

UDC 334.722.012.63/.64:[658.14:336.71(497.7)

EVALUATION OF SMES FINANCING IN MACEDONIA FROM THE “SUPPLY SIDE” PERSPECTIVE

Efimija Dimovska,

FON University - Skopje
Faculty of Economics
efimija@gmail.com

Abstract

The starting point of the research is the wide accepted evidence that the SME sector is one of the most important drivers of the economy in each country. In addition, many studies and research have concluded that access to finance remains to be a major concern and main obstacle for SMEs growth and development in developing countries. Bank loans are the main source of external financing of SMEs almost in all countries in the region, however, there are many factors as higher administrative costs and risks involved in lending to SMEs that reduce banks' willingness to lend to them. Therefore, many governments have acknowledged the importance of implementing various policies and programs aimed to support SMEs and their development, particularly in the time of global financial crises. However, the Government policies regarding this issue should be based on detail analysis of both, supply and demand side. The aim of this research is to provide an assessment of SME financing from the “supply side” i.e. from the banks' viewpoint. The method used for the research is a questionnaire based survey on five selected banks in Macedonia and on-site interviews with bank's officials.

Key words: access to finance, SMEs, banking sector, government intervention

1. Introduction

The term “SME” involve various definitions, which differs from country to country. In situation when there is no universally accepted definition, the most common classification criteria used by different organizations and countries are the number of employees, sales or assets. In the case of European Union (EU), in May 2003 European Commission has adopted the Recommendation 2003/361/EC, according to which enterprises are classified as micro, small and medium. The main goal of this definition is to make a clear distinction

between independent and affiliated enterprises for the purpose of appropriate allocation of state aid funds for SME's. (European Commission, 2003) Most of the countries in the region have applied the EU SME definition, but only for the criteria "number of employees", while each country has its own specific criteria concerning the annual turnover and balance sheet, in compliance with their economic condition.

The classification of enterprises in the Republic of Macedonia is regulated with the Company Law, according to the number of employees, annual turnover and total assets. (Official Journal of the RM, 2004) Yet, taking in consideration the aspiration of the Republic of Macedonia for EU integration and the ongoing process of approximation of the national legislative to the EU regulation, Republic of Macedonia applied the EU classification criteria within the Law on state aid control (Official Journal of the RM, 2010), which gives a wider area for state aid allocation.

Table 1: Classification of enterprises in EU and Republic of Macedonia

	Category of enterprises	Number of employees	Annual Turnover	Total Assets
European Union	Micro	< 10	≤ 2 million EUR	≤ 2 million EUR
	Small	< 50	≤ 10 million EUR	≤ 10 million EUR
	Medium	< 250	≤ 50 million EUR	≤ 43 million EUR
Macedonia (Company Law)	Micro	< 10	< 50.000 EUR	Maximum 80% of gross income to be from one client/buyer
	Small	< 50	< 2 million EUR	< 2 million EUR
	Medium	< 250	< 10 million EUR	< 11 million EUR

Source: European Commission; Company Law of the RM

Small and medium enterprises play an important role in a country's economy. They are crucial for economic development, particularly in emerging markets. The evidence shows that over 95% of all registered companies across the world are SMEs. This number is even higher in the European Union, where SMEs represent 99, 8% of all businesses, out of which 92, 1% are micro business with less than 10 employees. (Wymenga, Spanikova, Derbyshire, Barker, 2011, p.9) SME sector makes a critical contribution to GDP and employment in both developed and developing countries. In terms of employment, 67% of all job places in the European private sector are within the SME sector. Regarding the SME contribution to the GDP creation, their importance is not lesser, achieving nearly 60%.

