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FINANCING OF SMALL AND MEDIUM ENTERPRISES – CASE OF MACEDONIA

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Abstract: This paper is prepared in a clear structure, in order to clarify in details microfinance, as a method for SMEs in accessing financing sources. At the beginning microfinance has been developed as an opportunity to help poor people lift themselves out of poverty. The most important thing is that microfinance helps people to open new businesses and with that improve economic and social condition of the society. It is done knowing the great need for access to financial resources, and also for other ways of support, either informal or nonfinancial methods. In this study, the importance is given to the development of microfinance in Macedonia, it is about the stages that have been performed and the results so far achieved. Knowing the methods of financing SMEs in other countries, the main issues that we have analyzed are the sources and methods of financing SMEs in Macedonia. In order to make the evaluation of these factors, we have used regression analysis on three variables.Finally there are presented the results obtained from empirical analysis, where we have analyzed the amounts of credits allocated to SMEs, the number of active enterprises, and the change of interest rates for SME loans, all these are made for a period from 2004 - 2012 (divided into quartiles). The results clarify the impact of credits and interest rates on the existence of SMEs and the opening of new enterprises in Macedonia. To our bad luck, the obtained results do not match with the results of other countries, while the reason is explained at the end of the study.

Keywords: Microfinance, Small and Medium Enterprises (SME), lending, banks, business support agency

Introduction

While the world is facing the last economic crisis, due to the large unemployment, even in the most developed countries of the world, everyone is turning their attention to the development of small and medium enterprises. Some of them see salvation in the SME financial assistance, others to tax breaks, some through self-employment programs; struggle to survive and overcome the economic impasse that has gripped almost all countries.

The main reason for development of microfinance is the distribution of loans without collateral, because debtors are too poor to be able to provide a guarantee in estate assets. Therefore microfinance is recognized as an opportunity to interrupt the cycle of poverty, which rotates in a spiral producing poverty again.

Establishment of new enterprises, development and expansion of existing enterprises has been and is one of the most important issues for the economy of any country. Many researchers around the world have explored the small and medium enterprises, as well as their impact on many economic and social aspects.
The main problem that has aroused the curiosity of researchers and economists is how to finance the activities of small businesses to survive the crisis, since the largest number of new enterprises remitted in the first three years of their life.

Our goal in this study is to analyze the functioning of microfinance in general and in particular in Macedonia, as well as to study ways of financing small and medium enterprises and the results that may arise from their funding and support.

The main objective is to analyze empirically, then confirm or reject the following hypotheses:

H1 / 1: Rising interest rates negatively impacted SME lending.
H1 / 2: Growth of lending has positively influenced the development of SMEs.

When talking about the impact of interest rates on enterprise development, we consider the results that have come from various authors who have studied this phenomenon. In this case we have an example; the study of the impact of rising interest rates in Dhaka. According to the study of Morduch, Montgomery and Dehejia (2005), shows that the increase of interest rates makes debtors very sensitive in seeking credit. As a result, small debtors are unable to access credit; therefore it reduces the possibility for development. In Akowuah study (2011) about the impact of interest rates on demand for credit, it turns out that interest rates have a positive impact in the short term and negative impact in the long term. Stiglitz and Weiss (1981) have argued that high interest rates adversely affect the demand for loans and the rates only can be accepted by high – risk projects. This does not include the poor and small and medium enterprises, because they cannot afford the investment costs and risks.

According to Woosley, Padhi and Frame (2001), increased activity of small and medium enterprises is associated with increased lending by large banking organizations. This study was done in countries with low and middle income. According to the study of the effects of lending in SMEs development that is made by Anwar, Hassan, Zaid, (2012), the models of SME lending have strong links with their development, just because they represent the backbone of the development of an economy.

**Literature Review**

**What is microfinance?**

Microfinance as economic phenomenon is displayed for the first time in 1976 in Bangladesh. Although microfinance tracks lead us to many countries around the world, the origin of microfinance comes from an already-known economist, Muhammad Yunus, who in 2006 won the Nobel Peace Prize as a result of his work in this direction. At first he began to borrow money to poor people who were involved in agricultural work. Because it was confirmed that this method would work, he could establish a special branch of the Grameen Bank that provided microfinance services. After that, this method was used in several countries like: Germany, USA, Mexico, Bolivia and other Asiatic countries.

Many times we find cases where in public the term microfinance and microcredit are mixed, or they are used as synonyms of each other. Therefore here are the explanations of these terms. Microcredit mainly refers to small loans that banks or financial institutions offer to their clients in small amounts. Another definition explains microcredit as extremely small loans, which are given the poor people to help them become self-employed. Otherwise it can be found as "micro lending" or "microloan".

