

# The economic and financial status of trade entrepreneurs in Serbia

**Radojko LUKIC**  
University of Belgrade, Serbia

**Abstract:** Due to overall importance special attention is paid to the theoretical and practical analysis of the performance of small independent retailers. Considering that, this paper analyzes the specifics of economic and financial status of trade entrepreneurs, i.e. small independent retailers in Serbia for 2008 - 2012 period. Despite very "complex", i.e. appalling business conditions in Serbia in the last period, the results (of almost all observed indicators) show "relatively" satisfactory economic and financial position of the trade entrepreneurs in Serbia. In total trade operating income in Serbia in 2012 it participated with 3.81%. In order to improve their economic and financial position in the future they should merge (because of joint procurement and other trading activities execution), apply new concepts of cost management (Toyota's principles of business, above all), the concept of managing relationships with customers and suppliers and modern information technology. (JEL Classification: F65 L81 M40).

**Keywords:** trade entrepreneurs, Serbia, market share, business strategy, solvency, economy, profitability

## 1. Introduction

The research presented in this paper are the determinants of the economic and financial position of entrepreneurs in trade Serbia. The aim and purpose of the present study was to examine the complex impact of the implementation of new business models on the performance of entrepreneurs trafficking in Serbia, including modern technology, especially radio frequency identification (RFID). In contemporary theoretical and practical research due to its importance special attention is paid to the analysis of the performance of small independent retailers. In this context we examine the advantages and disadvantages, problems and strategies of business operations as a function of competing against the large chain retailers. With that in mind, this

paper analyzes the factors of economic and financial position of the trade entrepreneurs, and small independent retailers (with a dominant share in total number) in Serbia (which are obliged to submit annual financial statements to the Business Registers Agency). In addition to the specific factors, their economic and financial position is greatly affected by the overall unfavorable business conditions in Serbia. Key features of general business conditions in Serbia are: low growth rate of industrial production, budget and foreign trade deficits, high unemployment, low standards of living, low purchasing power, high inflation, reduced banks' credit loans (because of their own problems), expensive bank loans, financial indiscipline, high percentage of accounts receivable and other. The general perception is that the reason for the recession, which is reflected on the decrease in purchasing power, is structural in its nature, and is to a lesser extent dependent on global macroeconomic situation.

The specific factors of economic and financial position of the trade entrepreneurs in Serbia (which are thoroughly analyzed in this paper) are: market share, labor productivity, liquidity and solvency, cost efficiency, profitability, merging strategy, private brand, the effects of the application of new concepts of cost management (especially Toyota business principles), and the importance of applying modern information technology. In the context of the analyzed problem, cost efficiency has particular importance among them. Generally speaking, the application of modern information technology improves operational efficiency and reduces actual costs, for example with the supply chain management. Lately a lot of is done in reducing the cost of goods sold with putting pressure on suppliers, and with efficient use of information technology in managing supply chain. Considerable attention is also focused on the reduction of other operating expenses, such as energy consumption. The study on the example of the 30 largest FMCG companies found that they had managed to reduce costs by an average of 1% in ten-year period (Filipovic, 2013: 24-25; Lukić, 2011a: 579; Lukic, 2014: 490).

In order to improve the market position and financial entrepreneurs should, as a key business strategy, to associate. The effects of the strengthening of the position of purchasing to suppliers and to develop a better relationship with customers / consumers. All this affects the reduction of costs and increase profit entrepreneurs.

In the context of the analysis of key factors, it is particularly pointed out that their properly integrated control can significantly contribute to improving the economic and financial position of the trade entrepreneurs in Serbia in the future, by following the examples of countries

with developed market economies.

Rich literature in the West is dedicated to the study of strategies, issues and analysis of the performance of small independent retailers (Tajeddini, 2013: 453). Concerning the literature in Serbia for the issue being concerned, there is very little written about it, so that almost no work from complete. With that in mind, this paper attempts to thoroughly analyze the strategies and business problems and, in particular, the factors affecting the performance of trade entrepreneurs in Serbia. The results of the study should serve as a fundamental basis for future analysis and improvement of the performance of trade entrepreneurs in Serbia.

Given the topicality, importance and complexity of the problems treated in this paper, one can define numerous research hypotheses. Nevertheless, the main research hypothesis (H1) is that with an adequate system of key factors control - target profit of trade entrepreneurs in Serbia can be achieved. The prerequisite for this is, above all, familiarity with the intensity of their total and individual influence on costs (cost of goods sold and operating costs). All hypotheses were confirmed.

The implementation of new cost management models and Dupont analysis methodology provides the basis for this. In addition to these research methodologies, this paper uses comparative and statistical analysis, as well as an business excellence model index.

Necessary information for the given hypotheses research were collected from the literature, appropriate web sites and, in particular, the Business Registers Agency, which has a solid base of financial and other information for trade entrepreneurs in Serbia. To some extent, we used the data from the Statistical Yearbook of the Republic of Serbia (2013).

Structure of the present study are: The global importance of small independent retailers; Strategy and business problems of small independent retailers; Strategy and business problems of small independent retailers; Macroeconomic environment of trade entrepreneurs business in Serbia; Concentration in the retail Serbia; Trade entrepreneurs impact on the performance of trade and economy in Serbia; Labor productivity of trade entrepreneurs in Serbia; Cost efficiency of trade entrepreneurs in Serbia; Liquidity and solvency of trade entrepreneurs in Serbia; The effectiveness of trade entrepreneurs in Serbia use of property; Profitability of trade entrepreneurs in Serbia; Profitability of trade entrepreneurs in Serbia. Within each of these chapters are highlight appropriate research results. The general conclusion that is satisfactory financial and

economic status of entrepreneurs in the trade of Serbia, in a very unfavorable economic conditions.

