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# FINANCING OBSTACLES OF SMALL ENTERPRISES - EMPIRICAL ANALYSIS IN THE REPUBLIC OF SERBIA $^a$

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#### Abstract

Small enterprises are the driving force of any economy, and the engine of economic growth in both developed countries and countries in transition. One of the problems that small enterprises and entrepreneurs face is the lack of financial resources, or difficult access to them, for starting and financing the development of their entrepreneurial venture.

The aim of the paper is to analyze the financing difficulties of small enterprises and entrepreneurs in the Republic of Serbia. 167 enterprises were surveyed and their responses were grouped into three groups depending on the size of an enterprise: small enterprises and entrepreneurs, medium enterprises and large enterprises so that by comparing the obtained results we could determine the differences in attitudes depending on the size of an enterprise and prove that small enterprises have limited access to financial resources.

The research investigated financing constraints, financial services and approved loan conditions in relation to the size of an enterprise. The results showed statistically significant differences between small, medium and large enterprises in the majority of the observed parameters and that small enterprises and entrepreneurs have difficult access to financial resources.

**Key words**: small enterprises and entrepreneurs, financing obstacles, financial

institutions, loan, risk.

# ОГРАНИЧЕЊА У ФИНАНСИРАЊУ МАЛИХ ПРЕДУЗЕЋА - ЕМПИРИЈСКА АНАЛИЗА У РЕПУБЛИЦИ СРБИЈИ

## Апстракт

Мала предузећа представљају покретачку снагу сваке економије и мотор привредног раста како у развијеним земљама тако и у земљама у транзицији.

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 $<sup>^{</sup>a}$  This paper represents the part of research conducted within the frame of the doctoral studies.

Један од проблема са којим се суочавају мала предузећа и предузетници јесте недостатак финансијских средстава или отежан приступ финансијским средствима за отпочињање и финансирање развоја свог предузетничког подухвата.

Циљ рада је анализа проблема у финансирању са којима се суочавају мала предузећа и предузетници у Републици Србији. У том контексту је спроведено анкетно испитивање 167 предузећа, чији одговори су груписани у зависности од величине предузећа у три групе: мала предузећа и предузетници, средња предузећа и велика предузећа како би се поређењем добијених резултата уочиле разлике у ставовима у зависности од величине предузећа и доказало да мала предузећа имају отежан приступ финансијским средствима.

Истраживање се заснива на ограничењима у финансирању, финансијским услугама и одобреним кредитним условима у односу на величину предузећа. Резултати истраживања су показали да постоје статистички значајне разлике између малих, средњих и великих предузећа по већини испитиваних параметара, као и да мала предузећа и предузетници имају отежан приступ финансијским средствима.

**Кључне речи**: мала предузећа и предузетници, ограничења у финансирању, финансијске институције, кредит, ризик.

## **INTRODUCTION**

The importance of small enterprises and entrepreneurs is not a new phenomenon. This is indicated by the large presence of small enterprises and entrepreneurs in the economies of developed countries and countries in transition.

Regardless of the fact that a good business idea always finds a way to money, the first problem that entrepreneurs and small enterprises face are the funding sources.

According to Schumpeter, the biggest obstacle to innovation is the lack of funds, where the banking system has an important task to meet the needs for loans (Schumpeter, 2012, p. 114). Other studies (Stanković, Đukić, & Lepojević, 2014, p. 1093; Drucker, 2001, p. 15), have confirmed the great interdependence of business success and the level of investment in innovation activities.

In the initial period of business, the most of small businesses use their own sources of funding and resources from their family and friends. When the need for funds overcomes internal capabilities, enterprises turn to banks for additional resources.

The aim of the study is to prove that there are statistically significant differences in the demand for financial services, financial constraints and approved loan conditions in relation to the size of the enterprise.

With that aim, 167 enterprises were surveyed. The responses were categorized into three groups depending on the size of an enterprise in order to prove statistically significant differences in the responses of entrepreneurs and small enterprises, medium and large enterprises.

The results showed that all the differences in responses of small and medium enterprises, as well as small and large enterprises, are statistically significant and that finding the right funding is more difficult for small enterprises and entrepreneurs in relation to medium and large enterprises. The research results are important for a better understanding of the needs and position of small enterprises and entrepreneurs, and thus may be useful for improving their position.

#### THEORY AND HYPOTHESES

Most small enterprises and entrepreneurs start their business using their own resources or savings with the help of their family or partners (Casu, Girardone, & Molyneux, 2006, p. 60). When those resources are not sufficient, an entrepreneur seeks credit funds (Kaplan, 2001, p. 138). Contrary to entrenched attitudes, banks are not the most appropriate source of funding in the initial period of business. Banks avoid risk and financing start-up enterprises is risky.

