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**FINANCING SMEs AND ENTREPRENEURS IN SERBIA:  
THE PERSPECTIVES FOR SUSTAINABLE INVESTMENTS  
AND GROWTH**

*This study examines the development trends in SME and entrepreneurs financing in Serbia at the beginning of the XXI century. The focus is on the creation of a model for sustainable investing in the SME sector and to promote economic growth and employment. The goal is to create a starting point for future research, e.g. like drawing the consistent theoretical model followed by viable and realistic economic policy guidelines for Serbian SME. Serbia's efforts to join the EU gives a new dimension in the creation of simplified but effective model of SME and entrepreneurship financing based on policy guidelines and trends in the EU in the period 2013–2020.*

*Keywords:* Serbia; SME; entrepreneurs; financing; investments.

*JEL Classification:* E59, G31, G32, G33, G38, G24, L53, M41.

Бранко З. Лютич, Предраг Марьянович, Ивана Лютич  
**ФІНАНСУВАННЯ МАЛОГО ТА СЕРЕДНЬОГО  
ПІДПРИЄМНИЦТВА У СЕРБІЇ: ПЕРСПЕКТИВИ ІНВЕСТИВАННЯ  
У СТІЙКИЙ РОЗВИТОК**

*У статті проаналізовано тренди розвитку малого та середнього підприємництва та його фінансування у Сербії на початку XXI століття. Особливу увагу приділено створенню моделі стійкого інвестування у сектор малого та середнього бізнесу, що має стимулювати економічне зростання та працевлаштування. Логічна теоретична модель у подальшому має стати основою для розробки реалістичної політики у секторі малого та середнього бізнесу. У контексті потенційного включення Сербії у ЄС створення простої, але в той же час ефективної моделі розвитку малого та середнього підприємництва та фінансування такого розвитку має базуватись на трендах, що прогнозуються для ЄС на 2013–2020 роки.*

*Ключові слова:* Сербія; малий та середній бізнес; підприємці; фінансування; інвестиції.

*Табл. 4. Літ. 17.*

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**ФИНАНСИРОВАНИЕ МАЛОГО И СРЕДНЕГО  
ПРЕДПРИНИМАТЕЛЬСТВА В СЕРБИИ: ПЕРСПЕКТИВЫ  
ИНВЕСТИРОВАНИЯ В УСТОЙЧИВОЕ РАЗВИТИЕ**

*В статье проанализированы тренды развития малого и среднего предпринимательства и его финансирования в Сербии в начале XXI столетия. Особое внимание уделено созданию модели устойчивого инвестирования в сектор малого и среднего бизнеса, что должно стимулировать экономический рост и трудоустройство. Логическая теоретическая модель в дальнейшем должна стать основой для разработки реалистичной политики в секторе малого и среднего бизнеса. В контексте потенциального включения Сербии в ЕС создание простой, но в то же время эффективной модели развития малого и среднего предпринимательства и финансирования такого развития должно базироваться на трендах, прогнозируемых для ЕС на 2013–2020 годы.*

*Ключевые слова:* Сербия; малый и средний бизнес; предприниматели; финансирование; инвестиции.

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### **Problem statement**

In the Republic of Serbia as a late transition economy, with uncompleted privatization process, economy in stagnation with pronounced characteristics of fundamental structural economic crisis, small and medium-sized enterprises (SME) are not the priority sector per se. The priority was to privatize the economy and national resources at any price, regardless social and economic costs. Since this process is now at the stalemate, as most of not-privatized enterprises and other parts of natural wealth are not any more attractive to investors, mostly foreign, there is not much public glorification of the not so successful past. Based on the official statistical data the number of unemployed is around 0.7 mln, while NGOs, trade unions and independent think tanks estimate that twice as much. The absence of economic growth, chronic inflation, and high interest rate is the fundamental characteristics of Serbian economy facing the middle of the second decade of the XXI century. SME could have a goal to create productive capacity, based on the increasing competitiveness, to create jobs and alleviate poverty in Serbia, but unfortunately, without ever increasing inflow of external capital, partly on subsidized interest rates goal of enhancing SME development in Serbia is hardly possible.