The position of the SME sector in the Republic of Macedonia is similar to EU: the biggest part of the active enterprises in the Republic of Macedonia, or 99, 65%, is the SMEs. (Central Register of the RM, 2013) SME sector in Macedonia participate with 80, 5% of total employments. These data provide evidence of the SMEs importance for the entire economy. Contribution of SMEs to the creation of the GDP in Macedonia in 2010 is around 64% . (State Statistic Office, 2012)

2. Literature review

Despite the importance of SMEs for the economic growth and jobs creation, their formation, survival and development is often troubled by several obstacles. Various researches around the developing world provide evidence that SMEs face greater financing obstacles than large firms. (Beck, Demirgüç-Kunt & Maksimovic 2005; Beck & Demirgüç-Kunt 2006; and Beck, Demirgüç-Kunt, Laeven, Maksimovic 2006)

In different countries they have different financing possibilities, depending on countries' specific characteristics of the financial system and the business environment. The structure of SMEs' financing is depending on both demand and supply side factors. The reasons for a market failure relate to insufficient supply of capital and inadequacies on the demand side. In the presence of market imperfections, any financing limitations will reflect on SMEs' investments and external sources of financing are critical component for the enterprise growth.

Bank loans are the main source of external financing of SMEs in Macedonia and in many other developing and developed countries. Regardless of the evident importance, there are only few researches conducted to analyze the banking sector participation in SME lending. The existing studies demonstrate that above and beyond the conventional view that financial institutions are reluctant in SME financing, banks are considering the SME sector as one of the strategic market segment.

The research done by Beck, Demirgüç-Kunt and Martinez Peria, represent an effort to determine the SME financing from supply side. (Beck et al., 2010) The results of the survey carried out in 45 countries, involving 91 banks, show that banks are observing the SME sector as highly profitable and they have developed organizational structure and appropriate credit evaluation techniques in accordance to the SME main characteristics. In addition, the research confirmed that there are significant differences between the developed and developing economies, and the general conclusion is that macroeconomic environment is more important for the banks, than the size of the enterprise.

De la Torre, Martinez Peria and Schmukler conducted similar survey in 48 banks and 1 leasing company across 12 countries. (De la Torre et al., 2010) The results are very comparable, i.e. the banks stated that they are interested for the SME sector, they have established separate organizational units, they offer variety of products designed for SME needs, and they apply various methods for credit and risk analysis. The conclusion of this research is that the statement that banks are not interested in SME lending is not confirmed in the practice.

3. Methodology

Having in mind the obstacles that Macedonian companies are facing in obtaining the necessary capital for their operations, particularly in the time of crises, it's more than justified to evaluate the SME financing issues, from the "supply side" perspective.

The banking sector in Macedonia has dominant share of almost 90% in the total assets of the financial system. Sixteen banks are operating at the moment, out of which three are large, eight are in the group of middle banks, and five are small. Around 64% of total assets and 70% of credit and deposit activities are concentrated in the three largest banks.

In order to explore the supply side factors i.e. banks' experience and policy in lending to SMEs, a survey was carried out on a sample of five banks: NLB Tutunska Banka AD Skopje, Komercijalna Banka AD Skopje, Stopanska Banka AD Skopje, ProCredit Banka AD Skopje and Halkbank AD Skopje. The selection was based on their share in the banking sector, their operations with SME sector and their share in the realization of the European Investment Bank (EIB) credit line within the Macedonian Bank for Development Promotion (MBDP). Consequently, the selected sample represents 31% of the whole population (16 banks), they account for about 70% of total assets in the banking sector in Macedonia (NBRM, 2012) and they participate with 82, 6% in the total EIB portfolio. (MBDP 2011) Three out of five banks are large, and two are in the group of middle banks. Four of five banks are with majority of foreign owned capital.

The survey was conducted in the period July – September 2012 using a questionnaire of multiple choice questions that was sent to responsible managers for SMEs lending in the respective bank. The questionnaire was organized in three main groups of questions:

- Main information regarding SME lending, including SME definition, SME credit portfolio, purpose of loans and sources of financing;
- Potential and obstacles for SME lending in normal conditions and in the time of crisis;
- Role and intervention of the Government and their effectiveness.

It must be noted that despite the differences in the bank's size, ownership and business characteristics, each of the banks participate with 20% in the total sample.