Banks are interested in companies with a positive cash flow, low leverage levels, good management and reliable financial statements (Van Horne & Wachowicz, JR, 2007, p. 289; Höflich, 2011, p. 91; Scarborough, 2012, p. 250; Down, 2010, str. 129).

For these reasons, banks are a good source of funding at the later stage of an enterprise life cycle (Barringer & Ireland, 2010, p. 355).

In the early stage of business, the number of available financial resources is small. Due to low creditworthiness and unreliable data on the financial situation of enterprises and business ventures, access to external sources of financing is difficult. Banks are reluctant to grant loans, credit conditions are unfavorable, the application procedure is complicated and time consuming. Personal savings are not sufficient and the capital markets in the countries in transition are poorly functioning or not functioning at all.

Klapper, Saria-Allende, & Sulla (2002, p. 18) analyzed the financing of small enterprises in 15 countries in transition - Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovakia, Slovenia, Ukraine, Yugoslavia (Serbia and Montenegro). Most countries show a relatively low level of external financing, while Ukraine has the lowest level. In addition to macroeconomic stability and adequate funding, insecure property rights slow down the development of the private sector.

Based on the Global Competitiveness Report 2015-2016, about the ease of access to loans, the Republic of Serbia is at the 120<sup>th</sup> place out of 140 surveyed countries, but based on the possibility for venture financing it is ranked as the 130<sup>th</sup> (World Economic Forum, 2015, p. 315). It all points to the difficulties in financing enterprises in Serbia and especially small ones which have additional restrictions.

However, external resources are necessary for most entrepreneurs because successful establishment, as well as the management of small and growing enterprise, is a complex, time-consuming and difficult process (Bygrave & Zacharakis, 2004, p. 223).

Some studies show that the lack of adequate collateral is the greatest obstacle in obtaining loans followed by a lack of credit history (Stokes & Wilson, 2010, p. 406).

However, most banks will not approve a loan if the company has no positive cash flows regardless of the offered collateral (Hoflich, 2011, p. 91; Van Horne, Wachowicz, JR, 2007, p. 289). Adequate collateral can never compensate for poor cash flow. In assessing financial risk, Fabozzi and Modigliani favor the analysis of cash flows in relation to financial indicators (Fabozzi & Modigliani, 2009, p. 455).

On the other hand, some authors believe that many owners of small enterprises do not prepare cash flow projections and do not attach importance to the management of cash flows. The negative cash flows, in the early stages of running an enterprise, are the leading cause of failure and loan disapproval by banks (Scarborough, 2012, p. 250).

Down's research confirms everything previously mentioned. He believes that the financial statements and the financial control are less sophisticated and structured in small enterprises in comparison to the large ones, and that is the reason why small enterprises have limited access to banks, particularly when it comes to long-term loans (Down, 2010, p. 129).

High risk includes a high interest rate as the cost of risk, and in the case that the banks decide to support a project, financing costs become high. This is confirmed in research by Ayyagari, Kunt, & Maksimovic (2008, p. 510).

According to Casu et al., (2006, p. 64) small enterprises rely more on short-term and overdraft loans, while access to long-term loans is more important to large enterprises. In his research, Schlesinger (1987, p. 52) claims that access to loan is important for small enterprises, especially the ability to obtain short-term loans, while growing enterprises need long-term loans more. In his study of small enterprises, Schlesinger (1987, p. 50) noted that in addition to interest rates and the ease of access to loans, a wide range of banking products is of great importance in providing financial services.

According to the USAID (2012, p. 16; 21; 31), enterprises believe that services are not adjusted to their needs, so, as many as 60% of the SMEs sector considers that the duration of the loan, repayment terms and collateral do not suit their current needs. Data for small businesses were not available.

This paper analyzes the financing limitations of small enterprises and entrepreneurs.

Starting from the above, the following hypotheses are tested:

H1: High interest rates and difficult access to financial resources for the establishment and growth of enterprises are the largest of the financial constraints faced by small enterprises and entrepreneurs.

H2: Small enterprises and entrepreneurs have more difficulties in accessing funding sources than medium and large enterprises, and satisfaction with approved loan conditions is lower.

## RESEARCH METHODOLOGY

## Sample and Procedures

Empirical research for 167 enterprises was conducted by collecting and analyzing primary data through market research using surveys. Enterprises are divided into three groups. The first group consists of small enterprises and entrepreneurs, the second group of medium enterprises and the third group of large enterprises. The criteria for the classification of enterprises by size, according to the Law on Accounting from 2013, is the number of employees, the amount of operating income and average value of operating assets (Закон о рачуноводству, 2013).

