DETERMINANTS OF SME FINANCE: LESSONS FROM KOSOVO

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Abstract: In this study, we investigate the determinants of access to finance for small and medium enterprises (SME-s) in Dukagjini region, Kosovo. To contribute to the SME financing literature this paper uses the data received from interviews based on a self-organized questionnaire with 243 SME-s in Dukagjini region. Through linear regression model key factors are identified which determines SME growth financed by banks. The empirical results indicate a positive correlation among variables firm's age, size, business plan and financial performance to the sources of financing and the investment growth. We found evidence that firms operated with more number of owners and pledge of collateral have higher credibility to obtain bank financing. The paper provides some important conclusions and implications for policymakers and entrepreneurs.
The discussion of the relevant literature related to the access of SME-s finance, as well as to investment finance is of particular importance. According to Beck et al. (2006), using World Business Environment Survey (WBES) found that absence of long term bank finance of SME-s is the second most important financing constrain, while collateral and high interest rates are on the first place. It should also be stressed that the small firms come with more difficulty to loans since they encounter higher transaction costs and higher premium risks, for they are more fragile and they offer lower collaterals (Beck et al., 2006). Audretsch and Elston (2006) also emphasize that small firms faced higher financial difficulties than large one. Some other authors who have worked in this direction (Beck et al., 2006; Oliveira and Fortunato, 2006) can find similar argument.
Beginning from the traditional theory, the changes in the structure of capital influences the cost of financing and the value of firms, and, thus, there is an optimal level of financial advantage. Based to neoclassical theory of investments, internal and external sources of financing are perfect substitutes. Therefore, some scholars argue that the cost of capital and the market value of the firm are independent from the value of the firm (Modigliani and Miller, 1958). Thus, the theory of M-M started with the following premises: there are no taxes, there are no transaction costs, there are no bankruptcy costs, the equal cost of debt for companies and for investors, etc. One the other hand. It is well known in the real world, there are taxes, transaction costs, bankruptcies, differences in lending, asymmetry of information, the impact of debt in profit.
Different author's uses firm size as a proxy for better credit quality and showed that it can positively affect the access to credit. The growth of SME-s can be measured in different ways, including the growth of sales, profits, or number of employees. As the firm gets larger, it can acquire more tangible assets that can be useful for banks in assessing the credit risk of the firm. The ability of SME-s to grow depends on a large measure from their potential to invest in the restructuring and innovations. All these investments require capital, so is required access to finance.
Keywords: SME, access to finance, bank loans, Kosovo.

1. INTRODUCTION

A number of studies have focused on SME-s that play a fundamental role in the economic prosperity in both, developed and developing countries (Audretsch and Elston 2006). Numerous authors from academic and professional world explain SME-s as generators of both, economic growth and overall social development (McMillan and Woodruff, 2002). Ayyagari et al. (2007) showed that SME in 76 different countries of the world are solely responsible for creation of about 60% of employment in the manufacturing sector.

In their daily activities, SME-s in countries in transition are faced with numerous difficulties and constraints, in particular institutional ones- formal and informal (Estrin et al., 2005; Aidis and Estrin, 2006; Aidis, 2005; Krasniqi, 2007). These barriers include weak institutional regulation, insufficient experience in the new system of capitalist economy based on supply and demand, as well as weak professional experience, weak application of law, high level of taxes in the business environment.

The empirical and practical studies indicate a common attitude, which emphasizes that SME-s always faces huge problems in finding the sources of finance, due to various reasons, including restricted access to bank finance, competition from the large firms, lack of financial statements, technological and financial risks (Brinckmann et al., 2011). The absence of access to banking loans indicate that SME often find themselves compelled to obtain loans necessary to finance their activities. According to Cook (2001), the role of finances is the key element in the development of SME-s, in the time when the access of larger firms to finance institutions is easier than in the cases of smaller firms.

The discussion of the relevant literature related to the access of SME-s finance, as well as to investment finance is of particular importance. According to Beck et al. (2006), using World Business Environment Survey (WBES) found that absence of long term bank finance of SME-s is the second most important financing constrain, while collateral and high interest rates are on the first place. It should also be stressed that the small firms come with more difficulty to loans since they encounter higher transaction costs and higher premium risks, for they are more fragile and they offer lower collaterals (Beck et al., 2006). Audretsch and Elston (2006) also emphasize that small firms faced higher financial difficulties than large one. Some other authors who have worked in this direction (Beck et al., 2006; Oliveira and Fortunato, 2006) can find similar argument.

