAL SETTLEMENTS



Basel III phase-in arrangements
(All dates are as of 1 January)

Phases	2013	2014	2015	2016	2017	2018	2019
Leverage Ratio		Parallel run 1 Jan 2013 – 1 Jan 2017 Disclosure starts 1 Jan 2015				Migration to Pillar 1	
Minimum Common Equity Capital Ratio	3.5%	4.0%	4.5%		4.5%		
Capital Conservation Buffer				0.625%	1.25%	1.875%	2.5%
Minimum common equity plus capital conservation buffer	3.5%	4.0%	4.5%	5.125%	5.75%	6.375%	7.0%
Phase-in of deductions from CET1*		20%	40%	60%	80%	100%	100%
Minimum Tier 1 Capital	4.5%	5.5%	6.0%		6.0%		
Minimum Total Capital		8.0%			8.0%		
Minimum Total Capital plus conservation buffer		8.0%		8.625%	9.25%	9.875%	10.5%
Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital		Phased out over 10 year horizon beginning 2013					
Liquidity							
Liquidity coverage ratio – minimum requirement			60%	70%	80%	90%	100%
Net stable funding ratio						Introduce minimum standard	

* Including amounts exceeding the limit for deferred tax assets (DTAs), mortgage servicing rights (MSRs) and financials.
 – transition periods

(source: Basel Committee on Banking Supervision, Bank for International Settlements)

So now there is Basel III on the table of each executive from financial sector, designed in light of the past lessons, regulators and players have learned from the financial crisis and, it is hoped, ready to serve as a resource to correct the collapse of its short-lived predecessor (Basel II). As per a.m. chart the main changes, to be phased in, from 2013-19, are as follows:

- A change in the definition of the assets that can be counted as regulatory capital (capital must now be in the form of common share capital or retained earnings)
- Increased capital requirements that cover a wider range of risk types, such as the risks associated with securitization and counter-party credit risk.
- A new leverage ratio (from P&L perspective) that restricts the amount of money banks can borrow.
- New rules on bank liquidity. These will require banks to hold more cash on a day-to-day basis as well as over the longer term.
- New rules on risk management and governance.
- Enhanced disclosure requirements relating to the securitization of assets and the sponsorship of off-balance-sheet vehicles
- Pressures to further increase the stock of capital they hold while at the same time reducing their reliance on debt finance.

Table 4: Basel Committee master plan

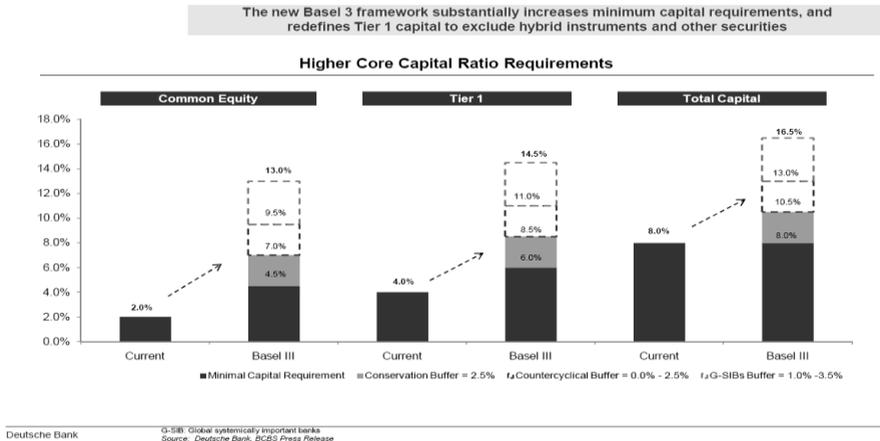
Basel Committee on Banking Supervision reforms - Basel III

Strengthens microprudential regulation and supervision, and adds a macroprudential overlay that includes capital buffers.

	Capital				Liquidity	
	Pillar 1		Pillar 2	Pillar 3		
Capital	Risk coverage	Containing leverage	Risk management and supervision	Market discipline		
All Banks	<p>Quality and level of capital Greater focus on common equity. The minimum will be raised to 43% of risk-weighted assets, after deductions.</p> <p>Capital loss absorption at the point of non-visibility Contractual terms of capital instruments will include a clause that allows – at the discretion of the relevant authority – write-off or conversion to common shares if the bank is judged to be non-viable. This principle increases the contribution of the private sector to resolving future banking crises and thereby reduces moral hazard.</p> <p>Capital conservation buffer Comparing common equity of 2.5% of risk-weighted assets; bringing the total common equity standard to 7%. Constraint on a bank's discretionary distributions will be imposed when banks fall into the buffer range.</p> <p>Countercyclical buffer Imposed within a range of 0-2.5% comprising common equity, when authorities judge credit growth is resulting in an unacceptable build up of systemic risk.</p>	<p>Securitisations Strengthens the capital treatment for certain complex securitisations. Requires banks to conduct more rigorous credit analyses of externally rated securitisation exposures.</p> <p>Trading book Significantly higher capital for trading and derivatives activities, as well as complex securitisations held in the trading book. Introduction of a stressed value-at-risk framework to help mitigate procyclicality. A capital charge for incremental risk that estimates the default and migration risks of unsecured credit products and takes liquidity into account.</p> <p>Counterparty credit risk Substantial strengthening of the counterparty credit risk framework. Includes more stringent requirements for measuring exposure; capital incentives for banks to use central counterparties for derivatives; and higher capital for inter-financial sector exposures.</p> <p>Bank exposures to central counterparties (CCPs) The Committee has proposed that trade exposures to a qualifying CCP receive a 2% risk weight and default fund exposure to a qualifying CCP will be capitalised according to a risk-based method that consistently and simply estimates risk arising from such default fund.</p>	<p>Leverage ratio A non-risk-based leverage ratio that includes off-balance sheet exposures will serve as a backstop to the risk-based capital requirement. Also helps contain system wide build up of leverage.</p>	<p>Supplemental Pillar 2 requirements. Address firm-wide governance and risk management; capturing the risk of off-balance sheet exposures and securitisation activities; managing risk concentrations; providing incentives for banks to better manage risk and returns over the long term; sound compensation practices; stress testing; accounting standards for financial instruments; corporate governance; and supervisory colleges.</p>	<p>Revised Pillar 3 disclosures requirements The requirements introduced relate to securitisation exposures and sponsorship of off-balance sheet vehicles. Enhanced disclosures on the detail of the components of regulatory capital and their reconciliation to the reported accounts will be required, including a comprehensive explanation of how a bank calculates its regulatory capital ratios.</p>	<p>Global liquidity standard and supervisory monitoring</p> <p>Liquidity coverage ratio The liquidity coverage ratio (LCR) will require banks to have sufficient high-quality liquid assets to withstand a 30-day stressed funding scenario that is specified by supervisors.</p> <p>Net stable funding ratio The net stable funding ratio (NSFR) is a longer-term structural ratio designed to address liquidity mismatches. It covers the entire balance sheet and provides incentives for banks to use stable sources of funding.</p> <p>Principles for Sound Liquidity Risk Management and Supervision The Committee's 2008 guidance <i>Principles for Sound Liquidity Risk Management</i> and Supervision takes account of lessons learned during the crisis and is based on a fundamental review of sound practices for managing liquidity risk in banking organizations.</p> <p>Supervisory monitoring The liquidity framework includes a common set of monitoring metrics to assist supervisors in identifying and analysing liquidity risk trends at both the bank and system-wide level.</p>
SIFIs	<p>In addition to meeting the Basel III requirements, global systemically important financial institutions (SIFIs) must have higher loss absorbency capacity to reflect the greater risks that they pose to the financial system. The Committee has developed a methodology that includes both quantitative indicators and qualitative elements to identify global systemically important banks (GSIBs). The additional loss absorbency requirements are to be met with a progressive Common Equity Tier 1 (CET1) capital requirement ranging from 1% to 2.5%, depending on a bank's systemic importance. For banks fitting the highest SIB surcharge, an additional loss absorbency of 1% could be applied as a disincentive to increase materially their global systemic importance in the future. A consultative document was published in cooperation with the Financial Stability Board, which is coordinating the overall set of measures to reduce the moral hazard posed by global SIFIs.</p>					

(source: Basel Committee on Banking Supervision, Bank for International Settlements)

Table 5: Basel III capital requirements



(source: Deutsche Bank study - The Road to Basel 3)

Designed between 2008 and 2010 for further unforeseen events, those changes didn't succeed to bring a positive impact on European sovereign debt crisis due to short time of early implementation. Even so, assuming that a systemic bank could have reasonable time prior any market adverse movement, how can it raise the capital required by Basel III?

The common sense based solution is simply to reduce their liabilities (fact easily observed at all major financial players). Essentially, this means lending less and investing less money in the financial markets. But this is unlikely to represent a good option for economic growth or domestic wealth and also does little for the banks themselves, which have to take a degree of risk to make a profit and satisfy their shareholders. At first sight, the increase in tight rules and regulations (as a consequence of a poor constrain before) create a paradigm base for a new possible / probable financial crisis – when, who, or what, might be considered the real cause – the “new” banks, their regulators or perhaps even a combination of both? As already seen with Basel II, however, the accidental consequences of regulation can sometimes be worse than the problems it is designed to solve.

Consistent with mentioned assumptions, the real economy (GDP) is already impacted through 3 main channels:

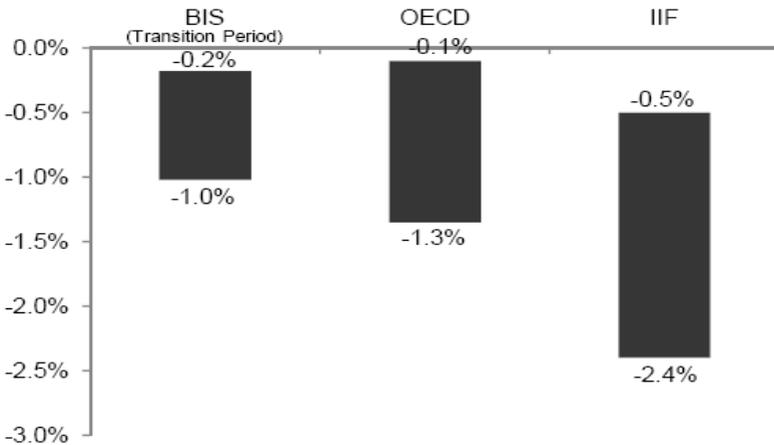
- Reduced lending volumes

- Increased interest costs
- Enhanced financial system stability

A estimation of this impact in GDP after Basel III implementation stages according to important financial organisms:

Table 6: GDP evolution on Basel III

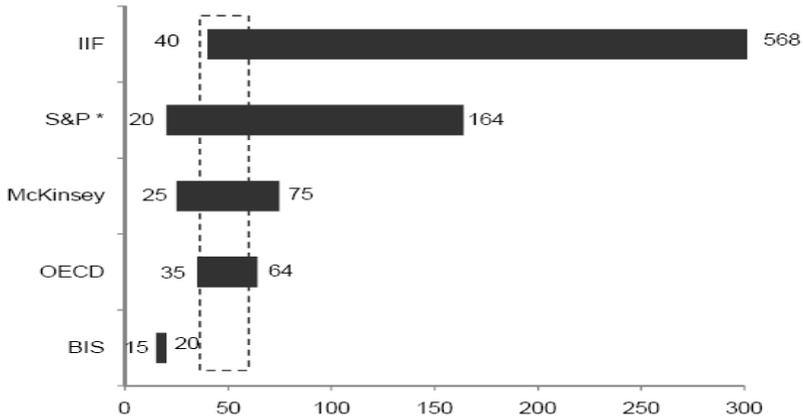
Estimated Negative Impact on GDP Growth



(source: Deutsche Bank study - The Road to Basel 3)

The negative estimation on financial costs increase is also expected:

**Table 7: Expected margins (interest) raise on Basel II rules implementation
Spectrum of Estimated Lending Spread Increases (bps)**



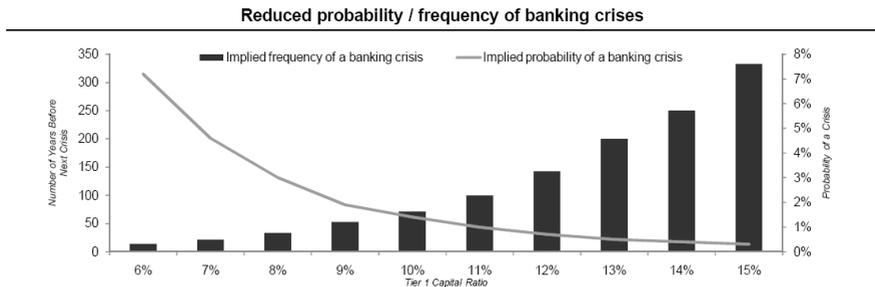
(source: Deutsche Bank study - The Road to Basel 3)

On same pattern, Fitch Ratings estimates the 29 global systemically important financial institutions (G-SIFI), which have a combined USD 47 trillion in assets, may need to raise USD 566 billion in common equity to meet new capital standards. This is a 23 percent increase against their aggregate common equity of USD 2.5 trillion.

In this respect, the probability and frequency of a banking crisis decreases proportionately to increases in regulatory Tier 1 capital ratios:

- Higher capital buffers improve banking sector resilience to economic instability
- Banks better “equipped” to withstand market crashes

Table 8: Expected positive trend on crises prevention after Basel implementation



(source: Deutsche Bank study - The Road to Basel 3)

Finally assuming that Basel III will provide the necessary balance in financial and global markets gradually until 2020, the following question is on the lips of many analysts and economical daily observers: “What’s next”?

- a economy exclusively based on same patterns like net profit, ROE, RORC ?
- a two digits grow chased every year?
- staff reduction beyond any imagination (99% automatic processes)

or

- sustainable development in respect with nature limitations (raw materials and water resources)
- an expected healthy profit connected with future generations growing needs
- synergetic alliances between old competitors
- holistic communications of corporations “real“ values and missions
- social responsibility based development
- transparency and traceability of supply chain
- CO2 footprint in economy analysis versus “green energy trend” (ex: Wind farms)
- Offshore solutions limitation (regions with single development options)

Perhaps a positive answer to mentioned challenges is driving us to so call “ethics economy” and more or less “ideal economy”. How far or how close we are at this essential economical momentum from this point, is

difficult to estimate in an economical evaluation still insufficient detached to “ceteris paribus” axiom.

Consistent with this long term shut, at this moment probably the best we can do, is to only speculate about next 24 months major economy picture adjustments: Mr. Obama, **Trans-Atlantic Free Trade zone with EU? Offshore area boomerang effect** after International Consortium of Investigative Journalists reveals tens of thousands of people in more than 170 countries and territories linked to offshore companies and trusts for profit dissimulation purposes? **BRICS Challenges Unipolar World and US Dollar Hegemony?** (BRICS hit some major western sore spots by announcing the formation of a \$50 billion jointly-funded development bank to rival the IMF and World Bank, at annual Summit in Durban, South Africa in late March)

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**FACTS IN DECENTRALIZATION OF
PUBLIC EXPENDITURES IN EUROPEAN UNION**

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Abstract

Our research is focused on the very important field of public expenditures. The main goal is to emphasize the level of decentralization on public expenditures for all 27 European Union Countries. This decentralization is an important trend in public policy and depends on several factors such: specific of the expenditures, level and structure, specific social objectives, level of GDP, system of intergovernmental relations, subsectors of public administration sector, and so on.

Keywords: *Public expenditures, decentralization, Budgetary Policy*

JEL classification: *E60, H5, H72, H75, H756, O52*

1. Introduction

The budget expenditures are included in the government sector. This sector includes all institutional units other than market producers whose output is intended for the individual or the collective consumption and mainly financed by compulsory payments made by units belonging to other sectors and / or all units mainly engaged institutions in the national income and wealth redistribution.

The Public administration sector is divided in four sub-sectors (ESA standards):

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- Central administration (S1311)
 - Regional administration (S1312)
 - Local administration (S1313)
 - Social assistance funds (S1314)
- 1) The **central administration** (S1311) includes all the administrative departments of the State and other central agencies whose membership extends normally over the whole economic territory, excluding local social insurance funds. In this sub-sector are also included the non-profit institutions controlled and mainly financed by the central government and whose competence extends over the whole economic territory.
 - 2) **The regional administration** (S1312) consists of administrations that are separate institutional units, exercising some of the functions of the government at a level lower than the central and higher compared to the local institutional units other than social security fund management. This sub-sector includes those non-profit institutions controlled and mainly financed by the regional governments and whose competence is limited to the economic territory of the regions
 - 3) **The local administration** (S1313) includes those types of public administrations whose competence extends only at the local level, in addition to the local agencies of the social security funds. Here are also included those non-profit institutions controlled and mainly financed by the local governments and whose competence is limited within the local government sphere of action.
 - 4) **The social assistance funds** (S1314) include all the central institutions, regional, and local, whose main purpose is to provide social benefits and which fulfill each, the following two criteria:

The analysis of the data on expenditure classification was made taking into account the costs of the governmental functions (COFOG) as follows:

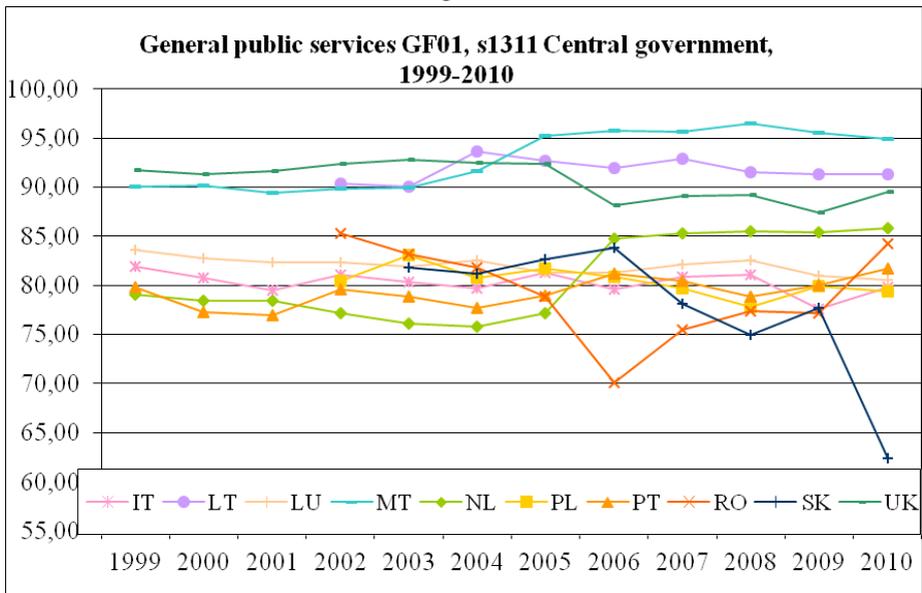
- General public services;
- Defense;
- Order and public safety;
- Economic affairs;
- Environment protection;
- Housing and community amenities;
- Health;
- Recreation, culture and religion;

- Education;
- Social protection;

2. Sections

The decentralization of the public services expenditures. The states that have a high level of centralization concerning this type of expenses, are: Ireland (96.55%), Malta (96.49%) and Cyprus (94.22%). It is also worth noting that the decentralization of the spending on public services in Romania has an average of 20.19% over the period we analyzed. In our country, from the expenditure on general public services, the judicial authorities have an important share (over 32%); this is justified in particular by the government's decisions to encourage the wage increases for persons that work in the court of justice, in order to mitigate the corruption in the sector.

Figure 1.



A very interesting aspect that is worth pointing out, is the fact that these expenses have important shares in the Social fund (See 3.3 the origins of the budgetary expenditure) in only a few countries namely: Spain (where there is a maximum of 16.39% in 1999 and a minimum of 2.60% in 2003), Portugal (expenditures on general public services have a downward trend from 10.99%

in 2001 to 5.46% in 2007, reaching 3.5% in 2010), Ireland (with percentages of up to 9.52% in 2002), while the rest of E.U. 27 members, had percentages very close to zero. This shows that there are only three countries, out of 27, in which the expenditures on the general public services have quite significant percentages in the Social Fund.

The decentralization of the public expenditures with the defense.

A particular feature for the defence expenses is the fact that in most of the countries, they are rather concentrated at the Central State's budget. In this respect, we insist, whereas in 18 countries (Denmark, Estonia, Finland, Lithuania, Romania, Belgium, Cyprus, Germany, Spain, France, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, and Slovenia) out of the 27, the share of the costs with defence at the state's budget level, from the total defence expenditure, in each country, in the period 1999-2010 is approximately 100%. This shows a high degree of centralization of these expenses, a normal fact, having in sight that we talk about the defence costs. The average in the E.U. is 99.98%.

Slovakia is the country where the defence spending has the smallest share out of the total spending in 2006 (65.52%). In other countries, which have not specified the percentage of the defence expenditures in the central budget, it is over 94%. We can illustrate that the defences spending in the local budgets in Denmark was 27.2 million Euros in 1999. In 2006 they reached 35.5 million Euros, reaching a maximum of 36.7 million in 2010. The highest defence costs, out of the 27 countries we analyzed, in the local budgets, were recorded in Slovakia in 2006, and it was in quantum of 266.2 million Euros.

When referring to the share (fair share) with which the NATO countries could contribute to the common defence and security, we find that the U.S., in 2004, allocated with 50% more than the established rate compared with Germany and Spain, that contribute with less than half out of this, 40% and 36%. (Lindstrom G., 30).

After Romania became a full member state of NATO, Romania's responsibilities no longer limited to national territory protection policies, but also to the policies that promote intensive Romanian interests, and supporting the global stability in any region where NATO missions take place, aiming at the same time, safeguarding and promoting the vital interests of Romania. We must however, keep in mind that any excessive military expenditure diverts

valuable resources that could be used for the social development and poverty reduction, and any misuse has adverse effects. Therefore it is necessary to streamline and have an efficient use of the budgetary resources allocated to the national defence.

The decentralization with the expenses on public order and safety.