4. Survey results

The results of the survey are presented bellow, organized in three main groups.

1. Main information regarding SME lending

● *SME definition*

On the question "How you define SMEs?" two, out of five banks, stated that they are using the Company Law classification for categorization of their clients. Three of the banks apply their own criteria including the earned income, and two of them use the credit exposure as additional criteria.

The lack of single definition of SMEs complicates the comparison between the banks of the SME loans share in their total credit portfolio. For this reason, the heterogeneity of SME definition among the banks is ignored in further analysis. However, it must be emphasized that different criteria apply only on loans from own sources, while foreign financed credit lines typically have clearly defined criteria for the target group.

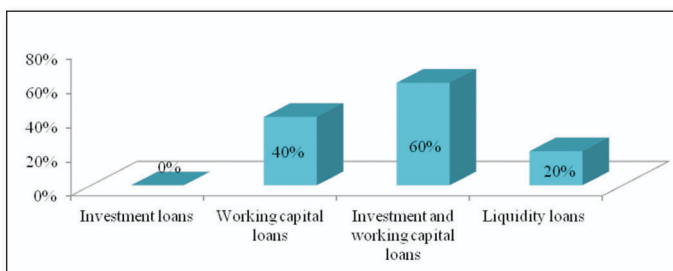
● *SME credit portfolio*

Generally most of the banks did not provide an answer on the question "What is the percentage share of the SME loans in the total portfolio in 2008 and 2011?". The received explanation was that they don't have detailed analysis of their portfolio by company size and they need to put an additional effort to provide the required data. Following, for the purpose of the analysis, information from banks' annual reports are used. According to the available data most active banks in SME lending are NLB Tutunska Banka with 90% share of SME loan portfolio and ProCredit Banka with 84% SME loans in the total credit portfolio.

● *Purpose of the SME loans*

On the question "What is the purpose of the majority approved SME loans", three banks (60%) responded that most of their SME loans are for both investments and working capital, two banks or 40% answered that the biggest percentage of the SME loans are for working capital. One of the banks stated that in past few years they are financing SME working capital loans and loans for solving liquidity issues.

Figure 1:
Purpose of the approved
SME loans



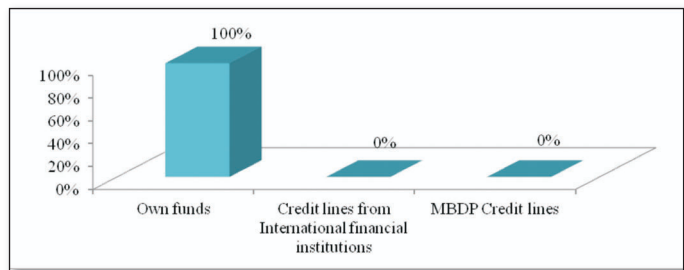
None of the banks indicated investments as most common purpose of the approved loans. According to the banks, the credit portfolio structure by loan purpose has been changed in the past few years, which can be related to the overall negative economic situation in the world and its influence on the Macedonian economy. Namely, as a result of the economic crises many companies have postponed their planned investments and the liquidity problems have increased. Therefore, the majority of the approved loans are for financing the operational expenses.

● *Source of financing the SME loans*

On the question "What is the most used source of financing for SMEs loans?" there are very interesting results. Namely, 100% of the banks answered that majority of their SMEs loans are financed from their own sources, not from MBDP credit lines or other international financial institutions credit lines, even though all five banks are actively participating in servicing foreign financed credit lines and their share in the MBDP EIB credit line is 82,6%. Probably this is not so surprising, if we take in consideration that Macedonian banks remained very liquid and capitalized even in the time of crisis. The average capital adequacy ratio of the banking sector as of 31.03.2012 is 17, 5%, which is almost double then the legally required minimum of 8%. (NBRM, 2012)

Figure 2:

Source of funds for SME loans



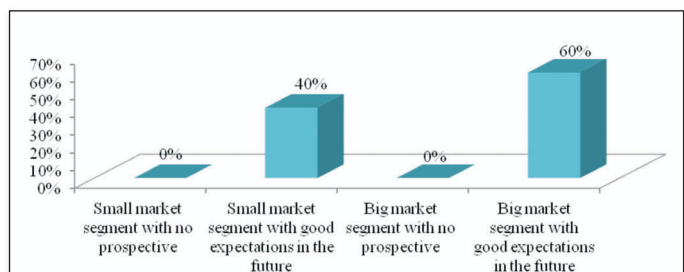
2. Potentials and obstacles in SME lending

● *SME sector assessment*

Three of the banks observe SME sector as big market segment with good expectations in the future, while two of the banks consider that SME sector is a small segment with good expectations. General conclusion is that all of the banks have sole opinion that SME sector is prospective for allocation of their funds.

Figure 3:

Source of funds for SME loans



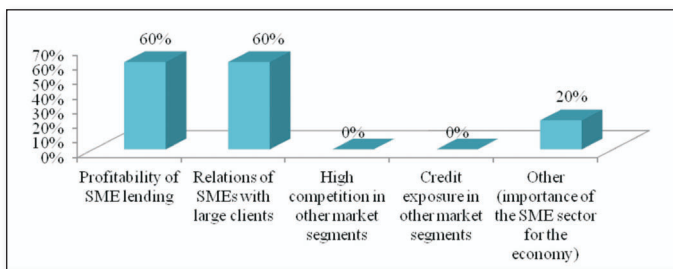
● *Key factors determining banks' SME lending*

The summary of banks' answers on what factors influence their interest in SME lending is presented in

Figure 3. The results show that banks estimate that the profit potential from SME lending is high, in fact much higher than for the large enterprises, and that the potential profits and capacity for market growth will more than compensate the higher cost of lending and more unstable risk profile in the SME segment. The banks' officials point out that perceived high profitability is also from possibility to sell additional banking services and product to SME clients.

Figure 4:

Factors for banks' interest in lending to SMEs



Another factor with same importance is the relationship of SME clients with large companies. Most of SME are cooperating with large companies, and banks are using such information for risk and credit assessment of SME clients, which reduces costs and time. In the past years new practice have been developed in some of the banks, where large companies provide guarantees for their small business partners, or even they appear as borrowers for investments of their subcontractors.

None of the banks indicated competition or high credit exposure to other market segments, while one bank added an additional factor: the importance of the SME sector for the national economy.

● Key obstacles for SME lending

The analysis of the key obstacles for SME lending is done with question for ranking the given answers, whereas 1 means an obstacle with biggest influence, while 6 means lowest influence. Table 2 summarizes results of ranking the obstacles for SME lending.

Table 2: Ranking of obstacles for SME lending

Obstacle	Rank
Lack of adequate credit application	1
Macroeconomic factors	2
Competition in SME lending	3
Technology of SME lending	4
Specific bank's criteria	5
Regulation and legal environment	6

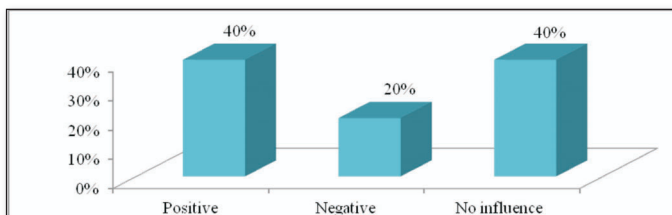
Most of the banks indicated lack of adequate and acceptable credit application as most serious obstacle for SME lending. Macroeconomic factors are the second ranked obstacle. In addition to the advance given options, one of the banks emphasized over debt and low capitalization of the SMEs as one of the most important obstacle. The general conclusion is: that credit demand for good projects is missing; the perceived lending risk by the banks is still very high; many companies are illiquid and have problems in servicing the existing loans. Banks have funds, but they have very restrictive credit conditions and provide loans only to low risk clients and profitable projects.