Barriers of access to finance are exposed also among SME-s of Dukagjini region in Kosovo. Based on data of the World Bank (2009), the major obstacle to the development of SME-s in Kosovo is access to bank loan (10% are financed through bank loans and above 85% of investments are financed from private sources.

2. THEORETICAL FRAMEWORK

In their everyday activities related to finding of financial means, SME-s are obliged to fulfill formalities, such as, for instance, development of business and the strategy of investments that they can make from private or external sources. This dilemma's like the level of financing that should be made from borrowed sources, the capital borrowed from banks or other financial institution, from private investment funds, business angels, and others are quite ambiguous. Usually if the access to public sources is impossible for SME-s than they are forced to look for external sources of financing.

There is no single and theoretical model that explains the financing of SME-s, which influences the performance and their development. However, in theory and practice there are different explanation of sources of financing which will correspond to all the firms in different situations. Therefore, scholars have made investigations on this issue and concluded in their articles that different theories exists as explanation of SME financing, starting from traditional theory, theory of Modigliani and Miller, trade off static theory, the pecking order theory, capital structural theory (Gitman, 2003).

Beginning from the traditional theory, the changes in the structure of capital influences the cost of financing and the value of firms, and, thus, there is an optimal level of financial advantage. Based to neoclassical theory of investments, internal and external sources of financing are perfect substitutes. Therefore, some scholars argue that the cost of capital and the market value of the firm are independent from the value of the firm (Modigliani and Miller, 1958). Thus, the theory of M-M started with the following premises: there are no taxes, there are no transaction costs, there are no bankruptcy costs, the equal cost of debt for companies and for investors, etc. One the other hand. It is well known in the real world, there are taxes, transaction costs, bankruptcies, differences in lending, asymmetry of information, the impact of debt in profit.

Hence, the static trade off theory, which is based on the M-M theory and it is complementary, validate and except savings from the tax on profit. They incorporates into the discussion also the expenditures of the firm bankruptcy, including here: administrative expenditures and the agency costs that can reduce the value of the firm (Jensen and Meckling, 1976). This theory is, in fact, the dominant theory regarding the determination of the financial structure of the firm, and it is founded on the premise that it is the firm that chooses how much it will be financed from debt, and how much from the capital, by balancing the cost of profits. According to this theory, the optimal level of the structure of capital is the one that equates the profit and costs from debt.

Starting from pecking order theory, usually the firm initially prefers internal sources of financing to external ones, and, regarding external sources, they prefer debt to capital. According to this theory, the firms prefer to finance their investment based on a hierarchic order.

3. HYPOTHESIS AND LITERATURE REVIEW

Different author's uses firm size as a proxy for better credit quality and showed that it can positively affect the access to credit. The growth of SME-s can be measured in different ways, including the growth of sales, profits, or number of employees. As the firm gets larger, it can acquire more tangible assets that can be useful for banks in assessing the credit risk of the firm. The ability of SME-s to grow depends on a large measure from their potential to invest in the restructuring and innovations. All these investments require capital, so is required access to finance.

On the other hand, research shows that younger firms are more vulnerable to having restricted access to bank finance because information transparency is lower. It also argues that younger firms have a lower level of asset intensity and because of it they are credit rationed According to Ganbold (2008), in a research of the World Bank, one among the key difficulties in the growth of the firm is access to financial services, which reflects in economic growth, employment generation, and reduction of poverty in the developing countries (Ganbold, 2008). Therefore, the following hypothesis is generated:

H1: Firm age is positively related to access to business finance

H2: Firm size is positively related to access to business finance

It is a serious concern that the firms owned and operated by women face difficulties in getting access to bank finance due to stereotype gender discrimination. There are contradictory opinions regarding the impact that the gender of the owner of the firm has into the access to finance. While a group of thinkers assert that women are reluctant to accept bank credit since they are afraid to lose control over their business (Abor 2008). Some other scholars argues that businesses owned by female owners use the debt (loans) less for different reasons, including discrimination and aversion to risk. Watson et al. (2009) emphasize that women are more interested to use credit from their family members, friends and relatives. Female clients seek loans with more difficulty, since they feel discriminated and discouraged. Taking the abovementioned arguments in consideration, we hypothesized that:

H3: Female owners of firms are negatvely related to access to business finance

Collateral plays a vital role in accessing bank loan. Many SME owners complain that they are denied loan despite a strong earning capacity and future growth prospect. In developing countries authors found that firms that own assets for collateral are found to have a relatively better access, signifying the importance of collateral in the credit market

The huge participation finance from internal sources of SME-s, increases their probability to acquire bank loans, since the internal sources carry the opportunity cost of financing of the project. As the provision of collateral plays an indispensable role in easing SME access to debt finance, MSEs that have more fixed assets tend to utilize higher financial leverage. Thus, SME-s provide higher level of trust to banks, since, in the case of failure, the unexpected burden falls on SME-s themselves.