The first thing we think is necessary to point out is that only the Czech Republic, Greece and Malta's expenditure on the public order and safety in its entirety, can be found only in the state budget. The highest level of decentralization of the expenditure on public order and safety, as shown in Chart No. 19 is registered in England, Belgium, Netherlands Spain and Sweden.

Figure 2.

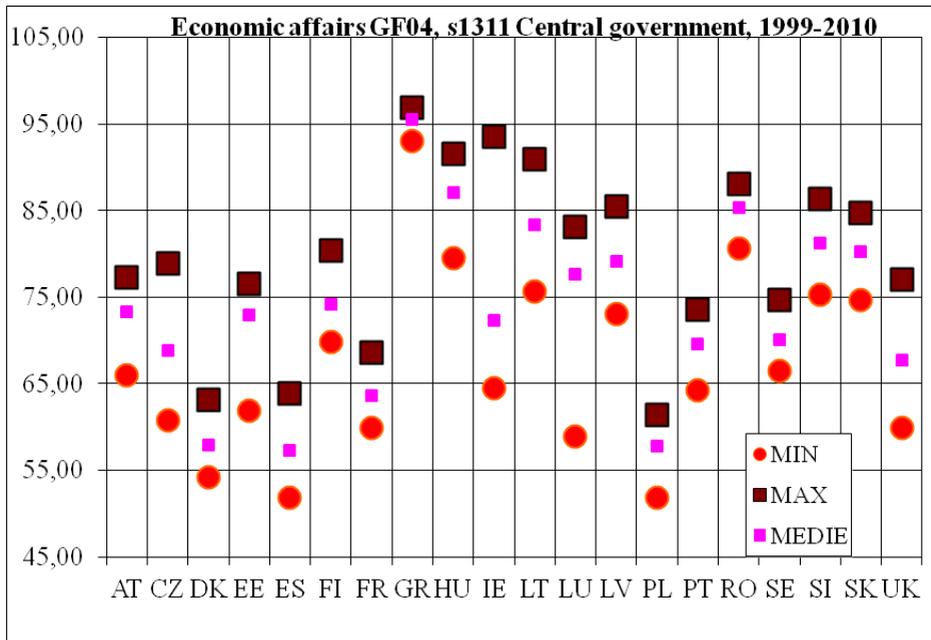


In Hungary, there is a maximum share of the public order and safety expenditures of the local budgets in the total public order and safety expenditure in 1999 and 2000, (100%). In Spain, the public order and safety expenses of local budgets have an increasing trend from 2,853 million Euros in 1999 to 3,814 million in 2001, then a decrease to 3.751 million Euros in

2003, followed by a further increase in 2007 to 4,706 million Euros, falling to 4.407 million Euros in 2010. The spending with the public order and safety of the local budgets is very low, 46.2 million Euros in 2005. In our country these charges are related to the Community Police. However, from the category of expenses for the public order and national security, the police ones hold the largest share (around 27%). We could observe a trend of increasing amounts, allocated mainly to ensure the public safety in our country.

The decentralization of the expenses with the economic affairs. The share of the costs with the economic activities in the total state budget expenditures for economic activities, in this period is as follows: in Cyprus is 100% throughout the period under review, Malta, 100% between 1999 and 2010. These very high percentages show that the decisions on how to spend the resources on economic actions are taken at the central level in both countries.

Figure 3.



At the level of this year, the quantum of the new entrants' income countries is lower than the E.U.15 average. On the other hand, after these countries entered in the Union, the average of the G.D.P. per capita in E.U. 27 is with 10% lower than before. There were several discussions regarding the policies to be followed by the new members. The economies of the new member states have different structures so, unlike Poland, for example, whose economy is based largely on agriculture, and the economies of Cyprus and Malta are focused on tourism and financial sectors. Eight of the new member countries in 2004 had transition economies, two not, and five of these savings have a small sized economy. The economic policies must be designed so as to constitute incentives for the society to enable it and to take benefits as much as possible. These countries had to work harder to catch up with the developed countries. We believe that the economic convergence process must be driven by investment and productivity, institutional reform, structural funds, political stability. The priority should be the macroeconomic stability, the maintenance of the recommended limits for the budgetary deficits and the decrease of the inflation.

It can be seen a constant share of expenditure on the economic activities in total government spending in Greece. Thus, throughout the period under review the share of expenditure with the economic affairs in total expenditures of economic actions in the central budget of the Greece is between 93.09% and 96.91%.

In Romania, during the period 2002-2008, the economic costs of the actions at national level have a share in total spending, rising from 85.08% in 2002 to 88.12% in 2006, and then dropping to 85.64% in 2010. Italy is one of the countries that register a share of the expense with the economic affairs, at the central level in the total expenses of 29.92% in 2000. The situation of the expenditures for the local economic activities in other countries under review is as follows: in Lithuania, we have a share of local spending with the economic activities in the total costs of the economic activities between 11.54% in 2000 and 24.30% in 2010.

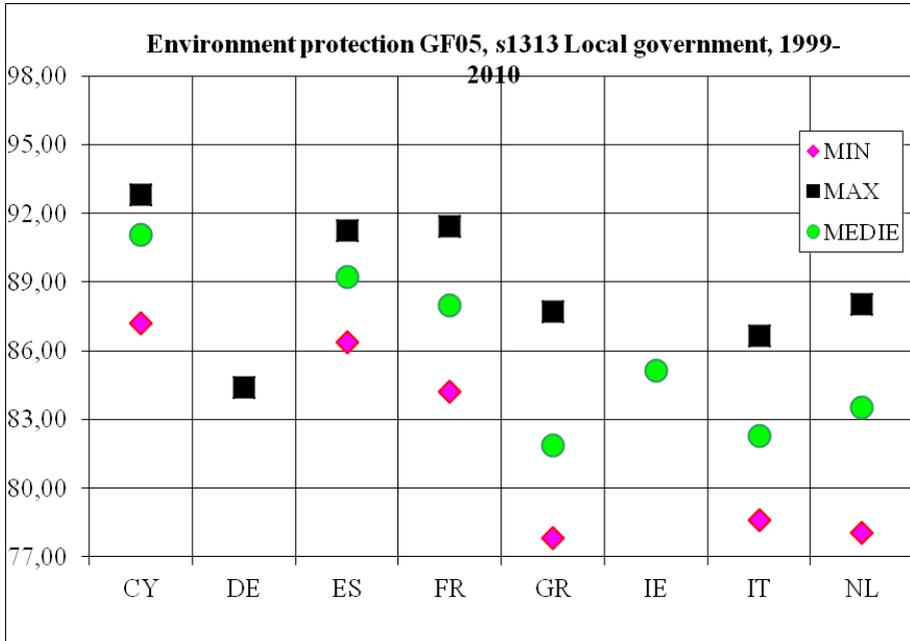
The foreign direct investments in 2005 were higher in Poland, Hungary, and Latvia. Interestingly, in comparison with the countries of the E.U.15, the investments in these countries are located around the capitals of these states. The market size and the access to neighbouring markets are other factors that may influence the choice of the location for the investors. The access to the market structure may influence the growth of the local

production and the business location. We saw that the companies tend to choose the same location just like the other companies with similar profile do. Other very important factors affecting the foreign investments are the labour costs and transportation's infrastructure, political stability, law system stability, and labour migration.

In countries such as: Austria, Cyprus, Czech Republic, Denmark, France, Malta and others are not to be found in the Social Fund, in what concerns the budget expenditures for the economic action. Germany and Spain have instead a share of the costs of the economic activities in the Social Fund from the total costs of the economic activities of over 13-14% over the period we analyzed. Romania has a share of the costs of the economic activities from the Social Fund's budget in total economic expenditure, below 1% between 2002 and 2004 and in 2005, will register an increase of 2.64%.

The decentralization of the expenses with the environment protection. In the recent years, the environmental costs in the most developed countries have significantly increased, given the more widespread concerns of the governments and especially the European Union's environmental protection issues. Romania and Malta are the only countries from the study, where the environmental costs reach 100% out of the total expenditure between 1999 and 2004 for Romania and 2003 for Malta, the average of the expenses between 1999 and 2010 being 61.85% and 95.42% as provisioned in the central budget.

Figure 4.



Other countries where the environmental costs have a significant share in the central budget are: Slovenia with a share of 97.47% over the entire period we analyzed, Slovakia with 65.71% Lithuania with 75.04% and Latvia with 82.79%. The smallest share of the environmental expenditure in the total expenditure, at the central level, was registered in countries such: as Germany, Ireland, Spain, Belgium, Cyprus and France. As for the share of the environmental expenditures in total expenditures, of the local budgets, we can see that it is very large in Ireland, Spain, Cyprus, France, Hungary, Poland etc. In these countries the share of the local budget's expenditures for environmental protection in total expenditures for the environmental protection, is more than 85-90%. Slovenia is one of the countries with the lowest share of the expenditures with the environmental protection provisioned for the local budget, in the total environmental expenditure over the entire period we have analyzed, with an average of 24.01% and a minimum of 2.53% in 2004

During the period 1999-2010, the share of the budgetary expenses from the Social Fund with the environment protection, in all the 27 countries is 0%.

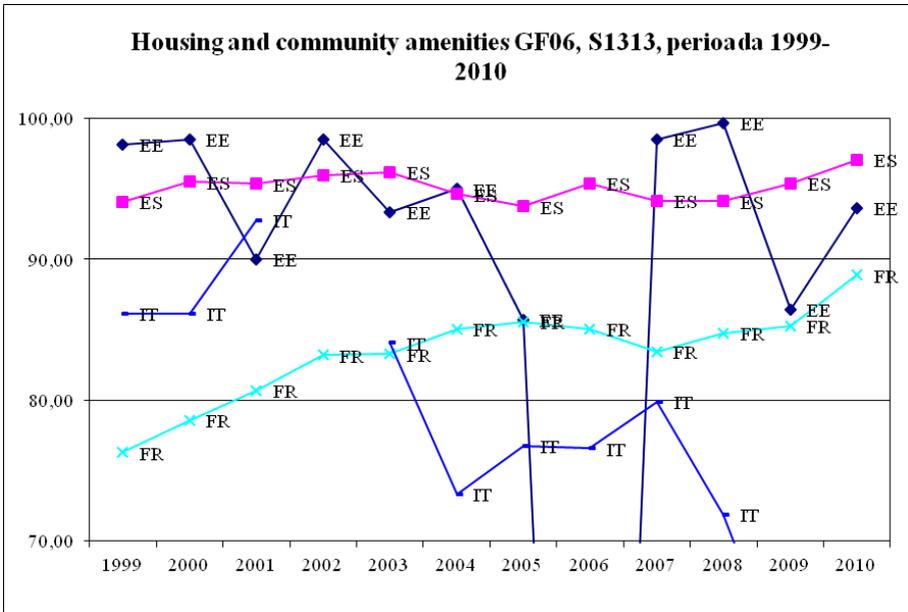
The environmental objectives should be oriented towards: preserving, protecting and improving the environment, protecting the human health, a prudent and rational utilization of the natural resources, promoting measures at the international level to addressing problems of regional and global environmental protection and restoration of the good functioning of the ecosystems, stop (the future) to extinction, protecting the soils against erosion and pollution, taking measures for full implementation of the environmental legislation in the member countries, the adoption of action plans to protect the biodiversity, the marine environment, soil protection, forests, greater involvement of economic actors and citizens in environmental protection, fighting against the global warming.

The instruments for achieving the environmental objectives that are linked to the environmental budgetary policies are: the taxes, facilities and tax relief, subsidies (direct and indirect), and the environmental audit.

The decentralization of the expenses regarding the housing and community amenities. The countries with a high level of centralization of the cost regarding the comfort of the community and the housing are: Malta, which is the country with the percentage of expenditure on housing and community comfort from the state budget in total expenditures for housing and community comfort, of 100%, Cyprus, Austria, Denmark, Finland, Greece, Italy etc, with percentages above 50%. In these costs, an important share is held by allowances for families, aid to elderly and other disadvantaged categories. The tendency is to increase the expenditures for housing and community comfort, having as a cause the evolution of the demographic factor.

The most decentralized countries in the spending on housing and community comfort, situated at the local budgets level, are: Latvia (100% in 2000-2003), Hungary (100% in 1999 and 2000), Estonia (99.70% in 2008), Spain (97.04% in 2010), and Italy (92.74% in 2001). The Czech Republic has known a significant increase in the costs for housing and community comfort of the local budgets in the total social costs, from 49.80% in 2001 to 80.56% in 2003. In the Netherlands, the percentage of the expenditures for housing and community comfort evolves from 68.8% in 1999 to 84.32% in 2003.

Figure 5



In what concerns Romania, this type of expenses from the local budgets, evolved between 1999 and 2005, from 74.90% to 79.88%.

On the other hand it should be noted that these costs have a high degree of decentralization since the share of these expenditures of the local budgets is over 68% of the total expenditures on housing and community comfort.

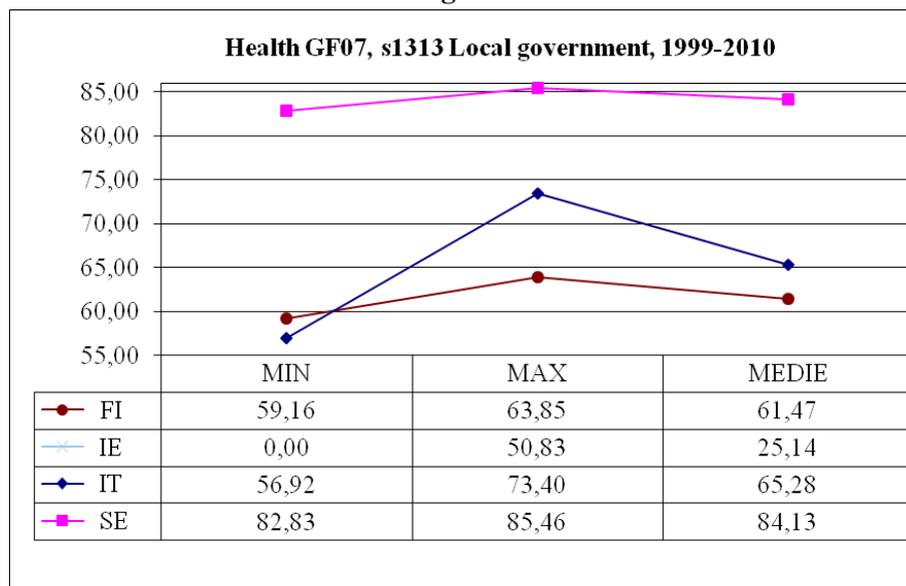
In all Eastern European countries, including Romania, after 1990, there was privatization process of residential fund, a process that led to the "improvement" of the patrimony for most of the population. In our country, the personal owned housing percentage exceeded 95%, which makes the labour mobility very low.

The decentralization of the expense with the health. The health expenditures have been the subject of some reforms, being a very delicate subject when talking about decentralization.

Cyprus is a clear example of centralization of these expenses so that over the analyzed period, the share of the health expenditure from the total state budget expenditure is 100%. The countries with the highest level of centralization of the health expenditure are Cyprus, Malta and the U.K.

At the opposite side is: Denmark, France, Netherlands, Austria, and Slovakia. We can also see that in Germany, Greece, Luxembourg, and Netherlands, the percentage of the social fund health expenditure, in total health expenditures is over 90% in the period.

Figure 6



Romania, allocates 2-3% of the G.D.P. for health. This was one of the lowest allocations for health in Central and Eastern European countries - even though, according to the World Bank, it reflects the country's development. The health status of the Romanian population was lower than in the neighbouring countries. In this context, policy makers have considered the level of spending as insufficient, therefore, the social insurance was introduced to remedy the situation. (<http://www.policy.hu/chiritoiu/reformasistsan.pdf>).

After studying the data on the health spending from the local budgets of the European Union's countries we noted that the most decentralized health

expenditures are recorded in the Nordic countries: Denmark, which has a maximum of 98.23% in the period we analyzed, Sweden with a maximum of 85.46%, Italy with a maximum of 74.40%. We also believe that more countries are worth mentioning, namely Finland, where the percentage of the local budgets for the health spending in total health expenditures is 63.85% (in 2000) and also Ireland where the maximum is 50.83 %.

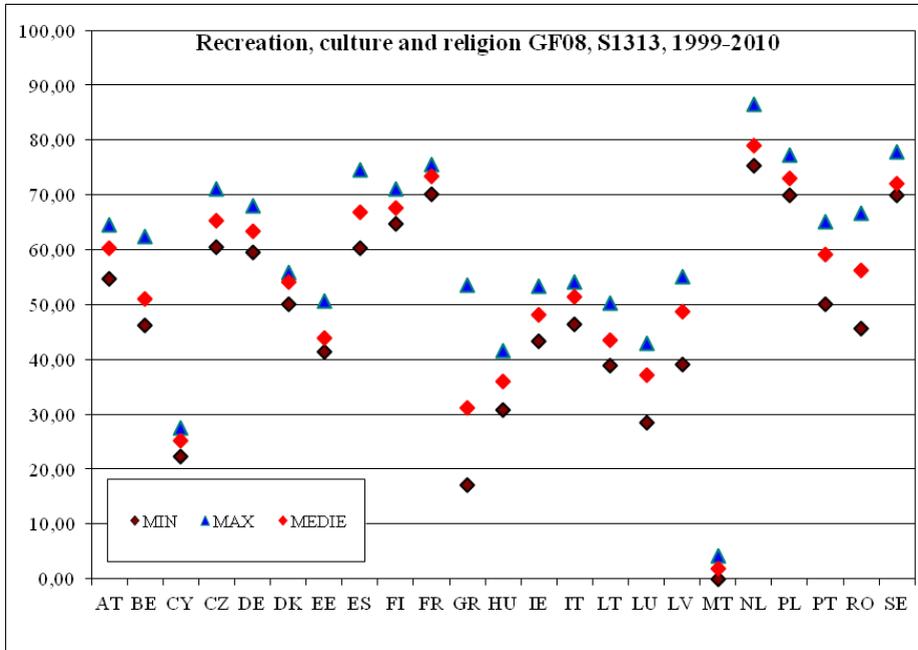
The communitarian policies that approach the environment and the health as an integrated system, taking into account the fact that the pollution in its various forms, affects the health. There are certain areas where the member states cannot act alone effectively and where the cooperative action at the Community level is indispensable. These include major threats to the health and the problems with cross-border or international impact, such as pandemics and bioterrorism, as well as on the free movement of goods, services and people. There is a policy to encourage the private contributions to the health and pensions private funds for the people with middle or high income.

The decentralization of the expenses with the recreation, culture and religion. The expenditures on recreation, culture and religion have an important share in the local budgets in most E.U. countries, than in the central budgets. Exception of those mentioned are the following countries: Malta, Cyprus, Greece, Luxembourg, and Estonia.

In Malta, the expenditures on recreation, culture and religion are more concentrated in the central budget; here we have the maximum recorder in E.U. 27.

A particular situation is found in Greece, where, between 1999 and 2001 the percentage of 40% increases to over 70% between 2002 and 2004, reaching a maximum of 82.85% in 2007.

Figure 7



It can be seen that the countries which are the most centralized in terms of expenditure on recreation, culture and religion are very attractive for tourists, therefore, probably, the state wanted to have control of these costs.

At the opposite side are countries like Germany and Belgium. Also in this category belongs the Netherlands which an increase from 13.54% in 1999 to 23.75% in 2003, and thereafter there is a decrease to 18.95% in 2010. The maximum in the most decentralized expenditures on recreation culture, religion 86.46% is registered in the Netherlands. Fairly significant increases take place in the period 1999-2007, is recorded in the Czech Republic (60.41%) in 1999 to 71.13% in 2010, and in Spain from 60.27% to 74.50% in 2009.

The decentralization of the expenses with the education. A conclusion on the degree of decentralization of the education system in the European countries can be drawn from the data analyzed in the 27 countries.

We observed a highly centralized system of the expenditures with the education in Cyprus and Malta, where the share of the education expenditures in total expenditure from the state budget is 100% throughout the period we

analyzed. The lowest share of the education expenditure in the central budget was recorded in countries like Germany, less than 3% between 1999 and 2001 and between 3% and 4.5%, between 2002 and 2009, Belgium under 15% for the entire period. We can say that Romania has a high degree of decentralization of the education system having in sight the share it holds on the education spending at the local level from the state budget's expenditures, namely over 50%. Other countries that have high shares of the local budgets for education spending in total state spending on education state's budgets by 50%, countries like: Germany, Estonia, Finland, Hungary and others. In contrast, as expected, the countries with the lowest share of education expenditure in total expenditure from the state budget, at the local budgets are Cyprus and Malta (0%) followed by Greece (under 3%) and Portugal (under 9%).

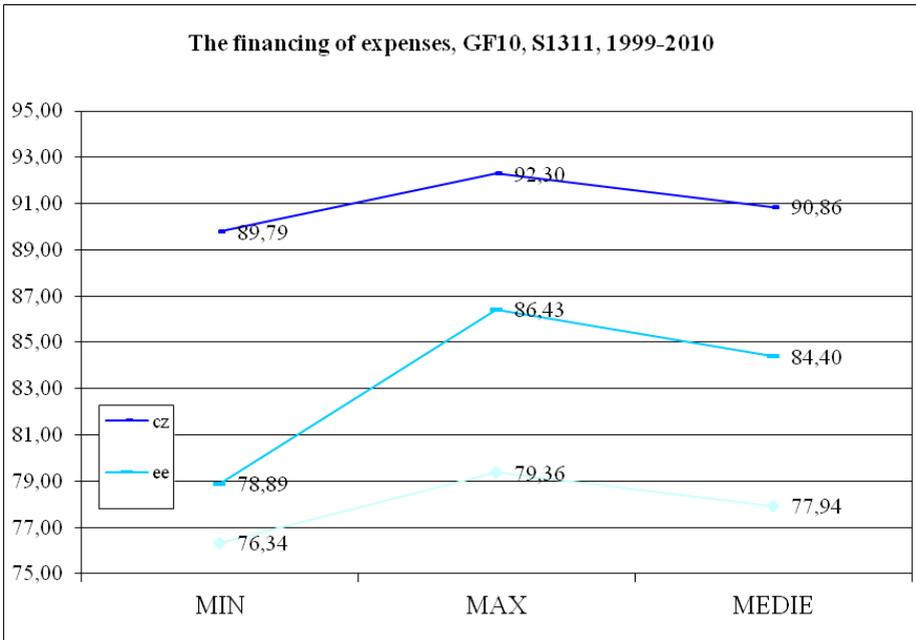
In what concerns the share of the expense with the education provisioned in the Social Fund, from the total expenses with the education, with the exception of 5 states, all the other states analyzed do not have provisioned amounts in the Social Fund. The exceptions are: Spain, Portugal, Finland and Romania.