The main objective of our research is focused on the creation of the theoretical model of financing SME's in Serbia, partly based on a limited access to financial and statistical data modelling, aiming to give additional insight into real blackbox of SME financing in Serbia. Serbian SMEs are not in Amadeus database of comparable financial information for public and private companies across Europe (Amadeus, 2013). At the same time public disclosed data on Serbian SMEs at the Serbian Agency for Public Registers (Republic of Serbia, Agency for Business Registers, Information on the Registration of Financial Reports, 2013) is limited to a few not so significant selected financial data from financial reports, which unfortunately do not reveal much except for mere financial statistical data. Most of scientific research in Serbia has being theoretically oriented, just to transfer the models and experience from the EU and leading transition economies in the area of SME financing. The main objective of our research is to review the latest theoretical research in Serbia and to assess the current practice of SME financing in order to improve their access to finance, dominantly to bank loans. The other aspect is to reevaluate the economic policy and to offer some general suggestions on how to improve SME financing in Serbia, especially to give some hint how to improve best practices of commercial banks, since venture capital funds, investments funds and pension funds are not much attracted to the idea of investing in SME. One of the solutions is that the government resumes a proactive role in improving SME practice, while stressing the significance to combine governmental and public support in both financial and non-financial aspects with the aim to reduce continually transaction costs and risks.

The key scientific and research task is to create a new common ground for future research which shall be focused narrowly on the perspectives of creating a feasibly and successful model of SME financing in Serbia which should be used as a springboard for the creation and implementation of the sectorial economic policy, and at the other hand to be equally relevant for SMEs to implement it in practice. The determination of the main determinants of SMEs growth in Serbia with the focus on microfinance specific factors (e.g., continuous decreases of overindebtedness, generation of internal financing based on profit growth and increasing net value of SMEs, external

financing dominantly bank loans and different form of government subsidies). The focus is on the internal growth factors such as are the improvement of liquidity and consequently solvency performance, potential for future company growth. Weak institutional structure in Serbia to support SMEs, high bureaucracy and crime rates, accompanied by external financial constraints like the almost prohibitive cost of capital. Financial barriers are the largest obstacle to SMEs growth, which are identified as a key element which in turn could assist these companies to grow, since only increased inflow of external funds could finance innovations, investment in new technology as a base of increased competitiveness.

In Serbia until the end of the second decade of the XXI century it is evidently necessary to change drastically public perception and awareness that SME are really important generators of economic and social growth, jobs and social infrastructure contributing to social and political stability. The global economic crisis pronounced in the EU and more than strong and long-lasting in Serbia have made the mentioned financial constraints for SMEs unbearable. The absence of positive economic growth, persistent inflation, high interest rates which are drastically higher than in the neighbouring EU countries, has additionally weakened even weak domestic demands, while at the same time bank loans although abundant in supply are prohibitively expensive. This fact has drastically jeopardized cash flow and liquidity performance of Serbian SMEs. One possible solution is that government of Serbia respond with a drastically different approach, to support sales and improved working capital management, while at the time enabling easier access to bank loans. Since Serbia is not an EU member, or attractive to the OECD studies, research on SME financing is more than obscure and left to Serbian government initiatives which in practice ends in some sort of verbal support and empty politics promises, while SMEs at the same time profoundly lack adequate external funds at affordable costs.

#### **Literature review**

Theoretical research and simplified models of SMEs financing in Serbia are rudimentary, predominantly based on models and forms of finance from the EU and OECD countries. The first articles in this area were mostly based on the research and standard methodology of APEC, which is more or less without big alterations remain in place nowadays worldwide (The National Investment Council/Marsden Jacob Foundation, 1995). During the period 1996–2012 Serbian SMEs did not achieve high growth rates and their full development potential, while their constant companions were the growth constraints caused by difficulties in raising external finance. The capital market in Serbia has being some kind of extended tool to legalize the murky privatization transactions, since even the largest corporations have not organized successful IPOs, and it is even less real to expect that the SMEs could create any result to raise capital through issuing shares. The financing needs of growing SMEs firms in Serbia enable to define the features of high growth SMEs, the key elements of growth based on their lifecycle, which in turn enable to define investment ready criteria, at the same time helping firms of such a size to grow (Ljutic, 1998, a, b; 2003, a, b). Low savings rate in Serbia and instable banking and economic systems do not assist SMEs to have a better access to the process of allocating capital, the only one maker – Belex Stock Exchange is too weak even for most successful large firms, let alone SMEs. The whole concept of SME financing in Serbia at the capital market is a theoretical wish-