Microfinance is a type of banking service offered to unemployed individuals, for borrowers with lower income or groups who have no other form of gaining funds and financial services, as well as small businesses. Compared to financial services in general, microfinance services are financial services that are relatively small amount in relation to the annual income of a typical individual.

In his essay, Robinson (1998) defines microfinance as follows: "Microfinance refers to financial services such as small loans or deposits, which are given to people who keep animals and/or fish farms or have micro-enterprises where goods are produced, recycled, repaired or traded; provide services, work for wages or commissions, earn income from renting land, machines and tools as well as other individuals and local groups in developing countries, in rural and urban areas."

According to Rodman & Qureshi (2006), in their scientific research "Microfinance as Business"; the term "Microfinance" includes the provision of a wide range of financial services to poor people such as: savings, loans, insurance, and money transfers.
The concept of microfinance as it is understood today, has its origins in developing countries, with the aim of alleviating poverty, integration of socially marginalized groups and as a tool for microfinance inclusion, therefore it quickly gained place in many developing countries and is already prominent in many regions, such as Western Africa (Latifee, 2006).

Microfinance in Macedonia

In the Republic of Macedonia there is a business climate still in development, as the country is part of the group of countries that are in a phase of transition and development in all aspects, including economic aspect. Macedonia is counted as one of the countries with a very high level of poverty, where most of the population lives on less than $2 / person per day, while businesses struggle to survive. Given these facts, we can conclude that microfinance presents a great need to support businesses and poor people in the country. Microfinance as an economic factor in Macedonia, is not regulated by law, but the loans related to microfinance and SMEs, as well as microfinance institutions operate under the banking law.

Small and medium enterprises represent an important component for future economic development of the country. According to the statistical office, in Macedonia in 2012 were 74,220 active SMEs and they have involved the largest number of employees, which is approximately 90% of the total number, while they create more than 60% of Gross Domestic Product. Therefore it is essential to support their activities and increase the opportunities for opening new small enterprises.

Sources and Forms of Financing

Small and medium enterprises in Macedonia usually finance their activities through their capital, then some through borrowings from family and friends, and some of them from financial institutions loans. The support and financing for SMEs in general, tends to be realized in three forms, including: lending by financial institutions, support from business organizations and agencies, and the assistance of the economic and social policies of the state.

Recent years we have seen important developments on the field of small and medium enterprises in Macedonia. Since 2007 a new SME Strategy 2007-2013 and Programme for SMEs from 2007 to 2010 are drafted. In Macedonia there are programs for supporting and financing small enterprises, as well as programs on subvention of agriculture, carried out by the Ministry of Labor and Social Policy. These programs aim to reduce the unemployment rate in the country, but have a positive effect on the opening of small businesses in the country. Here we can mention the Self-Employment Program through lending, where are included loans at 1% interest and financial aid for every job opening in the amount of 3,000 €. But there is a lack of accurate information about the success of the implementation of this program by the ministry, because it is possible that it only be political propaganda and not be effective for SMEs.

An opportunity for support is the Voucher System that is realized through the Agency for Support of Entrepreneurship. Voucher system provides consulting and development services of any working activity in the form of vouchers, while interested users have the possibility to choose advisers, according to the methodology adopted by the agency. For the unemployed, the self-employment services are provided for free, while for SMEs it is provided in the form of grant, where 50% is provided as subvention and 50% with customer participation. Regarding the financial services offered to SME’s there are a number of active organizations that offer support for enterprises in Macedonia: Center for Entrepreneurship and Executive Development, Business Advice Service, USAID, GIZ, Business Angel Network. These organizations have given great contribution to the development of SMEs in the country and have brought numerous innovations from other countries in terms of small business support.

The most frequent sources that SMEs use to finance their activities, in many countries are credits. Financial institutions in Macedonia offer credit lines to finance companies, thus has been observed increase in the number of new enterprises that were opened during the period that is analyzed, The European Union has also influenced the development of SMEs with loans that have been enabled by the European Investment Bank through Macedonia's banks.

In this table are shown the credits given to SMEs and active enterprises from 2004 to 2014.
Table 1. Relationship between loans and SMEs in the period 2004 – 2014

<table>
<thead>
<tr>
<th>Years</th>
<th>Active SME’s</th>
<th>Loans for SME’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>45881</td>
<td>32635</td>
</tr>
<tr>
<td>2005</td>
<td>50807</td>
<td>37908</td>
</tr>
<tr>
<td>2006</td>
<td>52703</td>
<td>58286</td>
</tr>
<tr>
<td>2007</td>
<td>58639</td>
<td>75923</td>
</tr>
<tr>
<td>2008</td>
<td>63193</td>
<td>100808</td>
</tr>
<tr>
<td>2009</td>
<td>70710</td>
<td>105270</td>
</tr>
<tr>
<td>2010</td>
<td>75497</td>
<td>102443</td>
</tr>
<tr>
<td>2011</td>
<td>73118</td>
<td>109912</td>
</tr>
<tr>
<td>2012</td>
<td>74424</td>
<td>112746</td>
</tr>
<tr>
<td>2013</td>
<td>71290</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>70659</td>
<td></td>
</tr>
</tbody>
</table>

Source: Presented data were obtained from the National Bank of Macedonia. Processing is done in MS Excel. Loan amounts are in million Denars.

