CHAPTER 25.

PROMOTING AVAILABILITY OF FINANCING TO SMEs IN SERBIA ON THE ROAD TO EU INTEGRATION[1]

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Abstract:

Access to finance has been identified as the most important factor that determines the survival and development of Small and Medium-sized Enterprises (SME). Depending on the financing needs, different sources of funding are available to SMEs. However, most of their external financing sources relate to debt. The aim of the chapter is to analyse whether the use of debt as the dominant source of finance for SMEs is economically reasonable in the ruling market circumstances in Serbia or it is necessary to promote alternative sources such as equity capital. The analysis and evaluation of debt and its economic reasonability in terms of maintenance of the real capital value, the inflation rate and the organic composition of assets were conducted on the randomly selected sample of enterprises from the SME sector in Serbia in the 2009-2011 period of time. The sample consists of 30 randomly selected SMEs. Half of the surveyed enterprises are small enterprises, while another half refers to medium-sized enterprises. In addition to examining the possibilities of maintaining debt at acceptable levels, the survival, growth and development of SMEs was perceived through the analysis and evaluation of their ability to maintain the real value of equity. The results of the analysis indicate an increasing tendency among Serbian SMEs to use debt as a source of finance. However, the analysis points out that the growth of debt could not be considered economically reasonable. In light of that basic recommendations for promoting alternative sources of finance i.e. equity capital are provided.

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INTRODUCTION

Small and Medium-sized Enterprises (SMEs) are considered to be the backbone of almost all economies in the world. As a source of employment, GDP growth and innovation they are the single most important generator of economic growth and development. SMEs are particularly important in transition economies because they are dealing with issues such as high unemployment, low economic activity, low competitiveness and unequal distribution of income and wealth. In Serbia, an increasing share of SMEs in all major macroeconomic indicators points out that they are essential for the economic recovery. SMEs are expected to have a key role in the restructuring process of the Serbian economy and on its road to EU integration.

Access to finance has been identified as the most important factor that determines the survival and development of SMEs. SMEs are often faced with limited access to adequate, in terms of conditions and prices, financial resources from both money and capital markets (Erić, Beraha and Đuričin 2011, p.64). Obtaining adequate financing is difficult for a number of reasons. The most important ones refer to the asymmetric information between SMEs and external financiers i.e. entrepreneurs possess more information on their businesses than the potential external financiers; high risk and uncertainty that are often associated with SME's business activities (Erić, Beraha and Đuričin 2011); and high transaction costs in handling SME financing.

Depending on the financing needs, different sources of funding are available to SMEs. Financing needs vary with the life cycle stage of an enterprise. Small businesses are usually established by an individual i.e. entrepreneur or small groups of people who have entrepreneurial ideas and funds and/or are financially supported by family and friends in return for a share in the company. As enterprises grow and develop, the need for innovation and investment occurs and financial needs of SMEs go well beyond their internal capabilities. This is when the use of external financing becomes important and the problems occur because obtaining finance is usually much more difficult for SMEs than for large enterprises.

Debt financing is the primary source of financing for SMEs. Most SME's external financing sources relate to debt. It is much more available than equity capital because there is a relatively small proportion of SMEs able to attract equity investors. SMEs are often too small to be investable and they lack potential for high growth. In most countries, particularly in transition and developing economies, commercial banks are the main source of finance for SMEs. In Serbia promoting availability of both debt and equity finance is especially important since the SME sector is expected to have a key role on the road to EU integration.

The aim of the chapter is to analyse whether the use of debt as the dominant source of finance for SMEs is economically reasonable in the ruling market circumstances in Serbia or it is necessary to promote alternative sources such as equity capital. In order to achieve this objective i.e. to find out whether the growth of debt is reasonable from an economic point of view, the analysis and evaluation of debt and its economic reasonability in terms of maintenance of the real capital value, the inflation rate and the organic composition of assets were conducted on randomly selected sample of enterprises from the SME sector in the 2009-2011 period of time. The sample consists of 30 randomly selected SMEs while half of the surveyed enterprises are small enterprises and another half refers to medium-sized enterprises.

In addition to examining the possibilities of maintaining the debt at acceptable levels, the survival, growth and development of SMEs in Serbia was perceived through the analysis and evaluation of SME's ability to maintain the real capital value i.e. uninterrupted physical volume of business activities and finance at least simple reproduction from their own sources.

The structure of the chapter is as follows. Section 1 describes the data and methodology of analysis. Section 2 presents the key theoretical issues regarding debt financing of SMEs in general and particularly in Serbia. Section 3 presents the results of the analysis of the structure of financing sources of the randomly selected SMEs in Serbia. The last section concludes.

