

THE IMPACT OF MACROECONOMIC CONDITIONS ON SMES PERFORMANCE IN TERMS OF EMPLOYMENT

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Abstract

Improving SME's performance is a major concern because they are a significant source for creating value added, employment, innovation and economic growth. Through this paper we analyse the evolution of the SMEs performance in terms of employment in the last years, and we try to determine which of the macroeconomic performance indicators are influencing the growth of SME's employment in seven CEE countries. To achieve the objectives we use correlation and multiple linear regression models on panel data. The results show that GDP, total private final consumption, gross capital formation and wages have a strong influence on SMEs employment.

Key words: Small and medium enterprises, performance, employment, CEE, crisis

JEL classification: C33, G01, L25

1. Introduction

In most economies, SMEs have a central place and are key contributors to employment, value-added and innovation. The development and performance of SME sector have a positive impact on economic growth and condition in a big proportion the recovery of the economies severely affected by the recent crisis.

At European Union level, the European Commission evaluates the performances of SMEs using three key indicators, namely the number of SMEs, the value added generated by SMEs and the number of persons

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employed by the SMEs. According to specialized literature (European Commission, 2013, p. 42), the level and dynamics of these indicators is influenced by *macroeconomic factors*, *structural characteristics of the economy*, but also by *microeconomic factors*. Macroeconomic factors relate to macro-economic environment, which has a major impact on the SME's employment creation performance. These factors aimed GDP growth, various components of demand (gross capital formation, private consumption, government current expenditures, exports of goods and services) and variables related to the capacity of national economies to invest for the future. The study realized by the European Commission (2013), identifies between the structural factors with a potential impact on SME performance the distribution of enterprises by size-class, public and private expenditures on research and development, and also public and private investments in innovation activities. Regarding microeconomic factors that would influence the performance of SMEs, business demography is of interest, respectively the permanent process of creating new businesses, but also of disappearance of some of the existing ones.

The major importance of SMEs in employment, including in current conditions, when increasing the number of jobs is amongst the top priorities of decision makers in the countries affected by the crisis, led to intensifying concerns of researchers to investigate theoretically and empirically the role of these enterprises in creating jobs (Blanchflower and Burgess, 1996; Butani et al., 2006; Neumark, Wall and Zhang, 2009; Ayyagari, Demircuc-Kunt and Maksimovic, 2011; De Kok et al., 2011; Moscarini and Postel-Vinay, 2012; De Kok, Deijil and Velduis-Van Essen, 2013; Criscuolo, Gal and Menon, 2014; De Wit and De Kok, 2014; Lawless, 2014; European Commission, 2015a; European Commission, 2015b). Bravo-Biosca, Criscuolo and Menon (2013) examine how the policies and framework conditions affect the distribution of firm employment growth in the ten OECD Countries for 2002-2005. The results of the study show that judicial and regulatory frameworks, financial market institutions, and R&D support policies have impact on employment dynamics and reallocation of resources across firms. Voulgaris, Agiomirgianakis and Papadogonas (2015) empirically assess the determinants of employment growth in the Greek manufacturing sector for a sample of 1397 companies, covering the period 2004-2011. The results of their study show that the key determinants of employment growth are age, market share, current assets turnover, leverage, exports, the return on assets and labor

productivity. The authors highlight that an important role in reducing unemployment in Greece might have the adoption of discretionary microeconomic policy measures, in particular for SMEs with export activities and innovative activities.

Although the number of studies focused on the importance of SMEs in job creation is high, according to our knowledge the problematic of determinant factors of SME employment performance, especially for European countries is not sufficiently investigated, proof being the extremely reduced number of studies (European Commission, 2013; European Commission, 2015a). Thus, our study aims to analyze the evolution of the SMEs performance in terms of employment for a sample of seven countries from Central and Eastern Europe (Bulgaria, Estonia, Hungary, Lithuania, Latvia, Poland and Romania) covering the period 2008 - 2014 and also to identify which of the macroeconomic performance indicators affect SME employment performance in selected countries. The specialized literature does not comprise of many studies on this problem, so the models that we propose for the analysis are new.

Our paper contributes to the specialized literature by providing empirical evidence on key macroeconomic factors affecting the performance of SMEs in terms of employment in CEE. From the factors affecting SMEs performance we consider the macroeconomic factors as being the key drivers of the performance of the SME in terms of employment and we aim to test the influence of macroeconomic indicators on SMEs employment and implicitly on SME's performance. Moreover, we have to keep in mind that the period considered is 2008-2014, and contains the years of financial crisis. In the context of financial crisis, the SME sector performance is more affected, and has to be sustained because these companies can contribute significantly to national economic recovery.