Banks as financing sources for SME’s in Macedonia

At the end of 2012, in Macedonia operate 16 commercial banks, of which 3 are in the category of large banks, medium banks are 8 and 6 small banks. The categorization is done according to the amount of bank's assets. This vast network of banks increases competition and brings services closer to SMEs. Banks should play the leading role in providing financial resources for SMEs, because small businesses besides loans have less access to other methods of financing their activities than large enterprises and corporations. SME services can usually be found in commercial banks or other guarantee funds. Some banks have established funds or credit lines specialized only for SME lending, but it is not enough to fulfill their needs because of high interest rates and some other difficulties.

Enterprises in Macedonia face several problems while applying for loans in banks because of numerous conditions they must fulfill. Some lending terms and conditions vary from bank to bank, depending on their credit policy, but typical conditions for lending to SME’s in Macedonian banks are:

- Warranty:
- Mortgages (mostly accepted in Skopje)
- Equipment
- Personal Guarantee (accepted only by some banks for loans under € 5,000)
- Interest rates: 10% - 18% (higher for micro credit, cheaper for larger amounts)
- Processing time: 3-15 days (recently declining).

After that we said that the most common source of financing for SMEs are credits, below are presented some data that highlights some banks that offer credit lines for SMEs in Macedonia.

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>Credit amount</th>
<th>% of Interest</th>
<th>Loan deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eurostandard B.</td>
<td>325,000 €</td>
<td>9-13%</td>
<td>12 months</td>
</tr>
<tr>
<td>Commercial B.</td>
<td>15,000 - 500,000 €</td>
<td>8%</td>
<td>8 years</td>
</tr>
<tr>
<td>Commercial B.</td>
<td>30,000 - 2,000,000 €</td>
<td>8%</td>
<td>1 year</td>
</tr>
<tr>
<td>Pro Credit B.</td>
<td>300,000 Den</td>
<td>1.6-2%</td>
<td>36 months</td>
</tr>
<tr>
<td>Pro Credit B.</td>
<td>150,000 €</td>
<td>8.4-12%</td>
<td>84 months</td>
</tr>
<tr>
<td>NLB Tutuniska B.</td>
<td>15,000 - 50,000 €</td>
<td>9-11%</td>
<td>48 months</td>
</tr>
<tr>
<td>Stopanska Banka</td>
<td>75,000 €</td>
<td>9.75%</td>
<td>by agreement</td>
</tr>
<tr>
<td>Stopanska Banka</td>
<td>3,000,000 Den</td>
<td>12.90%</td>
<td>no restrictions</td>
</tr>
<tr>
<td>TTK Bank</td>
<td>undefined, €</td>
<td>9.9-13.9%</td>
<td>1 year</td>
</tr>
</tbody>
</table>
Methodology

In this part we have analyzed the hypotheses that were mentioned above. In this section we define working methods and techniques that are used to analyze some specific points for financing of enterprises in Macedonia. By the study of literature and knowledge of many SME financing, are submitted several hypotheses, which are analyzed below.

H1 / 1: High interest rates have negatively impacted SME lending.
H1 / 2: Growth of lending has positively influenced the development of SMEs

The data that are used in the empirical analysis are provided by the official institutions of the country. In the analysis are used: interest rates, the amounts of loans granted by banks to SMEs and households, and the number of active small and medium enterprises. Interest rates are provided by the Central Bank of R.M., i.e. the statistical reports. The loans for SMEs were provided by statistical reports of the Central Bank, these loans are allocated by all banks and savings houses. The number of small and medium enterprises that have been active in several years were provided by the Statistical Office of R.M. The data used for empirical analysis were divided into quartiles from 2004: Q4 - 2012: Q4.

In this study are used some econometric models to estimate the correlation between dependent and independent variables. Our goal was to measure the impact of one variable to another, and the result obtained will be verified through tests T and F. Then through the comparative method will be analyzed appropriateness of the results of our country with other countries. To measure the impact of the variables will be used the method of regression.

Limitations of the Study

Before we look at results obtained from the empirical analysis, must be emphasized that the official reports which are used during analysis are uncertain, and there are some deficiencies about the data which are very important for our study. Thus we should note that the obtained result may be deficient in presenting the real state of the issue that is analyzed. This is because both of the aforementioned institutions have had significant deficiencies and changes in the presentation of data in their reports, so the data in the tables are customized with approximation method.

