



XXX International Scientific Conference
Strategic Management
 and Decision Support Systems
 in Strategic Management
SM2025

Subotica (Serbia), 16 May, 2025

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COMPREHENSIVE ANALYSIS OF THE PERFORMANCE OF THE FMCG TRADE CHAINS IN THE REPUBLIC OF SERBIA WITH A FOCUS ON RETAIL PRICES.

Abstract: The business performance of FMCG trade chains in the Republic of Serbia came to the fore after the recently conducted investigation by the Commission for the Protection of Competition at the end of 2024 as well as after the mass boycott of large trade chains by consumers in the Republic of Serbia in February 2025. Do large retail chains in Serbia make extra profit? Are the price margins of large retail chains in Serbia unreasonably high? Are the prices on the domestic market significantly higher compared to the prices of the same products abroad? Is the FMCG trade sector in Serbia liquid, efficient and productive? This scientific work will try to answer these and other questions by analyzing a large number of business indicators of some of the largest trade chains in the Republic of Serbia. Indicators such as ROA, ROE, net profit margin, financial leverage, productivity coefficients, liquidity coefficients, short-term asset turnover rate, inventory turnover rate and others were used in the analysis. Gross margin and gross margin rate were used in order to analyze the size of price margins and the movement trend of those margins in previous years. The retail chains included in the analysis are the largest retail chains in the Republic of Serbia, therefore they are good represent of the entire branch. Analysed chains in this paper will not be mentioned by name, which will not diminish the importance of the analysis, since the subject of the analysis is the entire market. The aim of this work is to determine current situation and trends in the FMCG market, as well as to determine the adequacy and justification of the price policy of large retail chains in the Republic of Serbia.

Keywords: FMCG, Prices, Performance, Trade Chains, Republic of Serbia.

INTRODUCTION

Retail chains as an important element of the distribution system represent an important segment in the lives of consumers and influence the quality of their lives in terms of what they buy and at what price (Marić, Vukmirović, Nuševa, Vučenović, & Macura, 2024). In the Republic of Serbia, there has been a significant increase in FMCG retail prices in recent years. Public pressure has constantly raised the issue of the justification of these price increases.

In the first chapter, the authors analyzed the Serbian retail FMCG market, taking into analysis a sample of 8 large retail chains (some of them are the largest in the Republic of Serbia). These 8 chains were taken as a representative sample for the analysis of the entire retail FMCG market. Authors carried out research of profitability, financial leverage, stock turnover, economy, liquidity, productivity, EBITA, gross margin and other business success indicators of these retail chains. After each partial analysis, the authors commented on the obtained results. The data were taken from the official website of the Agency for Economic Registers.

In the second chapter, the authors analyzed the general rate of inflation, the real growth of FMCG prices and analyzed the comparison of domestic and foreign FMCG prices. The inflation rate was analyzed in order to prove the existence of general price growth, while the comparison was made in order to determine the existence or non-existence of significant difference in prices when it comes to identical products on the foreign market.

The aim of the work was not to judge whether the trade margins were large. The basic idea was to assess how much the retail chains influenced the evident increase in prices, and how much other factors contributed to it on the other hand. In other words, were the price increases that occurred justified or were they the result of the retail chains' pursuit of extra profits.

1. THE ANALYSIS OF FINANCIAL INDICATORS OF FMCG RETAIL CHAINS IN THE REPUBLIC OF SERBIA

Before presenting and interpreting the results of the analysis, the authors emphasize two aspects of retail chains business operations. First, retail chains are the last component of the distribution system, which in practice means that they are also often exposed to the increase in wholesale prices. A huge number of manufacturers, wholesalers, agents, distributors and other actors calculate their margins before the commodities even reach the shelves of retailers. All these manufacturers and wholesalers often raise the prices of their products due to rising costs they are exposed to (labor costs, electricity, etc.). Relationships in marketing channels can often be volatile which also leads to changes in pricing policies by the retailers (Končar, Vučenović, Vukmirović, & Marić, 2020). Second, a retailers' price is composed of several components. Some of those components are wholesale price, transport and inventory costs, margin and value added tax. A change in any of these components will directly affect the change in the final retail price on the shelf (Marić, 2019).

