

## THE PERFORMANCES OF COFFEE PROCESSORS AND COFFEE MARKET IN THE REPUBLIC OF SERBIA

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### Summary

*The main aim of this paper is to investigate the performances of coffee processors and coffee market in Serbia based on the market concentration analysis, profitability analysis, and profitability determinants analysis. The research was based on the sample of 40 observations of coffee processing companies divided into two groups: large and small coffee processors. The results indicate that two large coffee processors have dominant market share. Even though the Serbian coffee market is an oligopolistic, profitability analysis indicates that small coffee processors have a significant better profitability ratio than large coffee processors. Furthermore, results show that profitability ratio is positively related to the inventory turnover and negatively related to the market share.*

**Key words:** coffee processors, coffee market, market share, profitability.

**JEL:** Q13, M41.

### Introduction

Coffee is one of the most significant internationally traded commodities. In many years it was ranked as the second traded in value on the foreign exchanges for producing countries, next to oil (Sereke-Brhan, 2010). The world coffee export approximately accounted US\$30.8 billion in 2015 (around 8.27 million tons), a decrease of 4% in comparison to 2014 (International Trade Centre, 2016). Coffee also represents an important source of export earnings for many of the world's least developed countries, so its export makes many of them vulnerable to exogenous shocks (International Coffee Organization, 2015).

Coffee is produced in more than 50 countries, particularly in South America, Africa, and Southeast Asia, but consumed as a beverage world widely. The total world production

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amounted 143.3 million 60 kg bags in 2015/16 crop year, and the major coffee producing countries were Brazil (43.2%), Vietnam (27.5%), Columbia (13.5%) and Indonesia (12.3%). The total global coffee consumption in 2015 was estimated 152.2 million 60 kg bags. The most developed countries are the largest consuming coffee markets with the total consumption of 81.2 million 60 kg bags, and individually EU (41.6%), US (24.4%) and Japan (7.7%) (International Coffee Organization, 2016). Furthermore, many countries and citizens depend on coffee production for income. Coffee plantation and coffee processing provides employment for over 100 million people across the globe (Jacob, 1998).

Due to the major role of coffee production for the economies, numerous researchers and institutions pay great attention analyzing the performances of coffee producers and the performances of the coffee market. The analysis of coffee processors performances usually includes the analysis of profitability, profitability determinants, the analysis of the trend in coffee production and coffee sales (Mohammed et al., 2013; Woodill et al., 2014). For the sustainable development of the coffee processing industry, balanced business performances of coffee processors are highly favorable. The performances of the coffee market are investigated in terms of market concentration (Euromonitor, 2016; International Coffee Organization, 2014). The aim of market concentration analysis is to define the characteristics of the market. Depending on the market share of the leading and other companies in industry, the market can range from perfect competition to oligopoly (Vuković et al. 2015). Concentrated markets can impose significant barriers to entry and better market position of smaller companies. In the case of a high concentration and a very limited market, the choice of consumers is highly reduced. The upbringing of modern market structure for securing intensive and effective competition between economic subjects is an imperative of every country, especially developing ones (Mihajlović et al., 2016).

The Serbian coffee market is small in comparison to the world coffee market and in comparison to the developed countries coffee markets. Beside this, import of not roasted coffee represents import of one of the main commodities in Serbia (Statistical Office of the Republic of Serbia, 2016). The market of coffee processors in Serbia consists of two large coffee processors (Grand Prom and Strauss Adriatic) and around 200 small coffee processors. It can be said that the Serbian coffee market is characterized by the competition of two groups coffee processors: large and small coffee processors. The aim of this paper is to investigate the differences of performances of large and small coffee processors in Serbia during the period 2012-2015. This research is designed to analyze the trend of coffee market concentration, the profitability of large and small coffee processors, and to investigate which factors determinate the profitability of coffee processors in Serbia.

