


<b>Impact of Small and Medium Enterprises on the Economic Development of the Republic of Macedonia</b>			<b>Economics</b>
			<b>Keywords:</b> small and medium sized enterprises, gross added value, Republic of Macedonia.
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<b>Abstract</b>			
<p>The contemporary working conditions that are characterized by dynamic structural changes, development of information technology, internationalization of businesses, ever increasing of the global competition, and finally the increase of insecurity, have imposed the urgency to develop the small and medium sized enterprises as a highly dynamic sector. For this reason the importance to research this topic arises, because it presents itself a very current issue, not only locally, but also nationally and internationally. Given the above, the aim of the paper is to analyze the role and influence of the small and medium sized enterprises in performing economic operations and their contribution to the economic development in the Republic of Macedonia. As a result, the set hypothesis of this scientific work reads as follows: the gross-added value of the small and medium sized enterprises has a significant impact on the country's GDP. Research has shown substantial impact of the sector of small and medium enterprises on GDP. Indicated impact on GDP makes sense because between independent variables the multicollinearity has been removed, and therefore it can be seen the isolated effect of one variable on GDP. The model was verified through a test of determination where <math>R^2 = 0.952</math>. This means that the model provides a basis for predicting with 95.2 % accuracy.</p>			

### 1. Introduction

The modern working conditions that are characterized with dynamic structural changes, development of information technologies, internationalization of businesses, growing global competition and increase of insecurity are those that imposed the need for development of small and medium size enterprises (SMEs) as a highly dynamic sector. In fact the actual processes of globalization indicate an ambience which has been radically changing at the same time turning the world into a huge market where national, regional and local markets lose their traditional value.

Up until recently, there has been prevailing the opinion that the large companies have a tendency to grow into large systems which shall keep pace with the technological development because they have high efficiency and productivity and large supply to conquer the world markets. Namely they also represented a challenge for the global economy, as well as an opportunity for economic development and prosperity; however, the change of the operating conditions and the deepening of the crisis that happened in the 1980's of the previous century made the economic policies of the developed countries to start seriously dealing with the issue of developing small businesses, industrial competition, restructuring and privatization.

In the 1980's there were turbulent changes in the functioning of the economic systems in some countries due to the fact that the socialist system was left behind and there were set foundations for market economy and more stable democratic society (capitalism). The crisis that hit the financial markets accompanied with high interest rates intensively imposed the need for having small and medium size enterprises, thus increasing their importance for the overall economy due to their financial structure.

At that period, it was at first in the USA where such institutional environment was boosted which positively reflected on the expansion of these enterprises, and those conditions expanded in the rest of the countries, which resulted in having the entrepreneurship actions becoming popular and actual again. It is only because of that that this period shall be remembered for the strong effect of the entrepreneurship initiative and the economic science shall be more and more engaged in proving how important the small and medium enterprises are due to the fact that they are carriers of the restructuring of the economic system and it is their vitality that generates new employments and mobilizes all the factors of production.

The abovementioned results into having a research on this topic as a very important thing to do because the topic is in itself very popular, both on local and even more on a wider national and international level. It is due to this that the aim of this paper is to analyze the role and the influence small and medium size enterprises have in the realization of economic activity with special emphasis on the case of the Republic of Macedonia. Subject to research shall be the developed countries as well as the developing ones with special emphasis on the Republic of Macedonia. As a result to this, the hypothesis set in this paper reads as follows: the gross added value of small and medium size enterprises has significant influence on the GDP of the country. In order to meet the previously set objective i.e. in order to get valid results, during the research there were applied certain scientific methods such as: inductive and deductive method, method of analysis and synthesis, comparison and statistical methods.