The main difficulties in the process of decentralization in education can take the form of failure due to the resistance to the renewal, or due to the improper political interference in hiring and promoting the staff, or the allocation of funds. The education and training are crucial to the economic and social changes. The flexibility and security needed to achieve more and better jobs depends on ensuring that all the citizens acquire key competences and adapt their skills throughout their life. The knowledge triangle (education, research, innovation) plays a key role in boosting the growth and the employment.

The decentralization of the expenses for the social protection. The social protection is a way of public support for the needy, the main purpose being to ensure a minimum level of resources for them. From the analysis conducted in this area, it appears that in countries with extensive social welfare states, the social assistance has a less important role, as it happens in the Nordic countries, and where the welfare state is not so generous the welfare is more important. Therefore the Nordic welfare is administered locally, and in Ireland and England at the central level.

As it can be seen, the share with the expenses of the social protection in the central budget in total expenses has high values in Malta (100%), the Czech Republic with a maximum of 92.3% in the period we analyzed, Estonia with a maximum of 86.43% and the U.K. with a maximum of 79.36% in 2010. Out of those mentioned above, it results that these three countries are practically the most centralized countries in what concerns the expenditure on social protection.

Figure 8



The largest contribution to poverty reduction occurs in the Netherlands and England, where about 70% of the individuals are saved from poverty due to the social assistance they receive. Other cases are Finland and Sweden, where the relative poverty is reduced by 61%. So, we can say that the four countries: Finland, Sweden, Holland and England have effective schemes of social assistance to reduce the poverty. There is a downward trend in the share of the social protection expenditures in the local budgets. The highest level of decentralization of the social protection spending is recorded in

Denmark, Sweden and England. A significant decrease in the degree of decentralization is in Ireland from 15.06% in 2003 to 1.72% in 2009.

The degree of decentralization of European communities depends largely on the specifics of each state. Communities in the European Union in 2007 recorded an average population of 5,410 inhabitants in an area of 50 km². There are major differences between European communities due to both: historical factors, political and geographical. The European community average population ranges from 1,640 inhabitants in the Czech Republic, to 140,000 inhabitants in the U.K. And the area of the communities in the E.U. countries varies from 316 km² in Malta to 1,550 km².

In our opinion the last trends of decentralization and regionalization occurring in the European Union have led to the transfer of responsibilities to the local communities. The most successful reforms in this regard took place in Belgium, Spain, Italy, United Kingdom, France, Germany and Denmark. In Denmark, for example, the local communities are responsible for almost all the public services even those that in other countries are the responsibility of the central governments (regional development, infrastructure, roads, etc.).

We could observe that at the European Union's level, the largest expense of the local communities is oriented towards the education and the social protection. These two segments together represent approx. 42-43% out of the total expenditures incurred by the local communities. The local communities' spending on social protection are the most significant in the Nordic countries like Finland (approx. 19%), Sweden (cca.27), about 50-52% in Denmark, while in countries like Greece, Spain, Italy and Portugal it is between 1-4% out of the total expenditure of local communities. The expenditure on education of the local communities has the highest share in the budget of the E.U.12, with values ranging from 40% in Slovenia and 57% in Estonia. The reason why the education costs of the local communities in the Baltic countries (Estonia, Latvia, and Lithuania) are so high is because they (the local communities) are responsible for the remuneration of the teachers in the primary and the secondary level of education. High levels of spending on education in local communities are registered in countries like Britain, Luxembourg, Sweden, Finland, countries with a high degree of decentralization.

Another type of expenditures of the local authorities is the economic affairs. The total expenditures made by the local communities for the economic activity, registered until 2010 had an average of 12-13% of the

budget of these communities. These are mainly expenditures for transportation, communications, agriculture, fisheries, energy, industry, construction, etc. the highest values are found in the developing countries such as the Czech Republic 39.27%, Slovenia 18%, Romania 14%, Estonia, Slovakia, Poland 26%, 18%, 42%, but also in countries like Ireland 28%, Austria 26% (due to infrastructure and development funds obtained from the European Union).

The health expenditure represents a substantial category of budget in the local communities, especially in those countries where "regional or local governments" are responsible for the hospital management. The average in the E.U. countries, for the local communities is 10-12% out of the total spending, but there are countries where the local communities' spending for the health sector is above the European average, namely: Denmark 97.25% Italy 65.28%, Sweden 84.13%. In the new members that joined the E.U. the level of these expenses in the budget of the local communities is rather low (under 10%), with the exception of Hungary and Poland (21% and 29%), due to the fact that in these countries, the public health services are considered a responsibility of the central government.

The public spending on the housing comfort (water supply, sewerage, public lighting, etc.) is on average 6-7% out of the total expenses of the local communities in the European Union in 2010. However in developing countries these values are above average. Thus in countries like the Czech Republic, Slovakia, Slovenia, and Romania, the spending with the public lighting, water and sanitation, etc. has significant importance in the local community budget (Romania has an average of 68%).

The expenditure with the public order, leisure, culture and religion and environmental protection is about 7-8% out of the budgets of the local communities. In the countries where the local communities have greater powers regarding the public order, the expenditure on these activities is more prevalent in the local community budget. Such countries are: U.K. 50%, Spain, Belgium, and Netherlands. We can see that the degree of the fiscal decentralization of a country differs from one member state to another due to factors like: economic, social, historical and the typology of each community with an impact on the type of the needs that generate certain public expenditures.

The analysis of a data set should be as objective so as to give us a clearer and real image on the sector we analyze. In this chapter, we studied the

evolution and structure of the incomes and expenses (budgetary), and of the main trends of these components between 1999 and 2010.

The total budgetary revenues of the E.U. 27, reached a maximum of 5,570,635 million Euros in 2010, while the minimum value was 3,933,492 million Euros in 1999. The E.U. 27 average total income is 4,814,070 million Euros. The global average tax pressure exerted in the E.U.27 in the period we analyzed was 45.03%. The highest overall average tax pressures were recorded in the Nordic countries with values close to 50% and the lowest in Romania, Lithuania, and Latvia with values close to 30%. The countries with large general expenses are: Germany, Italy, United Kingdom, France, Spain and Netherlands, while the lowest costs occur in Cyprus, Lithuania, Latvia, Malta, and Estonia. The average total amount spent from the state budget in Romania in this period is 36,855.6 million Euros; while in the local budgets is 11,944.7 million Euros and in the Social Fund is 15,284.7 million Euros.

The funds collected from the taxpayers are ultimately used throughout their interest; with the mention that in the allocation of the resources to the beneficiaries, the amount with which every individual contributes, is not taken into account, or the source of the contribution. The large public spending means in the first time, a good social satisfaction, and in particular a good satisfaction of the needs related to the social protection, health and education. The money is mobilized from the budget, after which is directed to satisfy the different needs of the taxpayers, which appear in the position of the beneficiaries of the public services offered by the state. A high tax burden discourages the taxpayers to invest, save, produce, and work. One of the reasons why the tax burden of the new member states is lower than in the other E.U. countries is the lower tax rates on the personal income and the income tax of the companies, established in such a way so as to stimulate the economies of those countries.

3. Conclusions

The states that have a high level of centralization concerning **the public services expenditures**, are: Ireland, Malta and Cyprus (94.22%). It also worth noting that the decentralization of the spending on public services in Romania has an average of 20.19% over the period we analyzed. A very interesting aspect that is worth pointing out, is the fact that these expenses have important shares financed thru the Budget Social fund (S1314) in only a

few countries such as Spain, Portugal and Ireland (with percentages of up to 9.52% in 2002), while the rest of E.U. 27 members, had percentages very close to zero. This shows that there are only three countries, out of 27, in which the expenditures on the general public services have quite significant percentages in the Social Fund.

A particular feature for **the public expenditures with the defense** is that in most of the countries, they are rather concentrated at the Central State's budget.

The first conclusion what must be emphasized is that the Czech Republic, Greece and Malta's **expenditures on the public order and safety** are financed at the level of the state budget (S1311). The highest level of decentralization is achieved in England, Belgium, Netherlands Spain and Sweden.

In countries such as Cyprus and Malta, 100% of **the expenditures with the economic affairs are financed** from the Central Budget. These very high percentages show that the decisions on how to spend the resources on economic actions are taken at the central level in both countries. In Romania, during the period 2002-2008, these expenditures were financed more than 80% from the central budget and 2% from the Social Budget. One interesting case is Italy where the share of the central budget was 29.92% in 2000. One special case are countries such as Germany and Spain where these type of expenditures were financed 13-14% at level Social Budgets (S1314).

In the recent years, **the expenditures with the environment protection** in the most developed countries have significantly increased. In some countries (Romania, Malta Slovenia Lithuania and Latvia) more than 80% are financed by the central budget. The smallest shares for the State Budget are recorded in Germany, Ireland, Spain, Belgium, Cyprus and France.

The countries with a high level of centralization of **the expenses regarding the housing and community amenities** are: Malta, Cyprus, Austria, Denmark, Finland, Greece, Italy etc, with percentages above 50%. The most decentralized countries in the spending on housing and community comfort from the local budgets level are Latvia Hungary Estonia Spain and Italy

The health expenditures have been the subject of some reforms, being a very delicate subject when talking about decentralization. The countries with the highest level of centralization of the health expenditure are Cyprus, Malta and the U.K. At the opposite side are Denmark, France,

Netherlands, Austria, and Slovakia. Interesting cases are Germany, Greece, Luxembourg, and Netherlands, where over 90% of health expenditures are financed through the Social Funds.

The expenditures on recreation, culture and religion have an important share in the local budgets in most E.U. countries. Exceptions are the following countries: Malta, Cyprus, Greece, Luxembourg, and Estonia.

We observed a highly centralized system of the **expenditures with the education** in Cyprus and Malta (100%). The lowest share of the education expenditure in the central budget was recorded in countries like Germany and Belgium. In Romania (Estonia, Finland, Hungary and others) 50% are financed from the central budget and 50% from the local budgets.

The decentralization of the expenses for the social protection is very low in countries like Malta (100%), Czech Republic (92.3%), Estonia (86.43%) and the U.K. (79.36%). And other models are Finland, Sweden, Holland and England at least 60% of these expenditures are financed through the Social Assistance Budget.

In our opinion the last trends of decentralization and regionalization occurring in the European Union have led to the transfer of responsibilities to the local communities. The most successful reforms in this regard took place in Belgium, Spain, Italy, United Kingdom, France, Germany and Denmark.

We could observe that at the European Union's level, the largest expense of the local communities is oriented towards the education and the social protection.

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THE INVESTMENT POTENTIAL OF SIBIU COUNTY

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Abstract:

In order to support its economic development, Romania offers various stimuli to investors, in accordance with European law. Recently, the Department for Infrastructure and Foreign Investments was established. It benefits from support from the Romanian state and encourages investors to come here and invest in areas such as: environment, energy, research, etc. In their turn, foreign investors analyze several factors and make various analyses between states. These interest factors are: costs with constructions and land, labour, the fiscal system, human resources, infrastructure, etc. Concerning the interest factor in Sibiu, manifested through the potential investors, the county is an interesting prospect for foreign investments. It is a known fact that FDIs create both positive and negative effects. Due to the fact that foreign investments are economic activities which take longer periods of time and which require considerable financial and human resources, they generate risks. In order to avoid risks, local administrations and governments in host countries must respect their promises.

Keywords: *foreign direct investments, investment potential, government offered subsidies, interest factors, European legislation.*

JEL classification: *A10*

In order to support the local economy, most developing countries seek to attract foreign investors. Attractiveness is increased once the stimulus offered by the state increases. Most analysis claim that the Romanian economy only stabilized bur economic growth is weak, compared with the country's investment potential.

The growth of only 0, 7 % registered by the GDP in 2012 is far below the possibilities of investments. Foreign investors appreciate that there is no

warranty from the Romanian state, at this time, that the structural reforms which are required should not delay and the moving onwards of the economy is taking place at a very slow pace. International institutions, the World Bank, the IMF and the European Community continue to support the idea that Romania can re-launch its economy by strengthening its structural reforms, attracting strategic investors for state owned companies and reducing debts. Stimulus which Romania offers after January 1st is in accordance with the regulations of the European Union, which forbids any member state to offer help to a company which gives it an unfair competitive advantage in relationship with the competition.

Considering increased globalization and the diversifying of foreign investors' production, which has higher added value due to lower production costs, FDIs are of increased importance for Romania. (Mirela Matei, *Investitii Straine Directe*, 2004).

Considering the same sell price for goods produced abroad, a larger profit is included for those who make them in Romania. This is because the made investment is a factor of GDP redistribution within the host country. It has been proven that FDIs create positive effects for the host country, economically and socially. Such an effect is the increased competition between local and foreign investors, because each of them does not want to be eliminated from the market (V.Cojanu, *Integrare și competitivitate*, 2007).

They need production equipments, more advanced technology and more qualified staff. (Mirela Matei, *investiții străine directe*, 2004).

Thus, economic competitiveness will increase locally.

A negative effect generated by foreign companies on companies with Romanian stockholders is the loss of market share due to a lack of competitiveness. Foreign investors will make more exports from Romania. Thus, local firms lose the chance to export Romanian products. Respecting the unique market principle, Romania provides benefits for foreign investments. This negative phenomenon can only be improved by increased quality and efficiency of Romanian products in order to penetrate the Unique Market.

Specialists claim that periods of increased economic competitiveness are characterized by attracting important foreign investment flows, as there is interdependency between them.

Romania set up, by Government decree no. 7/2013, the Department for Infrastructure Projects and Foreign Investment, which has several functions: establishing a policy, regulation and management of state property

representation internally and externally. Under the new institution, companies should receive support from the state in terms of investments, which must be within the following areas: Processing, agro-industry, manufacturing, high-level electrical or thermal energy, environmental protection, water and wastewater recycling, information technology and communications research and development.

In turn, investors analyze the host country, as stakeholders aim to gain higher profit. In addition to subsidies provided by the state in accordance with EU regulations, before they decide to invest in one country or another, they examine the costs of land and construction, taxation, human resources, infrastructure, etc. Investors compare stakeholders from many countries and these comparisons are meant to provide argument for the decision to invest. Concerning direct investment factors affecting export-import costs, we find geographical location and transport infrastructure. For example, Sibiu County offers outstanding investment opportunities for economic development because over time it has developed adequate infrastructure: air, road and rail providing sector development and surrounding counties.

Sibiu has a vast number of roads which assure access through :

- E 81 - Valea Oltului with Vâlcea – Pitești - București ;
- DN 1 with Brașov - Ploiești - București ;
- E 68 Sebeș Alba – Deva - Arad - Nădlac – Curtici;
- DN 14 Mediaș – Sighișoara – Târgu Mureș
- Through Transfăgărășan towards Argeș county;
- On the Sebeș valley with Gorj county;

The county is crossed by the highway component of European Corridor 4 beginning at Nuremberg - Vienna - Budapest Nădlac - Arad-Deva - Sebes – Sibiu. The motorway is currently in progress and will be completed on certain sections shortly. It will ensure the development of the county (it is said that the economy develops, in general, on both sides of a highway, on a maximum 50 km radius).

The rail transport system undergoes an intense process of modernization with the purposeful integration of Copșa station and the Mediaș electrified railway in the national and European transport links ensuring:

- thoroughfare 200: Brașov - Podu Olt – Sibiu – Vințu de Jos – Deva – Arad - Curtici;
- Double main rail road on the sector Ucea – Podu Olt – Sibiu – Vințu de Jos.

- Thoroughfare 300: București – Predeal – Brașov – Blaj – Cluj Napoca – Oradea – Episcopia Bihor ;
- Double, electrified main rail road on the sector Sighișoara - Mediaș – Blaj - Coridorul IV Trans – European .
- Line 2008 : Sibiu – Coșșa Mică;

The county has a modern airport with adequate infrastructure development activity for cargo type transports (buildings and infrastructure which are operating for this purpose), a large enough runway which enables the landing of large aircraft and climatic conditions which provide over 300 operating days per year without fog. The airport connects major cities throughout Europe and the operators are established companies in the field.

The current infrastructure is complemented by upgraded roads that allow quick connection with Medias and other cities as Agnita, Dumbrăveni, and favours rapid transportation of goods and passengers also investments in transport infrastructure which has as purpose to become a fast and efficient with the other towns of the county Avrig, Cislădie, Talmaciu.

Communication and urban infrastructure has undergone and is still undergoing a process of modernization, allowing production capacities in either urban or rural areas of the county, having a system of electricity and gas transmission which is in accordance with high requirements.

The wealth of this county is that it can provide products which are more competitive in all sectors and a qualified human resource. This is considered as a factor in the decision making process of investments, because it cannot be totally controlled and planned. This makes it possible to generate a risk investment activity. Sibiu has a highly qualified human resource, especially in the industrial field. The county engineers offer quality work while labour costs are low, compared to wages in Western Europe.

Sibiu county benefits from an old industrial tradition and has undergone a restructuring and modernization process which allows it to provide options to achieve investment goals. If investments are financed by domestic capital or foreign capital which is here a highly-skilled workforce, a tradition of industrial activities and possibilities for a positive location, the newer generations are becoming more and more diverse as a result of infrastructure development and achievement of nodes down the highway and the continuation belt of Sibiu city.

The industrial Area Sibiu - Sura Mica has an appropriate infrastructure and already hosts big names of the European industry: Continental

Automotive Systems, Marquardt Schaltsysteme, Khunke Production, Brandl E, Takata, SNR bearings; together, the six companies have over 6,300 employees and have an income of approximately £ 2.5 billion in the last financial year. Besides them, there are other companies: Gühring OHG, Bramac, Phoenix Mechano Switzerland, RUD Kettenfabrik Rieger & Dietz, Polisano Pharmaceuticals, MEWA, TAS, Siemens, Delphi, Grainer, Poliflex Krupp - Bilstein, Tondach, Winerberger, Compa (factory in Sibiu with old traditions in mechanical engineering), to the business of the automotive industry, building materials, industrial robots, moulds, plastics and pharmaceuticals.

Another area that may be subjected to a process of investment is Medias city, where there is the largest centre for coordinating Romania's gas resources and related industries which the development of gas sector requires. Here we find several Auto Components manufacturing companies active, such as Kromberg & Schubert or Automecanica.

Other areas also benefit from old traditions in industry. Such cities include Cisnădie, which has over 100 years traditions within light industry. Textile companies such as Somarest, Transeuro Textile, Ragu exist. Also, the Hartmann plus company is producing automotive components here. The town of Avrig also benefits from old industrial traditions: here, platforms related to mechanical engineering were developed. Miercurea Sibiu intends to build a large industrial park of Belgian investment, to attract new companies and new investors in the textile industry, the most important being Benetton.

The county has great potential for agricultural development, development of landforms are favourable to growing livestock, sheep and cattle are processing factories however need more investments, in order to ensure the processing of raw materials in line with European Union requirements.

The labour laws in Romania include indicators that give rigidity of employment data employment contract rigidity and analyzing indicators of employment (difficulty of hiring, rigidity of hours of work, the difficulty of redundancy) we see that there is a protectionist legislation which attempts equilibrium between the employer and employee, but satisfies the interests of both parties.

The economic potential of the county is supported by an educational system that provides a highly skilled workforce in the existing pre-university colleges and professional schools, which are very well adapted to the needs of

the labour market, not only in cities like Sibiu, but also in Săliște, Cislădie, Agnita, Medias and Dumbrăveni.

The local higher education system consists of Lucian Blaga University, an institution with European recognition that provides a wide range of specializations in accordance with the requirements of companies active in the local market and has developed a partnership with them, the Romanian – German University, Alma Mater University and the Land Forces Academy "Nicolae Bălcescu".

Another important factor in the investment decision is the tax system of the host country (Miniculeasam Fiscal Policy, 2009). In Romania, foreign investments are supported by tax rate of 16% of structural funds received from the EU. For the financial year 2007 - 2013 Structural Funds and the Cohesion of 19.667 billion Euros and future financial year 2014-2020 will be 39.8 billion of structural funds and agriculture. Sibiu County has many opportunities for investment and tourism.

Conclusions

Sibiu is the only city in Romania which has received 3 Michelin stars was European Cultural Capital in 2007, was the place where the Third Ecumenical Assembly was held, the Hilton Hotel which is part of one of the most prestigious hotel chains in the world. Thus, the city does not only provide ways for leisure, but also investment opportunities to develop the booming tourism infrastructure. Also, Ocna Sibiului's "Black Transylvania", with a history of Maria Theresa expects new investments as well as the tourist resort Păltiniș which has drawn up a development plan that the altitude could become a ski resort for a long period of year and so requires investment.

Another open area is the Hârtibaciului valley, where investments within Saxon cities and tourist area Marginimea Sibiu helped tourism development. This tourism potential is also supported by the two roads which are a touristic attraction, Transalpina and Transfăgărășan, the latter being praised by the magazine Top Gear.

Many activities which investors can place in Sibiu create new jobs in a well structured and growth potential.

Most frequently assessed risks by investors refer to ownership, fiscal policy, budget expenditure, inflation, exchange rates and other such notions. To improve the investment activity in our county, policymakers must consider

the risks which investors face. In this regard, local authorities should always respect their promises..

