The Impact of Access to Finance on the Performance of the SME Sector

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Abstract

In this research paper we aimed to analyze the impact of access to finance on the performance of SMEs. The aim of the research is to evaluate empirically and analyze the effects of changes in the macroeconomic environment, in particular the access of bank loans to companies on the performance of SMEs. In order to reflect a more realistic picture of the influence of macroeconomic factors on the performance of the SME sector, the analysis covered a period of 10 years (2009-2018). Overall, the empirical study reveals that the main determinants of SME sector performance are gross capital formation and real GDP growth rate.

Key words: access to finance, SME performance, macroeconomic environment, added value **J.E.L. classification**: C33, L25

1. Introduction

The importance and timeliness of this issue is highlighted by the position of SMEs in the private sector for both developed and developing countries. The main aim of the research is to investigate whether the performance of small and medium-sized enterprises in the EU28 is influenced by access to finance. Thus, we investigated the extent to which macroeconomic variables directly or indirectly influence the performance of SMEs.

Currently, small and medium enterprises constitute 99.8% of the total number of existing companies in the European Union and over 99% of the total number of existing companies in Romania. SMEs are considered to be the engine of the economy due to the generation of new jobs and the contribution to creating value added and reducing unemployment. SMEs are considered a very important source of job creation, growth, innovation, competitiveness, dynamism and flexibility. I also consider that the performance of SMEs is a very important topic to study due to the fact that they have a major influence on gross domestic product and unemployment. Given the constant changes taking place in the economy, I consider it vital to analyze the performance of SMEs, a performance that is influenced by a number of macroeconomic factors. Therefore, the main alternative indicators that measure the performance of small and medium enterprises are: the number of SMEs, the added value created by SMEs and the number of employees in SMEs.

2. Literature review

The performance achieved by small and medium enterprises is influenced by certain economic factors, factors that can be grouped into the following categories:

> General structural factors: long-term unemployment rate, the process of digitalization of the economy, labor force, indicators that measure competitiveness in business;

 \succ *Cyclical factors:* such as the production deficit encountered at national level, the long-term interest rate, the unemployment rate;

> *Macroeconomic policy variables:* such as the real short-term interest rate;

> Factors that refer to the specific challenges faced by SMEs - in this category we can include the issue of accessing funding sources and finding new customers.

The main alternative indicators that measure the performance of small and medium enterprises are: the number of SMEs, the added value created by SMEs, the number of employees in SMEs

Cicea, Popa, Marinescu and Ștefan (2019), use a series of macroeconomic indicators, which also refer to the economic aspects of SMEs with an impact on their performance. Thus, among the analyzed indicators are added value, corruption perception index, absorption rate of funds, GDP, general public expenditures, inflation rate, life expectancy at birth, population by level of education, unemployment (annual average). The inflation rate can influence the cost of capital, which causes an increase in the cost of producing goods and providing services. Another indicator used in the analysis was the average life expectancy at birth which indirectly generates information about the health of employees, a very important element in increasing the performance of SMEs. Of the variables analyzed as having an influence on the performance of SMEs, only four of them resulted in one-way causal relationships with them, namely: the corruption perception index, GDP, unemployment (annual average) and the absorption rate of funds.

The performance of SMEs is an important topic to study due to the fact that they have a major influence on gross domestic product (GDP) and unemployment. Thus, both at the level of the European Union and at the global level, SMEs have an important share in GDP and in terms of reducing unemployment, aspects that do not apply in the case of centralized economic systems. Factors influencing the increase of the added value of SMEs in the countries of Central and Eastern Europe were analyzed by *Rusu and Roman (2017)*. The results obtained showed that the total tax rate, exports of goods and services and private final consumption are statistically significant and have a strong influence on the performance of SMEs. Roman, Rusu and Stoica (2018) researched from an empirical point of view how the factors specific to the institutional environment influence the dynamics of new business creation, depending on the degree of economic development of the country. The results of the study showed that the formation of new businesses in the member countries of the European Union is significantly related to the institutional environment. Thus, the effects of institutional variables on setting up new businesses are different, depending on the economic stage of development of the countries studied. Similarly, Roman and Rusu (2018) analyzed how macroeconomic changes and the quality of institutions affect the level of entrepreneurial activity in 18 member states of the European Union.