To achieve the proposed objective our paper is structured as follows: in *the first part* we present a series of introductory remarks and a short literature review. *The second part* of the paper synthetically highlights the role of SME sector in the countries included in the sample and analyzes the evolution of the SME's performance in terms of employment in the last years. In *the third part* we realize an empirical analysis of the influence of macroeconomic performance on the changes in employment of SMEs. Our study ends with conclusions. The *research methodology* that we have used in this paper is based on the indicators calculated by the World Bank, the World

Economic Forum surveys, the European Commission and the European Central Bank and on the information provided by some empirical studies. The methods used are correlation and multiple linear regressions on panel data.

2. An overview of the role of SMEs in the economy of the selected European countries

In the European countries, SMEs are considered the engine of economic and social development, appreciation resulting from the significant contribution of these enterprises to create added value and new work places. Thus, SMEs account for over 99% of all enterprises in the EU, respectively 22.3 million of businesses, and generates about 58% of value added and have an important role in employment by providing two thirds of the employment in the non-financial business sector (European Commission, 2015a).

With regard to the seven countries in Central and Eastern Europe included in our analysis, in 2014, the share of SMEs in all enterprises in the non-financial business sector ranged from 99.6% (Romania), 99.7% (Estonia) and 99.8 % in the other five countries. Regarding the contribution of SMEs to employment, it is noted that in all seven countries the share of SME employment is above the European average of about 67% (see Table 1).

Table 1: The role of SMES in the selected European countries

	Share of number of SME enterprises in the total number of enterprises		Share of SME employment		Share of SME value added	
	2008	2014	2008	2014	2008	2014
BG	99.7	99.8	74	76	64	62
EE	99.7	99.7	78.3	78	75.9	75.6
HU	99.8	99.8	71.3	69.8	54.3	53.6
LV	99.7	99.8	78	78.6	72	68.8
LT	99.8	99.8	75.6	76.7	66	68.5
PL	99.8	99.8	68.8	67.8	52.6	50.5
RO	99.6	99.6	65.8	67.2	52.6	49.6
EU28	99.8	99.8	66.9	66.9	58.5	57.8

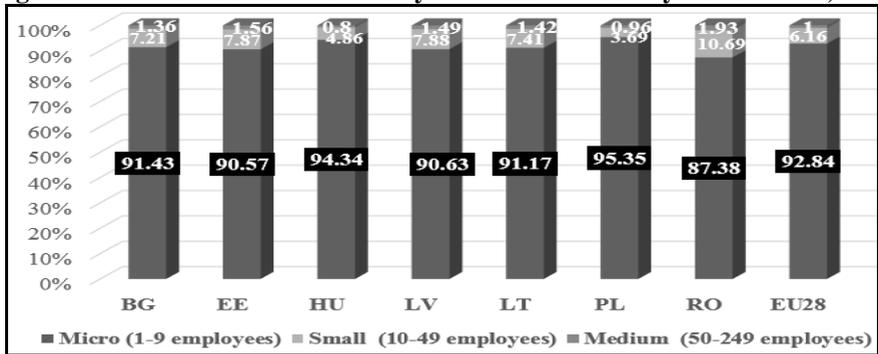
Source: authors' calculations based on European Commission, 2015c

Regarding the contribution of SMEs to create value added, referring to the year 2014, we notice that SMEs hold about 50% in Romania and 75% in Estonia in added value created in the business sector. In four of the countries

surveyed, SMEs account for over 60% of the non-financial business economy's value added, higher percentage than the European average of about 58%. In the other countries, namely Hungary, Poland and Romania, the percentage is lower than the European average.

In all the countries taken into consideration, including the EU28 level, micro-enterprises respectively enterprises with less than 10 employees, have a considerable share in the total number of SMEs, accounting for over 90% of all SMEs, except Romania, where the share is slightly low respectively of 87%. At the other extreme is situated Poland where micro-enterprises have the highest share, including comparing with the European average (see Figure 1).

