



## **SMEs Competitiveness Reflected Through Productivity - Comparative Study Between Romania and the EU**

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**Abstract.** The aim of this paper is to provide a basis for discussion about the competitiveness in Romania and in EU27, focused on the employment, value added and productivity of the SME in the economic crisis context.

The current global crisis caused also a temporary halt in Romanian SME development, reducing their number, their contribution to employment and to GDP by value added.

The economic crisis may be a threat or an opportunity, depending on the behaviour of SME; it is a threat if SME are acting like victims, and an opportunity, if they know how to adapt to changes, having a good view of events in progress, and managing this way to maintain or increase their competitiveness. This study, based on statistical data at European level aims to highlight the results of these behaviours reflected in the productivity level in Romania and in the EU.

**Keywords:** economic crisis, performance, employment, value added

### **1 Introduction**

The increasing of the complexity and of the level of variability of the business environment in general, and of the international business environment in particular, represented determinant elements of the awareness of firm strategic issue of international competitiveness and of increasing efforts to address its the many and various aspects.

Defining competitiveness was the subject of discussion and controversy for a long time, but until now no definition hasn't been unanimously accepted at international level. It's more than obvious that the notion of competitiveness is at the intersection of different spheres of knowledge and the factors that contribute to obtaining a certain level of competitiveness are different and heterogeneous.

Competitiveness is thus the result of a combination of factors of different nature (objective or subjective, internal or external, economic or extra economic), determined in order of its reporting to the results of some entities of the same nature.

Competitiveness problem can be addressed by presenting differentiation elements, but also interacting elements at microeconomic level (firms, organizations etc.), macroeconomic (in a country) or mondoeconomic (of a number of countries – such as the EU).

Also, the competitiveness of firms, industries, regions, countries, etc. can be statistically analyzed through issues such as: market share, profitability or position in world trade or on long-term dynamic through its ability to achieve long-term performance in a competitive economic environment. Similarly, at macroeconomic level, the competitiveness of a nation is seen as the country's ability to obtain long-term growth so that it's economic structure to be able to effectively adapt to the development of world trade.

We can say that improving the level of competitiveness is a microeconomic approach, macroeconomic stability being just a contributing factor. In terms of prosperity, it is important how businesses compete in each field of activity and not in which industries a nation specializes. Productivity growth can only be achieved through innovation, but innovation is not just science discoveries, but also new business models. The major problems in the future are to achieve an efficient management and to increase the operations sophistication level of Romanian enterprises.

The external environment influence on SME's competitiveness is very strong. The world is changing, the environment is more uncertain, the competition is strong, and the environment protection regulations are more restrictive. All these require rapid, efficient and effective answers (Bibu, Sala, Pantea & Bizoi, 2008).

Competitiveness suggests safety, efficiency, quality, high productivity, adaptability, success, modern management, superior products, and lower costs. Competitive strength of a company lies in competitive advantages and distinctive components that it has over other competitors. To consider a firm as competitive firm is required to realize a rigorous analysis of both, company and its business environment.

In the European conception, competitiveness is seen as the ability of an economy to support high rates of productivity growth. Since the Lisbon Strategy, set out to make Europe the most competitive and dynamic world economy, competitiveness has become one of the European Union's political priorities.

In this paper we will focus only on one of the factors influencing competitiveness, namely productivity's evolution and how it contributes to increasing the competitiveness of SMEs in Romania compared to the ones in EU.

Productivity is a concept placed in the centre of the overall economy analyzes, being likely susceptible to interest particularly managers (including managers of SMEs) as a tool for evaluating the economic performance at the enterprise level.

Labour productivity is one of the most important synthetic indicators of the enterprise economic activity efficiency which reflects the effectiveness or the fruitfulness of labour expended in production. Labour productivity growth represents the most important factor to increase output, reduce production costs and increase profitability and product competitiveness on domestic and foreign market.