### **An overview of the coffee market in Serbia**

Serbia is a country in which there is no production of coffee, but only roasting, trade, and consumption. Serbia imported 32,686 tons of coffee in 2015 accounted US\$83,349 thousand (*Table 1*). Import growth in quantity between 2011 and 2015 was negative

-1.71%. The Serbian share in world imports represented 0.3% in 2015 (International Trade Centre, 2016).

On the other hand, Serbia's coffee export in 2015 amounted 1,121 tons or US\$5.78 thousand, which represents 11.43% export growth in quantity between 2015 and 2014, but -3.91% export growth values (*Table 1*). The Serbian share in world exports is not significant. (International Trade Centre, 2016).

**Table 1.** Coffee trade balance in Serbia during the 2011-2105

Year	Import (000 USD)	Import (tons)	Export (000 USD)	Export (tons)	Trade balance (000 USD)
<b>2011</b>	<u>Top of Form</u> 109,299	<u>Top of Form</u> 33,254	<u>Top of Form</u> 3,314	<u>Top of Form</u> 435	<u>Top of Form</u> -105,985
<b>2012</b>	107,651	34,498	7,144	791	-100,507
<b>2012 / 2011</b>	-1.51%	3.74%	115.57%	81.84%	-5.17%
<b>2013</b>	87,360	32,689	7,255	795	-80,105
<b>2013 / 2011</b>	-20.07%	-1.70%	118.92%	82.76%	-24.42%
<b>2013 / 2012</b>	-18.85%	-5.24%	1.55%	0.51%	-20.30%
<b>2014</b>	76,664	30,433	6,015	1,006	-70,649
<b>2014 / 2011</b>	-29.86%	-8.48%	81.50%	131.26%	-33.34%
<b>2014 / 2013</b>	-12.24%	-6.90%	-17.09%	26.54%	-11.80%
<b>2015</b>	83,349	32,686	5,780	1,121	-77,569
<b>2015 / 2011</b>	-23.74%	-1.71%	74.41%	157.70%	-26.81%
<b>2015 / 2014</b>	8.72%	7.40%	-3.91%	11.43%	9.79%

*Source:* Authors calculation (based on International Trade Centre, 2016)

Coffee consumption in Serbia amounted 575 thousand 60 kg bags in 2015/16. Roasted and ground (fresh, black, traditional, Turkish) coffee have had a market share of over 90% of the overall coffee consumption in Serbia for many decades. Although fresh coffee consumption has reached the saturation point, a fact is that it is still more popular in Serbia than instant coffee. Instant coffee has been noted in a segment named „mixes“ (different mixtures of coffee milk, sugar, and flavors which give the final product aroma and taste), unlike the segment of pure soluble instant coffee in developed countries. Multinational coffee manufacturers (Nestle SA and Kraft Foods) dominated the sector of instant coffee until 2007 when the two large manufacturers of fresh coffee in Serbia (Grand Prom and Strauss Adriatic) entered the segment and achieved a huge success based primarily on their positive images (Bogosavljević Jovanović, Radojičić, 2016). Coffee companies make great efforts and invest a lot in marketing, branding, and differentiation of instant coffees, especially as they are more profitable. Installation of vending machines, attractive coffee shops, ready-to-drink coffees and other innovations have also influenced Serbian consumer habits and preferences. So, instant coffee

consumption recorded positive growth in the previous few years (9% in quantity and 13% in value in 2015).

In recent decades coffee roasters and consumers in the developed countries are switching to sustainable coffees, certified higher-quality coffees produced in accordance with certain environmental, social and/or economic standards (Organic, Fairtrade, Rainforest Alliance, UTZ Certified, etc.). There is still no significant consumer interest in Serbia for these coffees mostly because of the weaker purchasing power, and the lower level of awareness, information and education (Nuševa, 2012).

### **Materials and methods**

The aim of this paper is to review the performances of coffee processors and Serbian coffee market. For this purpose data from the financial statements of companies registered as coffee processors in the period 2012-2015 years were used. The data were collected from the financial statements of coffee processors from the database Amadeus, the database of Business Registry Agency and market research conducted by Euromonitor International Ltd. The research sample includes 40 companies observations divided into two groups. The first group consists of 8 observations of the two large companies in the field of coffee processing, while the second group consists of 32 observations of 8 small coffee processors in Serbia.

