

## SMALL AND MEDIUM-SIZED ENTERPRISES IN EUROPEAN UNION

**Grażyna KARMOWSKA, Mirosława MARCINIAK**  
*West Pomeranian University of Technology, Szczecin, Poland*  
*E-mail: grazyna.karmowska@zut.edu.pl*

**Summary:** Small and medium-sized enterprises are often referred to as the backbone of European economy, providing a potential source for jobs and economic growth. They may be viewed as important players in the wellbeing of local and regional communities, with considerable potential for employment creation. The paper examines development of SMEs across the EU member states, illustrated by rankings according with selected indexes, taking into account in the SME sector in the EU countries against the backdrop of general economic situation. Enterprise statistics were analyzed by number of enterprises, employment size and value added generated by this sector. Studies have shown that the economic situation of the country has a some impact on the access of companies from the MSE sector to various sources of financing, especially for debt financing. The dynamics of structural change, the SME sector shows that the increase in the number of enterprises is not always accompanied by improvements in productivity and increased employment. Apart from economic development, certain legal and administrative regulations fostering the growth of the SME sector must be put in place.

**Keywords:** development of SMEs, comparative analysis, source financing

### 1. Introduction

Small and medium-sized enterprises (SMEs) are often referred to as the backbone of European economy, providing a potential source for jobs and economic growth. SMEs are defined by the European Commission as having less than 250 persons employed. They should also have an annual turnover of up to EUR 50 million or a balance sheet total of no more than EUR 43 million (Commission Recommendation of 6 May 2003). These definitions are important when assessing which enterprises may benefit from the EU funding programs aimed at promoting SMEs, as well as in relation to certain policies such as SME-specific competition rules. Annual structural business statistics with a breakdown by size-class are the main source of data for an analysis of SMEs. A limited set of the standard SBS variables (number of enterprises, persons employed, value added, etc.) is available mostly down to the 3-digit (group) level of the activity classification (NACE), based on criteria that relate to the number of persons employed in each enterprise. The number of size-classes available varies according to the activity under consideration (<http://ec.europa.eu/eurostat/web/structural-business-statistics/structural-business-statistics/sme>).

One of the main challenges authors face in their examination of countries of the EU is to come up with a precise definition of the research subject and with accurate selection of regional development factors that can be used in further analysis as variables – those features have to capture selected aspects of SME's development. They also have to meet formal, statistical and subject matter selection criteria. The research material was data and reports from Eurostat. The research problem this paper attempts to address is: Is it true that the better the country's economic conditions are, the higher is SME financing? As changes in access to sources of funding received for the development of entrepreneurship, the efficiency of the economy, and the labour market?

## 2. Trends in the national economy of countries

One of the basic criteria for the evaluation of the economic development of the country's gross domestic product (GDP), while the *GDP per capita* is used, inter alia, to compare levels of development between Member States, whether the assessment of the convergence process. The basic characteristics of the statistical *GDP per capita* shows the Table 1.

**Table 1: GDP per capita (PPP in \$) in years 2008 & 2012**

Years	Maximum	Minimum	Interval	Average
2008	84 734	14 566	70 168	33 482
2012	89 577	15 672	73 905	33 831
Difference	4 844	1 106	3 738	349

Source: own compilation

Increase the value of the average, maximum and minimum economic level growth of EU countries, while the increase in spreads in 2012 about ok. 3.7 thousand. \$ testifies to this divergence between the countries of the EU. To capture the diversity of levels of economic development between countries, compared the rankings were based on countries' *GDP per capita* indicators for the years 2008 and 2012 and calculated their the growth rate (Table 2).