The selection of units in the sample was made by using a random sample in each stratum. It is believed that each sample where n> 30 is a large sample, and in our study, the number of enterprises in each stratum is larger than 30.

The main aim of the research is to demonstrate the existence of differences in financing constraints and in the impact of specific instruments of credit policy on business, in relation to the size of the enterprise in order to, by comparing the obtained results, show, that small enterprises and entrepreneurs have difficult access to finance. The surveys were filled out by the owners or directors of enterprises in consultation with the CFO when it comes to large enterprises.

The following Table shows the structure of the sample in terms of the size of an enterprise.

Table 1. Overview of the sample according to the size of an enterprise

Variable	Category	$\operatorname{f}^*$	%
Size of an enterprise	Small enterprises and entrepreneurs	85	50.9
	Medium enterprises	44	26.3
	Large enterprises	38	22.8
	Total	167	100.0

The surveyed sample mostly consists of enterprises engaged in trade (27.5%), followed by enterprises engaged in manufacturing (24.0%), construction (10.8%), accommodation and food services (7.8%), agriculture, forestry and fishing (6.6%) and other.

Data were collected from February to June 2014, in the Republic of Serbia. The data were analyzed in the statistical program - SPSS Statistics 17.0. Descriptive statistics was used to quantitatively describe the sample and the observed phenomena, the chi-square test, the analysis of variance and the difference between means were used for testing the differences between the observed groups. After a descriptive analysis, the aim of the research was to determine whether there is statistically significant difference (p <0.05) between the Mean values for all three groups of enterprises. To calculate the variance, the following parameters were used: ss (sum of squares) or the sum of squared deviations, df (degrees of freedom) or the number of degrees of freedom, MS (mean square) or the average of the squared deviations, F test for the analysis of variance and p that represents the level of statistical significance for the value of F.

Since the F value does not answer the question of whether a significant difference exists between all mean values or only between the individual ones, and in order to determine among which mean values statistically significant difference is present, the post hoc test or subsequent test is used.

#### Measures

The survey consists of the following components:

- Basic information about the enterprise
- Limitations in enterprise financing
- Types of banking services that enterprises used and satisfaction with approved loan terms.

Respondents answered three groups of questions. The first group included basic information about the enterprise related to the categorization based on size and primary activity of an enterprise.

Independent variables that refer to the enterprises are grouped by size and they are defined in accordance with the criteria set out in the current Law on Accounting, which are determined based on financial statements for each financial year.

In the second part of the survey, the respondents were evaluating items that might pose constraints in financing their enterprises. In this part of the survey, the respondents ranked the items using the 5-point scale (1 - very poor, 2 - poor, 3 - medium, 4 - good, 5 - very good).

The questions in this part of the questionnaire are closed, which means that the respondents choose between one of several predefined answers.

The third and last part of the survey consists of two parts. The first part examines whether the enterprises used a banking service and, if so, it was necessary to specify the types of loans and services that they used.

This part of the survey consists of a combination of open and closed questions because the respondents choose between several predefined answers relating to the type of banking services and one additional category where the respondents could put their own response.

The second part analyzes the impact of specific instruments of the credit policy of a bank through the Likert scale rating, and analyzes the procedure of obtaining a loan, lease or guarantees, interest rates and other fees and repayment period. In this case as well, the respondents ranked items using the 5-point scale (1 – very poor, 2 – poor, 3 – medium, 4 – good, 5 – very good).

The Likert scale is an instrument used in this paper primarily to evaluate the respondents' attitudes. It is used to measure the acceptance and intensity of the attitudes of the respondents. In order to get a satisfactory reply, it was necessary to define each variable and assign a number to each of the five possible answers.

This scale is widely used and allows a wider range of possible responses, and increases the number of statistical analysis that can be applied (Pallant, 2011, p. 9).

Based on the results of the Likert scale, descriptive statistics followed, i.e. calculation of the average score, display of minimum and maximum score and calculation of the standard deviation and then the analysis of variance and post hoc test.

## RESULTS AND DISCUSSION

## Limitations in Financing Small Enterprises

Despite numerous limitations due to the number of challenges that enterprises face and which affect their businesses, the survey includes the most common items that represent those limits and contributing factors. The aim of this part of the research is to detect differences in the responses of small, medium and large enterprises and to assess whether these differences are statistically significant. In addition, the goal is to investigate if there are any differences between difficulties that small, medium or large enterprises face. The following table shows the descriptive analysis of the answers to the following questions.