The performances research of coffee processors in Serbia is divided into three sections:

- Market concentration analysis,
- Profitability analysis and
- Identification of the profitability determinants of coffee processors.

#### ***Market concentration analysis***

Market concentration represents an important proxy for competition among companies in an industry. Analysis of the market concentration indicates to the characteristics of a specific market, which can be in a range from perfect competition to oligopoly, or even monopoly when one company achieves total revenue at a specific market. The aim of the analysis of coffee market concentration in Serbia is to investigate the characteristics of the competition among the coffee processors and to analyze the trend of market concentration during the 2012-2015. According to this the following hypothesis is defined:

*H<sub>1</sub>: Small number of large coffee processing companies have a dominant position on the market in Serbia.*

The concentration on different markets can be measured using a several statistical and econometric methods, such as the Herfindahl-Hirschman index (*HHI*), Concentration ratios (*CR<sub>n</sub>*), Gini coefficient, Linda index, Hannah-Kay index, Hall Tideman index etc. According to the availability of data, the concentration of coffee processing companies was measured by Concentration ratio. Oster (1999) defines the concentration ratio as

the percentage of industry sales or employment accounted for the largest few firms in the industry.

$$CR_n = \sum_{i=1}^n S_i$$

Where:

$CR$  – concentration ratio

$n$  - the number of firms

$S_i$  - market share

Concentration ratios range from 0 to 100 percent. Since there are two large coffee processors in Serbia, concentration ratios are measured using  $CR_2$  model. Market concentration can be measured by several variables: operating revenue, total assets, capital, the number of employees etc. According to the Federal Trade Commission in the USA (Ward, 2005) the industry is:

- Unconcentrate – if small number of companies produce less than 25% of industry output ( $CR_n < 0.25$ ),
- Moderately concentrated – if small number of companies produce at least 25% and less than 50% of industry output  $0.25 \leq CR_n < 0.50$ ,
- Concentrated – if the small number of strongest companies in the industry produce at least 50% of industry output ( $CR_n \geq 0.50$ )

### ***Profitability analysis***

Profitability, as one of the most important indicators of business success, indicates the earning power and business success of a company (Kimmel et al., 2012). There are different indicators of profitability in the economic theory and practice and in this paper the following are selected:

- Return on Assets (ROA) - measures a company's success in using assets to earn net income.
- Return on Equity (ROE) - measures how much profit (net income) a company generates with the shareholder's equity.
- Profit Margin (PM) - indicates net income per unit of sales.
- Gross Margin (GM) – represents the portion of revenue that the company retains as gross profit.

The *Table 2* provides an overview of the profitability indicators.

**Table 2.** The overview of the profitability indicators

Profitability indicators	Calculation	Unit	Reference Value
Return on Assets (ROA)	NI/TAavg	Ratio	$\geq 0.1$
Return on Equity (ROE)	NI/(C+R)	Ratio	$\geq 0.15$
Profit Margin (PM)	NI/NS	Ratio	$\geq 0$
Gross Margin (GM)	GI/NS	Ratio	$\geq 0$

Source: Author's illustration (according to Kimmel et al., 2012; Walsh, 2008)

Where:

NI – net income

TAavg – total assets average

C – capital

R – reserves

NS – net sales

GI – gross income

The aim of profitability analysis is to examine whether there is a significant difference in the level of profitability that generate coffee processors in the market of Serbia. For the sustainable development of the coffee processing industry, balanced business performance of coffee processors is highly favorable. Significant fluctuation in profitability can negatively affect the development and growth of companies, as well the market competition. According to this aim, the following hypothesis is set:

*H<sub>2</sub>: There are no significant differences in the profitability between large and small coffee processing companies.*

### ***The identification of the profitability determinants of coffee processors***

In order to examine which factors influence the profitability of coffee processors in Serbia, dependent and independent variables are defined. Profitability as a dependent variable is represented by the indicator return on assets. The group of independent variables consists of size, current ratio, leverage, growth, inventory turnover and market concentration.