Productivity is defined as a ratio of output to input. Output could be: physical quantity, sales, production value, value added. Input comprises the resources used to produce output and the most common expression of input is labour, measured as number of hours worked or number of workers. Value added is commonly used as a measure of output and it represents the wealth created through the organisation's production process or provision of services.

In the economic theory the term *apparent labour productivity* is used to describe the apparent value added on an active person. The term "apparent" is used because it can not be exactly define the origin of the new value added, respectively may be due to the new techniques and technologies, work efficiency or its intensity, superior organization, etc. The apparent labour productivity only takes account of the factor of labour as the resource used. The term "apparent" recalls the fact that productivity depends on all the production factors and on the way in which they are combined.

According to Eurostat, apparent labour productivity is defined as value added at factor costs divided by the number of persons employed. This ratio is generally presented in thousands of Euros per person employed.

We chose to analyze the SME sector, both because it occupies an important part in all enterprises, both in Romania and the European Union level, but also based on the ground that although in general productivity is directly proportional to firm size, many SMEs registered superior productivity to large enterprises. Given their importance in all economies, they are essential for the economic recovery in the context of the present global crisis.

Productivity contribution to ensuring the competitiveness of a country is well known, the increasing of the competitiveness level supporting innovation integrations in products created and in production processes. Although competitiveness based on low prices is important at SME level, it is not sufficient, for assuring success being needed also a quality and a factor "time" based competitiveness, respectively a multidimensional competitiveness covering all functions and all business areas of action.

Mastering the stake of competitiveness is a process that involves the identification of the key factors of competitiveness and the examination of the ways in which small and medium enterprises, depending on their strategies can hold these factors, to organize and coordinate it, for developing the competitive capabilities and improving economic performance.

## **2 Specific indicators of SMEs activity from Romania and the EU**

Most companies operating both in Romania (99.6%) and in the EU countries (99.8%) are from the SME category, accumulating together two out of three jobs (65.82% in Romania and 66 , 72% at EU level) contributing with 52.59% to the formation of value added in Romania, and with 58.56% to the media of the EU.

These data lead to the conclusion that SMEs have an important role in the welfare of local and regional communities, along with a high potential to create jobs. SMEs also play an important role in the context of Strategy Europe 2020 contributing to the economic health of European economies. In this strategy are stipulated the following actions necessary to support the small and medium enterprises sector: reducing tax burden, facilitating access to finance, supporting SMEs to penetrate other markets, ensuring fair competition, promoting education and entrepreneurial skills, intellectual property protection, encouraging research and development, support SMEs in the context of competition.

Turning to the comparative analysis between Romania and EU27, the following table reflects the situation of SMEs in those two cases.

**Table 1** Number of enterprises (2008)

	Romania		EU	
	Number (thousand)	Share (%)	Number (thousand)	Share (%)
<b>Micro</b>	449.83	88.9	19,314.48	92
<b>Small</b>	44.53	8.8	1,406.60	6.7
<b>Medium size</b>	9.62	1.9	230.93	1.1
<b>Total SME</b>	503.98	99.6	20,952.01	99.8
<b>Large</b>	2.02	0.4	41.99	0.2
<b>Total enterprises</b>	506	100	20,994	100

Source: Eurostat

The largest share in all SMEs in Romania and in EU is hold by the microenterprises, with a considerable difference compared to the share of the other two classes, namely small and medium enterprises.

**Table 2** Employment (2008)

	Romania		EU	
	Number (thousand)	Share (%)	Number (thousand)	Share (%)
<b>Micro</b>	1,027.44	23.28	39,324.5	28.96
<b>Small</b>	907.30	20.56	27,856.2	20.52
<b>Medium size</b>	970.23	21.98	23,410.1	17.24
<b>Total SME</b>	2,904.97	65.82	90,590.8	66.72
<b>Large</b>	1,508.80	34.18	45,185.4	33.28
<b>Total enterprises</b>	4,413.77	100	135,776.2	100

Source: Eurostat

SME contribution to employment is lower in Romania than the EU average in all categories except large enterprise, and with a very small difference to small businesses. Table no. 2 highlights the fact that about two-thirds of the workforce employed, both in Romania and in EU average is found in SMEs. Micro-enterprises have employed more people than all other classes of businesses from SME category, both in Romania and in all other EU member states.