Table 2. Descriptive analysis of the responses according to the size of the company

Small enterprises and e	Small enterprises and entrepreneurs						
	$N^*$	Min	Max	Mean	SD		
1. The ability to offer high quality	85	1.00	5.00	2.9529	.98689		
collaterals to the bank (q1)							
2. The amount of bank interest rates and	85	1.00	5.00	1.7529	.89849		
fees for loans and other services (q2)							
3. The possibility of submitting the required	85	1.00	5.00	3.0588	.96797		
information to banks for credit rating (q3)							
4. The speed of loan approval (q4)	85	1.00	5.00	2.6000	.94112		
5. The wide range of banking products (q5)	85	1.00	5.00	3.0706	.68640		
6. The development of support services	85	1.00	5.00	2.6588	.76459		
outside the company (legal, business,							
institutional support) (q6)							
Medium enterp	rises						
	N	Min	Max	Mean	SD		
1. The ability to offer high quality	44	1.00	5.00	3.6136	.94539		
collaterals to the bank (q1)							
2. The amount of bank interest rates and	44	1.00	5.00	2.8864	.81315		
fees for loans and other services (q2)							
3. The possibility of submitting the required	44	2.00	5.00	4.0000	.74709		
information to banks for credit rating (q3)							
4. The speed of loan approval (q4)	44	1.00	5.00	3.1364			
5. The wide range of banking products (q5)	44	1.00	5.00	3.5909	.87120		
6. The development of support services	44	2.00	5.00	3.6364	.74991		
outside the company (legal, business,							
institutional support) (q6)							
Large enterpr	ises						
	N	Min	Max	Mean	SD		
1. The ability to offer high quality	38	3.00	5.00	4.3947	.59455		
collaterals to the bank (q1)							
2. The amount of bank interest rates and	38	2.00	5.00	2.9474	.95712		
fees for loans and other services (q2)							
3. The possibility of submitting the required	38	3.00	5.00	4.5263	.60345		
information to banks for credit rating (q3)							
4. The speed of loan approval (q4)	38	1.00	5.00	3.0263	1.1267		
5. The wide range of banking products (q5)	38	2.00	5.00	3.4737	.95115		
6. The development of support services	38	3.00	5.00	4.1579	.54655		
outside the company (legal, business,							
institutional support) (q6)							

<sup>\*</sup> Note: N – number of companies within a specific group according to their size, Min – the minimum value, Max – the maximum value, Mean – the average value, SD – the spread of scores within a set of data, or standard deviation.

The analysis of variance showed that the responses of the owners or managers of small, medium and large enterprises differ significantly for all questions, because the resulting p value of these responses is less than 0.05.

Table 3. The analysis of variance – differences in the responses in relation to the size of an enterprise

Variable	SS*	df	MS	F	р
Q1	56.091	2	28.045	34.499	.000
Q2	56.401	2	28.200	35.538	.000
Q3	64.264	2	32.132	45.357	.000
Q4	10.079	2	5.040	5.279	.006
Q5	9.343	2	4.672	7.249	.001
Q6	67.588	2	33.794	65.712	.000

Source: Author's calculation

\* Note: The SS – a sum of squared deviations, df – degrees of freedom, MS – average square deviation, F – F test for the analysis of variance and p – level of statistical significance for F

In order to determine within which groups statistically significant differences are spotted, the analysis of variance and post hoc test must be also done.

Table 4. The analysis of variance – post-hoc test for significant differences

Variable	Size of an enterprise	Size of an enterprise	Mean difference	SD	p
	small	medium	66070	.16745	.000
Q1	small	large	-1.44180	.17595	.000
	medium	large	78110	.19967	.000
	small	medium	-1.13342	.16544	.000
Q2	small	large	-1.19443	.17383	.000
•	medium	large	06100	.19727	.758
	small	medium	94118	.15632	.000
Q3	small	large	-1.46749	.16425	.000
•	medium	large	52632	.18639	.005
	small	medium	53636	.18146	.004
Q4	small	large	42632	.19066	.027
-	medium	large	.11005	.21637	.612
	small	medium	52032	.14909	.001
Q5	small	large	40310	.15665	.011
_	medium	large	.11722	.17778	.511
	small	medium	97754	.13318	.000
Q6	small	large	-1.49907	.13994	.000
	medium	large	52153	.15881	.001

Using the post-hoc test for significant differences in comparison between groups (small enterprises with medium enterprises, medium with large and small enterprises with the large ones) leads to the conclusion that all differences in the responses of small and medium enterprises, as well as small and large enterprises are statistically significant.