● Prudential regulations impact

Prudential regulations are not seen as serious barrier for SME lending. Only one of the banks believe that prudential regulations negatively impact SME lending, while the other banks consider that the impact is positive or there is no influence.

Figure 5:

Prudential regulation impact on SME lending

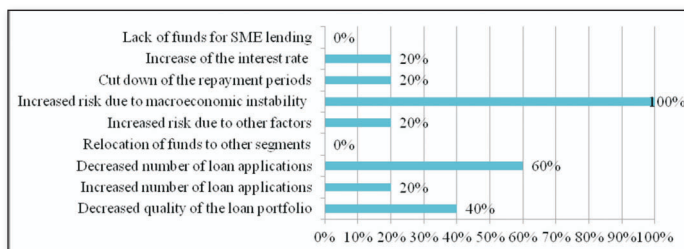


● Global economic and financial crisis impact

As already discussed in the literature, the global financial crisis has, and continues to have substantial effects across all economies, including Macedonia. SMEs have been extensively affected with the crisis and the evidence suggests that SMEs in many countries are confronted with a decline in demand for goods and services, increased payment delays and decrease in liquidity. It is a real challenge for SMEs to survive in such situation, particularly with limited financial recourses. In addition, the crisis has resulted in credit contraction and tightening the bank's credit conditions due to capital exhaustion and risk aversion regarding the recession and the poor SME economic prospects. Nonperforming loans in the Macedonian banking sector in 2012 rose to above 11%. In the Figure 6 are presented the results on the question "What is the impact of the global financial crisis on SME lending in your bank?"

Figure 6:

Global financial crisis impact on SME lending



All of the banks or 100% stated that the global financial crisis negatively influenced the macroeconomic stability and increased the risk for lending to SME. Creditors and investors usually assess the SMEs as riskier clients due to insufficient funds, low capitalization and their high sensitiveness to market fluctuations. Moreover there are many other factors as higher administrative costs, lack of collateral and borrower information that reduce banks' willingness to lend to them. In macroeconomic instability conditions these risks are increasing and banks are forced to be even more watchful in lending to SMEs.

In situation with increasing nonperforming loans and restrictive credit policies, SMEs that need external financing are not able to obtain the required funds from the banks. On the other hand remaining companies, still performing well, refrain from taking a new loan in such uncertain business environment. That is the explanation why 60% of the banks answered that the crisis had negative effect on the credit demand. This is confirmed by NBRM in their Annual report for the banking sector for 2011, according to which the number of received credit applications from companies has decreased by 31,2% comparing to 2010.

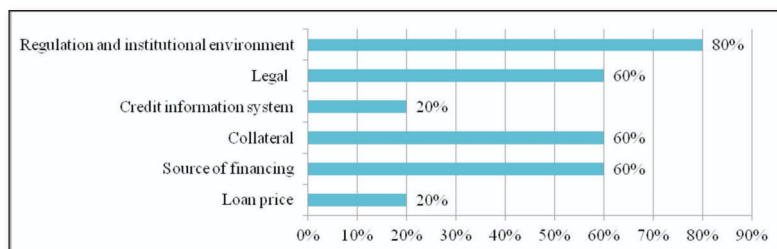
Third most important effect from the crisis is deterioration of the credit portfolio quality, which is very much related to the both a.m. effects.

3. Role and intervention of the Government

● *Need for Government intervention*

In general, banks are positive about the need for the Government to take an active participation in facilitating lending to SMEs. Figure 7, summarizes the responds of the banks on the question "In which area the Government should get involved in order to improve the access to loans for SMEs"

Figure 7:
Area of Government
intervention



According to the opinion of the banks, participants in the survey, the Government could promote SME lending by taking action in following areas:

- Regulatory and institutional environment, related both to favorable conditions for banks' operations and the enabling business environment for SMEs. Four of the banks or 80% believe that improvement in this area would have great impact on improving the lending conditions for SMEs;
- Sixty percent of the banks pointed the judicial environment, as one of priority areas for Government intervention, particularly in terms of general protection of creditors rights and in the context of fast and effective collection on collateral;
- Collateral question seems to remain one of the main concerns for the banks. Sixty percents of the respondents think that the Government can play significant role in solving this issue trough increasing the number of available guarantee instruments;
- According to 60% of the banks, increasing the sources of financing by providing new SME credit lines will be a helpful measure that Government should undertake.
- It is an interesting finding that interest rate subsidies and credit information bureaus are not identified as essential areas for Government intervention.
- One of the banks added that the Government should establish special instruments (credit lines, guarantee scheme) for start-ups, innovative and export-oriented SMEs.