**Table 3** Value added (2008)

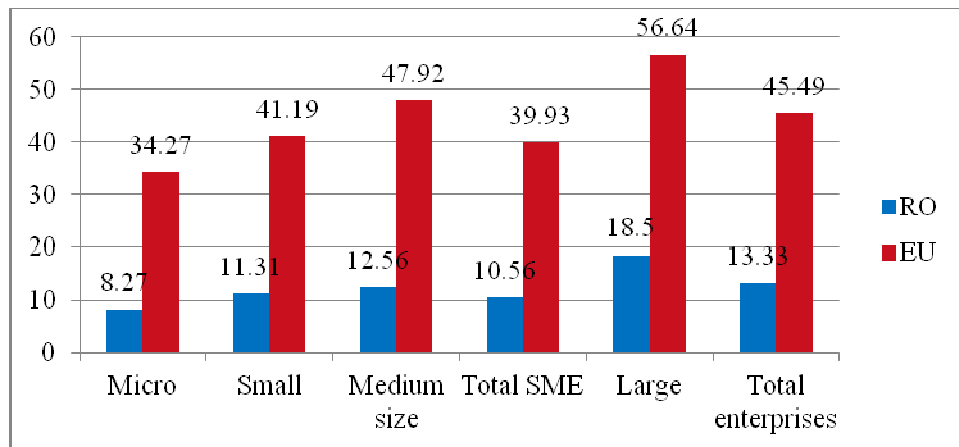
	Romania		EU	
	Value (billion €)	Share (%)	Value (billion €)	Share (%)
<b>Micro</b>	8.50	14.44	1,347.83	21.82
<b>Small</b>	10.26	17.44	1,147.27	18.58
<b>Medium size</b>	12.19	20.71	1,121.76	18.16
<b>Total SME</b>	30.95	52.59	3,616.86	58.56
<b>Large</b>	27.90	47.41	2,559.26	41.44
<b>Total enterprises</b>	58.85	100	6,176.12	100

Source: Eurostat

SMEs have generated 58.56%, respectively 3616.86 billion Euros of the average value added at EU in 2008, while in Romania the share was of 52.59%, respectively 30.95 billion Euros, which shows that Romania joins of the general trend of the EU Member States.

**Table 4** Apparent labour productivity (2008)

	Romania		EU		Productivity ratio of Romania compared to EU
	Value (thousand € / person)	The proportion compared to total enterprises	Value (thousand € / person)	The proportion compared to total enterprises	
<b>Micro</b>	8.27	0.62	34.27	0.75	0.24
<b>Small</b>	11.31	0.85	41.19	0.91	0.27
<b>Medium size</b>	12.56	0.94	47.92	1.05	0.26
<b>Total SME</b>	10.56	0.80	39.93	0.88	0.27
<b>Large</b>	18.50	1.39	56.64	1.25	0.33
<b>Total enterprises</b>	13.33	1.00	45.49	1.00	0.29



**Chart 1** Apparent labour productivity – 2008 (thousands €/person)

SME contribution to the value added was lower than its contribution to employment (i.e. 66.72% in the EU, and 65.82% in Romania), which led to a lower level of apparent productivity. Exceptions are the large companies that have experienced high levels of apparent productivity.

Comparing levels registered in Romania and in the EU, it appears that Romanian SMEs productivity is about 25% on each of the three categories of enterprises.

According to existing statistics (European Commission), the share of SMEs in 2010 recorded no major changes from 2008. This situation is reflected in the following comparative analysis between Romania and the EU, based on Commission estimations.