## 2. The global importance of small independent retailers

Small independent retailers have great significance (in all sectors, especially food) in terms of satisfying the wants and needs of, primarily local and neighboring, customers and the creation of added value in the retail sector, total trade and the national economy as a whole. We will illustrate their importance on the example of selective retailing countries, especially of the developed market economies. So, for example, in Latin America the percentage share of small independent retailers in the total number of food distribution channels (stores) was: 2005 - 24.62%, 2006 - 24.50%, 2007 - 24.39%, 2008 - 24.28%, 2009 - 24.17%, and 2010 - 22.17% (Agriculture and Agri-Food Canada, Top Grocery Retailers in Latin America, International Markets Bureau, August 2012: 3) .

In the European Union overall importance of small businesses in the retail sector is great. That is indicated by the data in Table 1.

**Table 1. Key indicators according to size of companies in the retail sector, except cars and motorcycles in the European Union, EU - 27, 2010**

	<b>Number of enterprises (thousands)</b>	<b>Number of employees (in thousands)</b>	<b>Added value (in millions of euros)</b>	<b>Labor productivity (in thousands of euros per capita)</b>
All companies	3 648.4	18 561.5	451 598.7	24.3
All small and medium-sized enterprises - SMEs	:	11 693.4	248 754.0	21.3
Mikro	3 475.0	7 104.8	133 334.6	18.8
Small	153.4	2 930.8	72 046.9	24.6
Medium size	16.0	1 626.5	43 161.5	26.5
Large	4.0	6 868.1	202 842.7	29.5

Source: Eurostat, 2011.

The information in the table show that small enterprises in the retail sector in the European Union take part in the total number of enterprises with 4.20% - 15.78% of the employees and with the added value of 15.95%. Therefore, their role is very significant in terms of satisfying the needs of consumers, in creating added value and sustainable development of the retail sector and the national economy. What is particularly specific is that the productivity of a small enterprises is lower compared to large ones. This is a general conclusion, given their performance features.

According to available data (May 2013) small independent retailers in the United Kingdom participated in the total sales of durable goods by 8%, and with 9% in 2012 (GFK Markets - An Insight into May 2013 United Kingdom – UK, Retail Durable Sectors; [www.gfk.com/UK](http://www.gfk.com/UK)). The share of small independent food stores (with factory prices) in the total number in Germany in analyzed year was: 2007 - 36.61%, 2010 - 31.73% and 2012 - 30.04% (author's calculation of database: Germany - Retail Foods, 8/22/2013 , USDA - United States Department of Agriculture, GAIN- Global Agricultural Information Network Report Number: GM13031). Lately, consumers in Germany increasingly prefer small food shops, including convenience stores and independent retailers. In Germany, a small independent retailers participate in the total sales of food products to approximately 9% and in Spain to 50% (Assessing the Supply / Retail Distribution Environment September 2010; [www.pma.com](http://www.pma.com)).

The participation of small independent retailers in organic food sales is significant. So, for example, the share of small independent retailers in sales of organic food in the United Kingdom by observed years amounted to: 2004 - 22.1%, 2008 - 18.8% and 2012 - 18.7% (Soil Association 2013).

The share of small independent retailers in sale of pharmaceutical products (medicines) is also significant. In the United States in 2011 they participated in total medicines retail with 18%. The average gross margin of small independent pharmacies in the United States was 22.6% in the period of 2006 - 2010. Recently, it increased slightly so that in 2010. amounted to 24.0%, but it is still beneath the "industry average" (2010 - 25.4%) (McKesson 2012).

There are the typical areas in which small independent retailers have significant role. They play an important role in the socio-economic field. They offer supply to customers when there is only one store in the rural areas, in the cases of incidental and emergency purchases, so

as with products not available in other stores. Their role is important in the area of cooperation with other business organizations, expressed as provision of services (legal advice, tax advice, etc.) and networks. In the area of improving the living conditions of the local population (i.e., the support of local government) they play an important role concerning the "feeling" of belonging to rural area. The importance of small independent retailers is great in employment, because of stimulating measures for their establishing and there are many of them. Sector issues of small independent retailers are in the areas of diversity of choice (affecting their competitive advantage as a result of the implementation strategy of differentiation), and dynamic (in terms of introducing new product and retail innovations, i.e. better understanding of the local market and customer needs as a potential source of competitive benefits) (Coca - Stefaniak et al., 2005: 357).

### **3. Strategy and business problems of small independent retailers**

Despite the great importance and the role of small independent retailers in the retail sector of all product categories, they do, however, face a number of problems in their business which are not typical for medium and, particularly, large retailers. These are: lower productivity, lower inventory turnover ratio, lower gross margin, higher selling prices and unfavorable conditions of procurement (Knego, 2011: 3). These problems are clearly indicated by the results of empirical research for small independent retailers of selected countries EU (See: Table 1), and the U.S. - independent pharmacists).