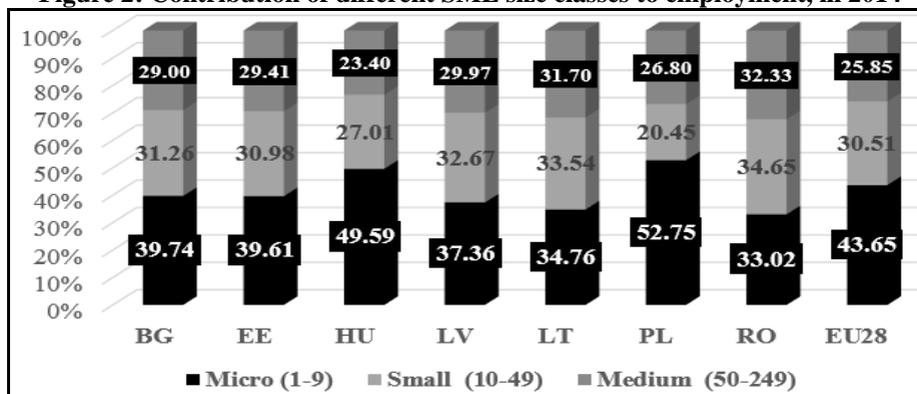
Figure 1: The distribution of SMEs by size class in the analyzed countries, 2014



Source: authors' calculations based on European Commission, 2015c

In contrast to the overwhelming share of the micro-enterprises in total SMEs, their contribution to employment is relatively lower. Thus, it appears that in all the countries surveyed, including the EU28, between 33% and about 53% of total employees in SMEs are working in micro enterprises (see Figure 2).

Figure 2: Contribution of different SME size classes to employment, in 2014



Source: authors' calculations based on European Commission, 2015c

SMEs performance in terms of employment can be highlighted based on the data in Table 2. Thus, in 2014, in all the countries in the sample, due to the recent international crisis, employment in SMEs has decreased compared to 2008, well above the EU average. The most dramatic reductions expressed by double-digit rates were recorded in Latvia and Lithuania, while in Poland the reduction was 4.64%. Across all the countries analyzed, by size class of SMEs, the performance of this sector in terms of employment experienced the most significant reductions in the case of medium sized enterprises. It also can be observed between the states included in the analysis, heterogeneous developments regarding the growth rate of employment in micro-enterprises. Thus, while employment in micro-enterprises has decreased significantly in Romania, Hungary and Poland, in the rest of the remaining countries the evolution was positive. Across all the countries included in the analysis, it appears that micro-enterprises sector has performed better in terms of employment, registering a slight increase in employment compared to other size classes, which have experienced a reduction in number of employees, caused by the economic crisis.

Table 2: The evolution of employment growth rate in SMEs, by size class, in 2014 compared with 2008

	BG	EE	HU	LV	LT	PL	RO	UE28
Micro	6.52	14.51	-7.84	11.39	0.06	-6.63	-13.87	-1.57
Small	-11.16	-17.37	-9.98	-23.70	-12.57	3.69	2.37	-0.21
Medium	-17.76	-19.82	-10.80	-22.52	-17.53	-6.44	-10.68	-0.52
Total SMEs	-7.20	-8.06	-9.13	-13.07	-10.35	-4.64	-7.74	-0.89

Source: authors' calculations based on European Commission, 2015c

Analyzing the employment dynamics in SMEs by sectors of activity (see Table 3) there is observed a heterogeneous situation between the states included in the analysis. Thus, SMEs in most sectors have performed very poorly in terms of employment in 2014 compared to 2008, fact which highlights the negative impact of the recent financial crisis and economic recession on SME sector.

Table 3: SMEs performance by sectors of activity, in terms of growth in employment (% change 2008-2014)