**Table 5** Number of enterprises

	Romania		EU	
	Number (thousand)	Share (%)	Number (thousand)	Share (%)
<b>Micro</b>	464.66	88.5	19,198.54	92.1
<b>Small</b>	49.17	9.4	1,378.40	6.6
<b>Medium size</b>	9.67	1.8	219.25	1.1
<b>Total SME</b>	523.50	99.7	20,796.19	99.8
<b>Large</b>	1.74	0.3	43.03	0.2
<b>Total enterprises</b>	525.24	100	20,839.23	100

Source: European Commission, Structural Business Statistics Database, estimations for 2010

Table 5 shows that SMEs in Romania have a share about equal to the EU average in terms of total number of enterprises. Analyzing the structure of SMEs, it is observed that the largest share is held by microenterprises, and its share in the EU microenterprises average is higher than the share in Romania.

Based on data from tables no. 1 and no. 5 we can see changes in the enterprises structure (share in total number of enterprises) in 2010 compared to 2008 only for Romania (chart 2).

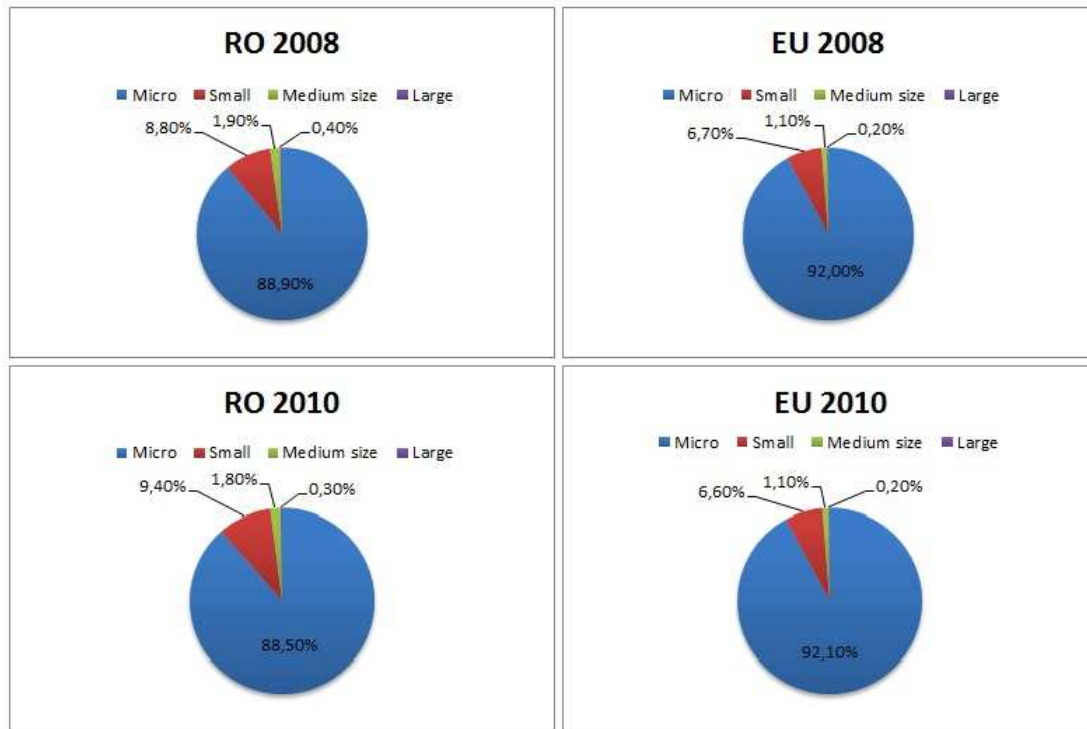


Chart 2 Enterprises structure (%)

Table 6 Employment

	Romania		EU	
	Number (thousand)	Share (%)	Number (thousand)	Share (%)
<b>Micro</b>	876.36	21.2	38,905.52	29.8
<b>Small</b>	821.06	19.8	26,605.17	20.4
<b>Medium size</b>	935.75	22.6	21,950.11	16.8
<b>Total SME</b>	2633.17	63.6	87,460.79	66.9
<b>Large</b>	1509.79	36.4	43,257.10	31.3
<b>Total enterprises</b>	4142.96	100	130,717.89	100

Source: European Commission, Structural Business Statistics Database, estimations for 2010

SME contribution to employment is lower in Romania than the EU average in all categories of enterprises except medium-sized enterprises. Table no. 6 highlights the fact that about two-thirds of the workforce employed both in Romania and the EU average is found in SMEs.