The literature on entrepreneurship (e.g., Ipinnaiye, Dinnen, & Lenihan, 2016) considers that the performance of SMEs is influenced by internal factors as well as macroeconomic factors (unemployment rate, inflation rate, competitiveness, exchange rate for exchange credit granted to the private sector, etc.). The mentioned authors consider that the importance and implementation of a correct strategy for SMEs is influenced by the existing macroeconomic conditions and therefore the enterprises modify their strategies according to the changes in the environment in which they operate. Empirical analysis has found that the macroeconomic environment directly influences the growth and development of SMEs (they register a higher growth when aggregate production increases).

The analysis of the effects of macroeconomic factors, including GDP growth and inflation in terms of sales growth, was performed by a small number of studies. *Beck, Kunt, and Moximovik (2005)* analyzed the effects of firm size, financial, legal, and corruption barriers on the growth rates of SME performance, given GDP per capita, GDP in millions of dollars, and inflation as control variables.

The key factors influencing the establishment of a new business were analyzed by *Roman, Bilan* and Ciumaş (2017). Thus, the effects of some macroeconomic, demographic, individual and business environment factors on the dynamics of creating new companies were evaluated. The results of the study showed that macroeconomic and demographic variables are the most significant determinants, followed by the individual characteristics of entrepreneurs and the business environment. Also, *Rusu and Roman (2017)* analyzed which are the possible determinants of entrepreneurship in the member countries of the European Union, by testing the relationship between a series of indicators and total entrepreneurial activity. The results of the study showed that the inflation rate, foreign direct investment, access to finance and the total tax rate are the main macroeconomic determinants of entrepreneurship.

3. Research methodology

In order to reflect a more realistic picture of the influence of macroeconomic factors on the performance of the SME sector, the analysis covers a period of 10 years (2009-2018), and the variables included in the study are represented by *domestic credit to the private sector by banks* (% of GDP), the annual growth rate of real GDP, the unemployment rate, the inflation rate, the tax rate, the gross capital formation, foreign direct investment.

The performance of SMEs at country level is expressed by three indicators, namely: *number of SMEs, number of employees, added value*, and in this research we aimed to investigate the performance of the SME sector in EU countries under the impact of indicators macroeconomic, performance measured by added value. It should also be noted that the macroeconomic environment can be defined by the indicator of the share of bank loans in GDP, a variable that can be used to measure the availability of credit to improve this sector.

In this paper we will perform an empirical application research, using Panel data. The data used in carrying out this research work are taken from Eurostat and the World Bank, the analysis being performed for the period 2009-2018. The sample for which this study was conducted consists of the 28 member states of the European Union, the analysis using country-level data. The *dependent variable* used in this research paper is the *added value* and the *independent variables* are the *internal credit granted to the private sector by banks (% of GDP), the annual growth rate of real GDP, the unemployment rate, the inflation rate, the tax rate, gross formation capital and foreign direct investment (see Table no 1).* We chose these variables, taking into account the representativeness and availability of data for all 28 member states of the European Union.