The first item to be analyzed is the ability to offer quality collaterals to the bank. By analyzing the given results, it can be noted that small enterprises and entrepreneurs ranked this item with 2.95, medium enterprises ranked it with 3.61, and large enterprises ranked it with the highest mark of 4.39. The results show that small enterprises have more difficulties in delivering quality collateral to the bank and thus obtaining a loan, especially long-term loans when a mortgage is constituted on the movable and immovable assets. This problem is present in the case of large enterprises as well, but the situation is not the same. These enterprises have an advantage because they tend to have registered and booked assets in their balance sheets and they have the equipment of greater value that can be offered to the bank. This indicates that small enterprises have limited access to loans, because certain researches show that the lack of adequate collateral is the greatest obstacle in obtaining loans (Stokes & Wilson, 2010, p. 406). The analysis of variance showed that the differences in the responses within all groups of enterprises are statistically significant (p < 0.005).

The next item analyzed by enterprises regarding their relationship with the bank is the amount of bank interest rates and fees for loans and other services. High risk means high interest rate as the cost of risk, and in the case that banks decide to support a project, financing costs become high. Results of descriptive analysis show that small enterprises ranked it as the lowest with 1.75, medium enterprises with 2.89 and large enterprises with 2.95. The analysis of variance confirmed the statistically significant differences in ranking related to small and medium enterprises, and in those related to small and large enterprises. An exception is seen in ranking related to medium and large enterprises.

Given that small enterprises and entrepreneurs are much more dependent on banks as a source of financing than large enterprises, they are, due to their size, very sensitive to changes in interest rates. These results are confirmed by the Report on the Conditions, Needs and Problems of the SMEs in Serbia in 2013, according to which 78% of enterprises claimed that their high interest rates were the biggest problem in running a business (Национална агенција за регионални развој, 2013, p. 25).

The next item that the enterprises evaluated is the possibility of submitting the required information to banks for credit rating. It usually includes financial statements for the previous period, financial projections for the loan repayment period, a business plan, status documentation and the like. When it comes to small enterprises, it can often be very aggravating.

The results of the descriptive analysis show that small enterprises and entrepreneurs ranked it as the lowest with 3.06, medium enterprises with 4.0, and large enterprises ranked it with 4.53, because for them, this issue does not represent a significant limitation. The analysis of variance confirmed statistical significance of the differences obtained.

The following limitation analyzed is the speed of loan approval. Research shows that small enterprises and entrepreneurs ranked the speed loan approval with an average of 2.60. which is the lowest mark given. Medium and large enterprises are slightly more satisfied with the speed of loan approval and thus rated it with 3.14 and 3.03 respectively. The analysis of variance showed a statistically significant difference in the responses of small and medium enterprises and small and large enterprises. The differences in the responses of medium and large enterprises are not statistically significant.

Each bank develops its own procedures for dealing with clients. Large enterprises with regard to their size, the number of professional staff and other capacities more developed, easily and quickly meet the demands of banks, and therefore the speed of loan approval is higher.

A wide range of banking products includes a mix of products and services that modern financial institutions provide their customers with. The results of the descriptive analysis show that small enterprises ranked the wide range of banking products as the lowest with 3.07, medium enterprises ranked it higher with 3.59, and large enterprises ranked it with 3.47. Even though the wide range of banking products is more important for large enterprises, because they, due to their size and complexity of the business, require a wider range of banking services while small enterprises are mainly focused on loans and usually short-term ones.

However, compared to other previously analyzed items, the wide range of banking products represents a smaller problem for small enterprises and was thus ranked with a higher mark. In the first phase of running an enterprise, it is important to gain access to the bank and its basic services, and then with the growth of an enterprise, the need for more complex, more diverse services is being developed.

The analysis of variance confirmed statistically significant differences in ranking related to small and medium enterprises, and in those related to small and large enterprises. An exception is seen in ranking related to medium and large enterprises.

Business of small enterprises and entrepreneurs is risky because of the uncertainty that they are faced with. However, the support to small enterprises is often missing, which will be seen through the following data.

The development of support services outside the enterprise (legal, business, institutional support) was ranked with an average score of 2.66 by small enterprises and enterpreneurs, the medium enterprises ranked it with 3.64, and large enterprises with 4.16. The analysis of variance showed

that all differences in the responses are statistically significant. For large enterprises, the lack of counseling services is not a problem, because these enterprises have their own professional staff.

In the Republic of Serbia the large obstacle is ignorance about the possibility of using business support services. Even "The Strategy to Support Development of SMEs, Entrepreneurship and Competitiveness for the period from 2015 to 2020" (Влада Републике Србије, 2015), in its columns lists the activities for the development of support services.

## Analysis of the Use of Financial / Banking Services

The study showed that all surveyed large enterprises used some of the banking services, as well as 97,73% of medium enterprises, and 70.59% of small enterprise, which can be seen in the following diagram.