In order to mitigate these problems it is considered that the small independent retailers should be differentiated, specialized, joined, personalized and that they should find profitable markets and gain customers' loyalty. The merging of small independent retailers (for joint procurement, promotional and other activities) allows to modernize its operations and together compete against the large chain retailers and the new challenges of business environment. Strategic cooperation of small independent retailers improves their competitive advantage with lower prices, and contributes to the achievement of the target costs and desired profit. Business strategies of small independent retailers are usually seen within three Porter's generic strategies (low cost strategy, differentiation strategy and focus strategy) in order to achieve adequate competitive advantage, and oppose it to strong competitors on the market. In conditions of strong competition on the retail market the concept of customer relationship management should be

applied as much as possible in order to woo and retain the customers (Vojvodić, 2011: 211). Similarly, they should apply new concepts of cost management in their business operation (particularly Lean and Kaizen) and modern information technology. All this have positive impact on their market and financial performance, especially in the long-term.

In order optimizing profit it is necessary that entrepreneurs are increasingly applied to traditional cost accounting system, as well as new concepts of cost management (accounting for basic activities, target costing, total quality management, billing product life cycle, etc.). Likewise, enterprise resource planning system (ERP) and radio frequency identification (RFID). Implementation of an integrated accounting information system positively affects the performance of entrepreneurs.

#### **4. Macroeconomic environment of trade entrepreneurs business in Serbia**

In Serbia, there has been unfavorable macroeconomic environment of all business entities recorded lately, including trade entrepreneurs - small independent respectively. They are shown in Table 2.

**Table 2 . The main macroeconomic indicators in the Republic of Serbia**

<b>Description</b>	<b>2011</b>	<b>2012</b>
Gross domestic product (in millions of dinars - fixed prices, ref. 2005 godina)	1.888.146,7	1.855.173,4
The growth rate of GDP	1,6	-1,7
Industrial production	102,1	97,1
The annual rate of inflation (consumer price index - CPI)	7,0	12,2
Exports (in millions of euros)	8.441,4	8.836,8
Imports (in millions of euros)	14.250,0	14.782,3
The foreign trade deficit (in millions of euros)	5.808,6	5.945,5
Number of employees (in thousands)	1.735	1.727
Gross earnings (in dinars)	52.767	57.430
Net earnings (in dinars)	39.976	41.377
Exchange rate of euro against the dinar (31. Decemeber)	104,64	113,72

Source: Statistical Office of the Republic of Serbia, the National Bank of Serbia. According to: Serbian Business Registers Agency - Financial Statements and Solvency.

The information in the table show that according to all indicators macroeconomic environment was worse in 2012 compared to 2011. Such environment appropriately reflected on the economic and financial position of trade entrepreneur, i.e. small independent retailers in Serbia.

## **5. Concentration in the retail Serbia**

Concentration in retail is significant factor of economic and financial position of small independent retailers. The big retailers "dictate" business conditions on the retail market. Small



independent retailers should adjust to them by using the appropriate successful business strategies. Table 3 shows the concentration of the top 10 retailers in the region (including Serbia) in 2011.

**Table 3. Concentration of the top 10 retailers of Central and Eastern Europe, 2011**

Country	Market share (%)
Poland	60%
Czech Republic	81%
Slovakia	86%
Hungary	19%
Russia	2%
Ukraine	10%
Romania	35%
Bulgaria	36%
Croatia	76%
Bosnia	45%
<b>Serbia</b>	<b>41%</b>

Source: GFK 2012.

The information in the given table show that highest concentration of top 10 retailers in the region is in Slovakia (86%), and lowest in Russia (2%). In Serbia, the top 10 retail chains control 41% of the retail market. They largely "dictate" the terms of business of small independent retailers, i.e. they are exposed to their strong competition.

## 6. Structure of retail formats in Serbia

Despite the significant share of large retail chains on the retail market in Serbia, the percentage of purchasing goods in small shops, is however high - over 60 per cent. These data are shown in the Table 4.

**Table 4. The structure of the retail formats of Central and Eastern Europe in the 2011 (value share - %)**

Country	Hypermarkets	Supermarkets	Discounts	Cash & Carry	Small stores/Market and street sales/Other
Bulgaria	14	19	7	1	60
Croatia	26	26	8	3	37
Czech Republic	40	15	19	2	24
Hungary	26	17	16	2	40
Polland	23	19	29	2	29
Romania	23	14	19	1	53
Russia	10	14	17	2	57
<b>Serbia</b>	<b>5</b>	<b>24</b>	<b>0</b>	<b>6</b>	<b>65</b>
Slovakia	31	24	16	2	27
Ukraine	1	13	3	1	81

Source: GFK 2012.

In Western Europe there is a growing importance of hypermarkets, supermarkets and Cash & Carry to the detriment of small and traditional shops. This, however, is not the case in Eastern Europe where small shops dominate with more than 53%.

As the data in the table show there is a significant purchase in small retail shops in Serbia, over 60%, what is not the case in countries with developed market economies and some of the Central and Eastern Europe countries. Given that, special attention must be paid to the improvement of the economic and financial position of the trade entrepreneur i.e. small independent retailers in Serbia.

Serbia has significant daily (household) consumption in small retail shops (Table 5). In 2012. in certain retail formats it amounted to: hypermarkets - 8%, supermarkets - 37%, discounts - 0% , and small shop/other - 55%. This, however, is not the case in other countries of Central and Eastern Europe, with the characteristic of increased food products sales in supermarkets and hypermarkets (Machek, 2012: 24 ; Markovic, 2013: 675).