Variable name	Variable symbol	Description	Unit	Data source	Previous signs
Added value	AV	Added value	%	Eurostat	* * * *
Internal credit	Domestic_credit	Internal lending to the private sector by banks	% GDP	World Bank	+
The economic activity	Gdp_growth	Annual real GDP growth rate	%	Eurostat	+
Unemployment	Unemp	Unemployment rate	%	World Bank	+/-
Inflation	Inf.	Inflation rate (average annual rate)	%	World Bank	+/-
Tax rate	TAX	Total tax and contribution rate	%	World Bank	-
Investment level	GCF	Gross capital formation (annual growth)	%	World Bank	+
Foreign direct investment	FDI	Foreign direct investment	% GDP	World Bank	-/+

Table no. 1. Description of the variables included in the study

Source: (own processing according to the specialized literature)

The dependent variable is the value added created by the SME sector, an indicator that is expressed as an annual percentage change. Thus, out of the three indicators that measure the performance of SMEs, we chose to increase the added value, according to several studies we analyzed (*Rusu and Roman, 2017*).

Numerous studies (Moscalu, Girardone and Calabrese, 2020; Nizaeva and Coskun, 2019; Rusu and Roman, 2017;) have indicated that easy access to finance is one of the most important problems for SMEs. In European countries, the financial system being focused on banks, the most important resource for bank financing of companies is bank loans. Thus, in the study we took into

account the share in GDP of domestic credit granted to the private sector by banks. This indicator is a proxy for access to bank financing and can be positively correlated with SMEs.

Beck, Demirgüç-Kunt, Laeven and Maksimovic (2006) have shown that access to finance and credit costs are the most important barriers for small and medium-sized enterprises, as well as factors affecting the performance of this sector. Thus, the importance of the SME sector in the economy highlights the need to ensure access to finance. Internal credit to the private sector may reflect companies' access to financial resources.

Given the impact that the macroeconomic environment has on the SME sector, Bekeris (2012) considers that it influences the profitability of SMEs, a very important indicator in obtaining a bank loan as a source of external financing. Studies show that financial constraints significantly influence the growth of SMEs, and among the factors that cause this is bank credit to the private sector (expressed as a share of GDP). Internal credit granted to the private sector by banks refers to the financial resources provided to the private sector by other depository corporations, through loans, acquisitions of securities and commercial loans, for which a request for repayment is established. It is measured as total loans to the private sector as a percentage of GDP. We chose this indicator as a proxy for access to finance, an indicator that can be positively correlated with entrepreneurship, as it reflects the increase in credit flows to the private sector. Thus, studies have shown that increasing this indicator can represent better access to finance, which can lead to the creation of new businesses. As a result of the analysis performed in this study, we consider that we will obtain a positive relationship between the availability of internal credit and the studied dependent variable. Nizaeva and Coskun (2019) investigated the relationship between domestic *credit* and the performance of the SME sector, as a result of the issue of access to finance, and concluded that there is a positive relationship between them.

The economic growth rate is measured by the indicator of the annual growth rate of real GDP, which expresses the value of goods and services produced in a country during a year, but in which prices are expressed in the prices of a reference year. The main elements that characterize the economic cycles are the dynamics of production, unemployment and inflation. *Klapper et al.* (2014) analyzed that in increasing the performance of an economy, a very important role is played by real GDP growth and job creation.

The inflation rate can be defined as the general increase in prices (expressed as a percentage) over a certain period of time. *Bareika (2012)* considers that the high inflation rate and the unemployment rate at macroeconomic level generate negative consequences on the profitability of the SME sector, because due to the decrease in the number of employees the market will become less solvent.

The unemployment rate is defined as the population that is able to work and is looking for a job, but cannot find work in a certain period. *Bareika (2012)* investigated whether there is a correlation between stock prices and macroeconomic indicators, concluding that the highest correlation coefficient was identified for GDP and the unemployment rate. A high unemployment rate will generate less income taxes, taxes collected from the state budget, and the state will have to support the growing budget of the unemployed.

The total tax rate (TAX) measures the amount of taxes and compulsory contributions paid by businesses as a percentage of commercial profits. *Rusu and Roman (2016)* investigated the relationship between the total tax rate and employment in the SME sector, obtaining a negative coefficient between this indicator and employment in the SME sector.

