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Original scientific paper

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EFFECTIVENESS OF GOVERNMENT PROGRAMS FOR IMPROVING THE ACCESS TO FINANCE OF SME'S IN MACEDONIA

Abstract

There is 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 countries like Macedonia. This situation has been deteriorated by the global economic and financial crises.

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. Yet, evaluation and impact assessment of implemented government programs in general is lacking and the effectiveness of such credit schemes has not been demonstrated.

The paper will examine the efficiency of subsidized credit lines implemented by Macedonian Government with a main goal to promote bank lending to SMEs. It will attempt to assess the cost of the Government and the impact on the "supply side" in providing financing for SME sector. The method used for the research is a questionnaire based survey, composed of multiple choice questions and on-site interviews with bank's officials.

Key words: access to finance, SMEs, government intervention

JEL Classification: G20, G28

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1. Introduction

SME sector is one of the most important drivers of the economy in each country and 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. Bank loans are the main source of external financing of SMEs in Macedonia and in many other developing and developed countries. However, there are many factors as higher administrative costs and risks involved in lending to SMEs that reduce banks' willingness to lend to them. Also, lack of collateral and borrower information is frequently reason for credit rejection. 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.

2. Role and importance of the SMEs

SMEs 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 businesses with less than 10 employees. (Wymenga, Spanikova, Derbyshire, Barker, 2011: p.9)

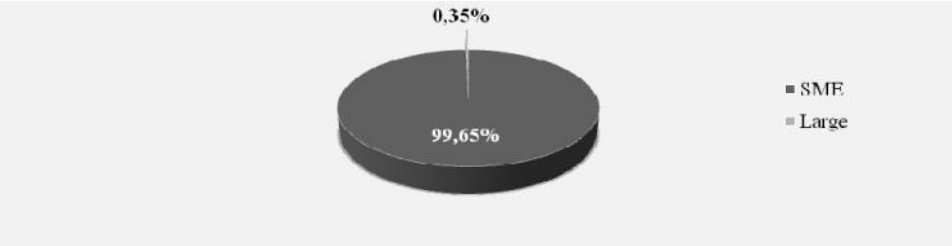
SME sector makes a critical contribution to GDP and employment in both developed and developing countries. In terms of employment, 67% of all job places in the European private sector are within the SME sector. European Commission has published a study regarding the SME role in creation of new job places. (Kok, Vroonhof, Verhoeven, Timmermans, Kwaak, Snijders, Zoetermeer, 2011) The results of the analysis shows that in the period 2002-2010, 85% of the newly created jobs where in the SME sector, which is a higher figure comparing to the a.m. SMEs share of 67% of all jobs in EU. 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. Namely, the data from the Central Register of the Republic of Macedonia for the period 2006-2012 show continuous enlargement of the officially registered enterprises. The classification by size 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)

The biggest part of the active enterprises in the Republic of Macedonia, or 99, 65%, is the SMEs[1].

Figure 1. Structure by size of active companies in Republic of Macedonia in 2012

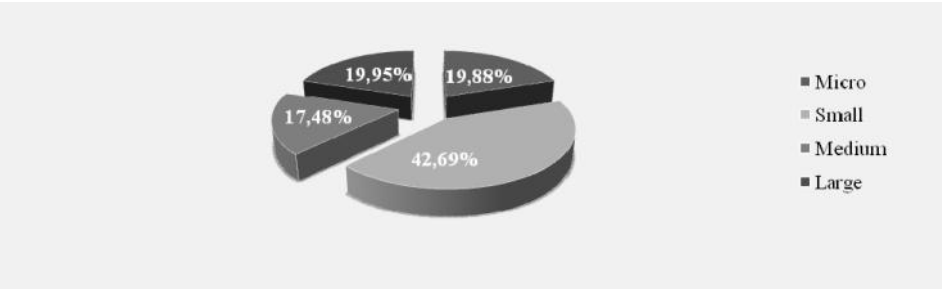


Source: Central Register of the RM, 2013

SME sector in Macedonia participate with 80, 5% of total employments, while 19, 5% of employments are in the big companies. 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).