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THE SOCIAL DIMENSION OF THE ROMANIAN ENERGY SYSTEM

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Abstract

Development towards a more sustainable energy system is today a priority for most governments around the world. In this paper we analyze one of the four dimensions of the energy sector in Romania. Based on but not limited to the four Energy Indicators for Sustainable Development regarding the social dimension published by the IAEA in 2005 and using data published by the Romanian National Institute of Statistics we aimed to reflect the need for (safe) access to basic energy services in the form of commercial energy at affordable rates and put it into a larger political and policy perspective of the present situation in Romania. We provide recommendations regarding further options for policy makers to obtain sustainability including the possibility to increase the use of renewable energy sources. Suggestions for future research are also discussed.

Keywords: *energy, social dimension, energy indicators*

JEL classification: *Q40*

1. Introduction

Today, energy in the context of socio-economic-development and environmental protection is a top priority for most governments around the world and also an important theme for deliberation in different groups and at different levels. We all agree that for the functioning and evolution of our society energy is indispensable. But it can also be one of the most important

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factors that can facilitate the poverty eradication and the change of the production and consumption patterns that proved to be unsustainable and harmful for the natural environment, the society and the economic environment.

Many countries that are now implementing sustainable development objectives regarding the energy sector are facing different challenges. "A common need is the ability to accurately assess current conditions, policy effectiveness and goals for the future." (Vera et al., 2005)

In 2005, the IAEA in cooperation with the United Nation Department of Economic and Social Affairs (UNDESA), the International Energy Agency (IEA), Eurostat and the European Environment Agency (EEA) published a set of Energy Indicators for Sustainable Development (EISD) together with guidelines and methodology sheets. This two-step project began in 1999. In the first phase 1999-2001, a set of 41 Indicators for Sustainable Energy Development was identified. In the second phase 2002-2005 seven countries implemented the original set of indicators, the product of this phase being the final reports of these countries summarized in country case articles published in the Natural Resources Forum and the joint interagency report mentioned above. The present paper is the first of a series of four articles that analyze the energy sector in Romania. It presents the results of a research on the social dimension of the energy sector.

2. The three major dimensions of sustainable development

Sustainable development in any sector addresses three major dimensions: social, economic and environmental. The EISD project identifies four dimensions - the fourth being the institutional one. For this dimension, indicators are still being developed as it is difficult to measure institutional issues and the variables tend to be structural or policy responses to sustainable development needs (IAEA et al., 2007). The institutional dimension also occupies a special place among the four, being able to influence the sustainability of the whole energy system. A sound institutional structure is essential for an efficient and reliable energy system. The indicator set published in 2005 consists of three dimensions: social, economic and environmental.

There are 30 indicators classified in 3 major dimensions, 7 themes and 19 sub-themes. The *social indicators* (SOC 1 to 4) address the themes equity (with three sub-themes: affordability, accessibility and disparity) and health.

The *economic indicators* (ECO 1 to 16) are grouped considering two themes: use & production patterns and security. The use and production patterns include considerations about overall-use, overall productivity, supply efficiency, production, end use, diversification, and prices, and the security theme addresses the issues of imports and strategic fuel stocks. The *environmental indicators* (ENV 1 to 10) are grouped regarding their impact on the atmosphere, the water and the land. The six sub-themes are climate change, air quality, water quality, soil quality, forest and solid waste generation & management (IAEA et al., 2005).

The core set of energy indicators, now called Energy Indicators for Sustainable Development (EISD), has been designed to provide information on current energy related trends in a format that aids decision making at the national level in order to help countries assess effective energy policies for action on sustainable development. According to the Guidelines and Methodologies of EISD (IAEA et al. 2005) the indicators can help to:

- integrate energy into socio-economic programs,
- combine more renewable energy, energy efficiency and advanced energy technologies to meet the growing need for energy services,
- increase the share of renewable energy options,
- reduce the flaring and venting of gas,
- establish domestic programs on energy efficiency,
- improve the functioning and transparency of information in energy markets,
- reduce market distortions and
- assist developing countries in their domestic efforts to provide energy services to all sectors of their populations.

3. The social dimension

Energy is indispensable for almost every human activity. Directly we use it in form of electric energy for lighting, electric and electronic equipment, thermic energy for heating, gas for mobility etc. and indirectly it is incorporated in every good that is produced on this planet. The production, availability and consume patterns of energy have a direct impact on the economy of countries and on the environment. More difficult to define are the social impacts of energy. The availability, price and the characteristics of energy consume have an impact on welfare/ poverty, employment, education, and health.

In rich countries, energy for lighting, heating/cooling and cooking is available through modern energy services and does not affect the health, security and time of the users. It is available and affordable. In contrast, the energy in the poor countries comes from sources that require time (collecting wood for heating and cooking), are expensive (coal, paraffin, kerosene) and/or endanger the human health (inadequate equipment or ventilation). These issues have led to the two major themes of the social dimension: equity and health. Social equity involves the degree of fairness and inclusiveness with which energy resources are distributed, energy systems are made accessible and pricing schemes are formulated to ensure affordability. (Vera et al., 2005) The most ambitious targets aim the availability of free energy (micro-generation, zero energy homes etc.) or at least at a fair price.

Four EISD measure the impact of the energy services on the social well-being:

SOC1 shows the share of households (or population) without electricity or commercial energy, or heavily dependent on non-commercial energy like fuel wood, crop wastes and animal dung (more than 75% of total energy use – although this is an arbitrary benchmark). An alternative definition of *SOC1* is Per capita consumption of non-commercial or traditional energy. The measuring unit of *SOC1* is percentage. The purpose of this indicator is to monitor progress in accessibility and affordability of commercial energy services including electricity percentage of households or population with no access to commercial energy options, or heavily dependent on ‘traditional’ noncommercial energy options, such as wood, crop wastes and animal dung. In most countries, the availability of data on the number of households or share of the population without access to commercial energy or electricity constitutes a limitation of this indicator. (IAEA et al. 2005)

SOC2 shows the share of household income spent on fuel and electricity (on average and for the 20% of the population with the lowest income) or the share of income needed to satisfy minimum household commercial energy requirements for household income group. The measuring unit of *SOC2* is percentage.

The purpose of this indicator is to provide a measure of energy affordability for the average household and for the poorest segment of households. It is important to examine income, wealth and in particular, affordability of modern energy services across the population. If a large percentage of the population has no possibility to meet their needs for

commercial household energy at current energy prices and private income levels there is a need to decrease the burden of expenditure on fuel and electricity in household budgets for the lower-income groups of the population. In developing countries, this is an important key to promote social and economic development. Limited income (affordability) may force households to use traditional fuel and inefficient technologies, and results in disparities of both access and affordability. (Vera et al., 2007)

SOC3 shows the household energy use for each income group and corresponding fuel mix. (Household incomes divided into quintiles (20%)). The measuring unit of SOC 3 is tones of oil equivalent (toe) per year per household, for electricity: kilowatt-hours (kWh) per year and per household, percentage for fuel mix.

The purpose of this indicator is to provide a measure of energy disparity and affordability. The indicator is an assessment of the amount of electricity and fuels used by the population relative to income level and the corresponding fuel mix.

SOC 3 is linked to energy prices and to several indicators of the social dimension, such as shares of households without access to electricity or heavily dependent on non-commercial energy options, shares of income spent on fuel and electricity, etc. The indicator might indirectly reflect a related use of forest resources as fuel wood, which in turn could cause deforestation. (IAEA et al. 2005)

SOC4 or accident fatalities per unit of energy produced by fuel chain shows the number of annual fatalities per energy produced in energy systems and related activities. It is also used to assess the risk to human health derived from energy systems, and in particular by various fuel chains per energy produced.

Although this issue is often ignored, the risks to the population and the rates of occupational injury and mortality from energy related accidents are high. Operating a liquefied natural gas terminal, transporting petroleum, running a coal mine or exploiting a hydropower dam also require the conscious assessment of system-wide resilience in response to human or technical failure in order to minimize the risk of accidents and consequently of fatalities.

Nuclear energy represents a special case in this context in that the scope of an accident could be potentially large, but major efforts exist to actively assess and manage the multidimensional risk in the nuclear industry. In addition, the

use of traditional fuels in many countries is linked to fatalities resulting from fires and smoke inhalation. (IAEA, 2005)

4. The social dimension of the energy sector in Romania

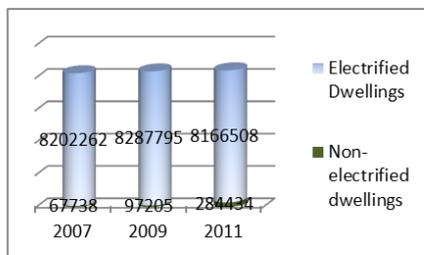
4.1 SOC1: Share of households (or population) without electricity or commercial energy, or heavily dependent on non-commercial energy

In 2007, the Romanian government identified 67.738 households not connected at the public electric system. Through the program “Electrification 2007-2009”, the government aimed to connect them to the national grid. The estimated costs were 479 million Ron. In 2007, no funds were allocated for electrification and in 2008 the allocated sums were blocked through a budget amendment. The budget for 2009 was the only one that allocated money for this project, 13 million Ron, just enough for 11.367 homes.

In 2009, a governmental study showed that 97.805 households in 2284 localities were non-electrified. 62.308 households were located in 1223 localities where the SC Electrica SA energy distributor operates and 35.497 households in 1.061 localities where private distributors operate. In March 2010, the government adopted by memorandum the completion of electrification of the villages without electricity - almost 100.000 - by 2012. In the year 2010, in Romania, 97 localities and about 2.000 hamlets were completely non-electrified. The required investment value amounted to 225 million Euros.

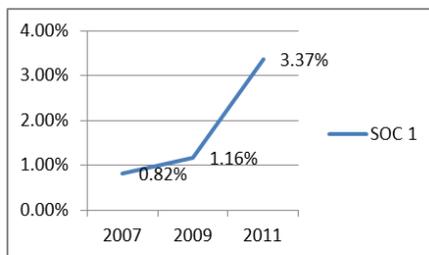
The 2011 census showed that 96.6 percent of the Romanian dwellings were electrified by that time (INSSE, 2012). This means that over 287.000 dwellings are still un-electrified. The inconsistencies between the data from different sources presented above could be explained by the increase of number of dwellings between 2007 and 2011 (from 8270 thousand to 8450 thousand) and by the fact that data used for the 2007 and 2009 studies wasn't as accurate as the 2001 census.

Figure 1: Electrification overview in Romania 2007-2011



Source: Processed by the authors

Fig.2 SOC1 evolution 2007-2011



Source: Processed by Horizontal (Category) Axis

A closer research is needed. Some of the households although not connected to the central electricity network, do benefit from electricity using micro generation technologies such as diesel or gas generators, solar panels or even hydropower. The number of this households is however very small.

Besides electricity, we also looked at the situation of the natural gas distribution and at that of thermal energy. They come as second and third in priority after electricity.

Table 1: Households provided with natural gas

	2000	2002	2004	2006	2008	2010	2011
Number of localities provided with natural gas	542	609	684	774	815	866	876
Simple length of natural gas distribution pipes (km)	21598	24068	25879	28960	31927	34726	35681
Natural gas distributed (million m3)	9194	10018	12734	10332	11049	9639	10270
of which: for household use	3742	3086	2745	2687	2731	2823	2963

Source: Statistical Yearbook of Romania 2009 and (INS, 2012a)

As we can see (from Table 1) almost 900 localities of the total 3180 are connected to a gas distribution system. In Romania, there are around 100 gas distributors. The two biggest gas distributors E.ON GAZ and GDF Suez have together about 2.6 million clients (both households and industrial consumers). The about 2.300 localities not connected to a gas distribution system are villages where firewood or gas-tanks are used for heating and cooking. Considering the high investment cost (both from the gas companies and the consumers) necessary to deliver gas in localities that are not already

connected, an important increase of the number of localities provided with natural gas is not to be expected. As said wood is the first choice of the poor families and some of the other house owners. Regarding the heating: 121 localities of the existing 3180 in Romania are provided with thermal energy through the centralized system (INS, 2009). These are mainly towns most of them located in the eastern part of Romania. Because of the old production and distribution-system – thermal plants, pipes - important energy leaks were generated. A tendency of decentralization has been registered. On the one hand many consumers chose to have their own heating systems and on the other hand, the big thermal plants that served an entire city are now replaced with smaller and more efficient district plants.

4.2 SOC2: Share of household income spent on fuel and electricity

In Table 2 the evolution of the income and energy expenditure of the households in between 2001 and 2010 is shown – Energy Indicator SOC 2.

Table 2: Evolution of SOC 2

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Energy expenditure Ron	50.82	69.27	83.89	110.544	134.76	157.85	171.22	212.99	365.92	382.51
Income	521.79	658.51	795.09	1085.79	1212.18	1386.32	1686.7	2131.7	2315.9	2304.28
SOC2	9.73	10.52	10.55	10.18	11.11	11.38	15.5	15.6	15.8	16.6

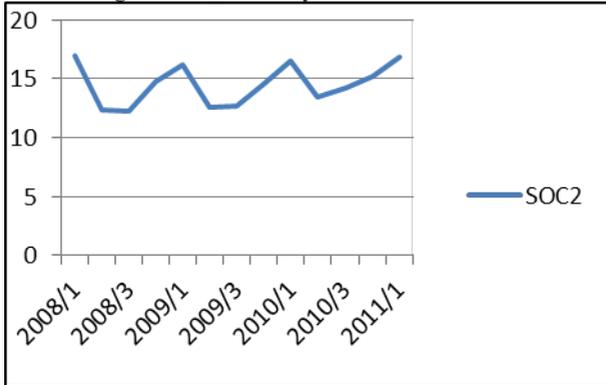
Source: Data from INS processed by the authors

The share of household income spent on fuel and electricity does not seem to be too high. We should however take in account that the Gini index for Romania is increasing: from 28,8 in 2003 to 32 in 2008 and 33,33 in 2010. The first two deciles (the poorest 20%) of the population earned in 2010 up to 349 lei per month that means a household income of up to 1501 lei for the poorest quintile (Table 3). Comparing this income to the medium energy expenditure in 2010, we can see that it represents an important part the income of the first quintile.

Concrete data about the energy expenditure of the poorest 20% of the population were not available. Low-income households that cannot afford to pay for the energy, especially those located in communes and hamlets use

wood for heating and cooking. In many districts of Romania, timber theft is a worrying phenomenon.

Figure 3: Quarterly evolution of SOC2



We used data from the press release of the Romanian National Institute of Statistics to represent the quarterly evolution of the share of household expenditure on housing, water, electricity, heating and other fuels from the first quarter of 2008 to the first quarter of 2011 (Figure 3). The medium SOC2 shows an upward trend. The highest values are as expected in the first trimester due to the increased heating expenditure costs in the winter months and the lowest in the second and

third trimester – spring and summer months when the heating is less used.

Source: Processed by the authors

4.3 SOC3: Household energy use for each income group and corresponding fuel mix

Regarding the household energy use for the different income-groups, the authors were faced with the problem of missing information. With the available data we will try to draw a realistic imagine in the idea of the SOC3 indicator. Table 3 shows the total income by deciles and households.

Table 3: Total income by deciles and households

Decile of total income per person ¹⁾ (Ron):									
Decile 1 up to	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10 over
236	236-349	349-434	434-531	531-629	629-736	736-867	867-1048	1048-1393	1394
Total income (lei, monthly per household)									
1197,39	1501,48	1596,68	1786,93	2006,03	2131,1	2271,19	2611,16	3251,52	4686,94

¹⁾ Income intervals are expressed in the prices of January 2010.

Source: Statistical Yearbook of Romania 2011

The total energy use of the population in 2008 and 2009 was 8037 toe respectively 8089 toe and the consumption of electricity 894 respectively 948 as shown in the table below. In the last five years, we can see an upward trend in the consumption of the electricity use (Table 5) by the households. The causes of this are, growing number of households and the growing number of electrical household equipment per household.

Table 4: Electricity consumption and prices 2005 -2012

Time	2005	2006	2007	2008	2009	2010	2011	2012
Electricity consumption of households (1 000 toe)	794	860	893	894	948	974	995	-
Electricity prices for household consumers -/kWh	0.06 55	0.07 92	0.08 55	0.08 85	0.08 14	0.08 56	0.08 48	0.0 79

Source: Eurostat

The electricity prices are different for households and legal entities. The prices that the households have to pay also differ taking in concern the medium monthly consume. An upward trend of the electricity prices can although be noticed (Tab. 4).

Table 5: Natural gas consumption and prices 2005 -2012

Time	2005	2006	2007	2008	2009	2010	2011	2012
Residential consumption of natural gas TJ	96,32 4	106,66 3	86,55 8	91,63 2	89,88 3	92,34 8	97,63 5	-
Gas prices for household consumers -/Gigajoule ron	15.37	23.46	25.79	21.83	20.49	17.34	17.31	17.3 1

Source: Eurostat

Opposite to the situation regarding the electricity consumption, the final energy consumption on natural gas has fluctuated and is now slightly increasing (Tab. 5). Many households, especially those located in communes use wood for heating and cooking. Some of them switched from natural gas to wood because of the increasing prices of gas and the important cost difference between heating with natural gas and heating with firewood. In cities the insulation of buildings (through programs supported by the local authorities) had an important role in reducing the quantity of energy used for heating. Renewable energy systems: solar panels and geothermal heating systems are also taking slowly but firmly ground in Romania. The Romanian government and the local authorities offer money support to the poorest households during the winter months. During the financial and economic crisis, the responsibility of supporting the disadvantaged part of the population was transferred totally to the local authorities. The subventions will decrease in future.

4.4 SOC4: Accident fatalities per energy produced by fuel chain

The use of energy should not damage human health, but rather should improve it by improving living conditions. Yet the production of energy has the potential to cause injury or disease through pollution generation or accidents. A social goal is to reduce or eliminate these negative impacts. The health indicator has the sub-theme of safety, which covers accident fatalities caused by the extraction, conversion, transmission/distribution and use of energy. Oilrigs and, particularly, coalmines are subject to accidents that injure, maim or kill people. Oil refineries and power stations may release emissions into the air that cause lung or respiratory diseases. However, per unit of energy, the toll from energy use in households is often much higher. In households that burn coal and wood for cooking and heating in traditional fireplaces and stoves, there are high levels of respiratory diseases, especially in children. (IAEA, 2005)

In the data provided by the Romanian National Institute of Statistics, the cases of injury caused by the extraction, conversion and transmission/distribution and use of energy are not separately highlighted. That is why we will present a situation of injuries and deaths caused by external causes with the amendment that more than half of the cases are caused by traffic accidents (Tab. 6).

Table 6: Injury and death cases by external causes

New cases of illness, by disease classes, declared by family physicians / thou											
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Injury, poisoning	374	410	434	444	452	444	413	308	314	295	321
Total	13610	15713	15791	15439	16205	16159	15324	14287	14604	15407	16204
Deaths by											
Injury, poisoning and other consequences of external causes / number											
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	10963	10958	11216	10819	10356	9818	9732	9343	9908	9510	9280
Female	3449	3312	3293	3304	3106	3223	3037	2914	2892	2675	2752
Total	14412	14270	14509	14123	13462	13041	12769	12257	12800	12185	12032

Source: Statistical Yearbook of Romania 2011

A clearer and more detailed situation is provided by the ambulance services of some districts. A centralization of this data does not exist and the available date could not offer a realistic imagine of this issue for the whole country. In 2008, 64 children died in accidents at home and 111 were hurt. This determined the Health Minister to start in 2009-2010 the campaign “A home without dangers for your child”. Because of the campaign, in 2010 the deaths and accidents were reduced to half.

5. Conclusions

The accessibility and affordability indicators are clear markers of progress towards development. Today in Romania 3.6 percent of the dwellings are not electrified. Regarding the affordability, limited income may force households to use traditional fuel and inefficient technologies, and the time needed to find and collect fuel wood is time that cannot be spent cultivating fields or otherwise working. The poor usually have to spend a large share of their income on indispensable energy fuels such as those required for services like cooking and heating. Some of the households do not dispose over the necessary sums. This is the underlying cause of a worrying phenomenon: the timber theft. As we could see, in the last decade, the part of the income spent on energy increased by 7 percentage points.

There also may be disparities in access or affordability between regions and between income groups within a region. Disparities within Romania may result from uneven income distributions (Gini index) and inadequate energy transport and distribution networks. Thermal energy systems with great losses in the cities lead to increased energy costs for the

households connected to the centralized thermal energy distribution system. The consumption of electricity by the households has increased over the past 5 years, while the natural gas consume fluctuated. The electricity and natural gas prices also show an upward trend.

Regarding the health protection of the energy consumers actions have been taken through the campaign “A home without dangers for your child”. A future research based on a survey regarding the perceived affordability, availability and safety of energy could complete this study by shoving the social opinion.

The allocation of bigger sums for programs like “The Green House“, with a focus on the non-electrified localities could be a solution for communes and hamlets without electricity or natural gas – that are faced with deforestation problems.

6. Acknowledgements

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PERSPECTIVES ABOUT THE ANTICIPATION OF CONSUMER BEHAVIOR- THE KEY ELEMENT IN SELLING INSURANCE

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Abstract

Insurances represent a special product by their nature, thing that implies the management of risks and protective measures in which concerns them. Consumers of this kind of products are individuals that are risk averse, their main concern being to protect their assets or stock exchange. In this case, selling this type of products depends on knowing the consumer behavior and adapting continuously the products to the consumer needs. Selling insurance products means effectively to offer a financial support in the future for which the buyer pays continuously. Moreover, it is possible not to benefit from it if the risk does not occurs. Sales management of insurance products represent the managerial component which creates the link between the sold product and the client and has a powerful anticipation proclivity of market tendencies and consumer attitudes. The market place for insurance products mainstays the selling process through its continous development due to creation of new products (diversification of products and also price), due to the selling people and organization which plan a lot of actions to influence in a positive way insurance market. Nevertheless, in order to obtain efficiency it is required a rigorously sells management which desires to maximize the synergy effect at the organizational level.