**Table 5. The structure of retail food products sale by formats in Serbia and selected countries of the region in 2011**

Country	Hypermarkets	Supermarkets	Discounts	Small shops/Other
B&H	30	45	1	24
Bulgaria	18	34	7	41
Croatia	38	37	5	20
Hungary	30	23	20	27
Slovenia	20	47	13	20
<b>Serbia</b>	<b>8</b>	<b>37</b>	<b>0</b>	<b>55</b>

Source: *GFK Shopping monitor CEE 2012*. According to Markovic, (2013).

In order to provide more comprehensive consideration of the specifics of retail formats in the sector of food products in Serbia (in relation to other countries, especially ones with the developed market economies), Table 6 displays the types of "C Market" retailer stores, Belgrade, Serbia, which sells food products.

**Table 6. Types of stores of the retailer "C Market", Belgrade, Serbia**

Types of stores (participation in %)	2010	2009	2008
Hypermarkets	5	5	5
Supermarkets	23	24	23
Cash & Carry	6	7	6
Mini markets	23	23	21
Traditional stores	30	30	32
Other	12	12	12

Source: EPIC 2012.

As the data in the table show observed retail company has domination of small shops. It is, therefore, in line with the general characteristics of the structure of retail formats in Serbia. Following the example of retailers of countries with developed market economy, we should in the future strive for the structure of retail formats in Serbia with more hypermarkets and supermarkets, including Cash & Carry, or big stores. The change in the structure of retail formats in that direction will be partly influenced by the coming of foreign retail chains in the retail food

market in Serbia.

In addition to domestic, there is an important role of small independent Chinese traders in the supply of customers with non-food products. They are known to offer goods at low affordable prices which correspond to customers, regardless of the quality of products, given the low purchasing power of the population in Serbia (Korać, 2013: 245). Therefore, according to expert estimates, they fit into the retail environment in Serbia and have business operations in almost all cities.

## **7. Trade entrepreneurs impact on the performance of trade and economy in Serbia**

In Serbia, according to the Law on Accounting and Law on Auditing, trade entrepreneurs are treated as small businesses. According to their characteristics some of them are large and medium-sized enterprises. In Serbia, there is large number of micro-enterprises with a dominant share of small shops which also on their own way contribute to improving the supply of people with needed products and services and creating additional value of total trade and economy in Serbia as a whole. The economic and financial position of the micro enterprises is significantly different (it is worse) to trade entrepreneurs in Serbia. In Serbia, a large number of small independent retailers operate within the "gray economy" by selling goods at much lower prices compared to other (legal) retailers which, to some extent, negatively reflects on their overall performance. Those are not the subject of this paper, only the entrepreneurs who submit financial reports to the Business Registers Agency. The impact of entrepreneurs on the performance of trade and economy of Serbia is very significant. The data in the table 7 show this (The Republic of Serbia - Business Registers Agency - Financial Statements and Solvency).

**Table 7. The impact of entrepreneurs on the performance of the economy and trade of Serbia in 2012**

	Entrepreneurs		Employees				Operating income			
	Number	%	Number	%			Amount (millions of dinars)	%		
Economy – total			1 004 336	100			8 145 320	100		
Trade – total			193 954	19.31	100		2 979 785	36.58	100	
Economy – entrepreneurs	19 679	100	43 995			100	207 963	25.53		100
Trade – entrepreneurs	8 234	41.84	14 278	1.42	7.35	32.45	113 808	1.39	3.81	54.72

Note : Author's calculation

Source: The Republic of Serbia - Business Registers Agency - Financial Statements and Solvency.

As can be seen from the data, in 2012 trade entrepreneurs participated in total number of entrepreneurs of the Serbian economy with 41.84 %. That same year, they participated in the total number of employees in Serbian economy with 1.42%, in total trade with 7.35% and in entrepreneurship of Serbia with 32.45%. In 2012 participation of all the entrepreneurs in creating a total operating income of the economy of Serbia was 25.53%. The participation of trade entrepreneurs in creating total operating revenue of Serbia in 2012 amounted to 1.39% - 3.81% of total trade, and overall entrepreneurial sector of the Serbian economy 54.72%. Based on the analysis of the data general conclusion may be reached – there is a significant impact of entrepreneurs on the performance of total trade and the economy of Serbia. They must therefore be given special attention in the future as part of a general strategy of Serbian economy development and, in particular, the Serbian trade development strategy. In accordance with their nature and importance they should be provided with favorable business conditions (tax, credit, social, etc.) in order to be more competitive in the retail market of Serbia.

## 8. Labor productivity of trade entrepreneurs in Serbia

In this paper labor productivity of trade entrepreneurs in Serbia will be analyzed on the basis of trends in operating income per employee. Table 8 shows the dynamics of labor productivity of trade entrepreneurs in Serbia for 2008 – 2012 period.

**Table 8. The dynamics of labor productivity of trade entrepreneurs in Serbia, 2008 - 2012**

	Number of entrepreneurs	Evaluation of growth of entrepreneur shops - open/ (closed)*	Number of employees	Operating income per employee (in thousands of dinars)*
2008	10 163	(540)	18 874	5 631
2009	9 558	(605)	17 784	5 732
2010	8 958	(600)	15 506	6 568
2011	8 785	(173)	15 603	7 036
2012	8 234	(551)	14 278	7 970

Note:\* The author's calculation

Source: The Republic of Serbia - Business Registers Agency - Financial Statements and Solvency.