[1] SMEs refers to micro, small and medium enterprises

Figure 2. **Share of employments by company size in 2012**



Source: Central Register of the Republic of Macedonia, 2013

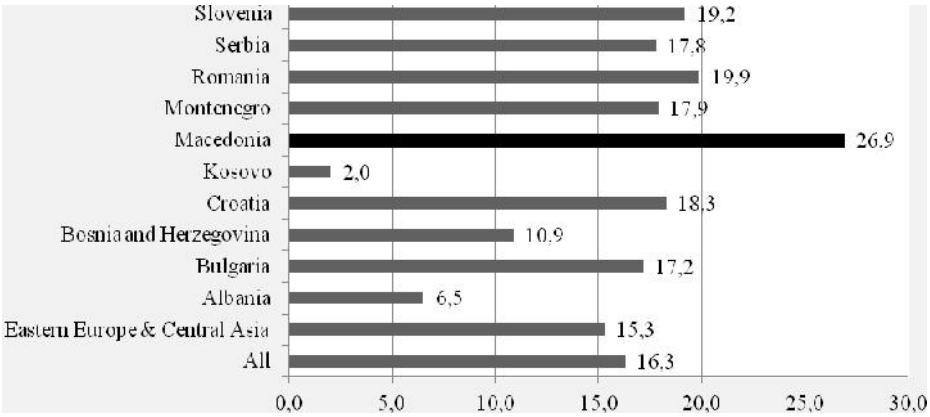
3. Access to finance: is there a problem?

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)

World Bank, in cooperation with the EBRD, in 2010 has conducted a detail survey called Business Environment and Enterprise Performance Survey – BEEPS. The survey was made on a representative sample of enterprises through direct interviews. One of the topics covered in the survey include obstacles for doing business. (World Bank, 2010)

According to this survey, 26,9% of the interviewed Macedonian firms identified access to finance as their major obstacle for doing business, which is the second ranked obstacle, after informal economy.

Figure 3. **Percentage of firms that identified access to finance as the biggest obstacle for their operation**



Source: Business Environment and Enterprise Performance Surveys-BEEPS, 2010

The general results of this survey confirm the financing obstacles for Macedonian SMEs and it can be concluded that Macedonian enterprise have bigger financial problems, comparing to the other analyzed countries. It must be noted that this obstacles are intensified with the world economic and financial crises.

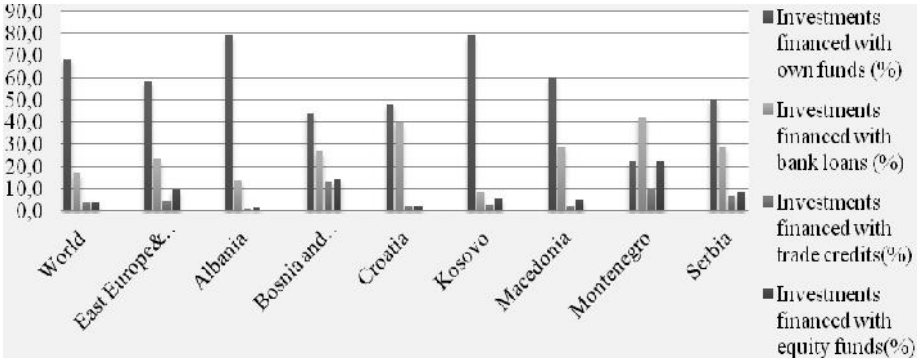
4. Sources of financing

External sources of financing are critical component for the enterprise growth. Different analysis conducted in the Western Balkan countries demonstrates the domination of the banking sector comparing to other external sources.

The analysis carried out by World Bank, in cooperation with EBRD, (World Bank, 2010) shows that the most frequently used source for the planned investments of SMEs in Western Balkan countries are internal funds (71, 8%). As a second source are banking loans (15, 4%), while the percentage of investments financed by equity funds, leasing and other alternative sources of financing is very low, comparing to the developed market economies. This survey shows that bank loans represent 40% to nearly 80% of external funds obtained by SMEs in

SEE. This situation is mainly due to the growing banking sector in the past several years and undeveloped capital markets and equity finance.