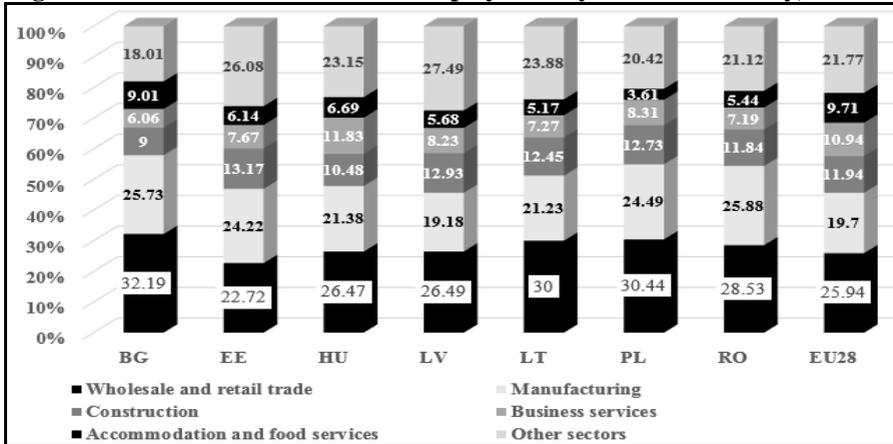
	BG	EE	HU	LV	LT	PL	RO	UE28
Mining and quarrying	-16	-8.8	-24.8	-1	-23.6	20	-11.7	-12
Manufacturing	-16	-13	-12.5	-16	-12	-6.8	-10	-10
Electricity and gas	40	-2.4	-2.3	-3	3	-6.8	9	12*
Water supply	28	-15.8	-15.5	-9.8	-9	20.7	29	14.6
Construction	-40.46	-22.3	-22.8	-26.3	-31	-10.8	-27.6	-16.6
Wholesale/retail trade	-0.53	-8.7	-9	-21.4	-9	-13	-15.7	0.18
Transportation	10.6	6.5	-3.9	1.3	10.5	3	11	-0.04
Accommodation	11	1.9	-2.6	-5	-3.7	-11.8	14	9.3
Information and communication	24.4	29	3	28.7	4.5	30	-1.6	10.2
Real estate	3	-12	-12.3	-20	-36.7	23.8	13	10
Business Services	10.5	-1.4	5	10	10	11.4	7	10.3
Administrative Services	9	-3.4	-9	10	2	25.5	41.5	17.2

*excluding Greece

Source: authors' calculations based on European Commission, 2015c

The strongest negative trend was recorded by SMEs in the construction sector, where employment has registered a sharper drop in 2014 compared to 2008, with 40% in Bulgaria, 31% in Lithuania and over 22% in the rest of the countries, except Poland where the decline was about 11%.

Figure 3: The distribution of SMEs employment by sectors of activity, in 2014



Source: authors' calculations based on European Commission, 2015c

It is also noteworthy that in all countries except Poland, the decreased employment in SMEs in the construction sector is well below the EU28 average of around -17%. On the other hand, in all the seven countries as a whole, the sectors that have performed better in terms of employment are "Information and communication", "Administrative Services" and "Business Services".

The contribution of SMEs to employment varies by sectors of economic activity. Thus, in the EU28, but also for the countries analyzed, more than 72% of SME employment is concentrated in five key Sectors, which are major contributors to employment, respectively "wholesale and retail trade", "manufacturing", "construction", "business services" and "accommodation/food services" (see Figure 3). In terms of employment, the top three sectors mentioned are considered the most important in all countries, providing most jobs.

3. The relationship between employment growth and macroeconomic performance

From the above analysis we observe that SME performance in terms of employment differs significantly depending on the CEE country where they are located. Starting from this, in this section of the paper we are analysing the

underlying factors that can explain the differences that appear in SME performance. By an empirical analysis we want to test if the differences in macroeconomic performances of the countries can explain the differences in the performance of SMEs in terms of employment. From the three indicators measuring the SME performance, which were mentioned in this paper, we consider the growth of employment as the dependent variable. The employment of the SMEs can be affected by a series of macroeconomic indicators, indicators that we have chosen as the explanatory variables of our models (see Table 4).

Table 4: The explanatory variables of the model and the expected relationship

Explanatory variables (Abbreviation)	Measurement	Expected sign
Gross domestic product (GDP)	Real GDP annual growth used as proxy for economic growth (%)	+
Total tax rate (TAX)	Taxes on income, profits and capital gains (% of commercial profits)	-
Gross capital formation (GCF)	Annual growth rate of gross capital formation based on constant local currency (annual % growth)	+
Exports of goods and services (EXP)	Annual growth rate of exports of goods and services based on constant local currency. Exports of goods and services represent the value of all goods and other market services provided to the rest of the world (annual % growth)	+
Private final consumption (FINCON)	Annual percentage growth of private final consumption expenditure based on constant local currency. Represents the market value of all goods and services, including durable products purchased by households (annual % growth)	+
Wage (WAGE)	Changes (%) in monthly gross wages.	+

Source: processed by the authors based on European Commission, 2015a

Starting from the presentation in Table 4 we can formulate the basic hypothesis of our study: *all considered macroeconomic performance indicators are statistically significant and have a strong impact on SMEs employment*. Also, we formulate a second hypothesis that total tax rate has a strong negative impact on SMEs employment, and all the other factors have a strong positive impact on SMEs employment.