ful thinking, no more than that. On the other hand, regulatory environment and framework are more favourable on paper than in practice. The segment of financial reporting, environment, corporate social responsibility and corporate governance disclosure for SME is not even in its theoretical infancy, and business angels as a form of private investors in SMEs is also in its infancy phase. Bank loans and supplier credits are dominant and probably shall remain a dominant form of SME financing in Serbia for the next decade or so.

SMEs in Serbia are facing their insurmountable challenge as a result of the global and regional economic crisis, also unsolved strategic map regarding the status as the EU eventual accession country. Credit shortages for SME are not fully researched even in leading OECD economies, so it is even less logical to expect that Serbia is able to define precisely the impact of credit shortages, financial constraints SMEs are facing, and the shape of government economic policy and intervention measures, since banks cut drastically loans, as a logical consequence of credit squeeze and mountains of collateral from bad loans to SMEs which in turn could not be liquidated and turned into cash, CPA, CGA, ACCA (2009). Analysis of the main determinants of SMEs growth in Central and Eastern Europe, but excluding Serbia (since it is not within the Amadeus database) do reveal from the empirical point of view it is suggested that firm growth is determined not only by the traditional characteristics of size and age but also by other firm-specific factors such as indebtedness, internal financing, future growth opportunities, process and product innovations and organisational changes (Mateev, 2010). New research in the Republic of Slovenia by Bartlett and Bukvic (2001) has confirmed that although an SME sector in the countries like Serbia could play a key role in the process of transition, contributing in job creation, innovation and increased national competitiveness, they have to evident barriers to development, like weak institutions, strong bureaucracy, external financial constraints (e.g. high cost of capital). We fully acknowledge and accept as a logical proposition that the growth potentials of Serbian SMEs lies in the presence of strong negative institutional and financial barriers, lack of financial discipline, and evident absence of an economic strategy by Serbian government for the sector of SMEs.

#### **Definition of the target problem**

Improving competitiveness of Serbian SMEs is an easily definable goal of economic policy, owners and entrepreneurs, but to obtain an easy and constant access to finance is the key element of their success. Serbia is more or less encircled by the EU member states or the states that sooner or later shall become the EU members, so there still remain the fundamental question and problem to be solved – how to increase the competitiveness of Serbian SMEs not to be only successful, or to increase employment and growth, but at the same time as a survival strategy for the sector as a whole. Banks and financial intermediaries in Serbia are not so innovative, and that is pointing out to the need to create innovative financial instruments to finance SME customers, while at the same time simultaneously improves their access to finance. Role models of successful practice in the EU are more than useful, but also, drastic change for praying the change and improvement, just to implement prayers in practice of SME financing. Commercial banks in Serbia are in the clinch with bad loans and illiquid and insolvent SME customers. The absence of a long-term strategic horizon and goals is evident from government ranks, institutional and regulatory bodies,

public, SMEs, and academia. It is obvious that something has to be done, but after so many empty talks, unfulfilled promises and overoptimistic strategies and projects there is an increasing outcry for real positive drastic changes which are lacking nowadays. The "only problem" with any SME sector growth-oriented strategy is not how to create it, but how to implement it.

**Presentation of the research material, including methodology description and key results**

From the fiscal and accounting year 2011 annual financial reports of SME and entrepreneurs are filed with the Republic of Serbia public registry Agency for Business Registers. Since SME are classified into the group of small reporting entities, their financial reports consist only of the items like: total assets, and within that category business loss over the value of capital, total capital. The second large line item is core capital, with the subitem of undistributed loss, than of the loss up to the value of capital, followed with the items of business income, net income, net loss and numbers of employed, and such a data are not sufficient information base to perform any statistical relevant analysis (Republic of Serbia, Agency for Business Registers, Information on the Registration of Financial Reports, 2013).