The size of companies can be measured using several proxies, such as natural logarithm of assets, sales, and employees. In this study, size is measured as the natural logarithm of the assets. Larger companies have better access to capital markets and lower cost of borrowing (Whited, 1992), and should have a higher turnover ratio and therefore higher ability to generate higher income (Titman, Wessels, 1988). Even though it is expected that size and profitability are positively related, there are opposite findings among studies. Stierwald (2010), found that the size of the company is positively related to profitability. On the other side, there are findings that confirm the inverse relationship between the size of companies and profitability (Goddard et al. 2005, Jensen and Murphy, 1990).

The current ratio as a ratio of current assets and current liabilities indicate the ability of company to pay current liabilities at time. Healthy companies should have this ratio at the minimum level of 2.0. The research results about the influence of current ratio on profitability are also mixed. Kuntluru et al. (2008) found that there is a positive relationship between current ratio and ROA as the indicator of profitability. Pratheepan (2014) found out that current ratio does not have any influence on profitability.

Leverage indicates the level of debt and can be measured by using different indicators, such as ratio of total debt to total equity, or ratio of total debt to total assets. In this study, leverage was measured by the ratio of total debt to total assets. If the level of debt is higher more resources are required to pay the debt, and that situation can influence negatively profitability. If the additional debts are not used in investment purpose, there is a high risk of decreasing profitability ratio. Asimakopoulos et al. (2009) found out that leverage is negatively correlated to profitability. On the other side, Burja (2011) found out that leverage is positively correlated to profitability, which is explained as the use of debt in good investment activities.

Growth measures the ability of firm to achieve a higher amount of sales in the current period in comparison to the previous period. If the company achieves growth in sales, that means it provides additional income for the current period. Therefore it is expected that growth affects profitability positively (Asimakopoulos et al. 2009).

Inventory plays a significant role in the growth and survival of the companies in the sense that ineffective and inefficient management of inventory will mean that the organization loses customers and sales will decline. An efficient management of working capital through proper and timely inventory management ensures a balance between profitability and liquidity trade-offs (Aminu, 2012). Well managed inventories can give companies a competitive advantage and result in superior financial performance (Isaksson, Seifert, 2013). Inventory ratio can be represented as the ratio of cost of goods sale and cost of material on the one side and average inventory on the other side. Also, inventory ratio can be represented as the ratio of sales and inventory, which was used in this study. The research results indicate a positively correlation between the companies inventory management and profitability in brewery industry (Eneje et al., 2012), sugar industry (Lwiki et al., 2013).

The market share can be also positively and negatively related to the level of profitability. A higher level of concentration means a larger amount of revenue, as a positive part of net income. The research results show a positive relationship between concentration ratio and profitability usually in the banking sector (Molyneux, Thornton, 1992). On the other side, higher concentration level can be related to the lower price policy, or higher other expenses, which can lead to the lower profitability ratio. Bourgeois et al. (2014) found a negative relationship between concentration ratio and profitability in food and drug stores, insurance, as well in health care industries.

According to the aim of the investigation of the profitability determinants of coffee processors, the following hypothesis is set.

$H_3$ : The characteristics of coffee processing companies (size, current ratio, leverage, growth, inventory turnover, market concentration) have a significant impact on profitability.

In order to test the hypothesis  $H_3$ , the regression analysis is used (according to Field, 2009).

$$ROA = \beta_0 + \beta_1 SIZ + \beta_2 CUR + \beta_3 LEV + \beta_4 GRO + \beta_5 INT + \beta_6 CR + \varepsilon_i$$

Where:

ROA – return on assets

SIZ – Size

CUR – current ratio

LEV – leverage

GRO – growth

INT – inventory turnover

CR – concentration ratio

## Results

### *The results of market concentration analysis*

The results of Serbian coffee market concentration, based on the operating revenue, total assets, equity, and the number of employees, are present in the following table.