The economies from Central and Eastern Europe have started to recover after the financial crisis, fact that can be observed from the increase in GDP at constant prices. So, the level of economic activity in the nonfinancial business sector reflects a real, but moderate, revival of the economic activity

in the nonfinancial sector. The recovery of the level of GDP (in real terms) compared to 2008 is different depending on the CEE country considered: so there are countries where the level of real GDP in 2014 was the same as in 2008 or higher (Bulgaria, Estonia, Lithuania, Poland and Romania) and countries with the level of real GDP in 2014 still below its 2008 level (Hungary and Latvia).

The level of total tax rate (TAX) also registered an improvement in 2014, the total tax rate decreased in average by 8% in the analyzed CEE countries. The level of total tax rate as a percent of the commercial profits has decreased, registering the highest decrease in Bulgaria (20%) and the lowest decrease in Latvia (4%). Estonia was the only country where the tax rate has increased.

Another explanatory variable considered for our model is *gross capital formation (GCF)*. This indicator includes all investments made by the firms in fixed assets and has affected the performance of the enterprises. The average gross capital formation for CEE countries was in 2014 lower with 26% compared to 2008. All the seven considered countries, taken individually, have registered a reduction of the gross capital formation in 2014 compared to 2008 (a reduction of 9% in Estonia and up to 42% in Bulgaria) (World Development Indicators). Such a depressed level of gross fixed capital formation had clearly an impact on the level of value added and employment, and, more generally, on the level of SME performance.

The exports of goods and services (EXP) have registered important decreased values in 2014 compared to 2008, but we expect a more limited, direct, stimulating impact on the SME sector, because the majority of SMEs are not active in export-oriented sectors.

Another indicator that also has depressed the performance of the SMEs is *private final consumption (FINCON)*. The level of private consumption in 2014 in CEE considered countries was with 2.9% lower than in 2008, and this aggregate demand component is a major driver of retail sales, an important sector for SMEs and in which SMEs account for the increase in the value added and employment.

The wages (WAGE) paid to employees have an important impact on SME's employment and implicitly on SME's performance. The average monthly wages in CEE countries have had a sinuous evolution and have decreased significantly as a result of the financial crisis.

The objective of our analysis is to test if the differences that appear in the macroeconomic performance of countries from CEE region explain the differences in the changes of SME's employment. The annual financial data for the explanatory variable are obtained from the World Development Indicators database, for the period 2008-2014. The data for the SMEs employment are obtained from the Annual Report Database on EU Small and Medium-sized Enterprises, which is a component of the SME performance Review, elaborated by the European Commission with the purpose of monitoring and evaluating the Member States' performance in implementing the Small Business Act.

To achieve our objective we first tested every variable included in the panel data for unit-root, to see if data is stationary and control for any existing relationships among variables. The null hypothesis is that all panels contain unit-root. This hypothesis was rejected in all the cases, so we had proper conditions to perform a regression analysis on this data. Following, to analyze the data we have used descriptive statistic, correlation analysis and regression analysis. To obtain the estimated coefficients of the regression models, calculations were made using EViews 7 computer package. In order to observe the relationship between SMEs employment and the macroeconomic performance, we have adopted the Pooled Least Square method, by adopting the OLS method to panel data.

The descriptive statistics of the macroeconomic influence factors (see Table 5) shows that the biggest standard deviation was observed for the gross capital formation, fact that shows that the macroeconomic instability generated by the financial crisis and the struggle of the economies to recover have affected, in a big proportion the gross capital formation from this countries. Also, the negative value for the minimum of almost every variable (except tax level) shows the negative impact of the financial crisis on almost all considered macroeconomic indicator. The most stable indicator was the changes in the level of wages, which had the smallest standard deviation.

Table 5: The descriptive statistic of the macroeconomic influence factors

Variable	Min.	Max.	Mean	Std. deviation
GDP	-14.81	7.58	0.5609	5.2078
EXP	-20.31	24.17	5.7309	10.0328
FINCON	-17.35	6.19	-0.0038	5.5816
GCF	-54.24	48.69	-2.2423	19.1825
TAX	27.00	66.80	42.4428	8.7472
WAGE	-11.11	12.50	4.1209	4.1247

Source: processed by the authors after E-views results

On the other hand the descriptive statistic of the dependent variable shows that at CEE level the mean growth of employment is negative (see Table 6). Also, analyzing the minimum value we observe that employment have decreased significantly in all considered countries.