**Table 2: Comparison of rankings according of GDP per capita and listing of growth rate (2012/2008)**

Country	Ranking in 2008	Ranking in 2012	Growth rate of GDP per capita
Luxembourg	1	1	5,7%
Netherlands	2	2	-1,1%
Ireland	3	3	3,5%
Sweden	4	5	4,2%
Austria	5	4	8,8%
Denmark	6	7	5,0%
Finland	7	9	0,0%
Germany	8	6	12,5%
Belgium	9	8	8,2%
United Kingdom	10	11	-2,1%
Italy	11	12	1,1%
France	12	10	5,6%
Spain	13	13	-4,2%
Cyprus	14	14	-6,6%
Greece	15	20	-17,1%
Slovenia	16	15	-3,8%
Czech Republic	17	16	4,7%
Portugal	18	18	0,2%
Malta	19	17	11,1%
Slovakia	20	19	8,1%
Estonia	21	21	8,2%
Hungary	22	24	8,9%
Lithuania	23	22	15,5%
Croatia	24	25	3,2%
Latvia	25	26	11,8%
Poland	26	23	25,4%
Romania	27	27	15,5%
Bulgaria	28	28	7,6%

Source: own compilation

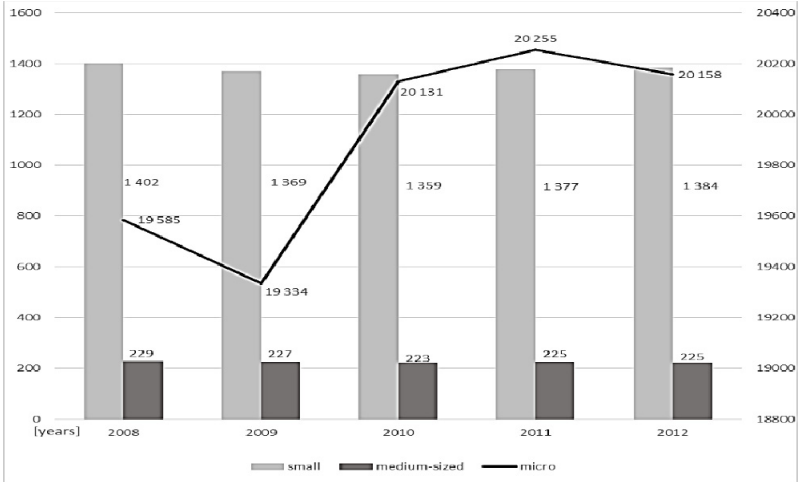
In both rankings in the first place was Luxembourg. While the lowest *GDP per capita*, more than five times lower, were Bulgaria and Romania. In the year 2012 in comparison to 2008,

only six countries showed decline in GDP *per capita*. The largest occurred in Greece (17%), and a few percentage in the Netherland, United Kingdom, Spain, Cyprus and Slovenia. The largest increase in GDP *per capita* reached Poland (ca. 25%), Romania and Lithuania (ca. 15%) and German ok. 12%. Whether along these changes to growth entrepreneurship in countries surveyed, increased funding for SMEs?

### 3. Structural and performance changes of Small and Medium-sized Enterprises

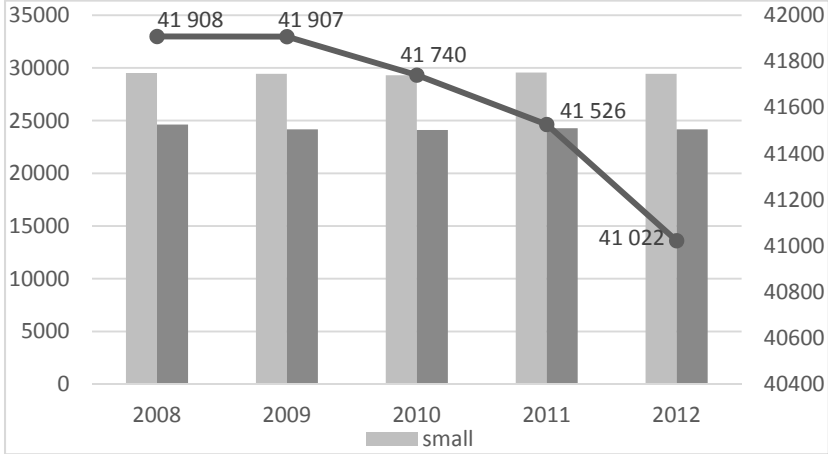
Overall, SMEs accounted for 66.5% of all European jobs in 2012 and for over €3.4 trillion value added at current prices against a total value added produced by the private, nonfinancial sectors of approximately €5.9 trillion. Graphically quantitative changes of the SME sector show charts on Fig.1 and Fig.2. using the typology of enterprises due to the number of working.