DATA AND METHODOLOGY

The analysis of the structure of financing sources of randomly selected SMEs through the assessment of the level of debt and the maintenance of real capital value based on the effects of revaluation and accumulated net income was performed by using the following methods: qualitative and quantitative analysis (Rodić, Vukelić and Andrić 2007, p.131), mathematical methods, classical data collection and analysis methods, description method and synthesis method.

The decomposition method was used to determine qualitative elements and the measurement method to determine quantitative elements of the subject of analysis. The complex subject of analysis is broken down by subject and time. The object's structure and main features were thus determined. The subject breakdown was applied when calculating the net equity index. In that case, the structure of equity was evaluated in order to find out the share of retained earnings of the current fiscal year in the value of equity, as well as whether an enterprise reported a loss to the amount of equity. This method was also applied in the assessment of an enterprise's debt level, when the total sources of financing were divided into equity and debt. The debt financing sources were broken down further by subject to the liabilities on which interest is paid and liabilities on which interest by rule is not paid. This significantly contributed to the quality of research as it provided a precise insight into the percentage increase of the share of financial and operating liabilities. The breakdown by time was used to determine whether the growth of debt was reasonable through the organic composition of assets when the assets of a company were divided into the long-term and short-term or the permanent and working assets. The use of measurement method started with determining the suitable unit of measure and mass to be measured. For these two values it was necessary to determine whether they expressed the same unit of measure, whether they had the same features and whether they were reported in the same values. The precondition of quantitative analysis which is related to the same unit of measure was fulfilled by expressing the unit of measure and the mass to be measured in RSD value units. Also, it was determined that the unit of measure and the mass to be measured expressed the same subject in the quantitative manner and had the same features and characteristics. Finally, expressing the unit of measure and the mass to be measured in the same value units was achieved by eliminating the impact of inflation.

After qualitative and quantitative characteristics of the subject of analysis had been determined, the method of comparison over time, in space, with rule and with axiom was used. The comparison over time was performed by monitoring the movement of values of the subject of analysis in the number of successive periods i.e. by using data from financial statements in the period 2009-2011. The comparison in space was performed by comparing the analysis results of one enterprise with the results of others. In spatial analysis the criterion of the same size of surveyed enterprises was met, while the limitations of this method, due to the application of random sampling, are expressed in terms of the type of activity, human resources structure, environmental conditions, market position and technical equipment. Assuming that a smaller number of SMEs in Serbia is engaged in export activities, the further breakdown of debt financing sources by spatial criterion to obligations to domestic and obligations to foreign creditors was not conducted, which refers to the second limitation of this method. The method of comparison with the rule was applied in the assessment of the debt level when the traditional financial rule was applied. The traditional financial rule for the debt to equity ratio is 1: 1 and for the assets to liabilities ratio 2: 1. Since no mathematical evidence was confirmed, the comparison with the axiom was performed based on the logical assumptions, knowledge and previous experience. As the organic composition of assets in the surveyed SMEs increased and the maintenance of real capital value worsened, it was concluded that the debt financing sources were mostly used for acquiring new fixed assets, rather than for working assets and requisite assets renewal.

Regarding the mathematical methods, the determination of interdependence of phenomena by correlation was used. It was determined that an increase in external sources of financing in the liabilities side of the balance sheet affected the growth of fixed assets in the assets side of the balance sheet, while an accurate index of correlation was not calculated.

Regarding the classical data collection and analysis methods, the following two were used: the content analysis method and the method of random sampling. Based on the relevant literature, the content analysis method provided the data necessary to verify the hypotheses.

The description method was used mostly when explaining the results of the research and when arguing the current market conditions in Serbia and the need to promote alternative sources of finance for SMEs.

The synthesis method, as the process of connecting elements in a single complex entity, was used in the final stage of the analysis. By combining the facts that had been reached using the above mentioned methods in a single logical unit, the conclusions on the justification of the growth of external in the total sources of financing were drawn.

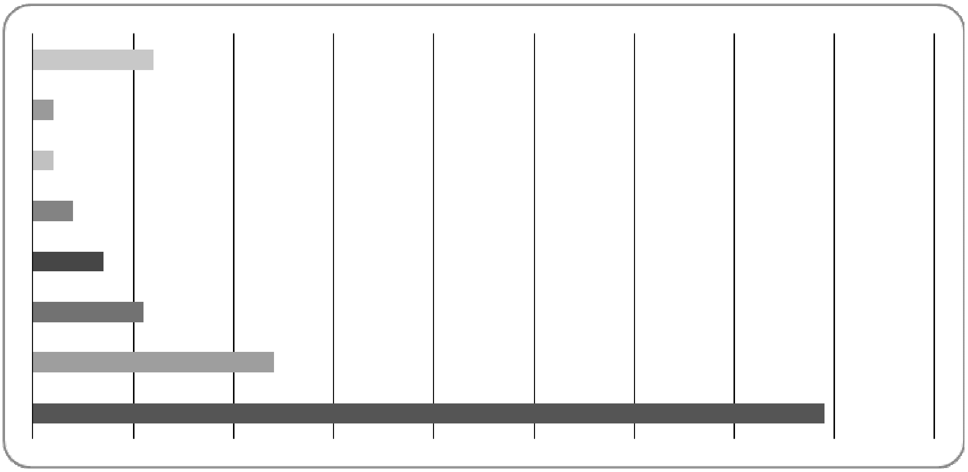
The analysis is based on the data contained in the set of financial statements of individual enterprises under survey for the 2009-2011 period of time. The financial statements were taken over from the Serbian business registers agency.