Table 6: Descriptive statistics of the changes in the level of SME's employment (by country and total)

Country	No. obs.	Min.	Max.	Mean	Std. deviation
CEE	42	-0.09	0.02	-0.0132	0.0475
BG	42	-6.42	1.36	-1.2050	2.5650
EE	42	-13.54	3.91	-1.1983	6.0778
HU	42	-6.88	1.88	-1.5433	2.7244
LT	42	-16.78	10.09	-1.4816	7.8019
LV	42	-18.32	4.52	-1.9200	8.5979
PL	42	-3.50	2.70	-0.7650	2.1787
RO	42	-9.60	5.17	-1.1850	5.4092

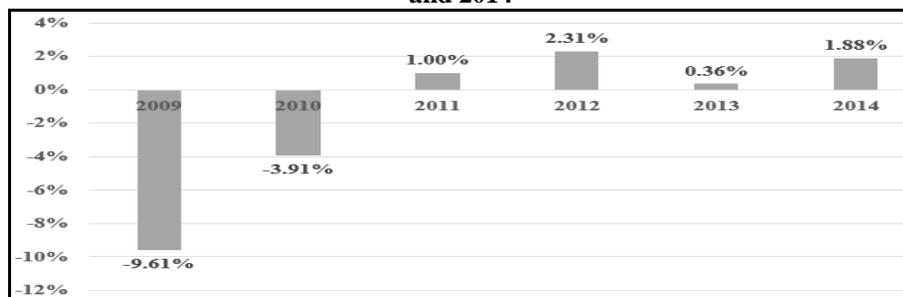
Source: processed by the authors after E-views results

The biggest decrease was registered in 2009 and 2010, after the outburst of the financial crisis (see Figure 4) and although the following years were market by an increase of employment, this increase was too small to compensate, fact shown by the negative value of mean for all the countries.

Also, the value of the standard deviation was the biggest for Latvia, followed by Lithuania and Estonia, fact that shows that the changes in the level of SME's employment from this country suffered the biggest changes over the six years period that we took into consideration. The smallest value of standard deviation was registered in Poland, followed closely by Bulgaria, fact

showing that the SMEs from these countries were more stable in the level of employment.

Figure 4: The evolution of SME's employment in CEE countries between 2008 and 2014



Source: processed by the authors

From Table 6 and Figure 4 we observe big differences between the changes in the level of SME's employment depending on the country they activate, differences determine by the specific of economic activity from each country.

Before realizing the regression analysis, we have tested all the variables tested against autocorrelations. The results of the correlation analysis are presented in Table 7, and show that changes in private final consumption, GDP and gross capital formation are positively related to SME's employment, as it is shown by the coefficients of correlation (with a statistically significant correlation as shown by p value which is lower than 0.01, 0.05 respectively 0.001).

Table 7: The results of the correlation analysis

	EMPL	EXP	FINCON	GDP	GCF	TAX	WAGE
EMPL	1.0000						
EXP	0.5735	1.0000					
FINCON	0.9547***	0.7677*	1.0000				
GDP	0.9300***	0.8192**	0.9865***	1.0000			
GCF	0.8128**	0.9016**	0.9190***	0.9622***	1.0000		
TAX	-0.3578	-0.2274	-0.4533	-0.3977	-0.2956	1.0000	
WAGE	0.3480	-0.3378	0.1341	0.1423	-0.0295	-0.2370	1.0000

*, ** and *** denotes that coefficients are significantly at the 90%, 95% and 99% level.

Source: processed by the authors after E-views results

The level of exports and wages are also positively related to SME's employment but not statistically significant. Tax rate is negatively related to SME's employment, but not statistically significant.

We have also taken into account the problem of multicollinearity. There are many studies that consider different values for establishing a high correlation (for example Kennedy (2008) considers a high correlation if the value is above 0.80 or 0.90; Anderson, Sweeney and Williams (1990) use the value of 0.70 and Bryman and Cramer (2001) consider the value of 0.80). For our analysis we have considered the reference point as being 0.80. From Table 8 above we observe that there exists multicollinearity between some of the independent variables which may influence the results of our analysis. According to the considered reference point there exist multicollinearity between GDP and exports and final private consumption and also between gross capital formation and exports, final private consumption and GDP with a high value of almost 1 and also statistically significant at 95% or 99%. So, in order to obtain accurate results in our analysis we have used separate models of regression, by eliminating the highly correlated variables.