**Figure 1: The number of enterprises (of all SMEs) for years 2008-2012 (in thousands).**



Source: own construction

**Figure 2: Number of persons employed in SMEs**

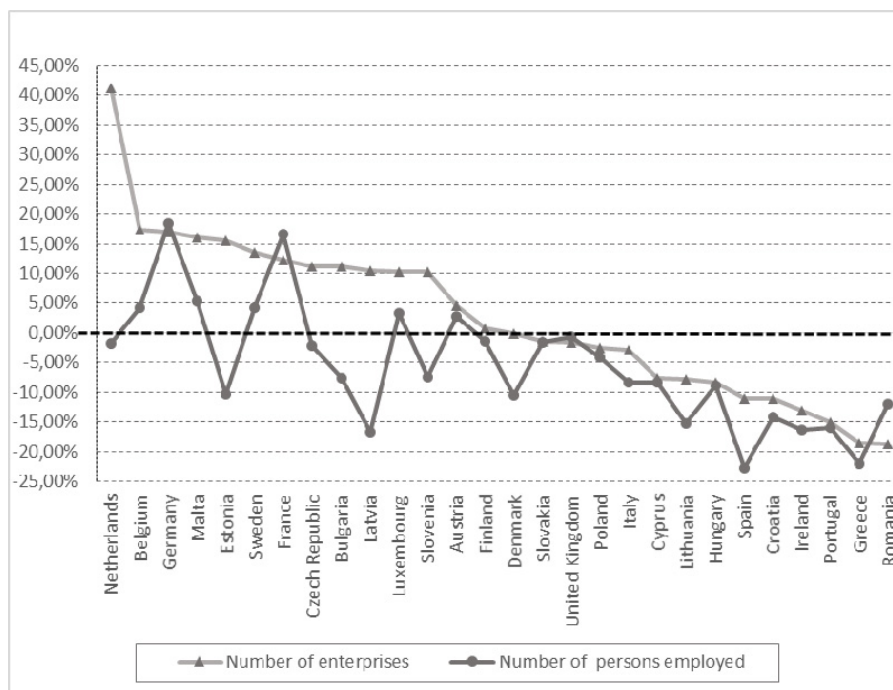


Source: own preparation

Analysis of the changes that have occurred in the whole SME sector showed that they were small. The number of enterprises micro type increased by 0.3 p.p., while the other the small by 0,25 p.p. and the medium-sized in 0.05 p.p. In turn, the analysis of the changes in the field of employment showed that during the period the number of persons employed in the MSE sector decreased by 1.5 million persons (1.3% of the total employees). The largest reduction

in employment (about 885,5 thou. persons) appeared in the smallest group of companies (micro) and smallest (about 75.5 thous. persons) in a group of companies classified as small. Important changes can be observed during the detailed analysis of individual countries. It has been calculated for each of these indicators of the dynamics of change (growth rates) for the years 2008-2012 including the number of enterprises and the number of persons employed.

**Figure 3: The structural changes of SME in 2008-2012 by EU countries**



Source: own preparation

By analyzing the increases at the level of countries, it is noted that for half of the cases (14 countries) there has been an increase in the number of enterprises, but only for 1/4 of the whole the increase in employment. The biggest business development occurred in Germany, which have reached over 17% increase in terms of both the number of enterprises and employment. A high level of growth have also countries such as: France, Malta, Belgium. In the case of the Netherland over 40% increase in the number of enterprises was accompanied by a slight decline in employment (-1.7%). The worst situation prevailed in the countries hardest hit by the crisis (Spain, Greece, Ireland and Portugal). Relatively high decline in employment (over 10%) have been reported also in Romania and in the Baltic States (Denmark, Estonia, Latvia and Lithuania).

To this end, using statistical measure derived indicators, classification criteria have been adopted to estimate the level of changes in individual countries. Table 3. lists the criteria and classification symbols, and in Table 4. the results of the examination of the classification of the countries surveyed.