**Table 7** Value added

	Romania		EU	
	Value (billion €)	Share (%)	Value (billion €)	Share (%)
<b>Micro</b>	11	12.1	1,293	21.6
<b>Small</b>	12	14.1	1,132	18.9
<b>Medium size</b>	14	15.9	1,067	17.9
<b>Total SME</b>	37	42.2	3,493	58.4
<b>Large</b>	51	57.8	2,485	41.6
<b>Total enterprises</b>	88	100	5,978	100

Source: European Commission, Structural Business Statistics Database, estimations for 2010

Data on value added shows that SMEs in Romania have a lower contribution compared to the EU average for all SMEs. The biggest difference between Romania (12.1%) and EU (21.6%) is observed in the category of microenterprises, which reflects lower performance compared to their average at the EU level.

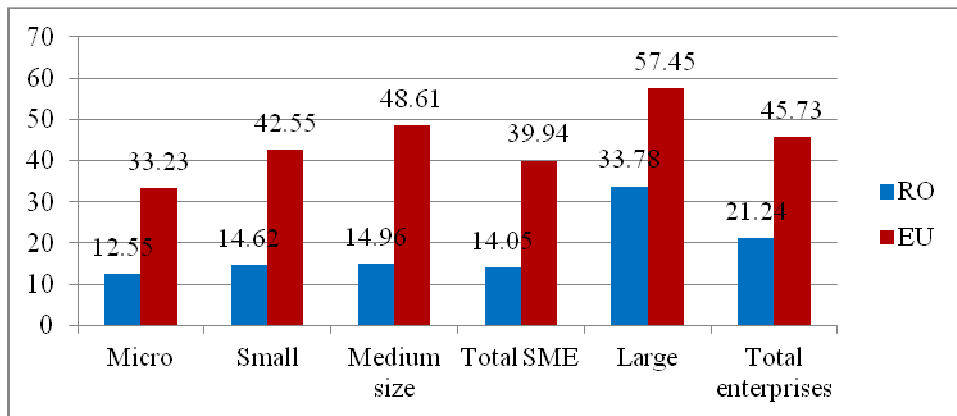
Given the contribution of SMEs to employment and to obtain value added, we can say that Romanian small and medium enterprises have a less important role in the national economy, compared to the EU Member States average.

**Table 8** Apparent labour productivity

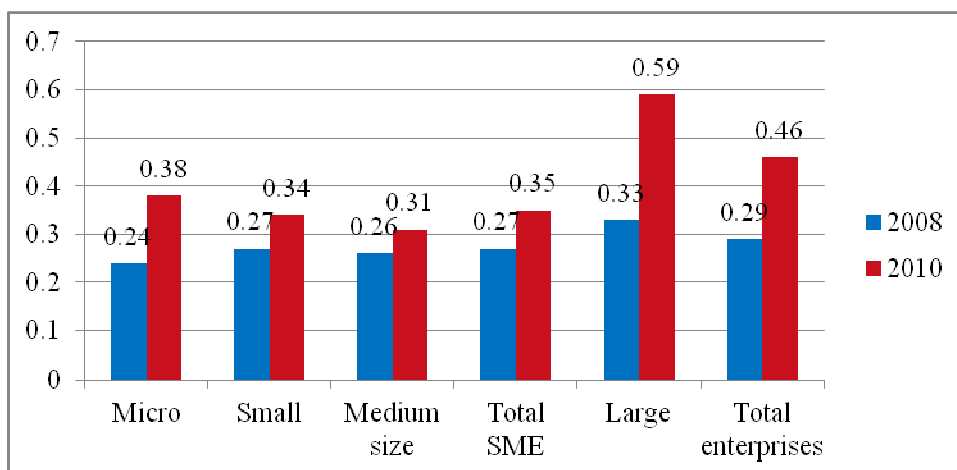
	Romania		EU		Productivity ratio of Romania compared to EU
	Value (thousand € / person)	The proportion compared to total enterprises	Value (thousand € / person)	The proportion compared to total enterprises	
<b>Micro</b>	12.55	0.59	33.23	0.73	0.38
<b>Small</b>	14.62	0.69	42.55	0.93	0.34
<b>Medium size</b>	14.96	0.70	48.61	1.06	0.31
<b>Total SME</b>	14.05	0.66	39.94	0.87	0.35
<b>Large</b>	33.78	1.59	57.45	1.26	0.59
<b>Total enterprises</b>	21.24	1.00	45.73	1.00	0.46