H4: The higher the collateral of SME-s, the higher probability for business finance.

It is can be found that the owners of the firm who are young and have low level of education are more active in using the external sources of financing, in spite of the fact that higher education reduces the fear for refusing the loans. It is noted that unlike younger entrepreneurs, older and experience entrepreneurs are less likely to invest additional finance into their firms. It is also evidence that experience owners of SME-s prefer to keep the control and do not apply for external capital. Some other authors finds also negative influence between education of owners and access to credit, arguing that owners with higher education can understand easier that their requirements for credits can be refused (Rand 2007). Therefore, these owners of firm for this reason often hesitate to apply for loans. In the other hand in their study, Hartarska and Gonzales Vega (2006) find that education does not have an important role in the decision process of the banks for lending. Therefore, the following hypothesis is generated:

H5: Experience owners use less bank loans for financing the investment requirements.

H6: Owners with high level of education use less bank loans for financing their businesses.

According to Guffey (2008), in addition to business plan which is a necessary requirement at the beginning of business, financial reports are an important element to acquire financial support during applying at the banking institutions (Guffey, 2008; Krasniqi, 2007). An increase in the level of skills of regular financial reports can provide indications on their ability to produce steady cash flows and to service debt. Those who are looking for credits in the compilation of business plans and financial reports will increase the opportunity for them to have properly prepared documentation, and to have a clear idea on the course of their business (Krasniqi, 2016).

According to Maziku (2016), the asymmetric information between the debt-seeking SME-s and the bank, is reflected in the incapability of the majority of SME-s to provide consistent financial reports and a real business plan, which increases the operational cost during the decision making for permitting the loans by the bank (Maziku, 2017). Thus, the financial reports does not have an impact only in reducing the operational costs, but keeping formal accounting record will easily access credit facility Therefore, we generate the following hypothesis:

H:7 Firms that have provided regular financial reports have higher probability for business finance.

4. METHODOLOGY

We have developed a questionnaire which is specially designed for this scientific research with 243 SME-s in Dukagjini region-Kosovo, in year 2018. Data were conducted with the STATA software. The sample selection is made randomly, from database at the Agency for Businesses Registration in the Ministry of Industry and Trade of Kosovo. The sample includes the Dukagjini region of Kosovo, and it is stratified in three basic sectors, namely production, trade and service firms.

Interviewing is made using face to face method with owners of the firms. The respondents provided answers that have to do with their perception regarding the business environment, access to finance, institutional framework as well as years in business, the size of the firm, number of employees, turnover of the firm, the amount invested, and assets. The information regarding the applying for loans that were accepted or refused by the financial intermediates, and the volume of investments were also gathered.

5. RESEARCH MODEL

We run the following ordinary least square regression model in order to achieve the objectives of the paper.
The structure of the regression model is presented as following:

$$Y = \alpha_0 + \beta_1 \text{ firm\_age} + \beta_2 \text{ firm\_size} + \beta_3 \text{ female} + \beta_4 \text{ collateral} + \beta_5 \text{ experience\_owner} + \beta_6 \text{owner\_edu} + \beta_7 \text{ financial\_report} + \mu \quad (2)$$

The dependent variable ***Loan size*** is a proxy for access to finance and it presents the value of loan at the time of approval.
To test the hypotheses, we arranged the independent variables according to firm and loan characteristic. According the firm characteristics, we observed variables ***firm_age, firm_size, female, collateral, owner_experience, owner_edu***, ***financial_report.*** These variables can affect commercial bank decisions for granting credit to the firms. The variable ***firm_age*** is the number of years that the firm operate. Hence variable firm***_size,*** is expressed through the number of full-time employees the firm was employing during the survey period. In addition variable ***female,*** dummy is employed to find whether women-owned firms are facing any financial constraints in the loan market. The variable ***collateral,*** is a dummy variable that means if the firm has pledged any sort of collateral while getting credit from the bank and zero otherwise. Also variable ***owner_experience*** expressed through the number of years that owners run its business. The variable is dummy variable coded as 1, for firm owners who have finished university education, 0 otherwise. Finally, the variable ***financial_report*** coded 1, if the firm provide regularly financial report, 0 otherwise, make it difficult for financial institutions to evaluate potential risks and returns, making them unwilling to lend credits to the firm.