**Table 3.** Market concentration of coffee processors.

Variable	CR <sub>i</sub>				
	2012	2013	2014	2015	2012-2015
Operating revenue	78%	74%	72%	66%	73%
Total assets	91%	91%	90%	90%	90%
Equity	89%	90%	91%	90%	90%
Number of employees	-	-	-	64%	64%

Source: Authors calculation (based on Amaedus, 2016; Business Registry Agency, 2016; Euromonitor, 2016).

The market concentration analysis of coffee processors in Serbia indicates the existence of the strong oligopoly according to all variables. Two large companies (Grand Prom and Strauss Adriatic) have a dominant market share. Concentration index  $Cr_2$  based on the operation revenue shows that two large coffee processors collected about 73% of total revenue during the period 2012-2015. According to this hypothesis  $H_1$  is accepted, and it can be concluded that a small number of large coffee processors have a dominant position in the Serbian market. Furthermore, there is a negative trend of market concentration index. Operating revenue of two large coffee processors decreased for about 10% in 2015 in comparison to 2012.

*The results of profitability analysis of coffee processors*

Table 4 represents the results of coffee processors profitability during the period 2012-2015.

**Table 4.** Profitability of coffee processors in Serbia

Profitability indicator	2012	2013	2014	2015	2012-2015
<b>ROA</b>					
Large coffee processors	-6.17	6.70	2.31	-2.64	0.05
Small coffee processors	4.06	5.11	3.74	5.01	4.48
Total	2.01	5.43	3.45	3.48	3.59
<b>ROE</b>					
Large coffee processors	-9.59	16.89	12.98	-4.58	4.20
Small coffee processors	11.89	16.67	12.30	9.28	12.03
Total	1.37	16.70	12.64	4.78	8.81
<b>PM</b>					
Large coffee processors	-6.41	5.94	2.68	-0.92	0.32
Small coffee processors	1.87	2.14	2.32	2.66	2.25
Total	0.21	2.90	2.39	1.94	1.86
<b>GM</b>					
Large coffee processors	-7.38	6.83	3.08	-1.06	0.36
Small coffee processors	2.15	2.47	2.67	3.06	2.59
Total	0.24	3.34	2.75	2.24	2.14

Source: Author's calculation

Profitability analysis indicates that coffee processors have in average positive net income. Profitability analyses based on ROA indicate that coffee processors in Serbia achieve an average profit of RSD3.60 per RSD100 invested assets. Comparative profitability analysis of the large and small coffee processors indicates that small processors achieved better business results. The group of small coffee processors achieved 4.48RSD per 100RSD invested assets, and RSD12.03 per RSD100 invested capital in the period 2012-2015. On the other hand, the dominant coffee processors realized RSD0.05 per RSD100 invested assets, and RSD4.20 of profit per RSD100 invested capital. The group of small coffee processors has more stable profitability during the observed period. On the other hand, large coffee processors have significant fluctuations in the level of profitability. Large coffee processors achieved negative results in 2012 and 2015 primarily from operating activities. The analysis of profit margin and gross margin indicates that the large coffee processors achieved an average RSD0.32 of net income or RSD0.36 gross income per RSD100 of sales. On the other hand, small coffee processors achieved an average RSD2.25 of net income, or RSD2.59 of gross income, per RSD100 of sales. Descriptive profitability analysis shows that small coffee processors achieved better profitability, according to all profitability indicators. In order to investigate if the difference between the profitability of large and small coffee processors is significant, multivariate test MANOVA was realized. The following table (Table 5) shows the results of MANOVA.