Source: European Commission, Structural Business Statistics Database, estimations for 2010





**Chart 3** Apparent labour productivity – 2010 (thousands €/person)



**Chart 4** The proportion of productivity in Romania compared to the EU

Comparing the data from table 4 with the one from table 8, and analyzing chart 4 there we observe an increase in the proportion of apparent labour productivity in Romania and the one corresponding to EU average, a situation determined by the estimations regarding the increasing of the value added per person employed in Romania in 2010 compared to 2008. Thus, on total SMEs, the share would increase from 0.27 to 0.35.

We believe that these estimates will not be confirmed by further statistics, given the decrease in consumption and domestic demand, which is why companies capitalize more and more difficult their products or services and limit their production. Although SMEs can bring economic recovery, taxing system in Romania does not encourage small entrepreneurs to develop their business.

### **3 Economic crisis and its consequences at the SME level**

The global crisis occurred in late 2008 has not spared SMEs. Such periods, uncertain for SME managers have to determine them to constantly monitor developments in the economic environment to be able to predict such situations and to demonstrate flexibility and adaptation, putting on role vigilance and reaction mechanisms. Thus, SMEs must always be ready to manage context crisis, repeatable, to detect possibly threats and opportunities arising from such changes and also to deal with the disappearance of one or more of their activities and with the appearance of a new demand, and not to indulge in the idea that customers need their goods and services, because they have a high quality and reasonable prices; such a sense of trust places the firm in an operation routine and unable to intercept threats that appear on the market.

The economic crisis generates new forms of needs, new opportunities for partnerships, creating new products and services, and SMEs managers should be able to anticipate these developments. Therefore they must be constantly in alert, to analyze the evolution of business, to sort information from customers and to take appropriate decisions given the situation.

In times of crisis, in comparison with large companies, SMEs have the advantage to afford to be more flexible; it can implement new services and launch new products. SMEs can act promptly applying adaptive solutions to market conditions and can identify new markets, new solutions. In order to be prepared in front of innovation, management should be aware of the competencies of the organization.

Consequently, during the crisis, it is necessary to strengthen the management of SMEs, along with the essential role of strategic reflection and action planning.

### **4 Conclusions**

The present financial and economic crisis has grave consequences for the business performance of many small and medium-sized enterprises in EU. Both in Romania and at the EU level, SMEs have a lower productivity than that registered by large enterprises, the lower apparent productivity being recorded by microenterprises. They also have a less ability to record economies of scale.

The inevitable increase in the number of companies removed during the recession creates opportunities for innovative business and for the new business of the companies returning to the market.

We can observe the lower contribution of SMEs to creating value added than to employment, both in Romania and the EU, suggesting a positive correlation between labour productivity and enterprise size category.

Apparent labour productivity in SMEs is lower than the average of all enterprises in the economy, but its growth in 2010 compared to 2008 is significantly higher on total enterprises in Romania, while at the EU average there aren't major changes.

The proportion of SMEs value added compared to the total enterprises in Romania is lower than the same proportions in the EU, and in 2010 compared to 2008 is significantly reduced (from 0.80 to 0.66) in case of Romania.

Confirmation of these predictions can only take place after the publication of new statistics, given the fact that the database of structural statistics on business does not provide a complete picture of economic indicators and needs time to be built.

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