During the observed period there were some adverse economic conditions for trade entrepreneurs in Serbia, especially in the 2012, in relation to the 2011. It is partly indicated by the evaluation of number of entrepreneurs shops expressed through the permanent tendency of closing of small independent stores rather than their openings, ranging from 173 (2011) to 605 (2009). It reflected as continuous decrease of number of employees in trade entrepreneurial sector in Serbia from year to year. Among other things, decreased number of employees has partly caused an increase in the labor productivity of trade entrepreneurs in Serbia in all analyzed years.

As a measure of productivity, gross value added per employee amounted to 6.84 euros with the trade entrepreneurs in Serbia in 2012 (Author's calculations based on data: Entrepreneurs in the Republic of Serbia 2012, August 2013, Working Paper, The Republic of Serbia - Serbian Statistical Office, Belgrade, No. 83). It is much lower (almost four times) compared to the labor productivity of small trade enterprises in the European Union (See: Table 1).

## 9. Cost efficiency of trade entrepreneurs in Serbia

Cost-efficiency of trade entrepreneurs in Serbia will be analyzed on the basis of trends in operating revenues, operating expenses and coverage of operating expenses with operating income. Table 9 shows the trade entrepreneurs' dynamics coverage of operating expenses with operating income in Serbia for 2008 - 2012 period.

**Table 9. Trade entrepreneurs' operating expenses coverage with operating income in Serbia 2008 - 2012**

	<b>Operating income (millions of dinars)</b>	<b>Operating expenses (millions of dinars)</b>	<b>Coverage of operating expenses with operating income (operating income/operating expenses) *</b>
2008	106 295	103 942	1.02
2009	101 945	100 007	1.01
2010	101 844	99 786	1.02
2011	109 794	107 745	1.01
2012	113 808	111 909	1.01

Note: \* The author's calculation

Source: The Republic of Serbia – Business Registers Agency- Financial Statements and Solvency.

The information in the table show that the cost-effectiveness of trade entrepreneurs in Serbia is at very low level. Coverage of operating expenses with operating income is almost on the "break even", i.e. on the breakpoint level. It is therefore necessary to apply new concepts of cost management (primarily Toyota business principles, Kaizen, Lean and others) to improve the cost-efficiency of trade entrepreneurs in Serbia in the future (Lukić, 2011a: 674; Lukic, 2011b: 157; Lukic, 2012: 574; Lukic, 2013: 268).

## 10. Liquidity and solvency of trade entrepreneurs in Serbia

Liquidity of trade entrepreneurs in Serbia, is analysed we be based on the dynamics of the current liquidity (current assets/current liabilities) and net working capital (current assets -

current liabilities) denominated in the total amount, a percentage of operating income in relation to stock. Net working capital shows what part of current assets is financed by long-term sources of funds. The bigger, the much more short-term borrowings from banks or financial markets can be taken. Table 10 shows the movements of current liquidity and net working capital of trade entrepreneurs in Serbia for the period 2008 - 2012.

**Table 10. Current liquidity and net working capital of trade entrepreneurs in Serbia, 2008 – 2012**

	<b>Current liquidity</b>	<b>Net working capital (in millions of dinars)</b>	<b>Net working capital (in % of business income)</b>	<b>Net working capital / stocks</b>
2008	1.11	2 778	2.61	0.15
2009	1.10	2 674	2.62	0.15
2010	1.12	3 065	3.00	0.16
2011	1.13	3 443	3.13	0.17
2012	1.12	3 410	2.99	0.17

Note : Author's calculation

Source: The Republic of Serbia - Business Registers Agency - Financial Statements and Solvency.

Current liquidity of trade entrepreneurs in Serbia in the observed period was "satisfactory" given the financial indiscipline of the Serbian economy, but unsatisfactory in relation to the golden rule of banking (2 working capital : 1 current liabilities) and "industry standards" (Industry Norms - Key Business Ratios - Benchmarking Ratios; [www.creditguru.com](http://www.creditguru.com)). Financing of current assets from long-term sources of funds, as the dynamics of the total amount of net working capital shows, the net working capital percentage of operating income and the ratio of net working capital and inventories, is at a very low level. In the observed period net working capital in operating income participated between 2.61% and 3.13%, only slightly more than 15% of stocks were financed by long-term sources of funds. All in all, liquidity of trade entrepreneurs in Serbia is very low compared to the relevant "industry standards", so appropriate financial measures must be taken in the future in order to improve it.



### 11. The effectiveness of trade entrepreneurs in Serbia use of property

To evaluate the effectiveness of trade entrepreneurs in Serbia property use we will use the following indicators: 1) the turnover of fixed assets (operating income / fixed assets), 2) the turnover of working capital (operating income / working capital), 3) Inventory turnover (operating income / stocks), short-term receivables, investments and cash turnover (operating income / short-term receivables, investments and cash), 4) short-term liabilities turnover (operating income / current liabilities), 5) operational cycle (time to collect receivables + inventory turnover duration), and 6) cash cycle (time to collect receivables + inventory turnover duration - days account receivable). Table 11 shows the efficiency of trade entrepreneurs property use in Serbia for the period 2008 - 2012.