Figure 4: **Structure of financing sources (%)**



Source: BEEPS, 2010

Therefore, the further analysis concerning the financing issue of SMEs should be focused on banking sector. However, there are many factors that reduce banks' willingness to lend to SMEs. The economic literature on enterprise financing has identified few main reasons why banks are often reluctant and avoid lending to an SME: (Zavatta, 2008)

1. The information asymmetry that exists between small businesses and lenders, or outside investors i.e. lack of relevant financial information, credit history etc.
2. The high risks involved in lending to the SME, associated with small scale activities, high failure rates, low capitalization and exposure to market risks, because they operate in a more competitive environment.
3. The high transaction costs in administrating SME loans.
4. The lack of collateral that usually characterizes SMEs, which may have little or no assets that can be used as collateral.
5. The lack of bank's capacity and skills to conduct a credit determine whether the borrower possesses the technical, managerial and marketing skills to generate adequate cash.

In developing countries, such as Macedonia, these problems are often worsened by institutional factors, such weak creditors' rights and protection, weak judicial system and bankruptcy procedures, lack of information infrastructure, etc.

5. Role of the Government

The question is whether the Government should undertake measures to mitigate the problem that SMEs are facing in obtaining finances for their activities? In the economic literature there are different theories and opinions. (See Stiglitz, 1994; Klapper and Zaidi, 2005) Public intervention may be considered justified where market is failing to provide the required financing necessary for the less-favoured sectors, regions or clients. In addition intervention by the public authorities is needed to mitigate the effects from certain external shocks, i.e. to assists a certain sector affected by this negative impact. As already mentioned, there is market imperfection due to which Macedonian SMEs have problems in access to finance. Furthermore, the world economic and financial crisis from 2008 is certainly that kind of external shock, causing negative effects to the Macedonian SMEs. This gives good reason for the Government to intervene.

The other question is what form such intervention should take: interest-rate subsidies, guarantees, loans, equity financing or something different?

6. Macedonian case: EIB credit line

As a response to the economic and financial crises the Government of the Republic of Macedonia in 2009 has decides to apply for a loan from the European Investment Bank to increase the available capital for Macedonian companies, and to mitigate the negative effects of the crisis in the Macedonian banking sector. EIB has provided similar loans for SMEs and priority projects in other SEE countries: Croatia, Serbia, Montenegro, Bosnia and Herzegovina, Turkey and Albania. In the time of crisis banks have become even more conservative in loan approval, which worsen already difficult financial situation of the SME sector.

The Financing Agreement for SME credit line in amount of 100 million EUR was signed between Macedonian Bank for Development Promotion - MBDP and EIB. MBDP is the only development state-owned bank in the RM, established in 1998 under the specific Law on establishment of MBDP (Official Journal 24/98, 6/2000, 109/2005, 130/2008, 105/2009), with main mission to provide financing support to SMEs and to support national economic strategies and objectives.

The credit line was disbursed through intermediary banks, contracted by MBDP, which has onlended the funds to the final beneficiaries. The total amount of the credit line was fully disbursed by April 2011. (MBDP, 2011)

The credit conditions applied for the final beneficiaries have been changed several times since the project start-up, meeting their demands, yet in line with EIB requirements. The final criteria were as follows:

- 100% financing by the EIB funds for SMEs and co-financing up to 50% in partnership with the local commercial banks for priority projects.
- Interest rate of 5, 5% p.a. for the final beneficiaries.
- Purpose: investments, permanent working capital and priority projects
- Target group: SME's and all registered enterprises under the Law on trade companies for the priority projects only.
- Maximum amount of 3, 5 million EUR per loan for SMEs and 12, 5 million EUR per loan for priority projects.
- Repayment period up to 5 years for investment loans, up to 3 years for loans for permanent working capital and up to 15 years for priority projects, with grace period from 6 to 12 months.
- Collateral is defined by each participating bank, according to their credit policy.