DEBT FINANCING OF SMALL AND MEDIUM-SIZED ENTERPRISES

Debt financing refers to raising funds by borrowing from individual or institutional creditors who are in return for lending the money entitled to the payment of interest and loan. Debt financing can be long-term or short-term. Long-term debt financing is used to purchase or improve assets such as facilities, large equipment, plants and real estate, while short-term debt financing provides the business with liquidity to conduct its day-to-day operations. There are a variety of sources of debt, but commercial banks are the main source of debt financing for SMEs.

Debt financing is the most widely used form of finance for SMEs for a number of reasons. Firstly, enterprises often prefer to keep the total control of their businesses and to own all the profit they make. Secondly, the availability of equity capital differs significantly across countries depending on cultural attitudes towards entrepreneurship and risk taking, the supply of risk capital and policies that encourage risk taking (Erić, Beraha and Đuričin 2011, p.66). SMEs are usually not large enough to gain public investment or public attention. It is often difficult for small enterprises to attract equity investors unless they are innovative and fast growing. Raising capital through public equity is not convenient for SMEs as it is associated with high fixed costs i.e. costs of underwriting, registration and advisory fees, and regular yearly expenses related to auditing, certification and dissemination of accounting information. Thirdly, debt repayments are tax deductible which lowers the tax liability of a company. Also, entrepreneurs often lack knowledge on other available financing sources and lack skills to present their businesses to the potential investors. Furthermore, the equity market is insufficiently developed in many countries and particularly in transition and developing economies which makes debt financing basically the only available source of finance for SMEs.

Figure 1: Sources of financing for EU-based SMEs in %



Source: Financing SMEs and Entrepreneurs OECD Policy Brief, November 2006 based on EOS Gallup Europe (2005), "SME Access to Finance", Flash Eurobarometer 174, October, upon the request of the European Commission (Directorate-General "Enterprise and Industry")

According to the survey conducted by the European Commission[4], commercial banks are the main source of finance for SMEs in EU countries. As many as 79% of surveyed SMEs uses commercial banks, while public institutions, private investors, private financing companies other than banks and venture capital is used by significantly lower number of enterprises (11%, 7%, 4%, 2% respectively). Leasing is used by 24% of SMEs.

However, due to its many disadvantages, debt financing should never be the first choice SMEs turn to when obtaining external funds. Debt financing should be used only when all other available options are exhausted. Regular loan payments reduce financial flexibility of an enterprise and if not made on time can ruin its credit rating and make borrowing in the future very difficult. Commercial bank loans are very expensive and unaffordable for many SMEs. SMEs are associated with much different financial circumstances comparing to large enterprises. Banks consider SMEs as a greater risk and because of that charge them with higher interest rates. In order to lower the risk banks typically request collaterals. Providing sufficient collateral is one of the key obstacles faced by SMEs in accessing bank loans. Banks usually don't find SME's loan portfolio profitable because of limited and highly risk returns, lack of accounting records, appropriate business plans and financial statements, and high transaction costs (Erić, Beraha and Đuričin 2011, p.65). Also, debt financing increases the risk of bankruptcy in case the enterprise fails to service the obligations under the term of the loan and particularly if the debt to equity ratio is inconvenient.

In developed economies where competitive financial markets exist, it is much easier for SMEs to obtain bank loans. Instead of old risk assessment models, banks developed new techniques which enable them to distinguish high- and low-risk SME borrowers with much more success. Banks are considering SME finance as an attractive business and are altering the nature of their products, with an increasing proportion of their revenue coming from fees for services rather than interest on loans, which favours lending to entities such as SMEs (OECD 2006, p.5).

Bank loans are the most commonly used external source of financing for Serbian SMEs, as well. It is only recently that the banking sector in Serbia became more interested in financing SMEs and begun adjusting its products and services to their specific needs and requirements. Today the majority of commercial banks have policies and separate departments dealing with SMEs (Đuričin and Beraha 2010, p.39). According to the results of the research under title: "Status, needs and

[4] EOS Gallup Europe (2005), "SME Access to Finance", Flash Eurobarometer 174, October, upon the request of the European Commission (Directorate-General "Enterprise and Industry")

problems of SMEs" which was conducted by the Serbian National Agency for Regional Development in the period March-April 2011 on the sample of 3,500 SMEs, the most frequent source of external finance referred to commercial bank loans (28%). According to the same survey conducted in 2009, as many as 40% of surveyed enterprises used this source of finance. All other sources of external financing i.e. borrowings from cousins and friends, leasing, loans provided by state were used significantly less. A significant reduction in the share of commercial banks loans in the sources of external financing is a result of the effects of the crisis. SME difficulties in accessing finance are even more emphasized in times of crisis as banks are under pressure and seek to preserve their capital bases. The stock of lending decreases both because banks are less willing to take risks and SMEs, on the demand side, are postponing their investment plans.