**Table 11. Indicators of efficiency of trade entrepreneurs in Serbia property use, 2008 - 2012**

	Fixed assets turnover	Turnover of working capital	Inventory turnover		Short term receivables, investments and cash turnover		Short term liabilities turnover		Operational cycle	Cash cycle
	Ratio	Ratio	Ratio	Days	Ratio	Days	Ratio	Days	Days	Days
2008	20.46	3.85	5.87	62	11.20	32	4.28	85	94	9
2009	20.27	3.74	5.79	63	10.62	34	4.15	87	97	10
2010	21.06	3.57	5.57	65	9.98	36	4.00	91	101	10
2011	21.80	3.67	5.73	63	10.22	35	4.15	87	98	11
2012	22.35	3.76	5.72	63	11.00	33	4.23	86	96	10

Note : Author's calculation

Source: Republic of Serbia - Business Registers Agency - Financial Statements and Solvency.

The efficiency of use of fixed assets by trade entrepreneurs in Serbia in observed period increased from year to year (except 2009). At the same time, the efficiency of use of working capital decreased until 2010. and slightly increased until 2012. The situation is similar with the efficiency of use of stocks (given their high share in total current assets), short-term receivables, investments, cash and short-term liabilities.

Days account receivables, investments and cash is shorter than the duration of short-term liabilities settlement. This means that trade entrepreneurs in Serbia partly credited their sales to customers from short-term credit funding sources (primarily suppliers).

Operational cycle is unsatisfactory, while the cash cycle is satisfactory, compared to "industry standards" for retailers. So, for example, the average operational cycle in Europe in retail is 69.8, a cash cycle is 26.6 days (PWC 2012). Therefore, in the analyzed period, trade entrepreneurs in Serbia were in liquidity position. The improvement of the operating cycle is a measure for improvement their overall business and financial performance.

## **12. Profitability of trade entrepreneurs in Serbia**

Profitability of trade entrepreneurs in Serbia will be analyzed with the application of Dupont analysis, so-called strategic profit model. In other words, we will analyze the rate of return on sales (net income / operating income), the rate of return on total assets (net income / assets), the rate of return on equity (net income / equity), and the impact of assets turnover (operating income / assets) and financial indebtedness-financial leverage (assets / equity) on profitability.

The rate of return on assets is a function of the rate of return on sales and asset turnover. Adequate control of these factors may affect the achievement of the target return on assets. Table 12 shows the yield of the total assets of trade entrepreneurs in Serbia for 2008 - 2012. period.

**Table 12. Trade entrepreneurs in Serbia, return on assets 2008 - 2012**

	<b>The rate of return on operating revenue</b>	<b>Assets turnover</b>	<b>Return on assets rate</b>
2008	1.64	3.13	5.13
2009	1.49	3.04	4.52
2010	1.51	2.95	4.45
2011	1.52	3.04	4.62
2012	1.44	3.10	4.46

Note : Author's calculation

Source: The Republic of Serbia - Business Registers Agency - Financial Statements and Solvency.

During the observed period the return on assets rate of trade entrepreneurs in Serbia was between 4.45% (2010) to 5.13% (2008). Until 2010 it showed a tendency of decline, and from that year until 2012 a slight increase. This tendency is in accordance with the movement of influential factors - the rate of return on operating income and asset turnover in the analyzed period. Adequate control of these factors can contribute to the improvement, i.e. achievement of the required rate of return on assets of trade entrepreneurs in Serbia in the future. This applies particularly to cost control (the cost of sold goods and operating expenses), due to the fact that the increase of prices can increase sales revenues only slightly, concerning the very low purchasing power of the population in Serbia - so there are more opportunities with the increasing of cost efficiency. As a function of that, it is necessary to use the available assets in all forms more efficiently.

The rate of return on equity is a function of the rate of return on sales, assets turnover, and financial indebtedness (Financial leverage). Adequate control of these factors may affect the achievement of the target return on equity. Table 13 and Figure 1 show the contribution of capital of trade entrepreneurs in Serbia for 2008 - 2012 period.

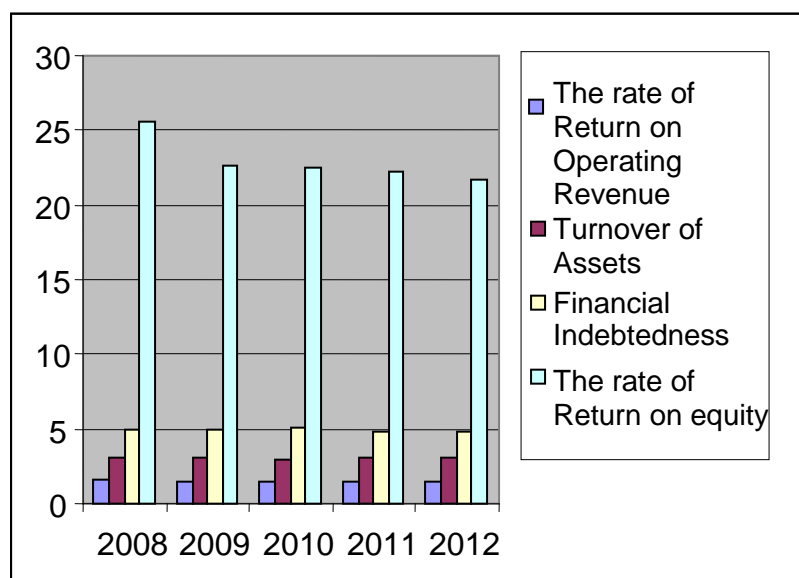
**Table 13. Return on equity of trade entrepreneurs in Serbia, 2008 - 2012**

	The rate of return on operating revenue	Turnover of assets	Financial indebtedness- Financial Leverage	The rate of return on equity
2008	1.64	3.13	4.99	25.61
2009	1.49	3.04	5.01	22.69
2010	1.51	2.95	5.04	22.45
2011	1.52	3.04	4.81	22.22
2012	1.44	3.10	4.86	21.69

Note : Author's calculation

Source: The Republic of Serbia - Business Registers Agency - Financial Statements and Solvency.