## 2. The Influence of SMEs on the Economic Development in the Republic of Macedonia

Unlike the period before transition (when Macedonia was a constituent part of the former Yugoslavia), where the most important issue was industrialization, and later on intensification of agriculture and development of other business activities, nowadays one of the most popular questions is the one about the small business i.e. about the small and medium enterprises. Neglecting the small business on the Republic of Macedonia led to serious structural disproportions which in the end reflected as inefficiency and low competition of the overall economy (Uzunov, Georgiev, Nedanovski, p. 405). Taking into consideration the negative experience from the past, the goal should be not only to simply increase the number of small and medium enterprises but primarily to make conditions for them to show their true features. Small and medium enterprises represent a significant and vital part of the economy of one country. They are significant from a perspective of their cooperation, and the competition they represent to the large enterprises when talking about their participation in the creation of new jobs, products and services and making greater profit. In this context, in the text further we present the movement of GDP of the Republic of Macedonia for a period of four years, so that we have a basis on which we shall be capable to further analyze the influence of SMEs on the creation of GDP as one of the basic ways for measuring the performance of an economy.

**Table 1: Gross Domestic Product in the Republic of Macedonia from 2010 to 2013**

Year	GDP in current prices (in million denars)	GDP per capita in Euros (current exchange rate)	GDP in million Euros (current exchange rate)	Rates of real growth of GDP in %
2010	437,296	3,459	7,109	3.4
2011	464,187	3,665	7,544	2.3
2012	466,703	3,680	7,585	-0.5
2013	499,559	3,930	8,112	2.7

**Source:** Announcement Gross-domestic product of the Republic of Macedonia in 2013 previous data, State Statistical Office.

From Table 1 we can see that the GDP gained from the annual accounts of the business entities and other sources, from 2010 to 2013 shows a constant growth. The GDP in 2013 amounts 499559 million denars and compared to the one in 2012 it has nominally risen for 7.0%.

The real growth rate of GDP compared to year 2012 is 2.7%. Because active business entities are those which participate in the creation of GDP, many scientific research papers aim at identifying which business entities according to their size have bigger or smaller share in the GDP of a country. Statistical data shows that in the Republic of Macedonia micro and small enterprises are major factors that influence the rise of the GDP from year to year (as presented in Table 1), and due to this they highly contribute to the real economic growth of the country. It is obvious that the realized rates of economic growth cannot be qualified as satisfactory ones for enhancing the basis and the condition of domestic economy as well as for increasing the standard of living of the population. This is supported by the fact that the average value of GDP per capita of the Republic of Macedonia is still very low. For example in year 2010 this value was 3,459 € with consistent growth, up until year 2013 when it rose to 3,930 €, and as such still being far below the level of the GDP in the developed countries.

**Table 2: Number of active business entities in Macedonia according to the number of their employees.**

Year	2008	2009	2010	2011	2012	2013
Enterprises with 1-9 employees	52,910	59,398	59,276	60,620	61,053	60,599
Enterprises with 10-49 employees	3,351	3,706	4,051	4,452	4,732	4,776
Enterprises with 50-249 employees	1,177	1,159	1,211	1,187	1,280	1,291
Enterprises with more than 250 employees	189	204	203	185	201	209

Source: [www.stat.gov.mk](http://www.stat.gov.mk)

From Table 2 it becomes clearer that small businesses become more and more important when considering the created opportunities for new jobs, and they also represent key engines for creating welfare in both local and regional communities. This contributes for strengthening the belief that it is the entrepreneurship and the entrepreneurs who are the backbone of the national economy and the society as well, beginning from the principle that “one should first think of the small one”; it is this that resulted in the idea to create policies that shall be beneficial for small and medium enterprises. This means that small and medium size enterprises should be first heard before any new rules and regulations are adopted; also it should be examined what influence shall that legislation have on small enterprises, and assistance should be offered whenever they have a need of it. The data in Table 2 show how new jobs are distributed among different size firms in the Republic of Macedonia. Here it is obvious that the number of enterprise with 1-9 employees is much bigger when compared to the number of enterprises with 10-49, 50-249 or over 250 employees. The analysis helps in determining that in the Republic of Macedonia, micro-firms are the greatest employers and they represent the best providers of good opportunities for new jobs, as well as a place to develop new ideas for potential perspectives. As a result of this, the sector of small and medium enterprises has a significant place and plays an important role in the economy of the Republic of Macedonia as being a key dynamic factor for the overall social economic development i.e. it is being identified as an engine of the economic development. SMEs absorb the largest part of labour force which additionally proves their importance for the economy as a whole as well as for the process of creating GDP.