**Table 1. Comparative analysis of the correlation of the selected random sample of 5 SMEs from Serbia, reporting years: 2005–2008\***

SME**	Correlation		Commentary	
	Long-term liabilities / Business income	Long-term liabilities / Sales (income from sale)	Long-term liabilities / Business income	Long-term liabilities / Sales (income from sale)
A	-0.99237	-0.88486	Negative correlation	Negative correlation
B	0.71293	0.73576	Strong relationship	Strong relationship
C	-0.09292	0.76230	Negative correlation	Very strong relationship
D	-0.62417	0.88462	Negative relationship	Strong correlation
E	-0.68942	-0.57824	Negative correlation	Negative correlation

*Note:* \* From 2009 SME in Serbia are reluctant to disclose any data for scientific research, since it has been established a new public register Agency for Business Registers of the Republic of Serbia, integral financial reports of SME are not publicly disclosed any more. The available data was gathered by the researchers.

\*\* SMEs disclosed few selected data only for financial statistical analysis, since the reporting entities are not obliged any more to publicize annual financial reports.

Although the random statistical sample could be classified as too narrow, the only partially available data gave as a rare opportunity to scrutinize the hypothetical framework of our analysis. First of all, in the period of 4 consecutive and relatively stable business years 5 SME's we had tested, did not show any logical pattern or correlation relationship which could give us more reliable insight into the relationship between long-term liabilities and business income. SME "A" has shown a negative correlation meaning that increase in long-term liabilities is negatively correlated with business income and with the income from sales. "C" has also shown negative correlation for the first relationship between long-term liabilities and business income, while at the same time it has shown very strong positive relationship with income from sales. "D" has demonstrated negative relationship for vis-a-vis business income, but just the opposite strong relationship between long-term liabilities and sales. "E" has revealed both correlations as negative.

**Table 2. Comparative analysis of the coefficients of determination for the selected sample, reporting years: 2005–2008**

SME	Coefficient of determination	
	Long-term liabilities / Business income, %	Long-term liabilities / Income from sale), %
A	98.48	78.30
B	50.83	54.13
C	0.86	58.11
D	38.96	78.26
E	47.53	33.44

The coefficient of determination measures how well the regression statistics represent the data, and most SME have shown that the relationship between long-term obligations and forms of income like business income and income from sales as positive giving a capability to explain variations in the sources of long-term financing and income as an approximation measure of business performance.

**Table 3. Altman's test of predicting the probability of bankruptcy**

	Automatic data processing code No.	1	2	3	4	5
Current Assets	012	46,921	15,445	29,019	94,950	13,485
Current Liabilities	116	18,296	16,007	37,332	109,242	10,322
Retained Earnings	108	11,039	583	-2,884	312	15,440
Total Assets	024	141,040	20,591	34,448	237,271	36,940
EBIT	213	12,237	2	95	37,498	5,471
Capital	102	61,446	4,001	334	146,152	2,495
Total Liabilities	111	21,457	16,007	40,216	109,242	19,005
Sales	201	174,236	77,621	21,411	178,233	35,038
T1		0.20296	-0.02729	-0.24132	-0.06023	0.08563
T2		0.07827	0.02831	-0.08372	0.00131	0.41798
T3		0.08676	0.00010	0.00276	0.15804	0.14811
T4		2.86368	0.24995	0.00831	1.33787	0.13128
T5		1.23537	3.76966	0.62155	0.75118	0.94851
Z Score		2.91703	3.87181	0.38842	1.76054	1.87733
		Fully Safe	Safe	Danger	Grey	Grey

Legend:

Z - Financial indicator for the prediction of the bankruptcy for private firms

T1 = Current Assets – Current Liabilities / Total Assets

T2 = Retained Earnings / Total Assets

T3 = Earnings before Interest and Taxes (EBIT) / Total Assets

T4 = Accounting Value of Shares (Stocks) / Accounting Value of Total Liabilities

T5 = Sales / Total Assets

Z' - Indicator of the Bankruptcy Prediction Model

$Z' = 0.717 T1 + 0.847 T2 + 3.107 T3 + 0.420 T4 + 0.998 T5$

Description of the notification and explanation zones

$Z > 2.9$  – Safe Zone

$1.1 < Z < 2.6$  – "Grey" Zone

$Z < 1.23$  – Dangerous Zone

The next step is the Altman test of predicting the likelihood of bankruptcy, which reveals that 1 out of 5 is in the danger zone, 2 in the grey, 1 is fully safe and the other only is in the zone of safety. This supports the previous conclusion that SMEs 3, 4 and