**Figure 1. Return on equity of trade entrepreneurs in Serbia**



Note : Author's figure

Source: The Republic of Serbia - Business Registers Agency - Financial Statements and Solvency.

During the observed period the rate of return on capital of trade entrepreneurs in Serbia ranged from 21.69 (2012) to 25.61% (2008), and has manifested a tendency to decline by 2012 when it slightly increased. On average, according to descriptive statistics, the rate of return on equity was 22.93% (std. deviation 1.54208), and the rate of return on operating income - 1.52%

(std. deviation .07382), turnover of assets - 3.05 (std. deviation .06907), and financial indebtedness - 4.94 (std. deviation .10085). Only in 2008 the rate of return on equity was higher than the average.

In the analyzed period the correlation between the turnover of assets, financial indebtedness, and the rate of return on equity of trade entrepreneurs in Serbia was weak. According to individual variables it was strong only between the rate of return on operating revenue (income) and rate of return on equity (See: Table 14). It is quite understandable when one takes into account the fact that the movement of the rate of return on operating revenue is in accordance with the "industry standards" (Industry Norms - Key Business Ratios - Benchmarking Ratios; [www.creditguru.com](http://www.creditguru.com)). The negative correlation between the assets turnover and financial indebtedness means: the higher the turnover of assets - less financial indebtedness and vice versa. In the future, in order to increase the return of equity of trade entrepreneurs in Serbia it is necessary to find "optimal" relationship between turnover of assets and financial indebtedness.

**Table 14. Correlation matrix**

		The rate of return on operating revenue	Turnover of assets	Financial indebtedness-Financial Leverage	Rate of return on equity
Pearson Correlation	The rate of return on operating income	1	0.338	0.312	0.950(*)
Sig. (2-tailed)			0.578	0.609	0.013
N		5	5	5	5
Pearson Correlation	Assets turnover	0.338	1	-0.338	0.493
Sig. (2-tailed)		0.578		0.578	0.399
N		5	5	5	5
Pearson Correlation	Financial indebtedness-Financial Leverage	0.312	-0.338	1	0.419
Sig. (2-tailed)		0.609	0.578		0.482
N		5	5	5	5
Pearson Correlation	The rate of return on equity	0.950(*)	0.493	0.419	1
Sig. (2-tailed)		0.013	0.399	0.482	
N		5	5	5	5

\* Correlation is significant at the 0.05 level (2 - tailed)

Note: Author's calculating; output of the statistical programme SPSS

Source: The Republic of Serbia - Business Registers Agency - Financial Statements and Solvency.

*(In order to provide complex analysis of trade entrepreneurs profitability in Serbia by using the business excellence model index we measured the indicators of business success for 2012. Model of business excellence shows the influence of key factors - profitability, value creation, liquidity and financial strength on business success (Belak, V., Aljinovic Barac, Z. (2008): Secrets of Capital Markets, Belak doo, Zagreb, Croatia; According to: Bubić , 2012). It looks like this:*

$$BEX = 0,388 \text{ ex1} + 0,579 \text{ ex2} + 0,153 \text{ ex3} + 0,316 \text{ ex4}$$

*where: ex1 (profitability) = EBIT / total assets; ex2 (value creation) = net operational profit / capital x price; ex3 (liquidity) = working capital / total assets; ex4 (financial power) = 5 (profit + D + A) / total liabilities .*

*Meaning of BEX index is: BEX index greater than 1 - company is good; BEX index between 0 and 1 – it needs improvement, and BEX index less than 1 - bare existence.*

*In 2012 BEX index calculated for trade entrepreneurs in Serbia amounted to 1.554. That represents their business excellence. Besides, this conclusion is consistent with the results of their efficiency research by using ratio analysis and strategic profit model. In doing so, we should not ignore the fact that their "satisfactory" business success was achieved in the conditions of unfavorable macroeconomic environment in Serbia.) (Belak, V., Aljinovic Barac, Z. (2008): Secrets of Capital Markets, Belak doo, Zagreb, Croatia; According to: Bubić , 2012: 183; Statistical Office of the Republic of Serbia, the National Bank of Serbia. According to: Serbian Business Registers Agency Financial Statements and Solvency)*

### **13. Conclusion**

In general, the obtained research results based on the Serbian Business Registers Agency original empirical data, for the period 2008 - 2012. show that the economic and financial position of the trade entrepreneurs and small independent retailers in Serbia, despite the unfavorable macroeconomic environment are on the "satisfactory" level, i.e. profit performances are above break-even point. It is understandable when one takes into account the fact that about 65% of the purchase is done in small shops.

Despite the very difficult economic circumstances, trade entrepreneurs in Serbia continued long-term profitable business in 2012, with a slight increase in the volume of activity. Compared to the previous year (2011) they have achieved higher earnings, and slightly improved positive net working capital. In carrying out its activities they, however, used borrowed funds, so that the decrease of their own share in total sources of funding resulted in a further increase of indebtedness. All this reflected on their liquidity, solvency and profitability .

Lately, there is an increasing productivity of trade entrepreneurs in Serbia, but it is significantly lower than the productivity of small businesses in the retail sector in the European Union.

Target profit is realized with the efficient management of costs, and other key factors. It is defined in accordance with the hypothesis in this research work.