Numerous obstacles to the use of commercial bank loans are making debt financing rather problematic for the Serbian SMEs. The most common problems refer to high interest rates, high collateral requirements, high bank costs, limited amounts of loans, and long and complicated application procedures. Besides commercial bank loans, the SMEs in Serbia can use other sources of external finance at more favourable terms such as subsidies and favourable loans from public sources. The Guarantee Fund plays an important role in supporting SMEs by guaranteeing for the loans that are approved by banks and other financial institutions.

THE ANALYSIS OF THE STRUCTURE OF FINANCING SOURCES OF THE SME SECTOR – RANDOM SAMPLING SURVEY RESEARCH

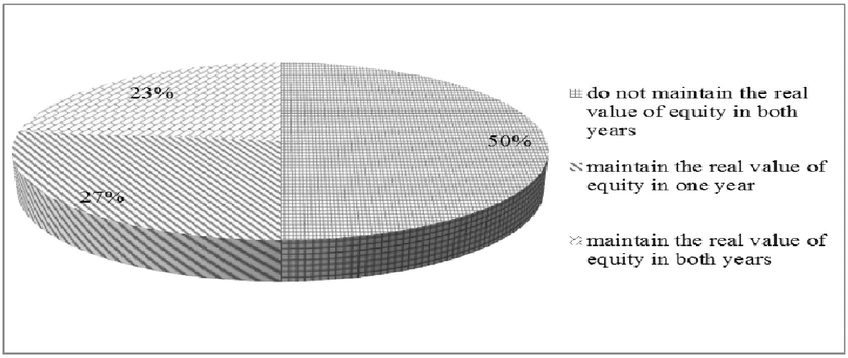
The aim of the random sampling survey research is to determine the extent to which the SMEs in Serbia are using debt financing sources and whether the use of these sources is economically reasonable.

A reduction in the real value of equity in the prevailing inflationary trends prevents financing simple reproduction from internal sources. As a result of that, in order to survive enterprises are forced to reduce the physical volume of business activities or to finance the renewal of consumed amount of working assets and requisite assets from additional sources of debt financing. Both alternatives have a negative impact on financial results and profitability of an enterprise since a reduction in the physical volume of business activity reduces the operating revenues, and due to an increase in the level of debt the financial expenses increase the risk of achieving a positive operating result (Đuričin 2012, p.106).

Special emphasis is put on examining the growth of debt of those enterprises that in the observed period of time did not maintain the real value of equity. The analysis of debt i.e. of the structure of financing sources in terms of ownership and the analysis of the validity of growth of external financing sources which are dominated by financial liabilities in terms of organic composition of assets and inflation rate provided the possibility to assess real conditions for the survival of SMEs in Serbia.

The assessment of the real value of equity is based on the comparison of Net equity index and Inflation rate index. The Net equity index is determined from the ratio of net equity reported in the balance of the current fiscal year and its value reported in the balance of the previous year. It provides an answer to the question whether the real value of equity is maintained due to the effects of revalorization and accumulated net income. In 2009 the Inflation rate index was expressed by the Index of retail prices, and in 2010 and 2011 because of the new calculation method by the Consumer price index by COICOP. When assessing the level of debt, the traditional financial rule was applied according to which an acceptable ratio of debt to equity is 1: 1 and of assets to liabilities is 2: 1. The reasonability of the growth of debt was evaluated in terms of organic composition of assets and the inflation rate because both categories require a shift in the structure of financing sources in favour of equity. Observed from the aspect of financial result, a high organic composition of assets or a big percentage of fixed in total assets means that operating expenses will grow through depreciation expenses, as well as a risk of achieving a positive operating result. If interest rates are above the inflation rate then the financing expenses are high and they increase the risk of achieving a positive operating result, while interest rates which are lower than the inflation rate cause the appearance of inflationary losses on creditors who are reluctant to lend (Rodić, Vukelić and Andrić 2007, p.294).