**Table 3: The classification ranges for dynamic indexes and their symbols.**

Symbols	Interpretation	Number of enterprises	Number of persons employed	Value Added
↑↑	High growth	$\geq 16,27\%$	$\geq 4,77\%$	$\geq 4,78\%$
↑	Average growth	$< 2,58\%; 16,27\%$	$< -5,44\%; 4,77\%$	$< -0,58\%; 4,78\%$
→	Moderate decrease	$< -11,10\%; 2,58\%$	$< -15,65\%; -5,44\%$	$< -5,95\%; -0,58\%$
↓	Large decrease	$< -11,10\%$	$< -15,65\%$	$< -5,95\%$

Source: own compilation

**Table 4: The results of the comparative analysis of the dynamics of changes in the SMEs**

Growth rates of the number of enterprises	Symbols	Growth rates of the Value Added			
		↑↑	↑	→	↓
↑↑	X	Belgium, Germany	Netherlands	X	
↑	Malta	Austria, Luxembourg, Sweden	Bulgaria, Czech Republic, Estonia, France, Latvia, Slovenia	X	
→	Finland, Slovakia	Denmark, Hungary, Lithuania, United Kingdom	Cyprus, Italy, Poland	Croatia, Spain	
↓	X	Greece	Portugal, Romania	Ireland	
Growth rates of the number of persons employed	Symbols	Growth rates of the Value Added			
		↑↑	↑	→	↓
↑↑	Malta	Germany	France	X	
↑	X	Austria, Belgium, Luxembourg, Sweden, United Kingdom	Czech Republic, Netherlands, Poland	X	
→	Finland, Slovakia	Denmark, Hungary, Lithuania	Bulgaria, Estonia, Cyprus, Italy, Slovenia, Romania	Croatia	
↓	X	Greece	Latvia, Portugal	Ireland, Spain	

Source: own compilation

On the basis of the data table, it was found that only 6 countries together with the increase in the number of enterprises and number of employed has increased the Value Added (VA). Among the surveyed countries the highest business development with increasing economic efficiency occurred in Malta. The worst situation in terms of VA dynamics prevailed in Croatia, Ireland and Spain.

Employment growth is not always favored an increase in VA. Only for 7 countries both phenomena have the same trend. Despite the drop in the number of enterprises and persons employed in them in Finland and Slovakia observed a high increase in VA.

#### 4. Analysis of SME Access to Finance

Small and medium-sized enterprises (SMEs) represent over 99% of businesses in the EU so it is crucial to support their growth and innovation. However, one of the most important issues facing SMEs is their difficulty accessing finance. The European Commission works to improve the financing environment for small businesses in Europe. European Union financing programs are generally not provided as direct funding. Aid is channelled through local, regional, or national authorities, or through financial intermediaries such as banks and venture capital organisations that provide funding through financial instruments ([http://ec.europa.eu/growth/tools-databases/crowdfunding-guide/index\\_en.htm](http://ec.europa.eu/growth/tools-databases/crowdfunding-guide/index_en.htm)).

The European Commission developed the SME Access to Finance (SMAF) index to monitor developments in SMEs' access to financial resources, and to analyse differences between EU countries. The index is calculated using a baseline of EU 2007=100, and so allows comparison between countries and across time. The index is a weighted mean of two sub-indices: access to debt finance index (85% of the weighting) and access to equity finance index (15% of the weighting) ([http://ec.europa.eu/growth/tools-databases/smaf/index\\_en.htm](http://ec.europa.eu/growth/tools-databases/smaf/index_en.htm)) The composition of the two sub-indices sets out the 14 indicators that cover the index, with

nine included in the debt finance sub-index and five in the equity finance sub-index. The index is calculated using data from European Central Bank for debt; from European Venture Capital Association and European Business Angel Network for equity and from the EC and ECB's Survey on the Access to Finance of SMEs (SAFE) for both sub-indices. High values in the overall Index and its sub-indices indicate better performance of the access to finance indicators relative to the EU level in 2007. Table 5 shows the general characteristics of the SMAF index for 2007-2012.