The level of investments is measured by the gross capital formation (GCF) indicator, an indicator that includes all investments made by companies with fixed assets and that influence the performance of enterprises. Rusu and Roman (2016) investigated the relationship between gross capital formation and performance of SMEs and concluded that this indicator has a strong influence on the SME sector. In their study, it was observed that the highest standard deviation is given by gross capital formation.

Foreign direct investment is defined as the net investment flows required to obtain a sustainable management interest in a firm operating in an economy other than that of the investor. Foreign direct investment can have an impact on setting up new businesses. According to some empirical studies (Albulescu and Tămăşilă, 2016; Lee, Hong and Sun, 2014), they can positively or negatively influence internal entrepreneurship.

For each dimension of the transverse structure we will have the same number of observations, so that our panel is balanced.

4. Results and discussions

Next we will analyze the data that we will use in the descriptive statistics, in the correlation analysis and in the regression analysis. The calculations were performed using EViews econometric software. Table no 2 presents descriptive statistics of the independent variables, and this table shows that the largest standard deviation is observed for domestic credit, which demonstrates that the financial instability generated by the global economic crisis has severely affected private sector lending by banks, in member countries of the European Union. Also, given the fact that among the macroeconomic factors, the share of domestic credit to the private sector in GDP, registers the largest standard deviation, thus demonstrating considerable differences from the financial point of view between the analyzed countries. Foreign direct investment registered significant variations, registering an increase from -40.41% in Hungary in 2018 to 280.13% in Cyprus in 2013. The most stable indicator is the inflation rate, as it is the indicator that recorded the lowest standard deviation. The negative value for the minimum is found in almost every variable (except unemployment rate, domestic credit and tax rate) and shows the negative impact of the financial crisis on these indicators that influence access to finance and the performance of SMEs. The negative minimum value for the real GDP growth rate shows that in the EU countries, in the period 2009-2018, there was a reduction in economic development.

The maximum value is recorded by indicators such as foreign direct investment and domestic credit which have a significant impact on the issue of access to finance faced by the SME sector. Within the EU28 countries included in the sample, the average value of domestic credit is 91.89%, and the lowest value is 25.73%. A very important obstacle affecting entrepreneurship is the tax regimes, so that the very high values of tax rates in some countries are considered a very important impediment to the development of entrepreneurship. The lowest inflation rate was recorded in Ireland in 2009 (-4.48), and the highest was recorded in Romania in 2010, which demonstrates the impact of the economic crisis and recession of that period. Regarding the unemployment rate, it should be noted that the most affected country was Greece, in 2013 (registering the value of 27.47%), at the opposite pole being the Czech Republic, in 2018, with a value of 2.24%.

Variable	Min.	Max.	Mean	Median	Standard deviation	Skewness	Kurtosis	Number of observations
Domestic credit to the private sector (% of GDP)	25.73	255.19	91.8923	87.18	45.3478	1.2489	4.7562	288
Annual real GDP growth rate	- 14.80	25.20	1.3906	1.90	3.7339	-0.2922	11.1056	290
Unemployment rate	2.24	27.47	9.4084	8.16	4.6212	1.5329	5.5578	290
Inflation rate	-4.48	6.09	1.4248	1.35	1.5097	0.2115	3.6265	290
Tax rate	18.40	71.30	41.5734	42.22	12.2028	0.0308	2.5967	288
Gross capital formation	- 54.33	72.17	0.8685	2.41	13.3986	0.3782	8.0377	290
Foreign direct investment	40.41	280.13	10.5333		32.3103	5.3289	37.1875	290

Table no 2. Descriptive statistics of the independent variables included in the study

Source: (own calculations based on Eviews econometric software)

The descriptive statistics of the dependent variable show that at the level of the European Union, the performance of the SME sector, measured by the increase of the added value is positive (see table no 3). Following the analysis of the minimum value, we note that in all countries (except

Belgium), the added value created by the SME sector has decreased significantly. The largest decrease was recorded in 2009 compared to 2008 *(see Figure no 1)*, as a result of the outbreak of the financial crisis. The highest growth was recorded in Slovakia, Lithuania and Malta. The largest standard deviation was recorded in Slavacia, Lithuania and Latvia, which shows that the changes in value added in these countries registered the largest changes in the period analyzed (2009-2018).