It must be noted that despite the favorable credit conditions, EIB loans are commercially approved loans to beneficiaries with good credit history and good cash flow that ensures timely repayment of the installments.

This credit line was withdrawn earlier than projected due to the big demand of the SME sector for the EIB loans**.** The following table presents the structure of the EIB credit line portfolio by three characteristic: target group, purpose and sector.

Table 1: **Portfolio structure**

	Number of financed projects (%)	Disbursed amount (%)
By target group		
SMEs	97	89
Big enterprises	3	11
By loan purpose		
Investment loans	N/A	24
Permanent working capital	N/A	57
Priority projects	3	19
By sectors		
Production	53	61
Construction	8	7
Trade	23	18
Transport	2	3
Health	6	4
Hotels/Restaurants	6	2
Other	4	6

Source: MBDP, 2011

The structure of the EIB loan portfolio in terms of the loan purpose shows that 57% of the disbursed amount is for working capital, which reflects the situation in the Macedonian economy. As a result of the economic crisis SMEs in Macedonia are facing a big problem with their liquidity. Regarding the structure by sector, the biggest percent of the funds (61%) were invested in production companies.

The total number of financed project with the EIB100 million EUR credit line is 306, out of which 97% are SMEs projects, and only 3% are for big companies. According to the MBDP data, collected from the final beneficiaries, this credit line has supported creation/retention of 2.140 jobs.

The EIB credit line represents a model of indirect interest rate subsidies on commercial loans extended to SMEs. The interest rate subsidy is technically realized by providing funds to commercial banks at low rates and these low rates are then passed on to SMEs through lower interest rates on the commercial loans approved by these banks.

For the funds onlended to intermediary banks MBDP is charging 1% p.a. on outstanding balance. As described above, the intention of the

Government with this credit line was to provide additional credit funds under favorable conditions for the final beneficiaries. Therefore, in the agreements signed between MBDP and intermediary banks the interest rate for the borrowers is fixed at 5, 5% p.a.

Subsequent to the fast disbursement of this credit instrument, and deepening the problems of the SMEs as a result of the on-going crisis in the Euro zone, EIB has approved two additional credit lines to Macedonia, one in October 2011 in amount of 50 million EUR and the second in July 2012 in amount of 100 million EUR. (EIB, 2012) The criteria are very similar to the first EIB credit line, and the only significant change is the increase of the repayment period for the investment loans to 8 years with 2 years of grace period, and for the working capital to 3 years with 6 month of grace period. (MBDP, 2012)

7. Research

- Impact evaluation

In order to explore the supply side factors i.e. banks' experience and policies in lending to SMEs and to evaluate the impact of the EIB 100 million credit line on participating banks, a survey was carried out on five banks that are contracted by MBDP for servicing the EIB credit line. The selected sample represents 31% of the whole population (16 banks) and they account for about 70% of total assets in the banking sector in Macedonia and 82, 6% of the total EIB portfolio. 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 by e-mail 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;
- Potential and obstacles for SME lending in normal conditions and in the time of crisis;
- Role and intervention of the Government and their effectiveness.

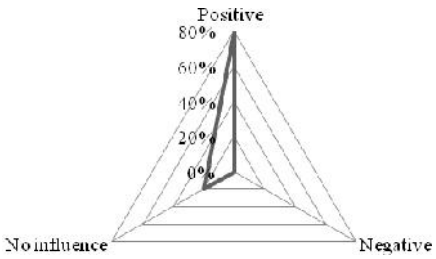
One of the goals of the research was to determine the impact on the bank's SME lending as a result of the cooperation with MBDP. The purpose was to conduct simple evaluation of the EIB 100 million credit line, which is a main source of SME financing through MBDP. Surveyed

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

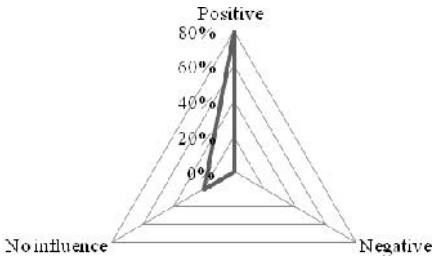
The results from the survey show significant positive impact on the total SME credit portfolio.