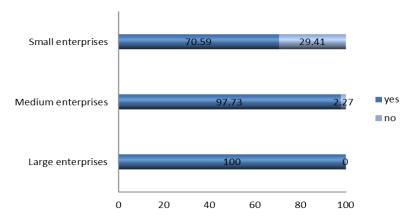


Figure 1. Have you used loans and other banking services, %? Source: Author's calculation

Table 5 indicates that differences in the responses of small, medium and large enterprises are statistically significant.

Table 5. Chi-square test - the differences between the enterprises in using loan

Variable	$x^{2*}$	df	p
The use of loans and other banking services	25.316	2	.000

<sup>\*</sup> Note:  $x^2$  represents a chi-square test, df – degrees of freedom and p is the probability of a random phenomenon.

The next task of the research was to determine what type of banking services enterprises used.

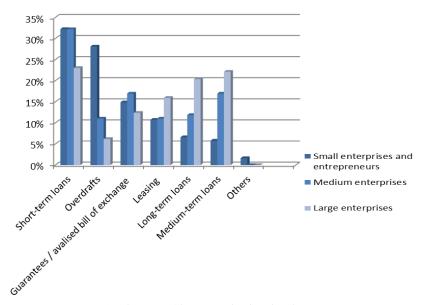


Figure 2. The use of loans and other banking services
Source: Author's calculation

The data show that small enterprises and entrepreneurs most commonly use short-term loans (32.2%), overdrafts (28%), guarantees and avalised bill of exchange (14.9%), leasing (10.7%), while long-term (6.6%) and medium-term loans (5.8%) are underrepresented.

A large percentage of medium enterprises uses short-term loans (32.2%), guarantees and avalised bill of exchange (17%), medium-term loans (17%), long-term loans (11.9%), leasing (11%) and overdrafts (11)%.

In large enterprises, most common are short-term loans (23%), followed by medium-term loans (22%), long-term loans (20.4%), leasing (15.9%), guarantees and avalised bill of exchange (12.4%) and finally overdrafts (6.2%).

Analysis of the approved financing conditions

Table 6 shows the descriptive analysis of the responses of each enterprise.

Table 6. Ranking of approved loan conditions – the difference in the answers in relation to the size of the company

Small enterprises and entrepreneurs						
_	N	Min	Max	Mean	SD	
1. Obtaining loans, lease or guarantees (q1)	85	1.00	5.00	2.3176	.94127	
2. The interest rate and other fees (q2)	85	1.00	5.00	1.8000	.82808	
3. Loan repayment period (q3)	85	1.00	5.00	2.7647	.82588	
Medium enter	rpris	es				
	N	Min	Max	Mean	SD	
1. Obtaining loans, lease or guarantees (q1)	44	1.00	4.00	2.9545	.74567	
2. The interest rate and other fees (q2)		1.00	4.00	2.4091	.78705	
3. Loan repayment period (q3)		2.00	4.00	3.3182	.51817	
Large enterp	rises	S				
	N	Min	Max	Mean	SD	
1. Obtaining loans, lease or guarantees (q1)	38	2.00	5.00	3.5789	.64228	
2. The interest rate and other fees (q2)	38	2.00	5.00	3.0000	.83827	
3. Loan repayment period (q3)	38	3.00	5.00	3.9474	.65543	
C						

Source: Author's calculation

The analysis of variance showed that the responses of small, medium and large enterprises are significantly different for all questions. The calculated values are shown in the table 7.

Table 7. The analysis of variance – differences in responses in relation to the size of an enterprise

Variable	SS	df	MS	F	p
Q1	43.758	2	21.879	31.587	.000
Q2	39.656	2	19.828	29.498	.000
Q3	37.876	2	18.938	36.654	.000

Source: Author's calculation

And the post hoc test showed that the differences are statistically significant, and present, among all three groups of enterprises.

The first item to be ranked is the procedure for obtaining loans, lease or guarantees. Based on the descriptive analysis, it is noticed that the small enterprises and entrepreneurs ranked this item with the lowest average mark of 2.32. Medium enterprises ranked it higher with 2.95, and large enterprises ranked it with the highest mark of 3.58. Based on these facts it can be concluded that large enterprises are the most satisfied with the procedure for obtaining banking services, while for the small enterprises and entrepreneurs it is still a limitation. Large enterprises are familiar with most of the banking procedures and in addition, they have the professional and technical capacity to meet them.