Findings

This is the most relevant chapter of this paper, because first of all we will have the expected results and, second we will be able to interpret their meaning for this case.

H1 / 1: High interest rates have negatively impacted SME lending

Basic model of hypothesis:
\[ \ln L_e = \beta_1 + \beta_2 \cdot I_r + \mu \]
\[ \ln L_e = 13.7812 + (0.2683)I_r + \mu \]
Le - is the amount of credit and the dependent variable.
Ir - is the stated interest rate and the independent variable.

The result of this model show that the interest rate and lending do not change in the same direction. These two variables have negative correlation. From the obtained results we can say that the increase in interest rates for 1% will have an impact on reducing the amount of lending to SMEs by 0.26%. Verification of the hypotheses is done with tests. T value is -26, while the critical value is 1.697. F value (1.31) is 698.6, while the critical value is 4.17. Since the value of T test is smaller than the critical value and lies on the border of confidence, we can conclude that the null hypothesis is acceptable. According to the results we can say that no matter how small it is, a change in interest rates affects the demand for loans and also affects the development of small and medium enterprises. This condition is seen in Macedonia and is also confirmed in other countries of the world. Thus to increase lending, should be required decrease on interest rate for loans dedicated to SMEs.

H1 / 2: Growth of lending has positively influenced the development of SMEs

Model specification of hypothesis:
\[ E_n = \beta_1 + \beta_2 \cdot L_e + \mu \]
\[ E_n = 34595.24 + 0.3708 \cdot L_e + \mu \]
Ent – is the number of active SMEs and is dependent variable  
Le – is the amount of credits for SMEs and the independent variable

According to the results we can say that the credit has been important for the development of small and medium enterprises. If lending to SMEs will be zero, then we have 34,595 active enterprises. If credit would increase for 1 million denar then companies would be developed for 0.3708 more. T Value is 23.21, which shows that the model has significance, because when we have credit growth, there is an increase to the enterprises. Above we saw positive correlation between variables. Now let’s see the comparison of values t and f, with their critical points. T value is 23.21 and the critical point of t-table is 1.697. F value (1.31) is 538.5, while the value of the F test is 4.17.

Even though positive correlation seen above, the critical values are lower than the values T and F. This forces us to say that the null hypothesis is rejected. From this we can understand that enterprises in Macedonia use other sources of financing for their development. So credit is not the most exploited source for the development of SMEs, as is indicated elsewhere in the world. After that we can conclude that enterprises in Macedonia finance their activities with their own capital, by loans from friends or family or other financing methods. From this result we can see two possible situations. First possibility is that, credit policies of banks for SMEs have appeared unsuccessful and the second possibility is that, their attempts to help small businesses through loans with low interest rates are not true.

<table>
<thead>
<tr>
<th></th>
<th>H1/1</th>
<th>H1/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Error</td>
<td>0.01</td>
<td>0.015</td>
</tr>
<tr>
<td>t</td>
<td>-26</td>
<td>23.2</td>
</tr>
<tr>
<td>F(1,31)</td>
<td>698</td>
<td>538.5</td>
</tr>
<tr>
<td>R²</td>
<td>0.95</td>
<td>0.94</td>
</tr>
<tr>
<td>Nr. Obs</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>P &gt; t</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Conclusions**

The main purpose of this paper was to study the functioning of microfinance in general, and to analyze financing SME’s in Macedonia. After we consulted many studies and publications related to the development of microfinance, we managed to evaluate that microfinance actually presents a very good opportunity for poor people, because it helps them in opening opportunities and profits to alleviate poverty. From small enterprises aspect, microfinance is useful in providing opportunities to find funding sources for them to carry out activities and to expand their businesses.

Methods of microfinance in Macedonia began to apply a few years ago and we have noticed improvements in policies and programs to support SME’s. These kinds of enterprises constitute the largest number of enterprises in Macedonia, but due to small capacity and high risk, banks and other financial institutions are reluctant to provide loans or other nonfinancial assistance. As can be seen, the largest support for SMEs comes from other non-governmental organizations such as: USAID, GIZ, BAN, etc.

At the end of this study we will recommend institutions and state agencies as well as business centers, which have an impact on the situation of SME’s, apply as much strategies to support existing small enterprises and opening of new businesses. We say this because, we all know that by increasing the number of new businesses will also benefit in reducing the rate of unemployment in the country.

People and SME managers here, are very poorly informed about business support programs, which come from the EU. A very good option would be the business support agency’s commitment in the presentation of programs offered by the European Union for funding the activities of SME’s. Also, some plans should be developed to inform, assist, and guide SME’s managers, to develop projects which will apply to European banks to gain financial funds for their business activities.
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