**Table 3: Number of active business entities according to their size**

	2009	2010	2011	2012	2013
<b>Micro</b>	38,107	39,999	46,322	53,117	49,935
<b>Small</b>	31,873	34,702	25,984	20,341	20,241
<b>Medium</b>	533	584	607	631	683
<b>Large</b>	197	212	205	335	431
<b>Total</b>	70,710	75,497	73,118	74,424	71,290

Source: [www.stat.gov.mk](http://www.stat.gov.mk)

As it is the case with the highly developed market economies, it also in the Republic of Macedonia that the SMEs sector has a significant place in the overall economy due to the fact that it covers around 99% of the total number of active business entities, the largest part of those being the micro-enterprises. The number of micro-enterprises increased from 38.107 in 2009 to 49.935 in 2013, although the numbers of medium and large enterprises have been increasing year by year also. Yet, those enterprises are less present when compared to micro and small enterprises. When it comes to small enterprise, their number decreased in the period from 2009 to 2013, with an impression that the still have important role in the economy because the number of their presence in the total number of active business entities is again increasing.

Small and medium enterprises largely participate in the gross added value at a level of the national economy. Namely, gross added value represents an indicator for the economic prosperity of the country. It measures the participation of each producer, sector or industry in the business processes. Gross added value represents a balance between the gross product and the inter-phase consumption, as shown in Table 4.

**Table 4: Gross added value per size of the enterprises according to the number of their employees from 2010 to 2012 in million denars\***

	Gross added value per size of the enterprises according to the number of their employees										Total
	0-9		10-19		20-49		50-249		250+		
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	
2010	53,776	23.96	21,108	9.40	24,464	10.90	48,229	21.49	76,789	34.22	224,366
2011	110,970	33.79	32,821	9.99	40,098	12.21	70,033	21.32	74,454	22.67	328,376
2012	49,676	25.09	20,139	10.17	22,719	11.47	37,294	18.83	68,160	34.42	197,988
2013	114,495	34.10	34,760	10.35	41,090	12.24	71,676	21.35	73,655	21.94	335,676

\* In the calculations sector A - agriculture, forestry and fishery, is not included.

**Source:** State Statistical Office, *Announcement – Structural business statistics, 2010, 2011, 2012 and 2013*, Skopje.

From the data presented in Table 4 it can be concluded that in the period from 2010-2013 the participation of small and medium enterprises in the gross added value was under constant rise except for the year 2012 when a decrease is seen compared to those of years 2011 and 2010. In 2013 again a higher level is reached and the previous rising trend comes back to practice.

In the total added value of 224,336 million denars calculated according to the costs for production factors, in 2010, the largest participation was that of the enterprises belonging to the sector of *Processing Industry* (29.1%), then follow the sectors *Wholesale and Retail* (21.2%), *Information and Communications* (10.7%), *Supply with electricity, gas, steam and acclimatization* and the sectors *Civil Engineering* (7.9%) and *Transport and Warehousing* (7.4%). The smallest contribution to the added value had the sector *Real Estate Business Operations* i.e. 1.1% (State Statistical Office, 2010 No: 6.1.12.20.). Regarding the size of the enterprises, in 2010, the largest participation was that one of the enterprises which employs 0-9 individuals (92.2%). In them there was employed 35.7% of the total number of employees, which created 24.0% of the added value. Besides the fact that they engage lesser employees (22.2%), yet in 2010 the contribution of the large enterprises to the added value was the greatest one, 34.2% (State Statistical Office, 2010 No: 6.1.12.20).