*Table 8. The analysis of variance – post-hoc test for significant differences* 

Variable	Size of an enterprise	Size of an enterprise	Mean difference	SD	p
	small	medium	63690 .	15457	.000
Q1	small	large	-1.26130 .	16241	.000
	medium	large	62440 .	18431	.001
	small	medium	60909 .	15226	.000
Q2	small	large	-1.20000 .	15999	.000
	medium	large	59091 .	18156	.001
	small	medium	55348 .	13350	.000
Q3	small	large	-1.18266 .	14027	.000
	medium	large	62919 .	15918	.000

Source: Author's calculation

Further on, the presented data show that all enterprises ranked the level of interest rates and other fees very low. However, small enterprises ranked this item with the lowest mark of 1.8, medium enterprises marked it slightly higher with 2.41, while large enterprises marked it as the highest with 3.0. These data can be explained by the fact that small enterprises, and especially entrepreneurs, due to their size, are sensitive to interest rates, while large enterprises, because of their size, have the capacity to negotiate and obtain better conditions.

The data showed that small enterprises and entrepreneurs are least satisfied with the approved repayment period, and ranked it with an average of 2.76. Medium enterprises have expressed their satisfaction by ranking it with 3.32, and large enterprises with 3.95.

## **CONCLUSION**

Besides the theoretical assumptions, the study was based on a survey of 167 enterprises in the Republic of Serbia in order to analyze the limitations in financing small enterprises and entrepreneurs.

Analyzing the potential financing limitations of small enterprises and entrepreneurs in Serbia, it is noted that the level of interest rates is the major limitation. The speed of loan approval is the second limitation that small enterprises face. The research results confirm the first hypothesis H1: High interest rates and difficult access to financial resources for the establishment and growth of enterprises are the largest of the financial constraints faced by small enterprises and entrepreneurs. The complicated and long procedure of loan approval, impedes and discourages the enterprise's access to banks, and high interest rates, which are of great importance for small enterprises, do not stimulate investment adequately.

Short-term loans are the most frequently used banking service for all types of enterprises, regardless of size. Small enterprises, due to simpler approval procedures, commonly use short-term loans for working capital and overdraft. This is the result of strict banking criteria that banks impose when authorizing higher amounts or long-term loans.

According to the frequency of use, medium and long term loans come as second or third for large enterprises, and they come as last for small enterprises. The reason for that are stricter loan approving conditions and complex loan approving procedure, high collaterals and other banking criteria that small enterprises find harder to fulfill. Guarantees and avalised bill of exchange are mostly used by small and medium enterprises because they are often the borrowers with the Development Fund of the Republic of Serbia and the Vojvodina Development fund, which seek the bank guarantee or avalised bill of exchange as collateral.

Looking at the approved loan conditions, it can be concluded that small enterprises and entrepreneurs are the most dissatisfied with the approved loan terms. Also, it is noted that they worst-ranked interest rates and other fees, then the procedure of loan approval. However, regardless of the size of an enterprise, the level of interest rates is an item that was ranked as lowest by all types of enterprises.

Research showed that all differences in responses of small and medium enterprises, and small and large enterprises as well, are statistically significant, and that finding the proper funding is a greater difficulty for small enterprises and entrepreneurs than for medium and large ones. This confirms the second hypothesis H2: Small enterprises and entrepreneurs have more difficulties in accessing funding sources than medium and large enterprises, and satisfaction with approved loan conditions is lower.

Due to the results of the research and hypothesis confirmed, it can be concluded that the access to funds is a challenge for every enterprise; however, the limitations in funding represent a much bigger problem for small enterprises and entrepreneurs.

Recommendations for future research are to carry out the testing of commercial banks in the Republic of Serbia. The results and their views on the issue of financing small enterprises and entrepreneurs would be of great importance because it would provide a comprehensive and complete picture of the problem of financing these enterprises.

Although this paper shows only one dimension of financial constraints of small enterprises and entrepreneurs, based on the data obtained by the enterprises, it is of great importance because these results indicate the difficult position of small enterprises in access to finance. This paper can be a starting point for improving the situation of small enterprises and it can be of great importance not only to financial institutions, but to complete institutional infrastructure for supporting small enterprises in the Republic of Serbia.