**Table 5.** Results of MANOVA – difference between profitability of large and small coffee processors

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Profitability	Pillai's Trace	0.294	5.001	3.000	36.000	<b>0.005</b>	0.294

Source: Authors calculation

Based on the result of Pillai's Trace  $p$ -value which is less than 0.05 it can be concluded that there is a significant difference between the profitability of the large and small coffee processors in Serbia. Furthermore, the test of between-subject effects indicates that there is the statistically significant difference in the profitability indicator ROA between this two groups of companies (Table 6). According to this findings, hypothesis  $H_2$  is rejected, and the alternative hypothesis is accepted, that there are significant differences in the profitability between the large and small coffee processors.

**Table 6.** Test of between-subjects effects

Source	Profitability Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Profitability	ROA	125.974	1	125.974	7.267	<b>0.010</b>	0.161
	ROE	0.914	1	0.914	0.002	0.961	0.000
	PM	23.862	1	23.862	2.462	0.125	0.061
	BP	31.557	1	31.557	2.462	0.125	0.061

Source: Author's calculation

### *The results of profitability determinants of coffee processors in Serbia*

The values of independent profitability variables are presented in the following table (Table 7).

**Table 7.** Independent variable of profitability (size, current ratio, leverage, growth, turnover, concentration index)

Independent profitability variable	2012	2013	2014	2015	2012-2015
<b>Size (SIZ)</b>					
Large coffee processors	4.75	4.75	4.70	4.72	4.73
Small coffee processors	3.26	3.30	3.30	3.33	3.30
<b>Current ratio (CUR)</b>					
Large coffee processors	2.15	3.38	2.36	1.92	2.45
Small coffee processors	1.22	1.83	2.24	1.38	1.67
<b>Leverage (LEV)</b>					
Large coffee processors	0.63	0.59	0.59	0.56	0.59
Small coffee processors	0.96	0.96	0.88	0.87	0.92

Independent profitability variable	2012	2013	2014	2015	2012-2015
<b>Growth (GRO)</b>					
Large coffee processors	0.03	-0.01	-0.10	0.05	-0.01
Small coffee processors	0.07	0.11	0.02	0.10	0.07
<b>Inventory Turnover (INT)</b>					
Large coffee processors	3.97	5.10	4.76	6.38	5.05
Small coffee processors	5.77	5.52	4.62	5.66	5.40
<b>Concentration ratio (CR)</b>					
Large coffee processors	78%	74%	72%	66%	73%
Small coffee processors	22%	26%	28%	34%	27%

Source: Author's calculation

Current ratio indicates that the small coffee processors have a problem to pay short-term liabilities, while large coffee processors don't have a risk of payment short-term liabilities.

Leverage analysis shows that coffee processors in Serbia have a problem of high level of liabilities. Small coffee processors are financing their business activities with 92% of liabilities, and with 8% capital. A small share of capital in financing business activities is a result of the regulation that requires minimum initial capital of RSD100. Large coffee processors are financing their activities 60:40 in favor of external source of financing. Even though the large coffee processors possess a greater amount of capital, they still have leverage higher than the reference value of 0.5.

Growth sale analysis shows that the small coffee processors have better growth sale rate (7%), while the growth sale rate of the large coffee processors is negative (-1%) during the period 2012-2015. Operating revenue of large coffee processors in 2014 is for about 10% less than in 2013. The decrease in operating revenue of the large companies and the growth of operating revenues of the small processors, is accompanied by the changes in the level of market share among the coffee processors. Inventory turnover ratio shows the similarity in inventory management between large coffee processors (5.05) and small processors (5.40).

In order to investigate which determinants are associated with the level of profitability the linear regression analysis was conducted. *Table 8* presents the results of enter regression model of profitability factors on the coffee market in Serbia.