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 MBDO does not have influence on its SME credit portfolio.



b) Impact on SME interest to apply for a loan

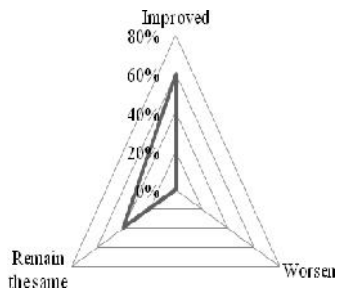
The results are the same as in the previous question i.e. four of the banks or 80% emphasized that based on the cooperation with MBDP the number of SME's credit applications has increased by 10%. Only one bank has stated that there is no influence.



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.



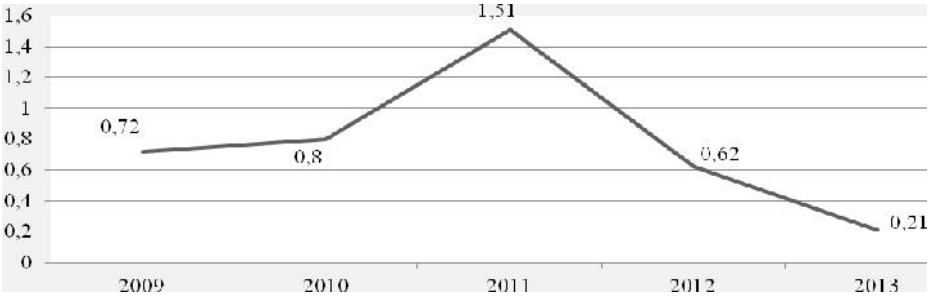
- Budget cost assessment

MBDP is obliged to repay the loan to EIB using flexible interest rate based on 3-months Euribor under the Financing Agreement and calculated on the outstanding balance of each tranche. The likely mismatch of the earned interest from the banks and due repayment obligation to the EIB is financed with Government budget funds.

The full loan amount was withdrawn in nine tranches starting in December 2009, and the last tranche was withdrawn in April 2011. For six tranches variable interest rate is applied based on the 3-month Euribor for the appropriate period increased for 50 basis points. As shown in the graph bellow, the Euribor rate for the analyzed period is in the interval from 0, 21% to 1, 51%. [2]

[2] For 2009 the average rate is for December, for 2010, 2011, 2012 the average is calculated on yearly basis, and for the 2013 the average is for January and February

Figure 5: **Average 3-month Euribor rates for the period December 2009 – February 2013 (%)**



Source: http://www.euribor-rates.eu/

The average 3-month Euribor rate for the analyzed period is 0, 77%, and increased by 50 basis points, the price for the EIB tranches withdrawn under variable rate is 1, 27%. On the remaining three tranches, the interest rate is in average of 2%. The weighted interest rate for all nine tranches is 1, 5%, which is not significantly higher comparing to the 1% charged to the participating banks. The budget cost or the indirect subsidy can be determined as a variance between the interest incomes and expenditures of MBDP for the EIB credit line. Bellow, a hypothetical calculation of the Government cost is presented for the first three years of the loan, which is still in grace period.

Table 2: **Calculation of the Government subsidy for the EIB 100 millions credit line for the period 2010-2012 (in EUR)**

Year	Withdrawn amount	Interest income (1%)	Interest expenditures (1, 5%)	Variance (Government subsidy)
2010	70.000.000	700.000	1.050.000	350.000
2011	100.000.000	1.000.000	1.500.000	500.000
2012	100.000.000	1.000.000	1.500.000	500.000
Total interest subsidy for 3 years				1.350.000

Source: own calculations

If such calculation is applied for the entire repayment period, the projected total amount of budget costs is app.4 million EUR, allocated over 15 years.