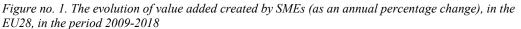
The country	Number of observations	Min.	Max.	Mean	Standard deviation
AT	10	-5.3242	6.9077	3.0984	3.3679
BE	10	0.0852	5.3276	3.6783	1.4799
BG	10	-9.8920	15.0851	5.6910	7.7157
CY	10	-12.0391	9.9790	-0.1421	7.3830
CZ	: 10 :	-14.5010	10.2036	2.2341	: 7.3002
DE	10 :	-1.6617	9.2525	3.9475	3.4013
DK	10	-9.3550	6.7094	1.7103	4.5403
EE	10	-22.2555	19.3895.	5.9087	10.9004
EL	10	-19.3878	13.6749	-4.6430	10.0108
ES	10	-14.5731	6.9915	-1.5145	6.7228
FI	10	-7.6210	7.0101	2.6169	4.2072
FR	10	-7.6637	6.1174	0.8526	4.4504
HR	: 10 :	-10.1032	8.5757	0.5697	: 7.4590
HU	: 10 :	-15.2138	13.2020	3.3961	7.9368
IE	10	-17.4921	16.7468	4.6032	11.2396
IT	10	-15.0467	11.1003	0.5416	6.8044
LT	10	-34.9248	26.7759	6.4482	15.8832
LU	10	-3.8954	9.0962	4.4727	4.8357
LV	10	-35.0243	18.3380	3.0170	14.2540
MT	: 10 :	-4.6531	22.2934	9.8365	6.7163
NL	10	-4.2861	6.0580	2.4588	3.5397
PL	: 10 :	-21.3670	10.9568	2.5518	9.6095
РТ	10	-9.5796	8.2076	0.7844	6.3917
RO	10	-23.6871	14.7183	3.4123	11.2490
SE	10	-13.3539	17.5652	3.6127	8.2800
SI	10	-16.1486	9.6875	2.7563	7.8651
SK	10	-15.8832	68.1702	6.7039	23.1518
UK	10	-18.0166	12.9566	2.6834	10.2633
UE	10	-9.6615	5.3464	1.9358	4.4755

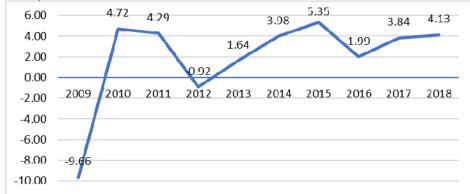
Table no 3. Descriptive statistics of the change in value added created by SMEs (by country, as an annual percentage change)

Source: (own calculations based on Eviews econometric software)

Thus, there are large differences between the performance of SMEs (expressed by value added, in the form of increasing the annual percentage change), depending on the country in which they operate, these differences being determined by the specific activity and economy of that country.

Figure no 1 shows the evolution of value added created by the SME sector and it can be seen that the largest decrease in value added created by the SME sector was recorded in 2009, as a result of the outbreak of the financial crisis. However, in the following years there was an increase in this value in the market, but this increase was too small to compensate for the impact of the crisis.





Source: (own processing based on data provided by Eurostat)

Table no 4 shows the results of the correlation analysis, and it is observed that domestic credit is positively related to the performance of SMEs, having a significant effect on it, with a statistically significant value, as shown by the p value which is less than 0.01. The highest value obtained exists between gross capital formation and the growth rate of real GDP, which indicates a strong correlation between these variables. Due to the fact that there are many values below 0.3, there are no relationships/correlations between these variables studied (between inflation and real GDP growth, the tax rate and inflation and the unemployment rate and the tax rate).