**Table 8.** Results of regression analysis of profitability determinants

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
ROA Dependent variable	(Constant)	-11.865	8.636		-1.374	0.177
	SIZ	4.880	3.133	0.716	1.558	0.127
	CUR	0.001	0.428	0.000	0.003	0.998
	LEV	-2.272	3.463	-0.131	-0.656	0.515
	GRO	0.026	3.768	0.001	0.007	0.995
	INT	0.510	0.205	0.390	2.485	<b>0.017</b>
	CR	-29.017	13.407	-1.101	-2.164	<b>0.036</b>
R <sup>2</sup> = 0.293						
R <sup>2</sup> adj = 0.190						

Source: Author's calculation

The results indicate that profitability of coffee processing companies is significantly correlated with the inventory turnover and concentration ratio. Profitability of coffee processors is not significantly related to the other characteristics such as size, current ratio, leverage and sales growth. According to this results, hypothesis  $H_3$  is partial accepted. Inventory turnover and profitability are positively related, and that means that higher turnover ratio and good inventory management will increase profitability. Results show a negative relationship between concentration and profitability of coffee processors. Even though large coffee processors collect a higher amount of revenue, profitability is on the much lower level than the profitability of the other smaller coffee processing companies in Serbia. The reason of this negative relationship between concentration and profitability of dominant coffee processors can be explained by very low and negative growth rate, increasing the operating and other expenses.

### Conclusion

Regardless the fact that the Serbian coffee market is small in relation to the world and the developed countries coffee markets, not roasted coffee represents a significant import commodity, accounted approximately more than 31,000 tons per year during 2011-2015. Two large and around 200 small companies are involved in processing not roasted coffee in Serbia, so there is a competition between these two groups of coffee processors on the market. The market concentration analysis indicates that the large coffee processors have a dominant position, achieving about 73% of total revenue during 2012-2015. Furthermore, there is a negative trend of market concentration index, which points toward increasing competition among the coffee processors. In spite of the dominant market share of the two large coffee processors, the results of the profitability analysis indicates that the small coffee processors had a higher profitability level and a better and more stable profitability indicators, due to the decreasing operating revenue, decreasing market share, and increasing operating expenses which the large coffee

processors have faced during 2012-2015. The operating revenue of the small coffee processors recorded a constant average positive growth during the same period.

The results also indicate that inventory turnover and market share are the two crucial determinants of coffee processors profitability in Serbia. Inventory turnover and profitability are positively related, while market share and profitability are negatively related. Achieving stable business performances at the coffee market requires that the large coffee processors should solve the problem of decreasing operating revenue, and increasing operating expenses, while small coffee processors should solve the problem of low current ratio and high leverage.

Although fresh coffee consumption still dominates in the overall coffee consumption in Serbia, it has reached the saturation point. Retail volume sales of fresh coffee are declining and this trend is expected to be continued. In order to strengthen their competitive position, all coffee processors should invest more in the growing market segment of instant coffee. Drivers that stimulate increased instant coffee consumption are: changing coffee drinking habits, diversity, convenience, innovations, well-known brands, etc. The coffee market in developed countries has gone through a “latte revolution” and certified coffees are gaining increasing retail volume sales. It is still too early for coffee processors in Serbia to introduce certified coffees, but they should consider the perspectives of involving socio-economical and environmental standards in their business activities.

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## PERFORMANSE PRERAĐIVAČA KAFE I TRŽIŠTA KAFE U SRBIJI

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### Rezime

*Cilj rada je istraživanje performansi prerađivača kafe i tržišta kafe u Srbiji na bazi analize tržišnog učešća, analize profitabilnosti i identifikacije determinant profitabilnosti. Istraživanje je bazirano na uzorku od 40 opservacija preduzeća prerađivača kafe podeljenih u dve grupe: veliki i mali prerađivači kafe. Rezultati ukazuju da dva velika prerađivača kafe imaju dominantno tržišno učešće. Iako se tržište kafe u Srbiji ocenjuje kao oligopolno, analiza profitabilnosti ukazuje da mali prerađivači kafe imaju značajno bolju profitabilnosti u odnosu na velike dominantne prerađivače kafe. Dalje, rezultati istraživanja ukazuju da je profitabilnost prerađivača kafe u značajno pozitivnoj vezi sa obrtom zaliha i negativnoj vezi sa tržišnim učešćem.*

***Ključne reči:*** prerađivači kafe, tržište kafe, tržišno učešće, profitabilnost.

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