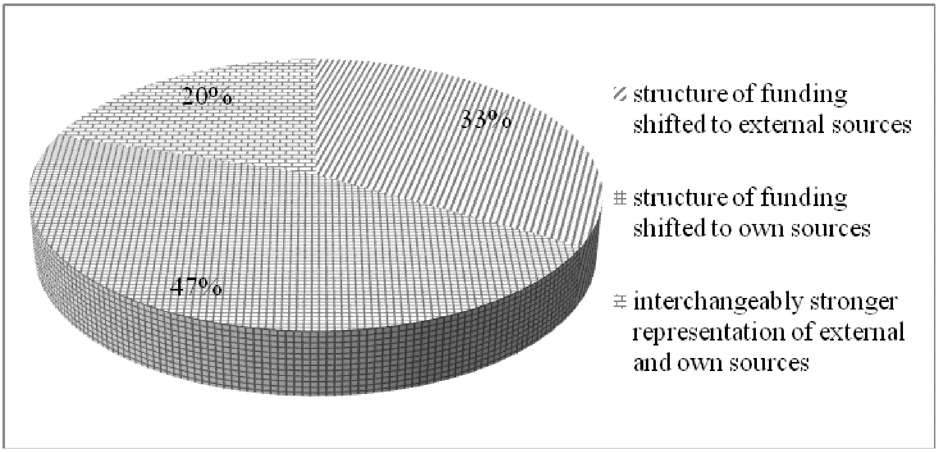
Figure 2: Maintaining the real capital value – SME



Source: Independent research by the authors

According to the results of the survey, 50% of analysed SMEs did not maintain the real value of equity, 27% maintained only in one financial year and only 23% maintained the real value of equity in both financial years.

Figure 3: SME Debt analysis



Source: Independent research by the authors

The debt analysis indicated that 47% of SMEs used more equity than debt financing, 33% alternately used equity and debt as a dominant source of finance, and 20% of surveyed enterprises used more debt than equity.

In order for the survey results to be more accurate, it is necessary to separately analyse the maintenance of the real value of equity and the level of debt of small enterprises and separately of medium-sized enterprises. Firstly, it was determined whether the individual enterprises maintained the real value of equity, and then for the enterprises that failed to do so it was analysed whether the growth of debt occurred, as well as whether that growth was reasonable in terms of inflation rate and the organic composition of assets. If due to the failure in maintaining the real value of equity the enterprises had to borrow, the question is whether the external sources of finance were used for the renewal of working assets and requisite assets in the following period, or for the renewal of fixed assets thus putting into question the maintenance of the real value of equity in the coming financial years as well.

Table 1: Maintaining the real capital value – small enterprises

	2010	**2011**	**2010**	**2011**	**2010**	**2011**
	1		**2**		**3**	
Net equity index	114.55	128.09	112.59	102.06	127.76	118.94
Consumer price index by COICOP	106.5	111.0	106.5	111.0	106.5	111.0
	4		**5**		**6**	
Net equity index	113.93	397.84	144.7	125.76	108.20	119.70
Consumer price index by COICOP	106.5	111.0	106.5	111.0	106.5	111.0
	7		**8**		**9**	
Net equity index	100.58	104.70	100.16	104.89	40.21	121.37
Consumer price index by COICOP	106.5	111.0	106.5	111.0	106.5	111.0
	10		**11**		**12**	
Net equity index	107.62	87.96	106.34	101.74	26.19	315.63
Consumer price index by COICOP	106.5	111.0	106.5	111.0	106.5	111.0
	13		**14**		**15**	
Net equity index	94.70	97.05	217.93	95.04	100.35	102.44
Consumer price index by COICOP	106.5	111.0	106.5	111.0	106.5	111.0

Source: Independent research by the authors

33.33% of the total number of analysed small enterprises maintained the real value of equity and was able to finance both simple and expanded reproduction. These enterprises are capable of financing growth and development from internal sources and they don't really need to use debt to finance the renewal of working and requisite assets. However, in two out of five small enterprises that maintained the real value of equity, an increase in debt occurred. The growth of debt occurred in the first and the fourth analysed enterprise. That would not be a problem in case of a lower share of debt in total financing of an enterprise, and in case the growth of debt was reasonable from an economic point of view.

The growth of debt in these two small enterprises is not reasonable either in terms of inflation rate or in terms of organic composition of assets. In order to avoid an increased risk of achieving a positive gross financial result through high financing expenses i.e. through unrealistically high interest rates, the 4.5% increase in the inflation rate requires strengthening of the share of equity in the total financing of an enterprise. On the other hand, the increase in the share of fixed in total assets in these two enterprises leads to the increase in depreciation costs and through operational expenses additionally burdens the financial result.

As far as 20% of analysed small enterprises worsened in terms of maintenance of the real value of equity and they were no longer capable of financing the acquisition of consumed working and requisite assets from internal sources. The question is raised whether these enterprises used external sources to finance simple reproduction? Small enterprises that suffered a decrease in the real value of equity, i.e. the second, the tenth and the fourteenth consecutive enterprise in the analysis, did not make additional borrowings in order to renew consumed working and requisite assets, but decided to reduce physical volume of business activities, which due to the decrease in the operating income, and consequently in the financial result, led to reduced profitability of these enterprises.