Keywords: *insurance market, selling process, consumer behavior, insurance products, sales management.*

JEL classification: D01

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1. Introduction

The globalization of the economy could lead us to the idea that the user or buyer of some insurance products would have the same requirements and the same motivations regardless of the geographical location or social circumstances. This assumption is wrong because every market is formed of certain consumers with different particularities and, in terms of insurance products we cannot expect a demand with similar characteristics or a standard offer on the part of the insurance companies. For example, we cannot address the same insurance offer for a city in Romania as the one we would offer in UK, simply because the two communities differ in terms of financial education, cognitive learning, social environment and so on.

In terms of insurance, we must take into account what are the reasons for contracting insurance, cognitive affective processes, types of behavior and under what conditions is made the decision for contracting insurance, the differences of situation and context. In other words, the insurance consumer behavior should be perceived from a holistic point of view because the way people behave in an economic environment is based on their needs but also on experience.

A fundamental premise of the consumer's behavior is that people not only buy products or services for what the products can do but also for what they represent, consumers often trying to create an identity through different consumption activities. Therefore, a person will choose the brand or an insurance company that has an image that fits to his ideas about himself, in other words the brand chosen should not enter into cognitive dissonance with the mental representations of the insurance consumer.

One of the characteristics of consumer behavior is the fear of loss. (Kahneman, D. , Tversky, A. Prospect theory- An analysis of decision under risk). Research has shown that, for a certain client the fear of loss is greater than the desire to win. Fear of failure and of loss represents a factor with social and cultural valence. Thus, there are cultures that encourage behavior of not taking risks. An effective method for using fear is by showing the potential clients what will happen if they won't buy an insurance policy (for disasters), what will they lose (assets acquired by hard work).

In what follows, we will present the two approaches: the economic and the psychological approach of the consumer's behavior.

The contemporary economic theory of the consumer's behavior is based on three streams: classical theory, the theory of social economy and the new theory of Backer and Lancaster.

The influence of the classical theory in addressing the consumer

- The basic assumptions of this theory have exerted influence on the consumer's behavior patterns. These relate to the following aspects:
 - the consumer benefits from perfect information regarding his needs and the offer available on the market;
 - the consumer's environment doesn't exert influence on the choosing process of products
 - the consumer's decision-making process is geared towards maximizing its utility based on the budget imposed constraints,
 - the usefulness of an acquisition is regarded in a global manner at the product's level.

Basically, this approach is based on rational dimensions of the decision-making process.

- *The influence of social economy on consumer's behavior whose basic principle* refers to the fact that consumer's decisions may be influenced by a series of external factors, namely social factors. Based on this principle were subsequently stated a number of theories on the consumer's behavior with emphasis on elements such as: social visibility, consumption trends, and famous brands.

- *The new economic theory and its impact on consumer's behavior*

In this case, two crucial areas were noted:

- the products are evaluated according to their attributes and the brand reputation is the basis for their differentiation.
- the utility associated, by the consumer, with a product is determined not only by the consumption of the good but also by the effort, respectively time and money, needed for its acquisition.

Thus, are taken into account several new concepts, namely:

- consumer loyalty is given by the correlation between the characteristics of the purchased product and the consumer's expectations.
- the consumer groups the products by categories according to the similarities he perceives.
- the price is used as a reference for products differentiation.

- *The psychological approach* of the consumer's behavior is successfully used in the study of consumer's behavior. Thus, a first opinion in

psychology refers to the motivation theory. Later to this approach was appended the one regarding the study on the individual's personality with the purpose of explaining the behavioral differences. Currently, research conducted in the field of perception, memorizing, mental images, etc.. contribute to a better understanding of consumer's behavior. The input of this research can be found in different fields: the analysis of the effects of advertising, market segmentation, brand positioning.

Regarding the insurance field, we can say that the aversion towards risk of the individual represents the basis for the insurance activity existence, because requesting protection against risks and the transfer of risk to insurers is determined by the aversion toward risk.

The idea of different behavior of individuals faced with risk was developed by Kenneth Arrow, back in the 5th decade, in his work regarding the theory on risk and uncertainty. Arrow showed that there is a natural fear attitude, of aversion towards risk, but also a preference towards it: "the existence of insurance...demonstrates the validity of the hypothesis of aversion towards risk, while gaming (gambling N/N) and other speculative activities could be considered as evidence of preference against risk in certain circumstances.

2. Summary

According to the theory of prospecting, a person is risk averse if they prefer certain prospecting (x) to any risky prospecting that has the expected value x . In the expected utility theory, the aversion towards risk is due to the concavity of the utility function. This characteristic is explained in its turn, by the law of diminishing marginal utility. The concave utility function is represented and compared with other functions in the section for utility function forms. Attitudes of different individuals towards risk have been grouped according to their acceptance of the game with equal chances. The simplest example is that of the game of chance with a currency which, thrown, leads to gain, respectively, to a loss, equal in size depending on the, face coin, which remains visible after it falls. The individual attitudes toward the game with equal opportunities can be grouped into three categories: risk aversion, neutrality towards risk and preference towards risk.

1. although the chances of gain or loss are equal, the individual with **risk aversion** will refuse to play. The aversion for risk was defined as " the

hypothesis of behavior against risk which consist of rejecting any lottery where the hope for winning is null”(Gollier, Chr. – *Aversion pour le risque*, in *Risques*, no. 17,1994, p. 27). This doesn't mean that the risk averter individual will never play. Under circumstances where the chances are favorable (70% chance of winning and 30% chance of loss), the earnings probably will prevail against risk aversion. What is more important from a practical standpoint is that a person with risk aversion agrees to pay an insurance risk premium higher than the average mathematical risk, provided he/she will be free from that risk.

2. a person with *preference towards risk (risk-loving)*, accepts the risk, even if the chances of winning are unfavorable. The greater his preference to risk (risk-loving) the less favorable are the chances he accepts.

3. *risk neutrality* manifest in individuals which are not interested and don't take into account the risks to which they are subject to.

The manifestation of these types of attitudes towards risk can be illustrated with a eloquent example. A person owns an asset, amounting 100 million lei, which is threatened by a risk (fire, earthquake, hurricane) in regard to which there is a 20% chance of being totally destroyed respectively, 80% chance that good shall not be affected by the risk involved. If the individual bears alone the risk he can hope for, on average, a fortune of 80 million (80% * 100 million). An insurance company offers to ensure the asset, for a premium of 40 million lei. The individual will have to pay this premium, but in case of total loss, the insurer will pay compensation amounting 100 million lei. For this case, the individual's wealth will be of 60 million lei (100 million -40 million), regardless of the occurrence/nonoccurrence of the risk, but he will hold a safe asset amounting 100 million lei, if the risk will not occur, or its equivalent in cash, if the total loss occurs. Insurance has unfavorable chances towards retaining risk, but offers its reduction. If the insurance is not accepted, the average result is a wealth amounting 80 million lei, but the real result can be anything between 0 lei and 100 million lei. The acceptance of the insurance guarantees a wealth in amount of 60 million lei, no matter what happens to the insured asset.

An individual with risk aversion (considered a rational behavior, normal) will accept the offer of the insurance company agreeing to pay a premium of 40 million lei, and thus obtaining a wealth in average of 60 million lei. A person with a preference towards risk will not accept the

insurance, both because the insurer's offer has unfavorable chances, and because their desire to face the risk.

The individual manifesting neutrality towards risk, will also reject the insurance. He is indifferent to risk and he is not interested to transfer the risk, but on the potential gain: the uninsured asset has an average value of 80 million lei, while if it is insured, its value is only of 60 million lei.

The most part of the individuals have an attitude of risk aversion but its size varies from one individual to another. The degree of adversity towards risk can be expressed using the concept of certainty equivalent (Laffont, J.-J. – *Equivalent certain*, in *Risques*, no. 17, 1994, p. 67), which is defined, as the amount a person is ready to pay in order to free itself from risk. The larger the amount, the bigger the degree of risk aversion. (The mathematical proof of the link between the certainty equivalent, risk premium and the three attitudes towards risk can be pursued in Eeckhoudt, L., Gollier, BC - *Les risques financiers*, Ediscience International, Paris, 1992, p 23-33) .

The existence and the degree of risk aversion exerts a notable influence on the insurance activity. As shown before, the aversion towards risk makes the policyholder willing to pay a bigger insurance premium than the average actuarial value of the risk they want to transfer. This allows the insurance companies to operate as profitable economic operators, because the premiums claimed and cashed in from policyholders allow them to cover the undertaken risks, to cover the expenses and obtain a margin of profit.

Secondly, the individuals with risk aversion are willing to spend a part of their resources to find possibilities for reducing the risk, which explains the demand for insurance and creates the premises for the existence and development of insurance activities.

On the insurance market, the consumer's behavior is shaped by several particular aspects like: moral hazard, adverse selection, information asymmetry and the issue of regret on the demand for insurance. We will detail these aspects in what follows, in order to create an overview on what constitutes behavioral restrictions in insurance.

Moral hazard

H.W. Rubin distinguishes this risk (moral hazard) assessed *ex ante*, before concluding the contract, of moral hazard, manifested *ex post*, after the contract conclusion. Moral hazard also leads to an increase in the probability of damage occurrence, but due to the indifference attitude towards risk of the

already insured individual. In this regard it has been created a moral risk if the person owning a homeowner's insurance leaves the doors unlocked and the windows opened when leaving home. The analysis for the occurrence of the moral risk conducted by the Norwegian economist Karl Borch, in the work cited (*The Economics of Uncertainty*), was continued by J. Stiglitz who states that insurance cannot effectively cover the risk, due to an information asymmetry, emerged precisely due to the moral hazard. The information the insurance companies have on the insurance applicants' behavior faced with risk is imperfect, because the actions of the policyholder cannot be fully supervised and foreseen before concluding the contract. Stiglitz reached the following conclusion: the more complete the coverage by insurance and the higher the amount, the less are the individuals incited to avoid the insured event³. It turns out that in the absence of the insurer's control, the insurance tends to diminish the spirit of anticipation against the risk that might occur, and thus determines the increase in the frequency or gravity of the risk consequences. The policyholder of an auto insurance contract for several risks, parks his car carelessly, even in a place where it could be hit or stolen; also the policyholder of a loan insurance granted for the purchase of a house will take fewer security measures for not losing his job, than another, which has no such insurance.

The existence of moral hazard has negative effects on the insurance activity, generating an anti-selection of risks, with consequences on the financial equilibrium and the insurance companies' profitability. Insurers cannot eliminate moral hazard, but may take a number of steps to mitigate its effects. Thus, insurers may determine the insured to have a preventive attitude towards risk, offering only partial coverage of risk through the franchise provided in the contract. The policyholder is thus subject to uncertainty and is aware that in case of risk occurrence he will bear some of the loss, thus existing the motivation for risk prevention, more than for the case of a full coverage contract.

Another possibility for mitigating moral hazard is by collecting information about the policyholder's behavior in the field of risk prevention. Information implies additional costs and is still imperfect which constitutes another reason for the need of partial coverage of risk.

Adverse selection

The hypotheses on which the adverse selection is based refers to the fact that while the insurance companies know better the risk, the policyholders have some personal information and unobservable by the insurance company, relevant for determining the risk. It can even be considered that the adverse selection is no longer on some markets Chiappori and Salanie (2000). If we go even further and assume that the insurance companies know better the risk, then the latter should be better informed regarding the risk. Based on this reasoning Villeneuve (2000) proposed an analysis of the better-informed policyholders, analysis based on which it is studied the way the information is transmitted,.

The presence of adverse selection and moral hazard, on the insurance market has been tested empirically. Thus, Wolfe and Goddeeris (1991) studied the demand for a certain type of life medical insurance, Medigap. They found weak evidence of the presence of adverse selection in this case. Pueltz and Snow (1994) tested the same insurance market in the U.S., referring to car insurance and found that agencies have greater inclination to providing risk insurance with more coverage, that which is consistent with the notion of adverse selection.

In 2001, Godfried studied Oosterbeeck studied the demand for dental insurance in the Netherlands, which was not included in the standard package of health insurance in 1995. It was noted that the agents with high inclination towards risk tend to buy supplementary dental insurance. Other studies have come to different conclusions. Chiappori and Salanie (2000) studied the automobile insurance market in France and Cardon and Hendel (2001) studied the health insurance market. Cawlez and Philipson (1991) studied the U.S. life insurance market. The results of these studies have not explicitly demonstrated the presence of adverse selection and moral hazard. Further more, at a global level, the information asymmetry is studied based on empirical tests, those that have the most interesting results will lead, in the future, to changes in the theoretical models. In Romania, the studies have just begun, being a field toward which the researchers began focusing in the recent years.

Information and information asymmetry

Both involved parties hold an important element of the insurance contract. Thus, information is related to a multitude of variables verifiable under the contract framework. For the example regarding the relationship between the insurer and the insured, the latter through his personal decisions

and actions knows better the probability of risk occurrence he insured himself against. Insurers, however, are not able, nor have all the information necessary to achieve the best results in terms of the behavior of each policyholder. Hence, a conclusion can be drawn, that a contract should not be based on the insured's behavior, since this variable is not verifiable. Moreover, the policyholders do not have enough information regarding the characteristics and hidden costs of the insurance, or regarding the behavior of insurance agents and or of managers in relation with policyholders. It is, thus, difficult to establish the contractual terms that depend on various competencies and qualities of a person.

In economics, information asymmetry occurs when in a transaction, one of the parties has more information or better information than the other party involved. A specific situation in this case is when the seller knows more about the product than the buyer, it is also possible the reverse situation, where the buyer has more information than the seller.

This situation was first described in 1963 by Kenneth J. Arrow in an article on health entitled *Uncertainty and welfare Economics of Medical Care* in the *American Economic Review*. Later in 1970, George Akerlof used the term of information asymmetry in the paper "The Market for Lemons." He emphasized that on such market, the average value of an exchange object tends to decrease, even for the one that is in perfect condition and of good quality, being possible that the market will go bankrupt. Due to information asymmetry, some sellers may lie about the products, misleading the buyers and consequently the latter tend to avoid this risk renouncing to certain types of transactions or spending less on a product, which can lead to negative economic effects.

Information asymmetry has recently been assessed as being in a slight decrease, due to the internet, which allows ignorant buyers to obtain information that was not available previously, such as the price of the insurance premiums of the competition, etc.

Studying the situation where a contract is under information asymmetry conditions refers to the analysis of the relationship between two individuals or institutions, where one of the participants has an information advantage over the other, and the individual goals are in conflict. The reason for the combination between the information asymmetry and conflict of interests is that, if the contracting parties have common interests, then all

relevant information should be automatically disclosed, and thus any asymmetry in information shall become irrelevant.

Information asymmetry on the insurance market is a situation where consumers are better informed than the insurers, those who draw up the insurance- definition provided by Rothschild and Stiglitz (1976). But, the insurance companies have a completely different opinion regarding the definition of information asymmetry, considering that individuals have still limited experience, while the statistical models for estimating their knowledge experienced significant progress. The adverse selection represents a process that occurs when the individuals from which different losses are expected forgo the insurance contracts, so that the insurance company is left with the customers that will bring great losses. Due of the presence of adverse selection, the private insurance markets operate with difficulty. (World Bank, 2000).

3. Case Study

3.1. Definitions

Gross nominal earnings include wages, respectively the rights in cash and in kind of the employees for the work performed (including for overtime) according to the wage applied, bonuses and allowances granted as percentage of the wage or in fixed amounts, other additions to wage, the amounts paid for non-worked time (indemnities for rest and study, holidays and other days off, amounts paid from aggregate wage bill for sick leave) awards, holiday bonuses and other amounts paid from the wage fund according normative acts and collective agreements, amounts paid from net profit and other funds (including value vouchers).

The nominal net wage is obtained by subtracting from the nominal gross salary: the tax for the health insurance fund, the individual contribution the State Social Insurance Fund and the contributions to the national social security fund.

The average monthly wage represents the ratio between the amounts paid to employees by the economic operators in the reference month, for whatever period it is due and the average number of employees. Average number of employees represents an arithmetic mean calculated based on daily number of employees in the reference month. The daily number of employees

take into account are included only the persons that have been paid for that month. Are not taken into consideration: the employees on unpaid leave, on strike, the ones transferred to work abroad or those whose employment contract/employment relationship has been suspended.

3.2. The methodology used

The monthly data, regarding the monthly wage and the number of employees, is obtained through a selective statistical research. For establishing the size of the sample were considered acquiring some estimation of the main researched features, that will be affected by errors within +/- 3% and guaranteed with a probability of 95%. Starting with January 2010 the sample contains 25000 socio-economic units. The budgetary units are exhaustively included in the research, except the local government authorities for which the local communal councils data is collected based on a representative sample at the county level (about 770 units). For the economic sector were included within the research the units with 4 employees and more, representing 92.73% of the total number of employees in this sector.

The objective of the monthly statistical research on earnings is the evaluation of the short-term tendencies of the average monthly and hourly wages and on the overall economy and industries.

Based on the above mentioned elements, we wanted to indentify the existing relationship, in our country, between the earning and the variation of the general insurance gross written premiums. In this sense, we used as an analysis method the simple linear regression.

In case of simple linear regression, it is necessary to identify an econometric factorial model with the structure:

$$y = f(x) + u$$

where:

y = actual values of the dependent variables;

x = actual values of the independent variables;

u = residual variable representing the influences of the other factors of the y variable, not specified in the model and considered to be incidental factors with insignificant influence on the variable y.

In order to be able to build a unifactorial linear regression model we've defined the salary as an independent variable, while the value of gross was

considered a dependent variable (outcome). Thus, the regression model may be written down as the following mathematical equation:

$$PSAG = a + b \cdot CS$$

From an econometric perspective, the considered model should include the residual component, seen as a representation of the differences that arise between the values determined from a theoretical point of view and the one measured in the real economy.

$$PSAG = a + b \cdot CS + u$$

where:

PSAG = general insurance gross written premiums - dependent variable;

CS = earnings - independent variable;

a, b - parameters of the regression model;

u - residual variable.

In order to determine the parameters of the unifactorial linear regression model we've considered a range of data on the evolution of the two macroeconomic indicators of results from 2002 to 2012. This information can be summarized in a table as follows:

TABLE 1: The evolution of the average salary in Romania during 2002-2012

Year	Gross annual average value	Net annual average value	Average exchange rate (Euro)	Net annual average value (Euro)	Gross premium for general insurance
2002	532 lei	380 lei			
2003	647 lei	470 lei			2.673.816.291
2004	804 lei	582 lei			3.476.543.926
2005	943 lei	721 lei			4.417.165.819
2006	1.108 lei	832 lei	35,245	236.06 €	5.729.284.541
2007	1.410 lei	1.043 lei	33,373	312,52€	7.175.789.699
2008	1.742 lei	1.282 lei	36,827	348,11€	8.936.286.505
2009	1.889 lei	1.381 lei	42,373	325,91€	8.869.746.957
2010	1.936 lei	1.407 lei	42,099	334,21€	8.305.402.152
2011	2.022 lei	1.504 lei	42,379	354,89€	7.822.309.952
2012	2.117 lei	1.604 lei	44,560	359,96€	

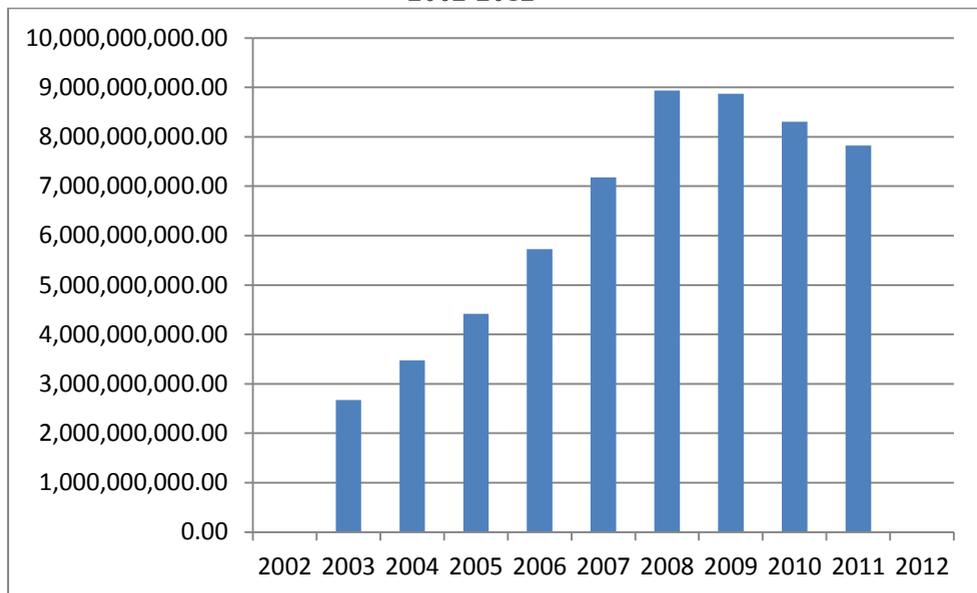
Source: National Institute of Statistics

(<http://www.insse.ro/cms/rw/pages/comunicate/castigulSalarial.ro.do>)

To be able to make a proper analysis of the existing correlation between the two macroeconomic indicators shown in the above table, it is necessary, as a first step of this research, to identify a series of features targeting the evolution of each measure considered within the timeframe under review. In this respect, using EXCEL software we've studied, initially, the individual evolution of the two indicators. Thus, studying the evolution of the general insurance gross written premiums during 2002-2012 enabled the

obtainment of the following significant information and graphical representations:

Figure 1 The evolution of general insurance gross written premiums during 2002-2012



As it can be seen, both from the analysis of the data series subject to research, and especially from the figure shown above, within the considered timeframe, the general insurance gross written premiums experienced a constant increase from one year to the next, with the exception of the last years included in the analysis period. Thus, it appears that, amid the economic-financial crisis that affected the whole world starting with the second half of 2009, the value of the premiums for 2010 records a decrease of over 6% compared to the immediately preceding time interval.