Through the regression analysis we want to determine which of the considered macroeconomic indicators are between the main determinants for the SME's employment in the CEE region. As a dependent variable for our model we consider the variation of the SME's employment. The results of the regression model are presented in Table 8.

Interpretation of the results: Based on the results of the static regression model and the statistically significant coefficients, we can conclude that GDP, private final consumption, gross capital formation and wages are the main determinants of the SME's employment for all SMEs from CEE countries.

Table 8: The results of the regression analysis

Variable	Coefficient	T-statistic	p-value
<i>Constant</i>	-4.2280	-2.1758	0.0360
EXP	0.2705	1.6778	0.1012
FINCON	0.8750***	27.5248	0.0000
GDP	0.8847***	12.5871	0.0000
GCF	0.1847**	2.5557	0.0147
TAX	-0.0077	-0.1585	0.8749
WAGE	0.1282**	2.5774	0.0141
<i>R-squared</i>	0.7485	<i>Adj. R-squared</i>	0.7214

** and *** denotes that coefficients are significantly at the 95% and 99% level.

Source: processed by the authors after E-views results

The private final consumption significantly influences the growth of SME's employment, fact observed from the positive coefficient (in agreement with our expectations) and the relationship is statistically significant at 1% level. An increase of the private final consumption of 10% would induce an increase of 8.75% of the SME's employment. The same relation with similar coefficient, in line with our expectations, appears for the level of Gross domestic product.

Also, the relationship between Gross capital formation, wages and SME's employment is in line with our expectations and is statistically significant at 5% level, but with smaller effects (of 1.84%, respectively 1.28%). On the other hand, the changes in the level of tax rate influence negatively the SME's employment (in agreement with the expected sign), but the coefficient is not statistically significant. The changes in exports of goods and services also do not have statistically significant coefficient. This is also an expected result because the majority of SMEs are not active in export-oriented sectors.

The effect of macroeconomic variables combined had an important impact on SME's employment as shown by R-squared value of 74% and Adjusted R-squared value of 72%.

4. Conclusions

In our paper we analyse the changes of SME's performance measured in terms of employment for the period 2008-2014. The purpose of our study

was to test the hypotheses and to offer evidence with respect to the impact of macroeconomic performance indicators on SMEs performance. We considered as determining factors the real gross domestic product growth, total tax rate, gross capital formation, exports of goods and services, private final consumption and changes in average monthly wages. When performing the analysis we kept in mind the fact that starting with 2009 the effects of the financial crisis started to be felt in the CEE countries, so our considered macroeconomic performance indicators were also affected. As a dependent variable we considered SMEs performance measured by employment growth.

The empirical results of this research show that the macroeconomic performance indicators are significantly affecting SMEs employment and implicitly the SMEs performance. More precisely, SMEs performance measured by SMEs employment it is influenced by total private final consumption, Gross Domestic Product growth, gross capital formation and wages. The descriptive statistics show a deterioration of SMEs employment at the level of CEE region, more affected being the SMEs ones from Latvia and Lithuania; comparative Poland and Bulgaria being the countries least affected.

Summarizing the empirical results of the correlation and regression analysis, we can affirm that four of the selected macroeconomic performance indicators are statistically significant and have a strong correlation with SMEs employment, and the major hypothesis of our study that all macroeconomic factors have a strong influence on SMEs employment it is only partial validated. Also, the second hypothesis formulated that total tax rate has a strong negative impact on SMEs employment has not been proven, we obtained a negative coefficient but this is not statistically significant. Also, all the other indicators have a positive influence on SMEs employment, but only four are statistically significant.

So, the decrease of SMEs employment in the first two years of the analysis was followed by an increase (in the other four years) but much smaller than the decrease. This fact can be explained by the fact that the macroeconomic environment from the analyzed countries was significantly affected by the financial crisis.

In future research we aim at analyzing a bigger panel of countries from the European Union and for a longer period of time, investigating separately the period pre-crisis, the years of crisis and the period post-crisis. Also, we intend to include in the analysis a bigger number of determining

factors, including structural and microeconomic factors, which may affect the performance of SMEs.

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