● *Evaluation of Government programs*

The evaluation of Government programs for facilitating SME lending is done with question for ranking the given answers, whereas 1 means a most positive program, while 5 means a program with least effects. Table 3 summarizes results of ranking the individual programs.

Table 3: Ranking of Government programs

Obstacle	Rank
Guarantee Funds	1
Specific credit lines	2
Interest rate subsidy	3
Administrative costs subsidy	4

Eighty percent of the banks expect most positive effects on SME lending from establishing a state guarantee fund. As a second ranked instrument are specialized credit lines, while expectations of the banks regarding the interest rate subsidies is not to a large extent optimistic. This is in line with the previously presented opinion of the banks regarding the area of Government intervention.

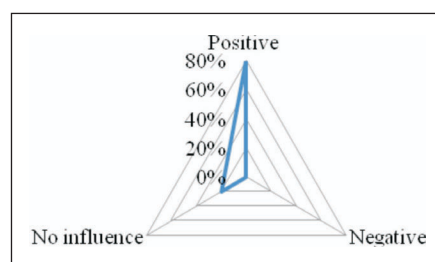
● Cooperation with MBDP impact on SME lending

One of the goals of the research was to determine the impact on the bank's SME lending as a result of the cooperation with MBDP. The purpose was to conduct simple evaluation of the EIB 100 million credit line, which is a main source of SME financing through MBDP. Surveyed banks participated with 82, 6% of the total EIB portfolio and represent a sample with significant relevance. The impact evaluation was performed from three different aspects. The general conclusion is that participation in MBDP credit lines has positive influence on bank's SME lending.

a) Impact on total SME credit portfolio

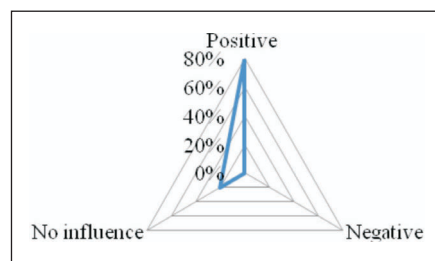
The results from the survey show significant positive impact on the total SME credit portfolio.

Four or 80% of the banks stated that as a result of the cooperation with MBDP their SME credit portfolio has increased by 4%. Only one bank answered that the cooperation with MBDP does not have influence on its SME credit portfolio.



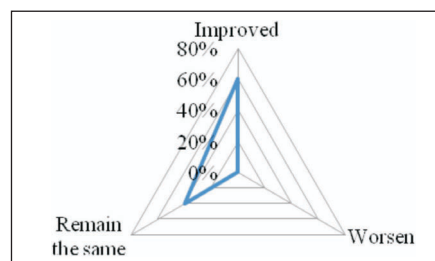
b) Impact on SME interest to apply for a loan

The results are the same as in the previous question i.e. four of the banks or 80% emphasized that based on the cooperation with MBDP the number of SME's credit applications has increased by 10%. Only one bank has stated that there is no influence.



c) Impact on credit conditions (interest rate, repayment period and collateral)

Regarding the credit condition the general influence is positive. Three or 60% of the banks answered that based on the cooperation with MBDP, the SME credit conditions, despite of the source of funding, has improved. Two of the banks answered that there is no influence.



In this part of the analysis it must be taken in consideration that the EIB credit conditions are defined in advance, within the Financing Agreement between EIB and MBDP or in the Subsidiary Loan Agreement between MBDP and the relevant bank.