Table 2 The main statistical tests performed on the general insurance gross written premiums during 2002-2012

<i>Column 1</i>	

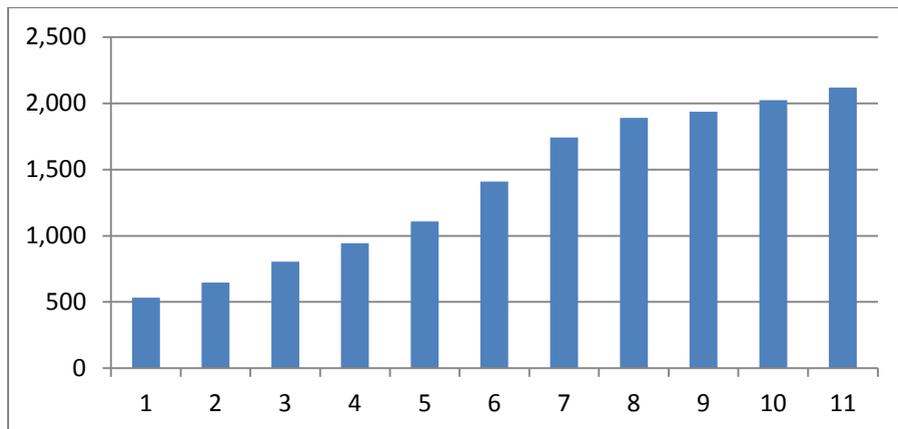
Mean	6.378.482.871,33
Standard Error	795.788.707,90
Median	7.175.789.699,00
Standard Deviation	2.387.366.123,71
Kurtosis	-1,49
Skewness	-0,48
Range	6.262.470.214,00
Minimum	2.673.816.291,00
Maximum	8.936.286.505,00
Sum	57.406.345.842,00
Count	9,00

Using the EXCEL software package we have conducted a series of statistical tests designed to ensure a better picture of the evolution of general insurance gross written premiums within the considered timeframe. Therefore, we can note that the average value of this indicator for the 2002-2012 time frame is 6.378.482.871,33 lei, with a range between a minimum of 2.673.816.291,00 lei (recorded at the end of 2003) and a maximum of 8.936.286.505,00 lei (at end 2011).

The values of the statistical tests performed above enable us to state that the distribution of the general insurance gross written premiums values for the considered timeframe is not perfectly symmetrical (the value of the skewness test is different from 0), the distribution being rather flat (kurtosis <3). Moreover, it is easy to see that, within the data series considered, the values comprised between the minimum and the average of the data series are more numerous than those included in the second half of the variation interval of the indicator subject to this research.

A similar analysis can be carried out in respect to the salary development (public and private) within the timeframe 2002-2012. The main elements obtained from the analysis conducted using EXCEL software can be presented as follows:

Figure 2 The evolution of the salary earnings during 2002-2012



The previous graphic representation leads to the conclusion that, within the timeframe subject to this research, the indicator for the salary earnings has had an accentuated evolution, with significant increases from a period to another.

Table 3 Statistical tests carried out on the salary earning during 1990-2009

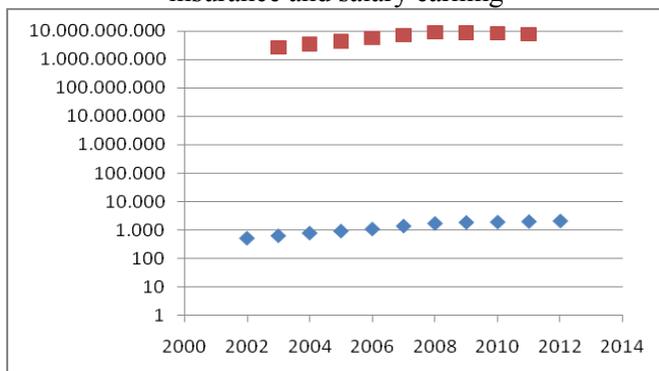
Mean	1377,272727
Standard Error	178,5938557
Median	1410
Standard Deviation	592,3288092
Sample Variance	350853,4182
Kurtosis	-1,784250748
Skewness	-0,149066393
Range	1585
Minimum	532
Maximum	2117
Sum	15150
Count	11

Using the Excel application, we established the variation interval of the researched indicator, establishing thus the fact that the salary earning value falls between 532 lei, in 2002 and 2117 lei, at the end of 2012. Also, we could establish that the average value of this indicator for the period 2002-2012 is of 1377,27 lei. As it can be seen, the values for the Skewness and Kurtosis tests offer us the possibility to state that the considered distribution is not perfectly symmetrical, being predominant the values placed between the average and the maximum of the data series.

From the two analyzes previously carried out it was possible to draw a very important conclusion regarding the analysis method of the correlation between the two indicators subject to research- the general insurance gross written premiums and salary earnings. Thus, it can be noted the fact that the evolution of the two macroeconomic indicators is very similar, with accentuated increases for the period between 2002-2012 and a decrease of around 6% during the last year included in the timeframe subject to the research. Also, it can be seen that the statistical tests carried out on the data series on to the two indicators are almost identical. Based on these findings, we can state that between the value of the general insurance gross written premiums and that of the salary earnings there exists a strong interdependence.

In order to support this statement, and to identify the regression function typology we created a graphical representation of the pairs of points that comprise the general insurance gross written premiums and the corresponding salary earnings points. This graphical representation is as follows:

Figure 3 The parallel evolution of the gross written premiums for the general insurance and salary earning



As it can be seen in the previous figure, the pairs of points for general insurance gross written premiums and salary earning describe almost perfectly a straight trajectory, and give us the possibility to conclude that the unifactorial linear regression model can describe with very good results the relationship between the two indicators analyzed. The main issue of any regression model is determining the model's parameters, operation that can be carried out using the method of the smallest squares (least squares). In doing so, we start from the simple linear regression model equation:

$$y = a + bx + u$$

where:

y_i = the theoretical values of the y variable obtained only according to the values of the essential factor x and to the values of the parameters estimators a and b.

To estimate the parameters of this regression model we used the Excel application, where we defined the equation that has as a resultative variable the general insurance gross written premiums, and as a factorial variable the value of the salary earnings. Also, we considered that this model of regression will include the free term c. the estimation method defined in the program is the method of the smallest squares- least squares.

Based on the elements presented above, using the Excel application, the following results have been obtained:

SUMMARY OUTPUT

Regression Statistics

Multiple R	0,952372
R Square	0,907012
Adjusted R Square	0,893728
Standard Error	7,78E+08
Observations	9

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	4,14E+19	4,14E+19	6,827,856	7,41E-05
Residual	7	4,24E+18	6,06E+17		
Total	8	4,56E+19			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95,0%</i>	<i>Upper 95,0%</i>
Intercept	4,18E+08	7,67E+08	0,544834	0,602785	-1,4E+09	2,23E+09	-1,4E+09	2,23E+09
Variable X1	4291439	519350,8	8,263,084	7,41E-05	3063370	5519509	3063370	5519509

RESIDUAL OUTPUT

<i>Observation</i>	<i>Predicted Y</i>	<i>Residuals</i>
1	3,19E+09	-5,2E+08
2	3,87E+09	-3,9E+08
3	4,46E+09	-4,7E+07
4	5,17E+09	5,57E+08
5	6,47E+09	7,07E+08
6	7,89E+09	1,04E+09
7	8,52E+09	3,46E+08
8	8,73E+09	-4,2E+08
9	9,09E+09	-1,3E+09

To interpret the results obtained using the linear regression method it is necessary that we establish, from the beginning, if it can be viewed as correct, and the provided results can be used in real macroeconomic analysis. We can also see that the probability that this model is correct is very high-approximately 95,23%, this conclusion being made based on the values determined using Excel application for the R tests- Squared (0,9070) and Adjusted R-squared (0,8937).

Also, the validity if this regression model is confirmed by the values of the F tests-statistic (68,27- a value far superior to the level provided in the table, considered to be the reference point for the validity assessments of the econometric models), and also by the null degree of risk (reflected by the value of the Prob F test-statistic).

Based on the afore mentioned elements, we can consider the regression model describing the correlation between the value of the general insurance gross written premiums and that of the salary earnings as being correct, thus reflecting accurately the real evolution of the two macroeconomic indicators. We can therefore transcribe the unifactorial linear regression method as follows:

PSAG = 0,00000004 + 4291439 CS

This regression method allows us to establish a series of aspects regarding the relationship between the two variables considered. It can be noted that between the value of the general insurance gross written premiums and the value of the salary earnings registered between 2002-2012 in our country there is a significant direct relationship. Therefore, we can state that an increase by a monetary unit of the salary earnings (with its two components – private consumption and public consumption) will lead to an increase with 4.291.439 monetary units of the general insurance gross written premiums. The insurance consumption during the analyzed period shows the individual's aversion to risk because together with the salary increase it increased the income for premiums in the insurance field.

The situation previously presented can be regarded as normal provided that it is known that, in our country, the economic growth in the recent years has been based almost exclusively on a consumption stimulation policy, especially in terms of its private component.

We can also say that in order to overcome the current socio-economic crisis, in Romania the measures that directly and negatively affect the salary earnings should be limited (for example: major wage cuts implemented within the last period or the layoffs from the public sector).

The analysis of the regression method previously presented cannot be considered complete without mentioning the fact that the significant value of the free term means that the factors that were not included in the model present a relatively high influence on the value of the general insurance gross written premiums. The negative value of the free term proves that the variables that were not included in the previous econometric model have, in their entirety, a negative effect on the evolution of the general insurance gross written premiums.

4. Conclusions:

- Regarding security, we must keep in mind the reasons underlying an insurance contracting, cognitive affective processes, the types of behaviors, a fundamental premise of consumer behavior being that people buy products or services not only for what they do but also for what they are, consumers often try to create an identity through consumption activities

- risk aversion people is willing to spend some of their resources to find ways to reduce risk, which explains the insurance claim and creates the potential existence and development of the insurance business.
- insurance market consumer behavior is shaped by some particular aspects such as moral hazard, adverse selection, information asymmetry and regret on the demand for insurance issues
- Information on the behavior of insurance companies insurance applicants at risk is imperfect, because actions can not be fully insured supervised, the insurance cover is complete and its amount is higher, the less individuals are incited to avoid the insured event
- Existence of moral hazard would affect the insurance business, generating antiselection risk, affecting financial stability and profitability of insurance companies.
- In the study case General Insurance gross written premiums and earning almost perfectly describe a straight trajectory which allows us to state that the linear regression model can describe unifactorial very successful relationship between two indicators analyzed.
- it can be concluded that gross written premiums for insurance are influenced primarily by the evolution of wages and consumer attitudes on insurance. Din analyzed data we conclude that the Romanian consumer financial education has improved , which is associated with increased risk aversion and improvement in insurance underwriting noting that during the crisis, it seems that people are less willing to purchase insurance, thus satisfying their need for security, the main directions for the allocation of earnings the basic needs and monetary obligations such rates, rents.

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CONSUMER BEHAVIOR IN TOURISM AND THE INFLUENCING FACTORS OF THE DECISION MAKING PROCESS

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Abstract

Being part of the tourism industries requires substantial knowledge. Therefore, it is important to be aware of all the factors that influence a tourist to purchase a particular tourism product. These complex factors are vital into the final purchase decision of an offer with emotional value for customers. This paper presents the typologies of tourists and tourism, and in relation to these aspects, the different types of segmentation, as well as several motivators and determinants that tourism companies and tourists should acknowledge in order to provide the premises for a win-win situation.

Keywords: *consumer behavior, motivators, market segmentation, determinants, tourists, types of tourism, purchase.*

JEL Classification: *M31*

1. Introduction

It is crucial for a tourism manager to research and understand the way in which consumers make decisions and the factors that motivate and encourage tourists to make particular purchases. Also, when analyzing a tourist's consumer behavior companies must take into consideration: the needs and habits of the consumers, consumer preferences and requirements, tourism market segmentation, and motivational factors such as cultural, personal, emotional, status, personal development, physical, etc.

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The subject of consumer behavior in the tourism context is the key to the foundation of all marketing activities which are implemented in order to establish, advertise, and sell tourism products. The success of a marketing activity is primarily related to understand consumers' decision making process to buy or use tourism products. Knowing their behavior patterns and the factors that influence their purchase, tourism companies should fully comprehend when they should get involved in the process in order to obtain the results they want. Also, in this way, organizations will be aware of how to influence their customers to buy different products that fulfill their expectations and needs.

2. Typologies of Tourists

It is important to know that tourism has existed for centuries, therefore this industry can be divided into different types of tourism, such as: business tourism, health tourism, religious tourism, educational tourism, social tourism, cultural tourism, visiting friend and relatives, special interest tourism, and hedonistic tourism. All of these types are included in two main categories- domestic and international tourism, with a subdivision together with inbound and outbound tourist issue.

A popular debate regarding tourism is related to the differences between tourist and traveler. A tourist (Swarbrooke and Horner, 1996) is someone who purchases a package from a tour operator, while the traveler is the person who makes his/her own independent arrangements for their personal vacation. However, Sharpley (1994) noted that the word "traveler" is usually applied to someone who is travelling for a long period of time, especially back-packing on a limited budget, and it also involves a spirit of freedom, adventure and individuality. On the contrary, the term "tourist" is usually used in a rather depreciative sense to describe those who are involved in mass produced package tourism.

Smith (1989) distinguished seven types of tourists: explorers are a small group who travel as anthropologists; elite tourists are experienced travelers who like expensive tailor-made tours; off-beat tourists plan to get away from other tourists; unusual tourists make side trips from organized tours to experience local culture; incipient mass tourists travel in destinations where tourism is not yet completely dominant; mass tourists want the same things they are used to at home; charter tourists have a little or no interest in the

destination itself, as long as the trip will provide them with all the accommodation that they required.

3. Market Segmentation in Tourism

Market segmentation is defined as a process of dividing a large homogenous market into groups of people who have similar needs, wants, or demands. The purpose of the segmentation is to provide the basis for creating a marketing mix that will perfectly correspond to the expectations of clients in the targeted segment. This explains the fact that market segmentation is a form of consumer classification used to provide support for the marketing function in a tourism organization.(Dibb,2001)

Segmentation is aimed to serve the need of marketers, as Middleton and Clarke (2001) believe that: ‘Market segmentation and product formulation are mirror images if they are correctly matched’. Certainly, segmentation is designed to improve the work regarding all four Ps of the marketing mix (Product, Price, Promotion, and Place). However, organizations must take into consideration that successful marketing is not all about one method of segmentation alone, it is important to use and combine all five types of segmentation (or six in tourism) in order to accomplish the profit or result that the company is expecting.

In the following sections, different types of market segmentation for tourism are developed. In this context, potential or existing customers can be divided by five main criteria, into groups who have similar characteristics as buyers.

3.1. Geographical Segmentation

Geographical segmentation is based on collecting and analyzing information according to the physical location of the customer (Swarbrooke and Horner, 2003). Also, this type of segmentation divides markets into different geographical areas by region, country, city, population, climate. For example, a tourism company can segment its customers as urban or rural consumers, clients who live north-west countries or more specifically near the mountains, etc. in order to have a specific perspective profile of their target audience.

3.2. Socioeconomic Segmentation

This method inquires to subdivide markets by different socioeconomic variables. For instance, in the UK society is separated into six groups, based on occupation and defined by the letters A, B, C1, C2, D and E.

Socioeconomic variables are represented by: income, occupation, education, lifestyle, price sensitivity, and brand preference (Swarbrooke and Horner, 1999). For example, a tourism company may be interested to examine a target group who only acquires products from a competitor, a tourism product purchased only by customers who have an average income, or a target group who wants to spend a few days away from the urban turbulence.

3.3. Demographic Segmentation

This form of segmentation is based on different characteristics and is really important for tour operators and travel agents to better understand their customers who are planning a trip (Swarbrooke and Horner, 1995), such as:

- Sex – men are known for their passion for sports, while women love to shop;
- Age – tourism companies usually divides the market in three main categories: young teenagers, adults and older generation;
- Religion – expedition or mission market,
- Family status – according to some research, the place in the family cycle of the consumers is decisive for purchasing different products or services, especially in tourism, for example: teenagers will spend their holiday in a place where they could have fun, separately from their parents, enjoying their independence, while a family with small children would want to spend their vacation in a place that provides for their children all the utilities, but also to allows them to relax under a dispensable budget.

3.4. Psychographic Segmentation

This form of segmentation is considered to be a modern technique that already has begun to influence different areas, including clothing, food, perfume, cars, jewelry, drink and tourism (Swarbrooke and Horner, 2007).

This method is based on the idea that factors like attitudes, lifestyles, opinions and personalities of people determine their behavior as consumers. For instance, extrovert people will love the idea to enjoy a hedonistic holiday (sun, sand, sea), while introvert people will love the idea to spend their vacation on an island away from crowded areas, whereas spa holidays target consumers who have predisposition towards a healthy lifestyle and finally tourists who seek a relaxing trip opt for visiting museums and getting to know the culture of the country they visit.

3.5. Behavioristic Segmentation

This technique involves the relationship between the consumers themselves and the product. According to Swarbrooke and Horner (2007), this method incorporates different variables like: user status (never used, ex-user, first-time user, regular user); readiness stage (unaware, aware and interested, desirous of purchasing, intent on purchasing, planning to purchase immediately); attitude towards product (enthusiastic, indifferent, hostile); benefits sought (status, economy, new experiences, good service, excitement, making friends); loyalty to the product (total, partial, none); purchase occasions (regular purchaser, once-in-a lifetime purchaser).

Even though this types of segmentation are known to be successful in any area, some tourism academics have searched for some techniques relevant only in tourism, Middleton and Clarke (2001) suggested there are six ways of segmenting markets in travel and tourism: purpose of travel; buyer needs, motivations and benefits sought; buyer and user characteristics; demographic, economic and geographic characteristics; psychographic characteristics; price. While four of these are similar to the classic methods, they are however formulated differently and purposely in tourism.

4. Motivators in the Decision Making Process in Tourism

A wide range of variables motivates consumers to buy tourism products and make some particular purchase decisions. Therefore, there are two main categories of motivators (Swarbrooke and Horner, 2007): those which motivate a person to take a holiday and those which motivate a person to take a particular trip to a specific destination at a particular time.

The motivators can be divided into (Swarbrooke and Horner, 2007): cultural (sightseeing, experience new cultures), physical (relaxation, suntan,

health), emotional (nostalgia, romance, adventure, fantasy), personal (visiting friends and relatives, make new friends, need to satisfy others), personal development (increasing knowledge, learning new skills), status (exclusivity, obtaining a great deal).

When talking about motivators, it is important to take into consideration the fact that every tourist is different and so are the variables that motivate him. The factors which determine an individual tourist's motivations are: their personality (friendly, loner, adventurous, careful, secure, shy); their lifestyle – depends directly to their interests and concerns; their likes and dislikes; their past experiences as tourists and particular type of holiday; their weaknesses or strengths - whether these depends to their health, wealth or the desire to escape from the monotony of their daily working life. Also, these types of motivators could be modified as a response to some changes that appear in consumer's personal life, such as: having a child, getting married, a modification of income, changing expectations or experiences as a tourist, health issues.

When considering a holiday, it is relevant to take into account the big influence the travel companions can have on how a vacation is perceived. For example, a housewife will chose a romantic destination when celebrating her wedding anniversary with her husband, but will chose another destination when planning to leave with her children, case in which the main motivation it will be to make them happy. And when she goes on holiday with her churchgoers, she will pursue a spiritual accomplishment.

4.1. The Connection Between Market Segments and Motivators

Motivators vary not only for each individual, but also between different market segments; for example: some academics seem confident that usually segments are based on demographic criteria. They seem to assume that, according to the demographic segmentation, tourists are divided in three main categories: young people who want to party, have fun, enjoy their independence, relax, dance and make a lots of new friends; parents who are concerned with keeping their children safe and happy, parents who want to escape from time to time from their parental responsibilities; and lastly, elderly people who prefer tranquil and comforting activities.

Another big role in motivating a tourist is represented by cultural segmentation. Some research has been conducted regarding national and

cultural differences in relation to the factors that motivate a tourist to purchase. This could come as a surprise because in the previous years, more and more, tour operators tried to sell their products in other countries. But, there seems to be some similarities between groups of countries in terms of motivation. For instance, people in northern European countries and the northern states of the USA are often motivated by the purpose to get some sun and relax. Nevertheless, in warm countries such as India or Saudi Arabia, the intention is to go on holidays to a colder area, in order to escape from the heat, and to change the climate, once in a while. Moreover, another relative example is the one regarding the spiritual holidays. The aim of these types of trips is to achieve spiritual fulfillment; this kind of trip is generally common among Muslims, rather than Christians. (Swarbrooke and Horner, 2005)

4.2. Timing of Purchase Decisions in Tourism

Motivators can also vary depending on when the decision to buy a holiday is made and which are the sources from which they obtain their information. Regarding the time of the purchase, a last-minute booking may reflect a wish to obtain a discount, the goal to surprise a partner, or could be the response to stress at work. Contrary, a vacation booked many months in advance could be the result of a desire to participate to a famous annual event, visit some relatives or some friends, or just wanting to have everything in order and to control all the details of the trip. (Swarbrooke and Horner, 2005)

In conclusion, the holiday represents a compromise between multiple motivators, so a tourist has two options: to purchase a service that includes partly all the motivators that he wants or to focus on one dominant motivator.

5. Determinants in the Decision Making Process in Tourism

Determinants are divided in two main categories: those variables which determine whether or not someone will be able to go on a holiday and those factors which determine the type of vacation, providing that the first set of determinants allows a holiday to actually take place. Determinants can be subdivided into: those which are personal to the tourist and those which are external to the tourist (Swarbrooke and Horner, 2003).