Table 1. Correlation coefficients at 5% level of significance

Loan Size	***firm_age***	***firm_size***	***female***	***collateral***	***owner_experience***	***owner_edu***	***financial_report***	
firm_age	**1.0000**							
firm_size	**0.0132**	**1.0000**						
female	**0.1291**	**-0.0457**	**1.0000**					
collateral	**0.1657**	**-0.0109**	**-0.0222**	**1.0000**				
owner_ex	**-0.1291**	**-0.0457**	**1.0000**	**-0.0222**	**1.0000**			
owner_edu	**0.1667**	**-0.0111**	**-0.0224**	**1.0000**	**-0.0224**	**-0.0299**	**1.0000**	
fi_report	**0.1136**	**0.0388**	**0.1065**	**0.0850**	**0.1065**	**0.0803**	**0.0857**	**1.0000**

Source: author's calculation

6. EMPIRICAL RESULTS

Based on findings, we conclude that the linear regression model used in this empirical research is specified good, given that R-squared is 0.59. These mean that the variation in independent variables explains the variation in dependent variable for more than 35%. In addition the statistical F-test, shows that all the independent variables, jointly are statistically significant and different from zero. Also, the correlation analysis shows that the problem of correlation in independent variables is not present in our data, given that the higher coefficient is 0.1065. Also, the dependent variable has a normal distribution and does not represent a statistical problem that requires treatment.
Based on the table in appendix 1, in which the results of the linear regression are presented, from nine independent variables, six are statistically significant with impact on the dependent variable, or on investment growth.
According to results, the variable ***firm_age***, is statistically significant and with positive sign. This means that the firms that have been a long time in the business, on average have access to finance in comparison with those of the firms that are a new in business.
The variable ***firm_size,*** is statistically significant and with positive impact in the business finance compared with the firms that are small one. This has the meaning that on average big firms have more possibility to access to finance than small firms. Hence the variable ***female*** is also statistically significant and with negative impact on access to finance when compared with the firms that are managed by the male owners. Similar ascertainments for the case of Kosovo can be found in the work of the author Krasniqi (2010).
The next variable ***collateral*** **is** statistically significant which means that the number of firms that can provide collateral in order to obtain financial credits are more likely to have success then firms without collateral. We have

also variable ***owner_experience*** which is statistically significant but has a negative sign, meaning that owner with higher experience are less likely to apply for business finance in comparison to the other firm owners.

The variable ***owner_edu***, is statistically significant and with negative sign, which means that firms that are managed by high education owners are less likely to obtain bank loans than firms managed by owners with low level of education. This ascertainment is in accordance with findings of many authors who ascertain that education of mangers-owners does not have impact on decision made by officials at the bank to allowed loans for investment in firm business.

Finally the **variable *financial_report***, is statistically significant and has positive sign, which means that the owners of the businesses who provide in regular basis all financial and accounting reports have more probability to obtain bank loans for their businesses.

7. CONCLUSIONS

In this paper, we have investigated empirically the key determinants of access to finance for SMEs in the context of Dukagjini region in Kosovo. The access to finance was a proxy variable captured by the loan size.

The result of this work are mixed and we found that For example, while the result suggests firm size has a positive relationship with access to finance for SMEs, it has a negative coefficient for small firms.

According to the firm age, we found significant positive results for older firms with access to finance. That means older firms can show better information quality to banks when they get older and mature. The results for female ownership showed that women-owned firms experience more financial constraints than the men-owned firms do. This suggests that the potential gender discrimination in the loan market is an especially big concern for developing and emerging countries.

The paper finds also that collateral has a positive effect on loan size for all firms. It also reflects the fact that banks in less developed countries are more comfortable in collateral-based lending. The findings show a financial reports as important factor with statistical significance, which means those firms gain positive influence in the access to the bank loans for financing the SME-s investment. In addition, firms that possess financial reports and use it for seeking bank loans on average have higher possibility to obtain credits for investments than those firms who do not possess financial reports.

Empirical evidence in this work regarding the owner education and owner experience shows a negative impact between owners-managers and creditors (banks) for access to finance.

Findings in this paper represents a clear signal for policy makers to create conditions for a favorable environment for stimulating the sources of external financing of SME-s in Dukagjini region in Kosovo. Some recommendations are related to: establishment of the guarantee fund for business sector, increasing the competition between the existing banks through new entries, reduction of the interest, better conditions for firm collateral.

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