*Table 5: Basic statistical measure of the SMAF index*

<b>Statistical measure</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Maximum	116,70	117,86	119,78	124,41	122,79	122,59
Minimum	80,83	78,21	74,57	86,45	81,76	79,28
Interval	35,87	39,65	45,21	37,97	41,03	43,31
Average	<b>100,00</b>	99,29	102,00	105,36	105,31	106,06
Median	102,36	101,49	104,43	105,79	106,13	107,06
Variability in %	8,72	9,27	11,56	9,47	9,19	9,89

Source: own compilation

The SMAF value for the EU28 declined between 2007 and 2008. From this point the value increased again until 2010, before levelling off. The EU SMAF index score for 2012 is 106, indicating an improvement of 6 points with respect to the score in 2008. The value of SMAF for many EU countries has increased since 2008 when the EU average for SMAF hit its lowest point. For 22 out of 28 member states, the SMAF score has increased between 2008 and 2012.

Sub-index on access to debt finance is comprised of indicators based on the take-up of different sources of debt finance, SME perceptions of loan finance and actual data on interest rates. The EU28 debt sub-index value has increased by 8 points since 2008. Across member states, 23 countries have seen their relative performance on this sub-index improve since 2008. Latvia represents the strongest performing country, whereas Greece, Cyprus, Italy, Portugal and Sweden have the least favourable environment for debt finance.

The sub-index on access to equity finance is calculated with data from the European Venture Capital Association and the European Business Angel Network reflecting investment volumes and numbers of beneficiaries. Here Lithuania, Ireland, Estonia, Denmark, Hungary and Finland are the strongest performing countries, whereas Luxembourg, Portugal and Sweden have the least favourable equity finance environments. The EU28 sub-index value has decreased by 1 point since 2008. 13 countries have improved their relative performance in the equity finance sub-index between 2008 and 2012. However, differences in the value of the sub-indices indicate the causes of changes in ranking positions for each country.

For 12 countries was worsening funding ranking SMAF, which is not always due to the deterioration of debt financing and equity financing. The largest decrease in Cyprus with 17 items resulted mainly from drastic deterioration of debt financing, a small improvement of the capital finance. A similar situation but in a much smaller scale in Italy. In the United Kingdom as well as in Luxembourg, Slovakia, Belgium and Poland, the situation was reversed. Debt financing has improved and significantly weakens the enterprise capital funding.

The least favourable financing conditions have occurred in Greece, Portugal and Sweden, where the diminished financing both debt and equity for the development of enterprise.

## 5. Conclusions

The economic situation of the country has some impact on the access of companies from the MSE sector to various sources of financing, especially for debt financing. Hence, the biggest business development has been reported in countries such as: Luxembourg, Netherlands, Germany, France, and Austria. However, this does not always increase access to financial sources for the development of the SME' sector.

The dynamics of structural change, the SME sector shows that the increase in the number of enterprises is not always accompanied by improvements in productivity and increased employment (Estonia, Latvia, Netherlands).

It can be safely concluded, that a country's higher economic development (measured by selected diagnostic variables) does not translate into higher SME financing (captured by SMAF index). Apart from economic development, certain legal and administrative regulations fostering the growth of the SME sector must be put in place.

## References

1. A recovery on the horizon. Annual Report on European SMEs 2012/2013 (2013)
2. Key figures on European business with a special feature on SMEs (2011), Eurostat European Commission Luxembourg: Publications Office of the European Union
3. Saisana M. (2012) Monitoring SMEs' performance in Europe Indicators fit for purpose, JRC Scientific and Policy Reports. Report EUR 25577 EN Statistical Office of the European Communities
4. <http://ec.europa.eu/eurostat/web/structural-business-statistics/structural-business-tatistics/sme>
5. [http://ec.europa.eu/growth/tools-databases/crowdfunding-guide/index\\_en.htm](http://ec.europa.eu/growth/tools-databases/crowdfunding-guide/index_en.htm)
6. [http://ec.europa.eu/growth/tools-databases/smaf/index\\_en.htm](http://ec.europa.eu/growth/tools-databases/smaf/index_en.htm)