Personal determinants of tourist behavior are: circumstances: health, disposable income, leisure time, family commitments, work commitments; knowledge of: destinations, the availability of different tourism products, price differences between competitor organizations; attitudes and perceptions: perceptions of destinations and tourism organizations, political views, preferences for particular countries and cultures, their attitudes to standards of behavior as a tourist; experience of: types of holidays, different destinations, taking a trip with particular individuals or groups (Swarbrooke and Horner, 2007).

These determinants will differ among tourists and depending on the time. Different individuals will perceive certain determinants to be more important than others, based on their attitudes, personalities, principles, fears and past experiences. Even for the same person, these determinants will vary, depending on different factors such as family situation, changes in age and experience as a tourist. Plus, these personal determinants could represent a market opportunity for the tourist industry.

Since the collapse of the economy, managers feel the need to work harder and improve their services and products as much as possible. This has been the reason for the increasing of the weekend breaks because it meets the needs of the tourist who searches for a short trip and a break from work. And from an economics standpoint, this has been highly beneficial for destination tourism.

Moreover, external determinants of tourist behavior are represented by: political factors – government legislation and policy, immigration restrictions and visa requirements, civil disorder and terrorism, the nature of the political system, taxation policy, tourist taxes; the media - travel media (promotion through mass-media and guidebooks) and non–travel media (news programs and wildlife programs on television; tourism organization marketing- foreign destinations’ advertising campaigns, tour operator’s brochures, travel agent’s special promotions (Swarbrooke and Horner, 2007).

Tourist behavior is driven by their own personal determinants or external determinants, depending on their personality and lifestyle. People who have interests in outdoors activities and environment and social responsibilities could be more tented to take into consideration external factors when making a decision to buy a travel package, while introverted people may be influenced by a series of internal determinants.

It is important to have in mind that these determinants could be facilitators (an appealing guidebook) or restraints (a limited budget) through tourists who want to transform their motivations and desires into reality.

5.1. The Determinants that Influence Group Travel

Usually, determinants are really complex and vary depending on the type of group that tourists belong to, whether it is a family or a group of friends.

Each individual has his own determinants, but in the case of a group, their determinants may differ depending on the dominant factors. In order to satisfy the demands of a group, it is necessary to satisfy each person from a particular group, which could be quite difficult. The solution of this problem, according to Swarbrooke and Horner (2007), is to make a compromise on behalf of each group member.

On the other hand, a strong group can set up a certain imposing determinant, such as fear of flying, on every member of the group. In this situation, even though some members of the group will prefer to travel by airplane, they might have to compromise, and use another means of transportation. In conclusion, the final decision is made by taking into consideration what the majority of the group wants and needs.

6. The Role of Travel Agents in Consumers' Decision Making Process

The tourism has a vital role in fulfilling the determinants of tourist behavior. For example: it creates products in order to correspond the determinants of some tourist behavior, offers all the information that is required by potential tourists, creates promotional offers, provides confidence to the tourists assuring them that the product is the ideal one and meets all the requirements and desires of the tourists, and offers the possibility to tourists to buy different tourism products on credit.

An important part in the tourism industry is played by the travel agent, who is the connection between service producers from this industry and their customers. As Ryan (1997) says: 'The information provided becomes part of the information that determines a holiday-maker's expectations. The travel

agent possesses the means to create the antecedents of success or failure of the holiday’.

Also, a travel agent is a professional who concentrates on making travel arrangements on behalf of other contracting entities. The services of a travel agent can be extremely useful. For instance, travel agents have access to cheap fares, hotel deals, and other travel advantages which consumers cannot get on their own.

A travel agent can work as a freelancer, or as part of a larger travel agency. Some agents can be specialized in some particular fields like business travel, exotic travel, or honeymoon arrangements. Additionally, customers often ask for the opinion of a travel agent in order to see what his recommendations are because his opinion may be valuable for them. Therefore, a travel agent can provide for their tourists a complete package of services that meet their demands or the travel agent can handle only certain details of the trip (the means of transportation, accommodation). A travel agent can also be helpful in the decision making process of a tourist because frequently many tourists make this decision on their own, for some wrong reasons, under the influence of different determinants, which are no longer accurate. Thus, this is where a tourism organization gets involved, more specifically the tourism organization must be aware of the mistakes and outdated determinants of tourist behavior when planning any activity (Swarbrooke and Horner, 2007).

The information provided becomes part of the information that determines a holiday-maker’s expectations. The travel agent possesses the means to create the antecedents of success or failure of the holiday (Swarbrooke and Horner, 2007). That is why a travel agent who is unprepared, who doesn’t have all the information or gives some improper advice, could determine a customer to buy or avoid using his services, or to further influence and give negative opinions of his holiday destination to friends, relatives and acquaintances.

7. Conclusions:

As any other complex process, the decision making process in tourism has its weaknesses in explaining this type of consumer-related mechanism, because in order to make an analysis regarding acquisitions in tourism, tourism companies must be aware of all the factors that influence a consumer,

in different periods of time. This is particularly complicated due to the fact that tourists change their requirements often and their needs are unlimited. Therefore, the way tourists choose their holiday should be continuously researched in order to better understand tourist behavior.

Consumer behavior should be studied in terms of its many patterns during the purchase process, because it depends on different factors that can appear during an acquisition (for example: the type of holiday to be taken, their motives and the determinants of that particular purchase, their lifestyle, their social position). Another impediment regarding the tourism products and services is the intangibility of these offers, which often leads to doubts and uncertain decisions during a purchase. This is why individuals may take advice from friends, relatives, travel agents and television which could determine certain underlying problems for companies when they are studying tourist behavior patterns. Withal, the purchase of the holiday is a major event in an individual's life because the trip could represent the escape from the monotony of his life, his work and could become the opportunity to relax, have fun, and enjoy a few days away from home.

Thus, when planning a vacation, a travel agent, has to take into consideration two types of factors, internal and external to the tourist. The internal factors can be divided into: personal motivators, personality, disposable income, health, family commitments, work commitments, past experience, hobbies and interests, existing knowledge of potential holidays, lifestyle, attitudes, opinions and perceptions. The external factors are classified into: availability of suitable products; advice of travel agents; information obtained from destinations; tourism organization and the travel media; word-of-mouth recommendation of friends and family, political restrictions on travel, health problems and vaccination requirements in destinations; special promotions and offers from tourism organizations; the climate/destinations of regions (Swarbrooke and Horner, 2007).

Furthermore, the decision-making process is really complex and depends on several factors and many decisions, which further are influenced directly by motivators, determinants and segmentation criteria. Segmentation divides the population into subgroups who have the same purchase characteristics. It seems that the decision of every individual from the subgroup is driven by a range of influences, that are subdivided into four criteria: demographic (age, sex, religion, family status), geographical (region, countries, population), psychographic (lifestyle, personality), behavioristic

(relationship between the tourist and the product- benefits, advantages that a customer expects to receive from a product).

In conclusion, it is critical for a tourism entrepreneur to be aware of the three main stages in the decision-making process in order to have a profitable business. These levels are: pre-decision stage and decision process, post-purchase evaluation, future decision-making. Thereby, the purchase process is the result of three factors: motivators, acknowledgment, perceptions and determinants (Swarbrooke and Horner, 2007). These aspects will be further developed in future studies.

Also, future research should draw attention to the process of making the right decisions in this particular area and to understand how consumers respond to different variables. Mostly, it is important to study tourist behavior in relation to different types of tourism activities (mass tourism, niche tourism, and macro-niche tourism, which is further subdivided into cultural, environment, rural, urban, etc.).

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THE IMPACT OF THE SOCIAL RISKS ON THE YOUNG EUROPEAN PEOPLE DURING THE LAST TEN YEARS

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Abstract

The social risks, components of the system of risks affecting the individual, organizations, society as a whole, given determination and effects in the economic, social, political, cultural, etc. have become, an important issue for the health and viability of the nations, mainly through the young population that provides transmission medium and long term, of the system of values, ideas, behaviors. In the present study,) highlighted, in dynamic, compared and correlated, major social risks – unemployment, impoverishment, etc., have an impact on young people, with economic motivations but also psycho-social

Keywords: *social risk, income, risk of unemployment, risk of poverty, young European population*

JEL classification: *E24, I24, I32, O15, O52*

1. Introduction

The evolution of the global economy in the last few years, marked by convulsions, shocks, instability - economic, social, political - took shape dimensions, if not new, at least the “renewed” risk, both at the macro and microeconomic level.

The social risks are pure risks, with psycho-socio-economic and political determination, manifesting itself in different forms, having consequences, costs reflected in economic, social, psychological -, different from risk to the risk, from a conjectural situation to another, ranging in time and space.

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Unlike the entrepreneurial risks, or the risks specific to the individual as a consumer, although the anthropic factor is present in the occurrence and their development, social risks are not the result of intentional actions, made in the decisional process of production or consumption. If the decisional risk – in the business or the consumer, can be complete with the gain or loss, achieving social risks does not mean than loss. Achievement of some social risks do not involve any form of social protection. Therefore, the burden of their achievement becomes more consistent. Another angle of the issue, is that of the persistence effects on long-term of the social risks – on the individual himself, upon those with whom he interacts, and on society as a whole.

The segment of the young population, in training and in the processing, responsive to the dynamics of the environment, is perhaps the most vulnerable to the various forms of manifestation of these risks. Why? Because it is in the phase of release - growing lifecycle phase, costs related to social and individual development are high and if the 'benefits' are not at the least as 'loss', the loss at the individual or social level, on the short-term, but mostly medium and long term, will be huge. Economic loss but mostly psycho-social.

2. Types of the social risk

Under the contemporary economic and financial crisis, the individual is subject to major social risks, more threatening and more aggravating in today's society. Of these, the specific problem raised unemployment and pauperization but also violence, intolerance, marginalization, cultural, religious, uprooting the alienation, the shortcomings of the social security schemes, etc.(Bouyssou, 1997).

On the European continent, strongly linked to the system of interdependencies in the global economic system, of the negative effects of the crisis stands a macrosocial risk manifested with virulence in these last couple of years in most European Union countries, mainly young population of the Central European countries and Eastern Europe, recent entrants into the EU system, yet sensitive to the impact of environmental factors — the risk of unemployment.

One of the derivatives of the risk of unemployment is another type of social risk – the pauperization. Pauperization and marginalization are an important parts of the population of the globe; even though, on the european continent, the problem does not meet the gravity of the other parts of the world, contemporary crisis has brought not only a larger number of people in a

situation of poverty, predominantly young and elderly people, but also a different attitude, a different style of life for the vulnerable population segments. Hence the necessity of rethinking, both in personal and social values and the system of relationships that we respect each other and cultivate on long-term.

Having as antecedent the low income or unemployment, pauperization, the system of risks shall be supplemented with other social risks social such as: violence, drug use, alcohol, prostitution, AIDS and others. The violence manifests itself in the form of either local or regional wars, inter-ethnic, religious or terrorist action by the formation of gangs, groups, and movements with the motivation for action, for political, ethnic, religious. The violence and the crime concern both the world experiencing poverty and underdevelopment, because here, the arguments in favour of such attitudes are manifold, but also developed European countries, where, on the outskirts of society, people struggling in the failure to secure a decent living, easy prey of large and dangerous scoundrels temptations which can cause the illusion of life needs. Violence is not specific only to drop the margins of society: a permanent longing, thirst and overwhelming greed for money and power, leading, in a society that had begun to forget what moral values, upon violence manifested in various ways.

In terms of economic and financial crisis, both the violence and the intolerance have found good land for development. Intolerance has large proportions in contemporary European society but of particular shapes delivering - exacerbated nationalism, religious fanaticism, racism, etc. are not representative for the european continent.

The evolution of the crisis of the European economy in general, the situation of the young population in particular, highlights the vulnerability of national economies and social security systems. Social risks originate in the economic, the consequences in the social, and, again in the economic. The interdependencies and the inter-influences: economic, social and political demonstrate that risks should be treated in a systemic vision. They may also be cause for a particular type of risk, but also effect for other type of risk.

3. The segment of the young population at European level - representation, education, employment

3.1. Representation. The social risks affecting European young population must be analysed from the human potential of the continent in

terms of these demographic. In the period 2003-2012, the population aged 15-24 year olds in the EU dropped as share, from 12.9% to 11.7% (<http://epp.eurostat.ec.europa.eu/>, 2013). Continent-wide, the situation is differentiated from one country to another, as follows:

- reduction of the share of young people in the total population in most countries of Europe (25 of 35 analyzed), most in Ireland, Estonia, Latvia, Slovenia, Slovakia;
- maintaining the share of young people in the total population in Belgium, Austria, Iceland;
- increase significantly the share of young people in the total population in Denmark, Luxembourg, the Netherlands, Sweden, United Kingdom, Norway, Switzerland;
- in 2003, the lowest proportion of young population had Italy 10.8% and Denmark 11.1% and after 10 years, against the backdrop of contemporary economic and financial crisis, 11% threshold was lowered in several countries: Italy 10%, Spain 10.1%, Greece 10.2%, Portugal 10.8%, Slovenia 10.9%;
- in Romania, the share of young people decreased from 15.6% in 2003 to 12.8% in 2012.

3.2. Education. As regards young people's education, the situation on the continent reveals following (Tab.1) (<http://epp.eurostat.ec.europa.eu/>, 2013):

Table 1: Distribution of the young persons depending on the level of education (%)

Level of education/ Year	Persons with lower secondary education	Persons with upper secondary education	Persons with tertiary education
2003	22.9	65.0	12.1
2004	22.8	64.7	12.5
2005	22.6	64.7	12.7
2006	22.1	64.9	13.0
2007	21.9	65.0	13.1
2008	21.5	65.1	13.4
2009	21.4	64.9	13.7
2010	21.0	64.7	14.3
2011	20.5	64.8	14.7
2012	19.8	64.6	15.6

Source: <http://epp.eurostat.ec.europa.eu/>

a) the share of people with lower secondary education level has dropped to the level of the Union's 27 members, from 22.9% to 19.8%; a decrease pronounced from 25.7% to 21.7% took place in the 15 member states before integrating in 2004 other 10; significant decreases were recorded in Bulgaria, Cyprus, Latvia, Switzerland but the steepest declines of this segment of the population have been in Malta, from 54,9% to 26.4% and Portugal, from 52,1% to 32.5%; at the opposite pole lies Norway whose share increased from 6.3% to 28,7% in this period; in 2012, with high percentages of this segment of the population have been in Turkey, Iceland, Spain and >37% and lowest in the Czech Republic, Poland, Lithuania, Slovenia, Slovakia < 11%.

b) the share of people with upper secondary education decreased in the past 10 years, from 65% to 64,7% in European Union countries; Denmark, Luxembourg, Slovakia, Norway recorded the largest decrease of this indicator; in Malta, Portugal, Bulgaria the weight of this segment of the population has increased by over 10% (in Malta absolute increasing was 23.8%, relative increasing 71,68%); in 2012, Croatia, Slovenia, Ireland, the Czech Republic recorded weights of over 80% of this indicator, the lowest values below 50%, being held by Turkey and Spain.

c) the segment of the population with tertiary education was at European Union level, a rising trend in terms of the share in the total population. Contemporary economic and financial crisis has not diminished the interest of young people to form an intellectual career and to be able to say, at a higher level in european businesses. Maybe even the crisis - progress and its effect, 'persuaded' the younger generation that only a University can offer the chance of an economic recovery and the economic and social comforts desired of individuals. At the level of each country, however, the situation in the EU and outside the EU to present themselves differently: decrease in the share of this segment were: Ireland, Spain, France, Lithuania, Norway; in other countries the number of young with universitary education reported to the total young population has grown sensitive in Estonia, Bulgaria, Finland, very much in Italy, Slovenia, Slovakia, Czech Republic – over 3 times. In Romania, the increase was significant, from 3.6% in 2003 to 9.2% in 2012. In 2012 the young population has been consistent in number: Cyprus (29.5%), France (26.8%), the United Kingdom, Belgium, Ireland, Spain, in these countries, weights of more than 20% of the total young population; in the same year, the poorest countries in population with university education were: Austria, Croatia, Finland (4.2%), Iceland (3,3%). At this indicator, Romania is well below the European Union average, highlighting, for a country in

transformation, a relatively high risk to cover demand for high-skilled labor, with short-term effects but mostly medium and long term.

3.3. Employment. Analyzing the situation of the young people employed in Europe, mainly the EU, we are seeing (table 2) (<http://epp.eurostat.ec.europa.eu>, 2013):

a) the degree of employment of the segment with pre-primary, primary and lower secondary education, in the period 2003-2011, has declined continuously, not solely determined by the economic and financial crisis. At EU level, the strongest decrease in the employability of this population segment took place during 2004-2005, 9.95% respectively; in 2011 the level of employment in the EU was 26% lower than in 2003. At continental level, the situation is this: over 50% of employment in Iceland (63,3%), Turkey, Denmark, less than 20% degree of employment in: Estonia, Cyprus, Latvia, Slovenia, United Kingdom, Hungary, Ireland, Poland, Lithuania, Bulgaria, Czech Republic, Croatia, Slovakia (4.9%). The degree of employment of the persons with pre-primary, primary and lower secondary education in Romania, it was in the year 2011, by 32,9 % therefore, above the average UE.

Table 2: Distribution of the young employed persons depending on the level of education (%)

Level of education/ Year	Persons employed, with pre-primary, primary and lower secondary education	Persons employed, with upper secondary and post- secondary non- tertiary education	Persons employed, with first and second stage of tertiary education
2003	37.7	51.2	11.1
2004	37.2	51.3	11.5
2005	33.5	55.1	11.4
2006	32.7	55.7	11.6
2007	32.4	56.1	11.5
2008	31.5	56.7	11.8
2009	30.4	57.3	12.3
2010	29.1	57.9	13.0
2011	27.9	58.7	13.4

Source: <http://epp.eurostat.ec.europa.eu/>

b) the degree of employment of the young persons with upper secondary and post-secondary non-tertiary education increased, at the level of the EU, over the whole period considered, with a relative increase in 14,64%. The biggest increases were in Malta (122%) and Portugal (75%). In Romania the increase was 8%, reaching 58% in 2011. At continental level, the decrease in the degree of employment of this segment of the population in 2011 compared to 2003, was registered in Belgium, Poland, Greece, Slovakia, Denmark, Hungary, the Czech Republic, Slovenia, Luxembourg. In 2011 the degree of the employment vary between 87,9% in Croatia, more than 80% in Slovakia, the Czech Republic, Bulgaria and under 40% in Portugal, Iceland, Spain, Turkey. The developed countries on the continent, including the EU members shall be placed in the range 40% to 70%.

c) in terms of the degree of the employment of young people with first and second stage of tertiary education, it has not decreased as a result of the economic and financial crisis. Compared to 2003, in 2011, the level of employment has increased in the EU with 20,72%, but the share in the total young population is relatively low, 13.4% in 2011, mainly driven by weights, less than 10% held by Iceland, Austria, Italy, Finland, Denmark, Germany, Switzerland, Croatia, Slovenia, the Czech Republic, etc. The best representations of this segment of the population they hold Cyprus (30.3%), Ireland, Belgium, Lithuania, France, Spain, the United Kingdom, with over 20% of the total young employed population. During the interval analyzed, the biggest increases in the share of young population with tertiary education, employed, were registered in the Czech Republic, Latvia, Portugal, Romania, Luxembourg, Slovenia, Greece, - with relative increases of 107% and 165%. In Romania, this ratio is increasing with 133%. The decreases were registered in Austria and Bulgaria – 21% respectively 1%. The evolution of this indicator illustrates the increased employment opportunity offered by the education level of the individual in circumstances in which the European economy has weathered a difficult time, marked by increasing the intensity and forms of manifestation of competition on the labour market affected by the decrease in production volume.

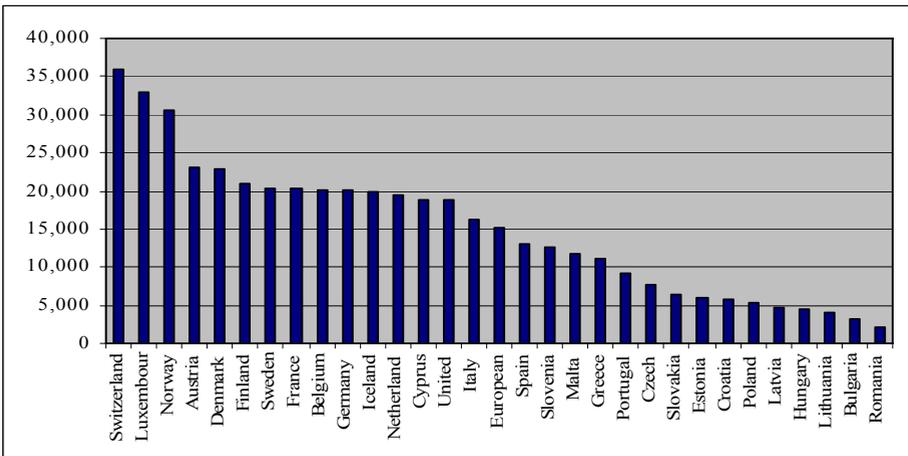
4. Causal relationships: economic independence of the individual young person – the risk of poverty of its

The economic independence of the individual is defined by its financial potential to ensure human development and according to the requirements and options to cover and meet the needs, the gradually. In this

sense, all the components that contribute to the individual's income are significant; to consider the proximity to the risk of poverty it should be noted the situation of income obtained from individuals, in this case, the young individuals from Europe, mainly from the EU, but also the situation of the unemployment among young people, as the macrosocial risk.

In terms of the annual mean income of the population in the age group of 16-24 year olds, in 2003-2012, had an ascending trend even though contemporary economic and financial crisis has made their mark throughout the european economic system, including, in particular, on the situation of the consumer, by reducing its purchasing power, behavior change in consumer purchase decision, consumption structure change, lifestyle change, etc. At EU level, the annual mean income in 2011 was 15.132 euro versus the 12.764 euro in 2005. In 2011, the highest levels of the mean incomes of the young European population were held by Switzerland – 35.976 euro followed by Luxembourg, Norway, Austria, Denmark, Finland, Sweden, France, Belgium, Germany, each with annual mean income/young pers. over 20.000 euro (fig.1). At the extreme negative per capita income situation, on place the ex-Communist countries, including Bulgaria, with an income/young pers. of 3.304 euro and Romania with 2.081 euro/young pers. These differences are reflected in the quality of life of young consumers from different countries of Europe.