In the observed period of time 33.33% of the surveyed small enterprises failed to maintain the real value of equity. As a result of that, the majority of these enterprises decided to reduce physical volume of business activities, while the seventh and the eleventh enterprise decided to obtain additional capital from external sources. In terms of inflation rate growth, the growth of debt wasn't reasonable in any of these enterprises. In addition, the share of fixed assets in total assets increased in the eleventh enterprise thus endangering its survival by the growth of both financial and operating expenses. The growth of debt in the seventh enterprise is considered reasonable only because the share of fixed in total assets decreased by 4.39% (22.15% - 26.54%) and consequently its total gross financial result was less burdened by the depreciation costs.

Table 2: Debt analysis of small enterprises

-in %-

	2009	**2010**	**2011**	**2009**	**2010**	**2011**	**2009**	**2010**	**2011**
		1			**2**			**3**	
Own Capital	**20.63**	**20.58**	**19.42**	**64.47**	**85.59**	**85.06**	**55.80**	**54.64**	**55.76**
Total liabilities	**79.37**	**79.42**	**80.58**	**35.53**	**14.41**	**14.94**	**44.20**	**45.36**	**44.24**
- financial	42.86	47.65	52.38	19.54	9.37	10.46	34.03	36.29	29.20
- from business	36.51	31.77	28.20	15.99	5.04	4.48	10.17	9.07	15.04
Consumer price index by COICOP	110.1[5]	106.5	111.0	110.1	106.5	111.0	110.1	106.5	111.0
Organic composition of assets	66.16	68.34	70.78	44.98	50.17	55.13	48.88	47.12	36.15
		4			**5**			**6**	

[5] Indices of retail prices, The Consumer price index by COICOP is calculated from January 2011

	2009	2010	2011	2009	2010	2011	2009	2010	2011
Own Capital	**60.10**	**19,64**	**6,34**	**56,12**	**53,78**	**60,82**	**81.70**	**48.29**	**85.56**
Total liabilities	**39.90**	**80.36**	**93.66**	**43.88**	**46.22**	**39.18**	**18.30**	**51.71**	**14.44**
- financial	27.93	60.27	68.37	34.23	20.28	18.11	12.26	9.46	7.47
- from business	11.97	20.09	25.29	9.65	25.94	21.07	6.04	42.25	6.97
Consumer price index by COICOP	110.1	106.5	111.0	110.1	106.5	111.0	110.1	106.5	111.0
Organic composition of assets	27.89	35.98	42.56	51.18	49.13	48.43	78.65	67.89	66.34
		7			**8**			**9**	
Own Capital	**33.27**	**72.10**	**47.83**	**67.83**	**74.21**	**73.90**	**28.13**	**11.41**	**15.67**
Total liabilities	**66.73**	**27.90**	**52.17**	**32.17**	**25.79**	**26.10**	**71.87**	**88.59**	**84.33**
- financial	50.63	18.62	14.56	16.78	8.30	6.73	18.76	63.67	74.71
- from business	16.10	9.28	37.61	15.39	17.49	19.37	53.11	24.92	9.62
Consumer price index by COICOP	110.1	106.5	111.0	110.1	106.5	111.0	110.1	106.5	111.0
Organic composition of assets	28.97	26.54	22.15	55.23	61.12	65.34	66.18	68.19	74.33
		10			**11**			**12**	
Own Capital	**87.55**	**90.52**	**82.09**	**13.25**	**25,55**	**17,82**	**14.48**	**5.06**	**12.33**
Total liabilities	**12.45**	**9.48**	**17.91**	**86.75**	**74.45**	**82.18**	**85.52**	**94.94**	**87.67**
- financial	10.58	8.06	15.22	73.74	54.90	45.11	72.69	69.01	60.50
- from business	1.87	1.42	2.69	13.01	19.55	37.07	12.83	25.93	27.17
Consumer price index by COICOP	110.1	106.5	111.0	110.1	106.5	111.0	110.1	106.5	111.0
Organic composition of assets	44.18	44.07	42.76	66.15	68.12	71.05	57.18	65.12	67.98
		13			**14**			**15**	
Own Capital	**65.83**	**60.24**	**65.88**	**36.96**	**81.26**	**79.68**	**49.70**	**58.63**	**59.33**
Total liabilities	**34.17**	**39.76**	**34.12**	**63.04**	**18.74**	**20.32**	**50.30**	**41.37**	**40.67**
- financial	26.31	30.62	26.27	48.54	14.43	15.65	38.73	31.85	31.32
- from	7.86	9.14	7.85	14.50	4.31	4.67	11.57	9.52	9.35

	2009	2010	2011	2009	2010	2011	2009	2010	2011
business									
Consumer price index by COICOP	110.1	106.5	111.0	110.1	106.5	111.0	110.1	106.5	111.0
Organic composition of assets	39.12	38.22	38.16	55.27	55.88	53.18	44.78	45.56	46.76

Source: Independent research by the authors

In the observed period of time, only 13.33% of the surveyed small enterprises improved the conditions for maintaining the real value of equity. However, these enterprises are typically characterized by high-risk businesses because external sources account for more than 80.50% of their total sources of financing and their debt continues to rise unduly. As it was previously mentioned, the growth of debt is not reasonable in terms of inflation rate and organic composition of assets, which additionally endangers the survival of these enterprises.