## REFERENCES

- Ayyagari, M., Kunt, A., & Maksimovic, V. (2008). How Important Are Financing Constraints? The Role of Finance in the Business Environment. *The World Bank Economic Review*, Vol 22, NO. 3, 483–516.
- Barringer, B., & Ireland, R. (2010). *Entrepreneurship, Successfully Launching New Ventures*. Third Edition, Pearson Education Limited.
- Bygrave, W., & Zacharakis, A. (2004). *The Portable MBA in Entrepreneurship*. Third Edition, John Wiley & Sons, Inc.
- Casu, B., Girardone, C., & Molyneux, P. (2006). *Introduction to Banking*. Pearson Education Limited.
- Down, S. (2010). Enterprise, Entrepreneurship and Small Business. Sage Publications Ltd. Drucker, P. (2001). Moj pogled na menadžment. Adižes, Novi Sad.
- Fabozzi, F., & Modigliani, F. (2009). Capital Markets Institutions and Instruments. International Edition, Pearson Education Limited.
- Hoflich, P. (2011). Banks at Risk, Global Best Practices in an Age of Turbulence. John Wiley & Sons.
- Kaplan, J. (2001). Getting Started in Entrepreneurship. John Wiley & Sons, Inc.
- Klapper, L., V. Saria-Allende, V., & Sulla, V. (2002). Small and Medium-Size Enterprise Financing in Eastern Europe. World Bank Policy Research, Working Paper, 2933.
- Национална агенција за регионални развој (2013). Истраживање о стању, потребама и проблемима МСПП у Србији. Београд [National Agency for Regional Development. Report on the Conditions, Needs and Problems of SMEs in Serbia. Belgrade].
- Pallant, J. (2011). SPSS, Priručnik za preživljavanje, [SPSS Survival Manual], IV izdanje. Mikro knjiga, Beograd.
- Scarborough, N. (2012). *Effective Small Business Management*, An Entrepreneurial Approach, Tenth Edition. Pearson Education Limited.
- Schlesinger, W., Unsal, F., & Zaman, M.R. (1987). Attributes of Sound Banking as Perceived by Small Businesses: Results of a Survey. *Journal of Small Business Management*, Vol. 25, No. 4.
- Schumpeter, J. (2012). *Teorija privrednog razvoja*, srpsko izdanje. [*Theory of Economic Development*. Serbian Edition], Službeni glasnik, Beograd.
- Станковић, Љ., Ђукић, С., & Лепојевић, В. (2014). Innovation Capacities of Serbian Small and Medium-Sized Enterprises. *Teme*, Ниш, No 3/2014, 1077–1093.
- Stokes, D., & Wilson N. (2010). Small Business Management and Entrepreneurship. Cengage Learning EMEA, Hampshire.
- USAID (2012). Финансирање раста малих и средњих предузећа, Пројекат за боље услове пословања. Београд [Financing the Growth of Small and Medium Enterprises, Business Enabling Project. Belgrade].
- Van Horne, J., & Wachowicz, J. JR (2007). *Osnovi finansijskog menadžmenta*. [Fundamentals Financial Management], Data status, Beograd.
- Влада Републике Србије (2015). Стратегија за подршку развоја малих и средњих предузећа, предузетништва и конкурентности за период од 2015. до 2020. године. [Government of the Republic of Serbia, *The Strategy to Support the Development of SMEs, Entrepreneurship and Competitiveness* for the period from 2015 to 2020].
- World Economic Forum (2015–2016). The Global Competitiveness Report.
- Закон о рачуноводству [Law on Accounting], Службени гласник Републике Србије, 62/2013.

## ОГРАНИЧЕЊА У ФИНАНСИРАЊУ МАЛИХ ПРЕДУЗЕЋА - ЕМПИРИЈСКА АНАЛИЗА У РЕПУБЛИЦИ СРБИЈИ

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#### Резиме

Мала предузећа и предузетници представљају носиоце привредног развоја како развијених земаља тако и земаља у транзицији. Да би се ова предузећа оснивала и развијала, неопходан им је приступ финансијским средствима. Међутим, приступ капиталу представља велико ограничење за ова предузећа.

Аутор се у раду бави анализом ограничења у финансирању малих предузећа и предузетника. С тим циљем извршено је испитивање 167 малих, средњих и великих предузећа, чији одговори су груписани у три групе у зависности од величине предузећа.

Циљ спроведеног истраживања је доказати да постоје статистички значајне разлике у потребама за финансијским услугама, ограничењима у финансирању и одобреним кредитним условима у односу на величину предузећа и да се упоређивањем добијених резултата покаже да мала предузећа и предузетници имају отежан приступ финансијским средствима у односу на средња и велика предузећа.

Резултати истраживања су показали да је висина каматних стопа највеће ограничење за мала предузећа и предузетнике, а потом следи брзина приступа кредитима. Истраживање је показало и да постоје значајне разлике у заступљености појединих банкарских услуга које предузећа користе. Мала предузећа и предузетници су најнезадовољнији одобреним кредитним условима и најлошије су оценили висину каматних стопа и других накнада, а затим процедуру добијања кредита.

Може се закључити да су све разлике у одговорима малих и средњих, као и малих и великих предузећа статистички значајне и да је проналажење одговарајућих финансијских средстава већа потешкоћа за мала предузећа и предузетнике у односу на средња и велика предузећа.