Figure 1: The mean income of the young population in Europe in 2011 (euro)



Source: <http://epp.eurostat.ec.europa.eu/>

In terms of unemployment, particularly youth segment, compared to 2003, in 2012 the unemployment rate has risen the most in Ireland (the relative growth of 249%), Cyprus, Spain, Hungary, Portugal, Greece – the relative growth of over 100%. In Romania the unemployment rate grew by 16%. In other countries, such as Belgium, Finland, Malta, Norway, Germany, Poland - the unemployment rate has been falling in 2012 compared with 2003, signifying lessening the risk of impoverishing and other types of risks. Beyond the trend followed by unemployment, notably the size of this risk that unemployment macrosocial during the analysis period. In 2003, the unemployment rates of over 20 % were registered Poland (41,9%), Croatia, Slovakia, Greece, Bulgaria, Lithuania, Italy, Spain, Belgium, Finland, Estonia and the levels of less than 10% in Denmark, Cyprus, Ireland, Iceland, Austria, the Netherlands. In 2012 the situation of the unemployment for this age group worsened, reaching alarming rates in Greece (55,3%), Spain (53.2%), Croatia, Portugal, Italy, Slovakia, Ireland. In Romania, the unemployment rate for this segment was 22, 7% in 2012. Only in the Netherlands, Austria, Norway and Germany, in the 2012, the unemployment rate for the segment of young population was less than 10%. In conclusion, the risk of impoverishing trend, during the review, has been growing. The situation present the differences according the sex, indicating, at EU level, in the year 2012, a higher level of the unemployment in the case of the male population, but differed from one country to another, as a result of the impact of their cultural environment.

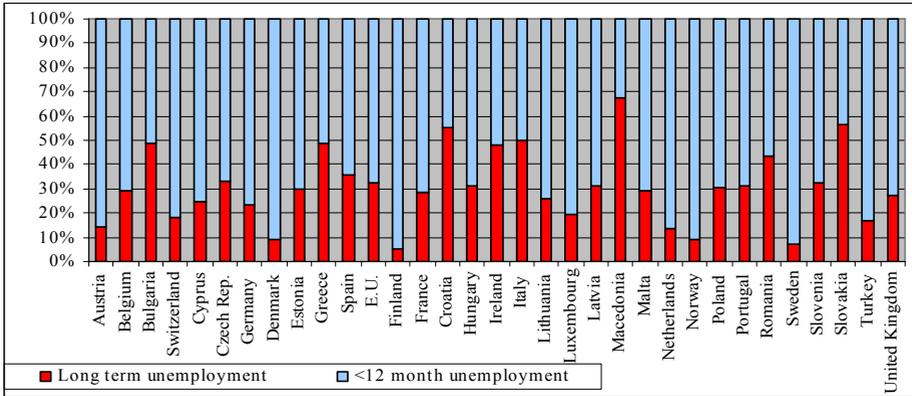
If the unemployment rate generally creates other risks economic and psycho-social effects in the short term and long-term unemployment (12 months and more) is the generator of the psychological and social effects, primarily associated with the adverse economic effects. Paul Samuelson said that “in periods of high unemployment, material considerations are proliferating, people's feelings and damaging family life and ... unemployment leads to damage to health both physical and mental fitness: increase the number of heart patients, cases of alcoholism and suicide”. Consequences of long-term unemployment are not just for those who are in this instance - family, the circle of acquaintances, relationships founded on values, attitudes, behaviours will suffer irreparably, perhaps permanently. Can be definitively and loss of professional values revealed in the production process, both the person concerned and of those involved and affected by default. The economic and financial dimension of the problem of the unemployment is visible to the entire national economic system – possible to quantify the relative short term, difficult on the long-term. Loss of opportunity is probably among the worst

track on which an economy that cannot efficiently manage resources in general, human resources mainly, has to endure.

The long-term unemployment situation in the case of population aged 15-24 years, at EU level, highlights a decrease in its level from 33.1% in 2003 to 23.2% in 2009; after the global financial and economic crisis, raising it to intervene 'in force' (32.4 % in 2012) (fig. 2).

Figure 2: The unemployment of the European youth in 2012

(%)



Source: Processing <http://epp.eurostat.ec.europa.eu/>

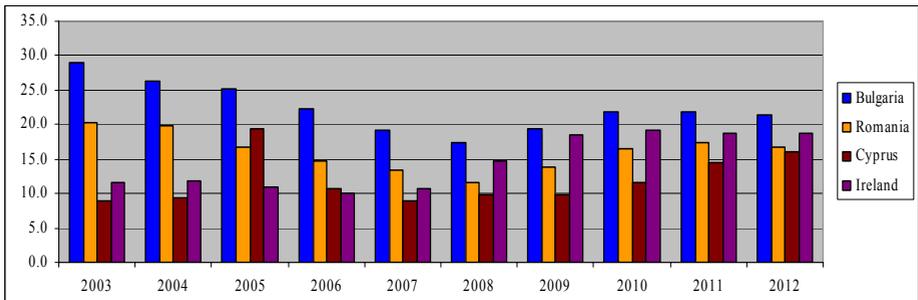
The biggest increases in long-term unemployment in 2012 compared to 2003, were registered in the United Kingdom (the relative growth of 119%) and Ireland (107%). The countries that have controlled the phenomenon and have managed to master are: Estonia, Cyprus, Hungary, Germany, Bulgaria, Italy, Romania, Poland and Slovenia. In terms of the dimension of this type of unemployment, in 2003, most European countries recorded rates of long-term unemployment of more than 20% of total unemployment – Italy, Slovakia, Bulgaria, Slovenia, Romania and Croatia reaching rates of over 50%. In the year 2012, suffering because of the inherent effects of the crisis, only Macedonia, Slovakia and Croatia have recorded rates of long-term unemployment over 50%; other countries, including Romania, have diminished the level of this type of risk but remained still as a threat both at the macroeconomic level but especially in microeconomic profile, individually; with values under 20% were: Luxembourg, Switzerland, Turkey, Austria and Netherlands and less than 10%: Denmark, Norway, Sweden,

Finland. Just as in the case of unemployment, long-term unemployment is on average, mostly male population (by country, and there are specific differences).

A concern for the health social environment of a country is unemployment specific handle incoming young population in the course of employment or education, training, etc. The EU average for this type of unemployment in 2003 was 13% reaching the 13,2% in 2012. In 2003, the highest values of the indicator were recorded in Bulgaria and Romania – over 20% of total unemployment and the lowest values in the Luxembourg, Netherlands, Iceland. In the year 2012, Turkey, Bulgaria, Italy, Greece hold the largest proportion (over 20%) and Luxembourg, Norway, Netherlands, Iceland - the smaller ones. In Romania, the share of this segment of the population has decreased, reaching the 16.8% in 2012.

Another form of unemployment is the young population not employed in specific work nor in any form of education or training. This is perhaps one of the most serious since the risk to predispose individuals are in this situation to other types of social or psychosocial risk – isolation, apathy, depression, suicide, committing various economic or no economic crimes, etc. is very high. Analyzing the situation in Europe in 2003, Bulgaria and Romania had weights of this form of unemployment of over 20 %. In the year 2012, Turkey, Macedonia, Bulgaria, Italy, Greece have become countries with highest unemployment of this type – over 20% but the biggest relative increases in 2012 compared with 2003, registered in Cyprus, Ireland, United Kingdom, Spain – more than 50%. The economic and financial crisis has increased obvious the upward trend of this indicator (fig. 3).

Figure 3: The evolution of young people not in employment and not in any education and training during the 2003-2012 (%)



Source: Processing <http://epp.eurostat.ec.europa.eu/>

The highlight of the economic situation of individuals is achieved, inter alia, in terms of quantity and quality with the risk of impoverishing. Poverty highlights the monetary, financial and material potential of the individual, which is below the minimum of a decent existence, being determined by the inequality of opportunities and earnings inequality in income distribution and redistribution at the macroeconomic level. Taking into account the prospects that can be addressed in general, poverty, - psychological, sociological and economic situation (Popescu, Gavrilă, Ciucur, Popescu, 2008) for the young population segment, the psychological perspective is perhaps the most important, taking into account that the development of the individual along his life, building a career, the potential intellectually, creatively, relational, etc. are marked by its behavior in release phase in life.

Regarding the evolution of poverty risk rate, calculated as 60% of median income, after social transfers in the period 2003-2012, young people aged 18-24 years, versus total population, observe the following:

- at EU level, the average risk of poverty, for the total population ranged between 2005 and 2011, 16.4% from 16.9%, while the risk of poverty rate calculated at the level of the population between 18 and 24 years old ranged from 19.5% in 2005 and 21.7% in 2012;

- in 2005 (in the years 2003 and 2004 are not available for all countries information) this indicator is calculated at the level of entire population highlight the highest rate, ranging between 19% and 20.5%, in the case of countries: Lithuania, Poland, Ireland, Spain, Greece, Portugal, Latvia, United Kingdom; in 2011, going over the impact of the economic crisis, Bulgaria, Romania, Spain, Greece, Croatia, Lithuania, Italy, Latvia recorded the highest poverty risk rates on the total population covered by 19% and 22.3%;

- in 2005, the highest poverty risk rates for young population were between 19% and 33.9% in countries: Denmark, Norway, Sweden, Poland, United Kingdom, Finland, Italy, Greece, Lithuania; in 2011, the young population was affected by the risk of poverty in weights of over 19%, reaching up to 42.4% in Denmark. Other countries affected by this risk: Norway, Romania, Greece, Finland, Lithuania, Sweden, Spain, Italy, France, Estonia, Bulgaria, Latvia, Croatia, Netherlands, Portugal, Poland, United Kingdom, Germany;

- the economic and financial global crisis has affected mainly young population, both in ex-Communist countries, and the developed nations of the continent;

- in 2005, the ratio between the share of young people and the share of total poor population highlights the situations of 2.87: 1 in the case of Denmark, 2.82: 1 in the case of Norway, 2.67: 1 in the case of Sweden and 2.09: 1 in the case of Finland. Other situations that reflect discrepancies between the share of the poor population in the country and the share of young poor people are specific to Iceland, the Netherlands, France; the EU average in the case of this indicator is 1.19: 1. At the opposite pole is placed countries like Malta or Cyprus, the ratio is 0,59:1 respectively 0.66:1.

- in 2011, the ratio between the share of young people and the share of the total poor population has increased for Denmark, reaching the 3,26: 1, Norway – 3,53: 1 as well as in the Netherlands. In other countries, in which discrepancies were high in 2005, – be maintained in 2011, or be decreased slightly.

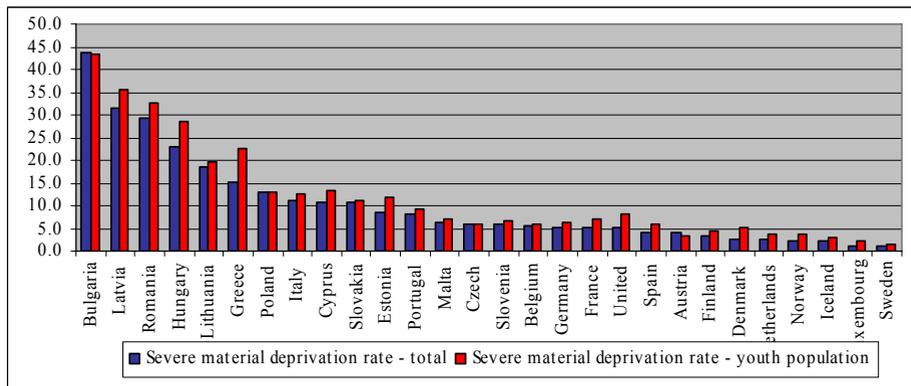
- the situations mentioned illustrate the adverse effects of the crisis on young population, mainly the large discrepancies between the segments of the population but also the attitude of least are involved in poverty vis-à-vis their social and economic situation and its prospects. Considering the problem of the high level of poverty for young segment in the Nordic countries compared with the total in the country, an argument could be that of social policies in these countries, beyond the positive dimension concerned for society as a whole, can create over time a passive behavior versus the desire for immediate employment after graduation and extension of economic dependence of financial backers.

With regard to the risk of severe poverty, especially notable is that at the level of the EU, the share of the population in this status dropped from 10.7% to 8.8%; a similar evolution recorded the young population and the share of young people in severe poverty dropping from 13.1% to 10.7%. Another positive aspect is the decrease in the share of population in severe poverty in case of the new entrants into the EU from 31.3% in 2005 to 19.2% in 2011, including in the case of young people, from 32.7% to 20.4%. A significant discrepancy between the proportion of the population affected by severe poverty is one of the developed countries of Europe and the ex-Communist countries. Thus, if, in the year 2005, the share of severe poverty in Luxembourg was 1,3 for the total population, respectively 1,8 for the young population in Latvia was 38.9 respectively 38.4. In 2011 too, the rate of severe poverty has seen major differences between developed countries and the ex-Communist countries (fig.4). In 2005, the top 5 positions in the hierarchy of severe poverty are occupied by the ex-Communist countries (Romania and

Bulgaria did not provide information in Eurostat, year 2005). In 2011, Romania and Bulgaria were ranked in the top 3 positions in the hierarchy of severe poverty in Europe and last, respectively, the least affected by this 'syndrome' are Sweden and Luxembourg.

As it illustrates the realities and the statistical information too, poverty is, for the most part, undeveloped societies attribute with economic, social and political structures insufficient commitment or finding another route, and an identity of their own. It is considered to be justified, „a process that depends on the education of those who, up to a point, the marginalized, the intentions of their decisions, to use and to capitalize on opportunities for integration have created or to be created by the system”. Extension in time and space of social risk, perhaps in the slightest as found on the european continent, will lead, sooner or later „broad discontent, hatred and unrest that, at some point, to overthrow the world” (Popescu, 2012).

Figure 4 – The sever material deprivation rate - total and 18-24 years, in 2011 (%)



Source: Processing <http://epp.eurostat.ec.europa.eu/>

Another type of social risk is severe deprivation of housekeeping, material facilities (% of total population calculated) (<http://epp.eurostat.ec.europa.eu/>, 2013) in turn, the risk-effect to the other economic and social risks: discrepancies between income levels, unemployment, poor access to education, etc. The size of this type of risk reveals that, in 2011, if for the total population levels for more than the European average 8.8% were registered in Bulgaria (43.6%), Latvia (31.4%), Romania (29.4%), Hungary,

Lithuania, Greece, Poland, Italy, Cyprus, Slovakia, for the young population segment is this situation even more serious, like this:

- European average for a young population that is ahead for total population – 10.5% versus 8.8%;
- with the exception of Austria, in all the countries analysed, the share of young people affected by this type of risk is higher than the share of the population as a whole;
- the countries most heavily affected by this type of risk, with levels exceeding the European average, add Estonia;
- the share of young people severely material private are placed on the extreme respectively, in Bulgaria (44.7%), Latvia, Romania – over 30% and in Sweden (1.5%), Switzerland, Luxembourg – less than 3%;
- the evolution of this type of risk, during 2008-2011, shows that the European average has declined in the years 2009 and 2010 compared to 2008, rising again in 2011;
- in 2011, the proportion of young population severely material private has increased by 205,13% in Estonia, by 102,27% in Latvia, dropping with 32,29% in Poland and 20,14% in Slovakia; in Romania registered a decrease of 2.08%;
- even if, in 2011, in the developed countries of the european continent, the share of young people affected by this risk was small, dynamic phenomenon illustrates the increasing share in 2011 compared to 2008, in Luxembourg with 360% in the Netherlands - 208.33% in Iceland - 166,67%.

5. How much depends on poverty young people of the level of income?

The poverty of the young population must be regarded as an issue of major concern for the viability and the long-term existence of a nation. The economic health status of the young people and correlated social and psychological can create or conversely reduce the long-term benefits of a country. To highlight the causality links between income levels and the share of people affected by poverty in total people, in 29 European countries (26 countries in the European Union (Ireland did not provide information for all years analyzed) and Switzerland, Norway, Iceland) have used statistical Pearson correlation coefficient for each of the years included in the period 2007-2011, separately for two groups of the population: young population and total population (table 3). The goal was to observe the dynamics of intensity of

these indicators (and not the type of connection, obviously the reverse), taking into account the transition through the contemporary economic crisis and the negative evolution of the unemployment of young people.

Table 3: Statistical correlation Pearson coefficients calculated for the total population respectively for young people 16 to 24 years

Year	Statistical correlation Pearson coefficients – total population	Statistical correlation Pearson coefficients – young people, 16-24 years
2007	-0,64358	-0,49839
2008	-0,70231	-0,46358
2009	-0,68254	-0,3924
2010	-0,67402	-0,51926
2011	-0,68407	-0,51225

Source: Processing <http://epp.eurostat.ec.europa.eu/>

The analysis highlights the following:

A. The case of population - total

- in each of those 5 years, between average net income levels and share of population affected by poverty, there is a reverse connection, moderate intensity (with values in the range (-0.5,-0.75));
- intensity correlation increases from 2007 to 2008, from -0.64358 to -0.70231, while still maintaining in later years, the higher levels of 2007, before the economic crisis on the european continent;
- moderate intensity correlation between the two indicators highlight that on the european continent, poverty also has other forms of causality.

B. The case of young people – 16-24 years

- in the period 2007-2009, the degree of association between average net income levels of the population and the share of young people affected by poverty, of the total population, it is acceptable to moderate, hovering between -0.25 and -0.5;
- the dynamic intensity correlation between the two indicators is decreasing, from -0,49839 in 2007 to -0,3924 in 2009 - highlighting that the share of poor young people on the european continent in the economic crisis, though, has not had as main motivation decrease the level of income;
- starting in 2010, the intensity of the correlation between the two indicators becomes moderate, dropping in 2011 compared with 2010.

Decrease the level of intensity correlation between level of income and the share of poor population, for young population segment, during the economic crisis, in conjunction with increasing intensity over the period ahead, the relative stabilization of the economic situation, highlighting significant causal relationships between the phenomenon of poverty and economic and social factors of that unemployment is the most significant but also the noneconomic factors.

Of these, psychological risk, affecting young and individual mentality manifesting itself through indifference, disinterest, inactivity, irresponsibility, etc. (Neculau, Ferreol, 1999] – is perhaps the worst and most dangerous on medium and long term, both for the formation and development of the individuals concerned and for the state.

The evolution of correlation between the two intensity indicators for young people, somewhat in reverse with the evolution of the correlation between the intensity for total population, reflects the fact that mature populations and the third age is determined by the evolution of the level of revenue.

Moderate intensity correlation between the two indicators, for total population is explained by the effect of moderation which it exercised over the outcome, the degree of association between the two indicators in the case of young people.

Psychological causality is fundamental in the behavior and decision-making of the acts of individuals, as economic and social beings. Contemporary economic and financial crisis has brought with it problems and new situations, challenges and imperatives of adapting to these individuals. If psychologists affirm that in the face of such situations, the individual fails to respond effectively, returning to the feelings of uneasiness, which „in his history proved viable” the problem becomes more serious as the individual young person does not have such a history. The reactions of the individual young person may result in: demand of the application or additional protections attention from authorities, denying the reality and crisis behavior unsuitable maintenance or even adopting a diametrically opposed position behavior (such as the rise in consumption), depressive, experiencing feelings of helplessness, restlessness, anxiety, abandoning efforts to overcome the crisis. (<http://www.psychologies.ro/>, 2013).

Beyond the psychological side of poverty “accepted” by the individual young person, another issue that requires proper attention and manage both personal and national, is attracting and using youth in the shadow economy, as

potential labour force dynamic, adaptable, little or no attached to a particular job. The use of youth employment in the black economy has, however, adverse consequences both for the individual and for society, being “creative” costs, without possibility of recovery, for all economic and social entities involved.

Young people falling into the trap of „commitment” in these activities are the first to lose service, unable to benefit from the rights and welfare of the state or of the employer. However, it appears that some young people, once dumping situation any hopes to be able to survive, expose themselves to the risk of working in the underground economy (<http://www.neweasterneurope.eu/>, 2013). But to avoid these attempts, resulting in many situations, the state is responsible through optimal development policies of the business environment, providing opportunities to professional and personal fulfillment, social protection, because „as the market is imperfect, but most effectively in the economy, so the state is imperfect but the mechanism more efficient in the management of social risks and collective needs” (Zamfir, 2011).

6. Conclusions

The social risks affecting the European young people have passed through the 'filter' risk management - identified, assessed, treated, controlled. The responsibility for managing their continuously returns to national decision-makers in collaboration with individual-level decision-makers, organizations. The role of the individual in the prevention or control of diversity and their severity is vital. Reducing the representation of the European young population at the national level, through the share in total population, the default role diminishes, the reunited force in prevention and control of the social risks.

In the past 10 years, a positive evolution registered youth orientation in terms of education, reducing the number of those who have a lower secondary education and increasing the share of those with undergraduate degree. This evolution has been the effect of the negative dynamics of employment of young persons with a lower secondary education and positive in the case of those with upper and tertiary education.

Although it represents a favorable situation to increase the average annual income of the young population in the past 10 years, it should be seen, in addition, with the increase in the level of unemployment of young population segment. Thus, rising unemployment and the impact of

psychological factors increased the risk of impoverishing the young European, risk who had a positive dynamic up to the manifestation of the contemporary economic crisis on the european continent, followed by negative dinamic that risk during the crisis, after which he started, restoring the relative social and economic balances.

The quality of the business environment and preparing the economy to assimilate and develop harmonious human young resources are important prerequisites in the reduction of the social risks but the psychology of individuals, in turn, subject to economic conditions, constitutes the key to efficient management of these types of risk.

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