5 are not performing well, e.g. not able to generate profits based on the external sources of long-term financing. This is also a complementary conclusion that most SME's in Serbia have more than limited access to long-term external funds, e.g. mostly bank loans, and at the interest rates that are prohibitively high.

In Table 4 which follows the computation of correlation for the 5 selected indicators used in the Altman model have shown for T1 extremely strong relationship, for T2 very strong positive relationship, for T3 very weak negative relationship which is almost negligible, for T4 and T5 – strong relationship. This correlation is also strongly supporting the conclusions based on the Altman test of predicting bankruptcy in the relation to long-term sources of SME financing.

**Table 4. Correlation coefficients for the selected financial ratios**

Correlation Coefficients				
Current assets / Current liabilities	Sales / EBIT	Retained earnings / EBIT	Sales / Total liabilities	Sales / Current liabilities
0.92115	0.77508	-0.08099	0.50516	0.52543

### **Conclusions and perspectives for further studies**

Partial analysis of the growth potential of the SMEs sample for Serbia has demonstrated clearly that although the country has not completed the transition process and is in the mid of a prolonged economic crises, SMEs almost share the fundamental characteristics of the firms of a similar size in other ex-transition economies. The proposition that SME are the engines of local economic growth, under the condition of adequate inflow of finance, mainly bank loans, is highly acceptable and a logical one. Growing SMEs in Serbia are prospective employers; at the same time they contribute to social stability and allocation of national wealth. The main unresolved issue remains in the area not of growth but survival, and the access to sources of finance is more like the first aid and emergency assistance, even less at this moment an element of financing the company growth. The current economic crisis in Serbia which has been present for the last few years, influences negatively the access of SMEs to sources of finance, also have had a negative impact on liquidity and cash flow, since there is an evident contraction of sales in physical and monetary terms.

Obvious conclusion of this research that the economic policy of Serbian government vis-a-vis SME sector stimulus and growth is at least very attractive on paper, very plausible and generally could not be judged as some kind of outstream from the similar policies in the EU and leading non-EU transition economies. On the other hand, SME owners and entrepreneurs are wholeheartedly welcoming such approach, basically proactive and constructive one, but the reality of SME operations and performance and their practical experience is telling them there is an increasing gap in sources of financing growth and rise of employment. The SME sector in Serbia is constantly emitting a message to the government that the first step should and must be the removal of all administrative barriers to SMEs. Simultaneously, the government should create real supportive regulatory framework, assist them to develop a growth strategy at the national level, but always having in mind that the strategy is only valid as the state budget is supporting it. Our research has demonstrated the lack of standardized financial and statistical data relevant to SMEs, something that shall be probably solved with the full access of statistical databases in Serbia to the EURO-

STAT and with the full implementation of statistical and financial disclosure methodology. We have also come to the conclusion that financial reporting and disclosure requirements in Serbia are regulated by the International Financial Reporting Standards (IFRS), but not with IFRS for SME, that is a big problem in itself, but not within the framework of this research.

This initial research has confirmed that SME financing is a crucial element of future growth, rise of employment and achievement of complementary performance indicators at the firm level. The importance of SME finance is recognized fully in this research as a factor of providing growth and rising employment. This study is arguing in favour to have more and better data on SME economic and financial indicators and financial statistics in Serbia, which in turn shall enable precise benchmarking with neighbouring countries (main competitors), but also with the EU and globally. Serbia has designed sectorial SME development strategies, with the main difference in the printing date, not substance, now the time has come to identify the obstacles to SME growth, based on the full understanding of their needs for suppliers of finance, and tailor-made government policy based on real market conditions and data, tested and implemented in practice in order to promote SME and entrepreneurship financing.

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