8. Conclusion

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. Design of subsidized financial products, targeting strategic sectors, should be considered as one of the solutions to overcome the problems in obtaining necessary finance. Indirect interest subsidies do not violate the WTO Agreement on Subsidies and Countervailing Measures and they are classified as a voluntary compromise by the participating banks in order to expand their outreach. Furthermore, the indirect approach of interest rate subsidy eliminates the negative effects from such Government intervention, in terms of inefficient and nontransparent funds allocation.

Another advantage, which is of great importance, is the low cost for the Government for implementation of such onlending activities. Even if the reference rate for calculating the interest (Euribor) increases, still the budget participation is not going to increase significantly.

While initially offering incentives to participating financial institutions to expand their SME lending, the long-term objective of these interventions should be that banks would increasingly start to consider SMEs as part of their mainstream clientele that would in the future be served wholly with the banks' own recourses.

Through the financed investment 2.140 job places are created or retained. If we take the minimal gross and net salary in the Republic of Macedonia[3] as a base for calculation, in that case the monthly inflow in the Government budget from taxes and contributions is in average amount of 4.200 MKD per worker. Consequently, the annual amount for all 2.000 jobs will be approximately 100, 8 million MKD or around 1, 6 million EUR. This indicate that the Government subsidy cost will be repaid in the in budget for very short period of time. In addition the

[3] Minimal gross sallary in RM is 12.265 MKD, and the minimal net sallary is 8.050 MKD

reduction of unemployment, due to the new jobs creation, influences the decrease of the budget costs for social transfers.

Regarding the effect on the economy, the assumption is that the total value of the financed projects is higher than 100 million EUR, taking in consideration the participation of the borrower of at least 20% of the project costs. From the repayments of disbursed loans MBDP builds a revolving fund that is used for financing of new loans for the target group. This implies multiple economic effects of the credit line

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

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%. 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. This data point to certain situation that needs to be further closely reviewed.

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. Central Register of the Republic of Macedonia. (2013). Official data.
5. Company Law. Official Journal of the Republic of Macedonia no. 28/04
6. European Investment Bank. (2012). www.eib.org/projects/loans/regions/enlargement/mk.htm (31.08.2012)
7. Klapper, L., Zaidi, R. (2005). A Survey of Government Regulation and Intervention in Financial Markets - Prepared for the World Development Report 2005: Improving the Investment Climate for Growth and Poverty Reduction, pp 15-20
8. Kok, J., Vroonhof, P., Verhoeven, W., Timmermans, N., Kwaak, T., Snijders, J., Florieke, Zoetermeer, W. (2011) Do SMEs create more and better jobs? http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/pdf/do-smes-create-more-and-better-jobs_en.pdf (16.06.2012)
9. Law on establishment of MBDP. Official Journal 24/98, 6/2000, 109/2005, 130/2008, 105/2009
10. Macedonian Bank for Development Promotion. (2011). Information on EIB 100 million credit line.
11. Macedonian Bank for Development Promotion. (2012) http://www.mbdp.com.mk/index.php/mk/kreditiranje/msp (03.09.2012)
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. Stiglitz, J. (1994). The Role of the State in the Financial Markets, pp 28
15. World Bank. (2010). Business Environment and Enterprise Performance Surveys -BEEPS. http://www.enterprisesurveys.org/CustomQuery (15.06.2012)
16. World Bank. (2010). BEEPS at-a-glance 2010 FYR Macedonia. http://siteresources.worldbank.org/INTECAREGTOPANTCOR/Resources/7045891267561320871/FYR_Macedonia_2010.pdf (24.06.2012)
17. Wymenga, P., Spanikova, V., Derbyshire, J., Barker, A. (2011). Are EU SMEs recovering? Annual Report on EU SMEs 2010/2011, pp. 9 http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/supporting-documents/2010-2011/annual-report en.pdf (05.06.2012)
18. Zavatta, R. (2008). Financing Technology Entrepreneurs and SMEs in Developing Countries. *info*Dev / World Bank. http://www.infodev.org/publications (15.07.2012)