	VA	Domesti c credit	FDI	GCF	Gdp_gr owth	Infl	TAX	Une mp
VA	1.0000	· —						
Domesti c_credit	- 0.2666***	1.0000						
FDI	-0.0764	0.4797** *	1.0000					
GCF	0.6111***	- 0.1550** *	-0.0439	1.0000				
Gdp_ growth	0.6794***	- 0.2651** *	-0.0183	0.7357* **	1.0000			
Infl	0.0269	- 0.1574** *	-0.0997*	-0.0056	-0.0341	1.0000		
TAX	-0.0435	- 0.2418** *	- 0.3208** *	-0.0186	- 0.1043*	0.0837	1.0000	
Unemp	- 0.1855***	0.1950** *	0.0120	-0.0856	0.2445* **	- 0.1672***	0.0633	1.00 00

Table no 4 Correlation matrix

*, ** and *** indicate that the coefficients are significant at 90%, 95% and Level 99% Source: (own calculations based on Eviews econometric software)

Table no 5 presents the results of the regression analysis and by performing it we want to determine which of the macroeconomic indicators are the main determining factors for the performance of the SME sector in the European Union countries. According to the data presented in this table, the constant, gross capital formation and the annual growth rate of real GDP are statistically significant.

Based on statistical results and statistically significant coefficients, we can conclude that gross capital formation and real GDP growth rate are the main determinants of value added creation in EU member states. As a dependent variable for the model we chose the performance of SMEs, expressed by the added value.

Variable	Coefficient	Standard Error	T-statistic		p-value
Constant	3.7423	1.9859	1.8843		0.0606
Domestic_credit	-0.0175	0.0097	-1.7880	:	0.0749
FDI :	-0.0040	0.0132	-0.3009	:	0.7637
GCF	0.1708***	0.0424	4.0251	:	0.0001
Gdp_growth	1.1105***	0.1650	6.7283	:	0.0000
Infl	0.1394	0.2474	0.5634	:	0.5736
TAX	-0.0130	0.0318	-0.4096		0.6824
Unemp	-0.0515	0.0836	-0.6170	:	0.5377
R-squared	0.5005	1	Adj. R-squared		0.4879

Table	no 5.	Regression	results

* and *** indicate that the coefficients are significant at 95% and 99% level

Source: (own calculations based on E-views econometric software)

The results of the regression show that the internal credit granted to the private sector by banks highlights an inverse relationship between access to finance and the performance of SMEs. Our results show that a decrease in loans to the private sector by banks is not an obstacle for entrepreneurs. The result obtained in the research is not in line with the expected sign, given however it is similar to the results of previous empirical studies (Sayed and Slimane, 2014; Osakwe, Verter, Becvarova and Chovancova, 2015).

Foreign direct investment (FDI) has a negative coefficient and is not statistically significant, the result being consistent with the results obtained in other empirical studies (*Danakol, Estrin, Reynolds and Weitzel, 2017; Djankov and Hoekman, 2000*), because when investors we enter a country, the activity of the opportunity-oriented entrepreneur will increase, and the activity based on needs will decrease.

The variables gross capital formation and real GDP growth rate statistically significantly influence the performance of the SME sector, so that the results obtained are in agreement with other studies (for example, *Rusu and Roman, 2016*).

The inflation rate coefficient is positive, but not statistically significant. This indicator is not in line with the results obtained in other empirical studies (eg Roman and Rusu, 2016; Perotti, Volpin and Entry, 2017), where this indicator has a negative effect on entrepreneurship, as inflation increases the costs of starting a business and reduces companies' access to capital. However, regarding the changes in the level of the tax rate, it negatively influences the performance of SMEs, being in agreement with the expected sign (for example, Rusu and Roman, 2016). Also, this indicator is not statistically significant.