Regarding 2011 the total added value is 328.376 million denars, calculated according to the costs for the production factors, whereas the greatest participation was that one of the enterprises belonging to the sector of *Processing Industry* (26.3%) and the sector of *Wholesale and Retail* (22.8%). Regarding the size, in 2011 there prevail micro-enterprises with less than 10 employees (91.3%). In them there were engaged 33.8% from the total number of employees, which created 25.6% of the total added value. On the other hand large enterprises (0.2% of the total number) engaged 22.7% of the total number of employees at the same time making 29.0% of the total added value within the business sector.

In 2012 the total added value amounts 197.988 million denars, calculates according to the cost factor. The greatest participation is the one of the enterprises belonging to the sector of *Processing Industry* (25.8%) and the sector of *Wholesale and Retail*, 23.3% (State Statistical Office, 2011 No: 6.1.13.20.). Regarding the size, there prevail micro-enterprises with less than 10 employees (91.2%). In them there were engaged 33.7% from the total number of employees, which created 25.1% of the total added value. On the other hand large enterprises (0.2% of the total number) engaged 23.3% of the total number of employees and created 34.4% of the total added value within the business sector (State Statistical Office, 2012 No: 6.1.14.22).

In the total added value, calculated according to the cost factor, in 2013 the greatest participation is the one of the enterprises belonging to the sector of *Processing Industry* (24.6%) and the sector of *Wholesale and Retail* (23.5%). Regarding the number, there prevail micro-enterprises with less than 10 employees (90.9%). In them there were engaged 34.1% from the total number of employees, which created 23.9% of the total added value. On the other hand, according to the Agency for Support of Entrepreneurship in the Republic of Macedonia and its *Annual Statement of the SME Sector for year 2013*, large enterprises (0.2% of the total number) engaged 21.9% of the total number of employees and created 33.6% of the total added value within the business sector.

### 3. Regression Analysis

The fact that the bigger gross added value of the production of the small and medium enterprises, as well as the large ones has positive influence on the gross domestic product is confirmed with a multi regression calculated for the period from 2010-2013, and it is presented with a mathematical function  $Y = a + bX_1 + cX_2 + \varepsilon_{it}$ , where Y in our model is the dependent variable i.e. the GDP which is under influence of the independent variables X1 and X2; in this case these independent variables are identified in the following way: X1 with gross added value of small and medium enterprises and X2 with gross added value of large enterprises. The data for the preparation of the multi regression are used from the Table 4 and Table 7.

The results are the following ones:  $Y = 286.232.717 + 0.460 X_1 + 0.996X_2$  where (a) constant is 286.232.717 denars, which means that the gross domestic product shall amount to this value without having been influenced by the gross added value of SMEs and the large enterprises. The value of the constant (a) shows a value where the line of regression intersects the Y axis. The coefficient (b) of the regression is 0.460, which means that it is for this amount that the GDP shall increase when the Gross added value of the SMEs shall increase for one unit and when the other variables shall remain unchanged. The coefficient (c) is 0.996 which means that it is for this amount that the GDP shall increase when the Gross added value of the large enterprises shall increase for one unit and when the other variables shall remain constant. The abovementioned influence on the GDP is logical because between the independent variables the multi-collinearity is being put aside, which means that the independent variables do not correlate between themselves (they do not have a high coefficient of correlation) and due to this it can be seen isolated the effect of one variable on the GDP. This model is checked through the test of the determinant where  $R^2 = 0.952$ . That means that the model gives basis for projecting with 95.2 % of correctness.

### 4. Conclusion

On the basis of the performed systematic analysis of the core issue which was subject to this research, the following conclusions can be drawn:

- Small and medium size enterprises (SMEs) are key factors for the welfare of each national economy;
- The globalized world market gives an opportunity for SMEs to act at its scale, which due to their number, diversity and efficiency become a significant element for enhancing the national economy and accelerating the development. It is because of this that special emphasis is put on the correlation between the SMEs and the performances of one national economy i.e. the greater significance of the small and medium enterprises for the economic development;
- SMEs significantly contribute for the creation of new jobs;
- SMEs contribute for the increase in production and the added value i.e. the increase of the economic development in general.

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