Table 3: Maintaining the real capital value – medium-sized enterprises

	2010	**2011**	**2010**	**2011**	**2010**	**2011**
	1		**2**		**3**	
Net own capital index	98.79	28.99	89.14	70.81	86.55	101.16
Consumer price index by COICOP	106.5	111.0	106.5	111.0	106.5	111.0
	4		**5**		**6**	
Net own capital index	119.14	70.63	124.66	100.33	99.91	104.82
Consumer price index by COICOP	106.5	111.0	106.5	111.0	106.5	111.0
	7		**8**		**9**	
Net own capital index	101.73	101.67	110.18	113.19	100.03	100.04
Consumer price index by COICOP	106.5	111.0	106.5	111.0	106.5	111.0
	10		**11**		**12**	
Net own capital index	78.74	109.56	96.78	97.23	100.96	100.51
Consumer price index by COICOP	106.5	111.0	106.5	111.0	106.5	111.0
	13		**14**		**15**	
Net own capital index	104.60	155.91	118.28	112.56	100.29	100.67
Consumer price index by COICOP	106.5	111.0	106.5	111.0	106.5	111.0

Source: Independent research by the authors

In the observed period of time, only 13.33% of the analysed medium-sized enterprises maintained the real value of equity. Precisely the same percentage of medium-sized enterprises worsened its capability to acquire consumed working and requisite assets in the current comparing to previous financial year. The capability to renew consumed working and requisite assets was improved in only 6.67% of the total number of surveyed medium-sized enterprises, while the decrease in the real value of equity occurred in as far as 66.67%. 30% of the total number of enterprises where the real value of equity decreased reported the growth of debt. The same percentage of enterprises reported the evenly represented share of debt and equity sources of finance, while equity finance was predominantly used by the rest of enterprises. Those enterprises where the dominant share of equity in total sources of finance was reported, as well as those where the equity to debt ratio was 1:1, whereby they failed to maintain the real value of equity, are characterized by the low capital profitability.

Table 4: Debt analysis of medium sized enterprises

-in %-

	2009	**2010**	**2011**	**2009**	**2010**	**2011**	**2009**	**2010**	**2011**
		1			**2**			**3**	
Own Capital	35.11	31.09	11.51	57.79	51.53	46.26	34.97	30.22	25.11
Total liabilities	64.89	68.91	88.49	42.21	48.47	53.74	65.03	69.78	74.89
- financial	46.72	49.62	63.71	30.39	34.90	38.69	46.82	50.24	53.92
- from business	18.17	19.29	24.78	11.82	13.57	15.05	18.21	19.54	20.97
Consumer price index by COICOP	110.1	106.5	111.0	110.1	106.5	111.0	110.1	106.5	111.0
Organic composition of assets	77.12	79.67	83.11	22.67	24.78	23.55	56.98	66.34	72.89
		4			**5**			**6**	
Own Capital	49.84	60.26	35.76	43.55	54.61	52.74	85.51	85.38	89.26
Total liabilities	50.16	39.74	64.24	56.45	45.39	47.26	14.49	14.62	10.74
- financial	40.63	32.19	52.03	45.72	20.75	38.28	11.74	11.84	8.70
- from business	9.53	7.55	12.21	10.73	24.64	8.98	2.75	2.78	2.04
Consumer price index by COICOP	110.1	106.5	111.0	110.1	106.5	111.0	110.1	106.5	111.0
Organic composition of assets	44.76	48.15	52.13	33.12	34.66	22.98	37.12	27.17	32.24
		7			**8**			**9**	
Own Capital	58.44	57.70	55.68	45.12	47.75	32.29	19.49	67.76	70.27
Total liabilities	41.56	42.30	44.32	54.88	52.25	67.71	80.51	32.24	29.73