The unemployment rate has a negative relationship with the performance of the SME sector. These results are similar to the results obtained in other econometric studies (*Roman, Rusu and Stoica, 2018; Vivarelli, 2013; Bekeris, 2012*). Both the gross capital formation and the real GDP growth rate significantly influence the performance of SMEs, an aspect demonstrated by the positive coefficients, the relationship being statistically significant at the level of 1%. Thus, a 10% increase in gross capital formation can lead to a 1.70% increase in the performance of this sector. In terms of domestic credit, foreign direct investment, changes in the level of taxation and the unemployment rate, negatively influence the performance of SMEs (the last three indicators being in line with the expected sign). It should also be noted that these coefficients are not statistically significant in this context. The changes in the inflation rate do not have a statistically significant coefficient.

According to the *R***-squared** value (see table 5), we find that 50.05% of the variation of the dependent variable (the added value created by the SME sector), is explained by the variations of the independent variables. Thus, we can conclude that the independent variables analyzed in this paper have an important impact on increasing the performance of the SME sector, as shown by the

results obtained: *R-squared* (50.05%) and *Adj. R-squared* (48.79%). To summarize, we can confidently say that the vast majority of selected factors (domestic credit, foreign direct investment, inflation, taxation and unemployment rate) are not statistically significant and do not have a strong correlation with the performance of SMEs. The descriptive statistics of the dependent variable show that at EU level, the performance of the SME sector is positive. The largest increase in this variable was recorded in Slovakia, Malta and Lithuania. As a result of the research conducted, we found that gross capital formation and the growth rate of real GDP are the main determinants of increasing the performance of the SME sector. Although not a new problem in the empirical field, the analysis performed is subject to shortcomings. Thus, the short period of data analysis is due to the unavailability of data on the dependent variable. As a result of these deficiencies, our analysis refers only to a period of 10 years (2009-2018). As a future research direction, we aim to empirically analyze the key determinants of SME performance, as measured by the number of employees and the total number of enterprises. It would also be interesting to include in the analysis the candidate and potential candidate countries for the European Union.

5. Conclusions

Numerous studies have shown that access to finance is one of the most important problems facing the SME sector. As a result of studying the literature, we found that access to finance and credit costs are the biggest obstacle for the SME sector, these factors affecting their performance. Given that in European countries, the financial system is oriented towards banks, the most important resource for external financing of companies is bank loans. Therefore, in the study we took into account the variable share of GDP of domestic credit granted to the private sector by banks. Thus, this indicator is a proxy for access to bank lending, considering that it can be positively correlated with SMEs. The results of the correlation matrix have shown that domestic credit can be positively correlated with the performance of SMEs. Studies show that the growth and development of SMEs is facing the problem of insufficient sources of financing, and especially bank credit, being one of the biggest problems facing this sector.

During the analyzed period, the performance of the SME sector registered a decrease in all the analyzed countries (except Bulgaria), the biggest decrease being registered in 2009, as a result of the outbreak of the financial crisis. The highest growth was recorded in Slovakia, Lithuania and Malta, with significant differences between the performance of SMEs in EU countries, due to the specific activity and economy of that country. The value obtained by R-squared, demonstrates that 50.05% of the variation of the dependent variable is explained by the variations of the independent variables. As a result of the statistical results obtained, we can conclude that gross capital formation and the growth rate of real GDP are the main determinants of increasing the performance of the SME sector.

Given that the SME sector is one of the sectors most affected by the COVID-19 pandemic, I believe that the measures taken at national level have contributed to the survival of this sector. Among the most important measures adopted by the state to save this sector, I consider that they include state aids, the adopted programs (*IMM INVEST, IMM FACTOR and AGRO IMM INVEST*) and the support of the production for export through guarantees and counter-guarantees. In conclusion, we consider that easy access to finance has a significant impact on the performance of the SME sector, and an appropriate macroeconomic environment can increase the performance of this sector. We also appreciate that the growth markets for SMEs offer them the opportunity to diversify their sources of financing. Given that SMEs are the engine of any economy, we argue that both public authorities and banks must pay special attention to this sector and adopt a series of measures to facilitate access to finance and stimulate the business environment.