5. Conclusion

Most of the banks in Macedonia use their own criteria for classification of the enterprises by the size and despite this difference, the SME segment is strategically important for Macedonian banks. In the last few years majority of approved SME loans were for working capital and liquidity needs, and the main source of financing is the banks' own funds. The ongoing global financial crisis has negative impact on credit portfolio growth due to increased macroeconomic stability, increase of non-performing loans and lack of credit demand. High credit risk enforced banks to tighten credit criteria and to apply restrictive credit policies. The banks believe that the Government should take active role in mitigating the obstacles for SME financing, thereby emphasizing few main area of intervention: legal and institutional environment, collateral and specific credit lines. Highest positive effect will be achieved through establishment of guarantee scheme and favorable credit lines.

The performed impact evaluation on the "supply-side", regarding the participation of the banks in the MBDP credit lines, indicates positive influence on bank's SME lending (total SME credit portfolio, credit conditions, SME interest to apply for a loan). In order to complete the impact assessment, monitoring on the loan quality should be established by MBDP/Government and comprehensive survey on beneficiaries should be conducted to evaluate the effects of the EIB loan on their business performance. However, it must be noted that the total loan amount disbursed through MBDP, as one of the main Government support instruments, is considerably smaller comparing to the total net credits approved to private sector as of 31.12.2011. Namely, the share of the MBDP net credit portfolio in the total banking sector portfolio at the end of 2011 is only 4% (MBDP, 2012) Moreover with the first EIB 100 million credit line MBDP has onlended only 306 loans to SMEs which is 0,4% of active SMEs in Macedonia. However, the Government support is still a rather significant and it needs to be further closely reviewed.

Furthermore, a systematic impact evaluation of Government programs should be established. Appropriate, tailor made, commercially driven public measures in place will help to mitigate the market imperfections and weaknesses in SMEs' access to finance not only in times of crisis but on an on-going basis as a fundamental structural issue. The Government support could make a real difference for the start-ups or to businesses in areas or sectors, where banks are not interested to take credit risks.

6. References

1. Beck, T., Demirgüç-Kunt, A., Maksimovic V. (2005). Financial and Legal Constraints to Firm Growth: Does Firm Size Matter? *Journal of Finance*, 60 (1), pp 137–77
2. Beck, T., Demirgüç-Kunt, A. (2006). Small and Medium-Size Enterprises: Access to Finance as Growth Constraint, *Journal of Banking and Finance* 30, pp 2931-43
3. Beck, T., Demirgüç-Kunt, A., Laeven, L., Maksimovic, V. (2006). The Determinants of Financing Obstacles, *Journal of International Money and Finance* 25
4. Beck, T., A. Demirgüç-Kunt, and M. S. Martinez Peria (2010), "Bank Financing for SMEs: Evidence Across Countries and Bank Ownership Types", *Journal of Financial Services Research* 39, pp. 35-54.
5. Central Register of the Republic of Macedonia. (2013). Official data.
6. Company Law. Official Journal of the RM no. 28/04
7. De la Torre, A., M. S. Martinez Peria, and S. Schmukler (2010), "Bank Involvement with SMEs: Beyond Relationship Lending", *Journal of Banking and Finance* 34, 2280-2293.
8. European Commission. (2003). Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (2003/361/EC). Official Journal of the European Union
9. Law on state aid control. Official Journal of the RM no.145/2010
10. Macedonian Bank for Development Promotion. (2011). Information on EIB 100 million credit line.
11. Macedonian Bank for Development Promotion. (2012). Annual report for 2011. Skopje, pp.19
12. National Bank of the Republic of Macedonia (2012). Annual report for the banking sector of the Republic of Macedonia for 2011
13. State Statistic Office. (2012). Gross Domestic Product 2010, 3.4.12.01/710.
14. Wymenga, P., Spanikova, V., Derbyshire, J., Barker, A. (2011). Are EU SMEs recovering? Annual Report on EU SMEs 2010/2011, pp. 9