Notwithstanding the unfavorable macroeconomic environment, liquidity and solvency of trade entrepreneurs in Serbia is satisfactory. However, with respect to the defined standard it is unsatisfactory. In order to increase their, and all business entities, liquidity and solvency in the future, it is necessary, to improve the "financial discipline" in the Serbian economy.

The efficiency of using assets is satisfactory. Credit sales were partly financed by loans from suppliers. Operational cycle is worse, a cash cycle is better than the average for retailers in Europe. By improving operating cycle, the cost efficiency can be improved and thus the profit positions of trade entrepreneurs in Serbia in the future. This is primarily achieved by applying new concepts of cost management (primarily based on Toyota's principles of business), the concept of managing relationships with customers and suppliers, and modern information technology.

## Literature

- Agriculture and Agri-Food Canada (2012). *International Markets Bureau, Top Grocery retailers in Latin America*.
- Bubić, J.; Hajnrih, J. (2012). The analyses business performances of agricultural enterprises in Vojvodina during the current crisis. *Economics of Agriculture 2*: 183-194.
- Coca-Stefaniak, A. (2005). Decline in the British small shop independent retail sector: exploring European parallels. *Journal of retailing and Consumer Services 12*: 357-371.
- EPIC "C Market" AD Beograd, Company Profile, February 2012
- Eurostat (2011). *Eurostat 2011 edition, Key figures on European business with a special feature on SMES, Pocketbooks*. European Commission.
- Filipović, N. (2013). Strateški trendovi u maloprodaji. *In store*: 24-25.
- Germany – Retail Foods (2013). 8/22/2013. USDA - GAIN Report Number: GM13031.



- GFK Beograd (2012). *Potrošač u Srbiji u 2012. i budući trendovi* [GFK - Consumers in Serbia in 2012 and future trends].
- Knego, N.; Blaženka, K. (2011). *The Position of Small Retailers in Croatia on the Verge of Entering the European Union*. Proceedins of the 8th International Conference on Economic Integration, Competition and Cooperation .
- Korać, M. (2013). Transnational pathways to integration: Chinese traders in Serbia. *Sociologija* LV(1): 245-260.
- Kumar, A. (ed) (2011). *Opatija*: University of Rijeka, Faculty of Economics; University of Ljubljana; University of Antwerp. 1-15 (ISBN: 978-953-7813-04-8).
- Lukić, R. (2011a). *Evaluacija poslovnih performansi u maloprodaji*. Beograd: Ekonomski fakultet.
- Lukic, R. (2011b). Estimates of economic performance of organic food retail trade. *Economic research* 24(3): 157-169.
- Lukic, R. (2012). Sustainable Development of Retail in Serbia. *Review of International Comparative Management* 13(4): 574-586.
- Lukic, R. (2013). Sustainable Cost Management in Retail. *Review of International Comparative Management* 14(2): 268-280.
- Lukic, R. (2014). The profitability of trade in Serbia. *Asian Journal of Management Research* 4(3): 485-500.
- Machek, M. (2012). Retail market structure development in Central Europe. *Central European Business Review* 1(3): 22-27.
- Markovic, M.; Simurina, J.; Pavicic, J. (2013). Economic and Business Impact of Crisis on Croatian Trade. *Review of Integrative Business Economics* 2(2): 672-680.
- McKesson (2012). *Retail Pharmacy Trends*.
- PWC (2012). *European Working capital, Annual Review 2012 – Working capital: never been better. What the top performing companies are doing differently*.
- Soil Association (2013). *Organic market report 2013*.
- Tajeddini, K. et al., (2013). Efficiency and effectiveness of small retailers: The role of customer and entrepreneurial orientation. *Journal of Retailing and Consumer Services* 30: 453-462.
- Vojvodić, K. (2011). Survival strategies of small independent retailers. *Business Logistic in Modern Management* 11: 211-221.

## ***Ekonomiczno-finansowy status przedsiębiorstw handlowych w Serbii***

### ***Streszczenie***

Ze względu na ich ogólne znaczenie, skoncentrowano się na teoretycznej oraz praktycznej analizie kondycji małych niezależnych przedsiębiorstw detalicznych. W artykule przeanalizowano specyfikę ekonomicznego i finansowego statusu przedsiębiorstw handlowych, tzn. małych niezależnych detalistów w Serbii w latach 2008-2012. Pamiętając o podejściu „kompleksowym”, tj. o zatrwajającej kondycją przedsiębiorczości w Serbii w ostatnim okresie, wyniki badań (w zakresie niemal wszystkich wskaźników) wykazują „relatywnie” satysfakcjonującą ekonomiczno-finansową pozycję serbskich przedsiębiorstw handlowych. Ich udział w całkowitym handlowym przychodzie operacyjnym w Serbii w 2012 roku wyniósł 3,81%. W celu poprawy sytuacji analizowanych przedsiębiorstw powinny one w przyszłości łączyć się (ze względu na wspólne zamówienia oraz inne działania handlowe), stosować nowe koncepcje zarządzania kosztami (przede wszystkim zasady biznesowe Toyoty), nowe koncepcje

Radojko LUKIC

zarządzania relacjami z klientami i dostawcami oraz nowoczesne technologie informatyczne (JEL: F65 L81 M40).

**Słowa kluczowe:** przedsiębiorstwa handlowe, Serbia, strategie biznesowe, udział w rynku, wypłacalność, zyskowość