6. Reference

- Abbasi, W, A, Wang Z., 2017. Potential Sources of Financing for SMEs and Role of Government in Supporting SMEs. *Journal of Small Business and Entrepreneurship Development*, Vol. 5, No. 2.
- Abdulsaleh, A., & Worthington, A., 2013. Small and Medium Sized Enterprises Financing: A Review of Literature. *International Journal of Business and Management*.

- Albulescu, C., Tămășilă, M. (2016). Exploring the role of FDI in enhancing the entrepreneurial activity in Europe: a panel data analysis. *Springer*.
- Beck, T., Demirguc-Kunt, A., Laeven, L., Moksimovic, V., 2006. The determinants of financing obstacles. *World Bank Policy Research Working Paper;*
- Bekeris, R., 2012. The impact of macroeconomic indicators upon SME's profitability. *Economika*, Vol. 91.
- Cicea, C., Popa, I., Marinescu, C. & Ștefan, S., 2019. Determinants of SME's performance: evidence from European countries. *Economic Research;*
- Erhan, L., 2010. Modalități de finanțare a întreprinderilor mici și mijlocii [Ways to finance small and medium enterprises]. Scientific Journal of the State University of Moldova.
- Ipinnaiye, O., Dineen, D., Lenihan, H., 2016. Drivers of SME performance: a holistic and multivariate approach. The article is published with open access at Springerlink.com;
- Moscalu, M., Girardone, C., Calabrese, R., 2020. SME's growth under financing constraints and banking merkets integration in the euro area. Journal of Small Business Management, Vol. 58;
- Muscalu, M., 2020. Impactul pandemiei COVID 19 asupra unor activități economice din domeniile servicilor și întreprinderilor mici și mijlocii [Impact of the COVID 19 pandemic on economic activities in the fields of services and small and medium enterprises]. *Romanian Academy*.
- Nanu, M., Spulber, C., Buziernescu, R., 2008. Considerations regarding growing financing capacity of sme's. *Annals of the University of Oradea, Economic Science Series*.
- Nizaeva, M., Coskun, A., 2019. Investigating the Relationship Between Financial Constraint and Growth of SMEs in South Eastern Europe. *SAGE*.
- Rocha, E., 2012 a. The impact of Business Environment of Small and Medium Enterprise Sector's Size and Employment: a Cross Country Comparison. *Kobe Universiy, Japan.*
- Roman, A., Bilan, I., Ciumaş, C., 2017. What Drives the Creation of New Businesses? A Panel Data Analysis for EU Countries. *Emerging Markets Finance and Trade*.
- Roman, A., Onofrei, M., 2015. Accesul la credite bancare al întreprinderilor mici şi mijlocii din ţările UE 28: experinţe recente şi provocări post criză [Access to bank credit for small and medium-sized enterprises in EU-28 countries: recent experiences and post-crisis challenges]. Faculty of Real, Economic and Environmental Sciences, Bălţi;
- Roman, A., Rusu, V., 2011. Constraints on Bank Lending to SMEs from Romania and Supportive Measures. *EuroEconomica*, Issue 5 (30).
- Roman, A., Rusu, V., 2018. Macroeconomic and institutional drivers of entrepreneurial activity. A cross-country empirical assessment. *International Scientific Conference Business and Management*.
- Roman, A., Rusu, V., 2012. The access of small and medium size enterprises to banking financing and current challanges: the case of EU countrie. *Annales Universitatis Apulensis Series Oeconomica*.
- Roman, A., Rusu, V., Stoica, O., 2018. Institutional environment and economic development in UE countries: the impact on new business formation. *Transformations in Business Economics, Vol. 17.*