- financial	28.26	28.76	30.14	37.32	35.53	46.04	54.75	21.92	20.22
- from business	13.30	13.54	14.18	17.56	16.72	21.67	25.76	10.32	9.51
Consumer price index by COICOP	110.1	106.5	111.0	110.1	106.5	111.0	110.1	106.5	111.0
Organic composition of assets	55.12	55.78	56.11	68.19	69.23	71.28	45.78	45.16	44.11
		10			**11**			**12**	
Own Capital	21.18	20.50	18,78	78.81	75.27	72.08	37.46	49.53	53.30
Total liabilities	78.82	79.50	81.22	21.19	24.73	27.92	62.54	50.47	46.70
- financial	70.15	70.76	72.29	18.86	22.01	24.85	55.66	44.92	41.56
- from business	8.67	8.75	8.93	2.33	2.72	3.07	6.88	5.55	5.14
Consumer price index by COICOP	110.1	106.5	111.0	110.1	106.5	111.0	110.1	106.5	111.0
Organic composition of assets	76.19	79.34	84.14	42.99	42.23	43.88	57.11	59.39	61.13
		13			**14**			**15**	
Own Capital	38.35	30.69	52.84	72.93	78.84	83.76	51.76	59.72	43.67
Total liabilities	61.65	69.31	47.16	27.07	21.16	16.24	48.24	40.28	56.33
- financial	40.07	45.05	30.65	17.60	13.75	10.56	31.36	26.18	36.61
- from business	21.58	24.26	16.51	9.47	7.41	5.68	16.88	14.10	19.72
Consumer price index by COICOP	110.1	106.5	111.0	110.1	106.5	111.0	110.1	106.5	111.0
Organic composition of assets	16.98	17.14	17.88	31.12	33.15	45.11	18.66	20.65	32.18

Source: Independent research by the authors

Those medium-sized enterprises that failed to maintain the real capital value and where the share of external in total sources of finance increased are characterized by the economically unreasonable growth of debt both in terms of inflation rate and in terms of organic composition of assets. Basically, that means that these enterprises did not use additional borrowing to finance the renewal of consumed working and requisite assets, but rather to finance fixed assets. That significantly increased the survival risk because the total gross financial result was burdened not only with additional financial expenses but with decomposition costs as well.

CONCLUSION

The analysis results on the share of debt in the total sources of financing and economic reasonability of their use provide an insight into the current financial position of individual enterprises, as well as the perspective of survival, growth and development of the entire SME sector.

In the previously presented survey, the growth of debt was observed only in those enterprises where external sources account for more than 50% of the total sources of finance. In case this criterion was neglected i.e. if the authors analysed the growth of debt in enterprises where the liabilities structure is already shifted in favour of equity capital, then as far as 63.33% of the surveyed SMEs would be reported the growth of debt. Such a high percentage of unjustified growth of debt indicates that conditions for doing business in Serbia are highly risky (according to the Statistical Office of the Republic of Serbia debt collection terms exceed the 30-day limit in 58.4% of cases). Since the debt collection terms have been significantly expanded and prevailing economic circumstances have been characterized by an increasing inflation, the growth of share of external in total sources of finance of Serbian SMEs could not be considered desirable.

In general, 33.33% of the surveyed small enterprises had their liabilities structure shifted in favour of debt. The debt on average accounted for more than 80% of the total financing sources and was dominated by financial liabilities. In the last three years, an increasing tendency among small enterprises to use debt as a source of financing was reported. It was the case particularly in 2010 in comparison with 2009 mostly due to the negative effects of the world financial crisis and significantly worsened conditions for doing business. The analysis indicated that the growth of debt in small enterprises wasn’t reasonable both in terms of inflation rate growth and organic composition of assets. Consequently, the survival, growth and development of these enterprises are questionable.

According to the analysis, those medium-sized enterprises where conditions for maintaining the real value of equity worsened financed the renewal of consumed working and requisite assets from debt. Because these enterprises didn’t pay attention to rising inflation rate and increase in the share of fixed in total assets, the growth of their debt couldn’t be considered reasonable. The economically unreasonable growth of debt due to expanded terms of debt collection and obligation repayment led to a reduction in the number of newly established enterprises and to an increase in the number of closed enterprises (Đuričin 2011 p.66).

The SME sector in Serbia is vulnerable for a number of reasons among which accessing adequate finance seems to be the most important one. The results of the research appear to confirm that the use of debt as a dominant source of finance is negatively affecting gross financial result of the Serbian SMEs. High financing costs often lead to the increased risk of achieving negative operating result. Since servicing loans is always associated with financial inflexibility, raising capital from investors is more convenient source of finance for SMEs particularly considering the current economic circumstances in Serbia. It is necessary to promote availability of alternative sources of finance such as equity capital as it doesn't increase financial expenditures of a company. This can be done by entrepreneurs themselves leveraging the capital lying dormant in their personal assets, or by "business angel networks" or venture capital markets (…). Successful approaches to developing early stage venture capital markets include both tax-based programmes and programmes that use government's ability to leverage private risk capital such as co-investment (OECD, 2009, p.13). Financial incentives should be introduced to stimulate equity investment in local SMEs. The awareness about the value of equity financing should be promoted and communicated more broadly in Serbia. An appropriate legal, tax and regulatory framework should be introduced to ensure the use of risk capital as a source of finance for SMEs.

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