The analysis includes 8 retail chains, 3 of which are officially the largest retail chains in the Republic of Serbia in terms of sales revenue. The financial indicators were calculated on the basis of the balance sheets and income statements of the companies publicly published on the website of the Agency for Economic Registers for the years 2022 and 2023. Business names of the companies will not be revealed in the paper, since the focus of the analysis is on the entire FMCG retail market.

Table 1: Presentation of indicators of profitability, asset turnover ratio and financial leverage of 8 large FMCG retail chains in the Republic of Serbia in 2022.

Retail company	Annual sales revenue (in thousands rsd)	ROA (%)	ROE (%)	Net profit margin (%)	Asset turnover ratio	Fin. Leverage (Equity multiplier= assets/equity)
A	133,722,449	7.37	14.74	4.9	1.5	2
B	92,776,372	2.81	5.84	2.17	1.29	2.09
C	90,019,875	1	20.3	0.61	1.62	20.36
D	31,110,307	3.73	13.88	2.74	1.36	3.71
E	27,635,345	5.89	17.69	3.57	1.65	3
F	22,600,436	2.86	7.04	1.77	1.62	2.46
G	18,841,408	5.04	22.95	2.09	2.41	4.56
H	6,908,731	2.83	23.86	1.39	2.04	8.43
Average	52,951,865	3.94	15.79	2.41	1.69	5.83

Source: Authors on the basis of (Agency for Economic Registers, 2025).

Based on table number 1, the first three leading retail chains in the Republic of Serbia in 2022 achieved a sales revenue of slightly more than 316 billion rsd. All 8 analyzed chains operated profitably in 2022. The largest return on assets was also achieved by the largest retail chain, which amounts to 7.37%, which means that that chain made 0.0737 rsd of net profit per unit of it's assets. The average return on assets of these 8 chains was 3.94%. The highest return on equity (own source of assets) was recorded by the retail chains marked with „H“ and „G“, which are also the chains with the lowest revenue from sales (compared to the 8 analyzed) and amounts to 23.86% and 22.95% respectively, this means that these two chains achieved 0.2386 and 0.2295 rsd of net profit per unit of their equity. The average return on equity

of these 8 chains was 15.79%. The highest net profit margin, similar to the return on assets, was recorded at the largest retailer marked with „A“ and amounted to 4.9%. This means that the retailer managed to turn 4.9% of the total revenue into net profit. The net profit margin is also an indicator of how good the retailer is at managing costs. The average net profit margin was 2.41%. The highest asset turnover ratio was recorded by the retail chains marked with „G“ and „H“, which are also, similarly when it comes to return on equity, the smallest in terms of sales revenue, amounting to 2.41 and 2.04 respectively. In practice, this means that these two chains generated as much as 2.41 and 2.04 rsd of revenue per unit of their assets. The average asset turnover was 1.69, while none of the analyzed chains achieved an asset turnover ratio that was less than 1, which in practice means that not a single chain achieved an annual revenue lower than the size of its reported assets at the end of the business year. This tells us about the sales effectiveness of these retail chains. When it comes to financial leverage, if the equity multiplier is greater than 2, it means that retail chain has more liabilities than equity, which is the case with most of the analyzed retail chains. The retail chain marked with „A“ has the lowest financial leverage and it amounts to 2, which in practice means that the ratio of liabilities and equity of this chain is 1:1. The average leverage was 5.83, the average leverage is raised by the chains marked with „C“ and „H“. Therefore, since these 8 retail chains are also among the largest retail chains in the Republic of Serbia (some of them are largest), we can conclude that the retail market for FMCG in the Republic of Serbia in 2022 was profitable (average ROA 3.94%, ROE 15.79%, NPM 2.41%) and sales effective (average asset turnover ratio was 1.69), it can also be concluded that the chains in this market operate with more borrowed than their own asset sources (average leverage was 5.83).

Table 2: Presentation of indicators of profitability, asset turnover ratio and financial leverage of 8 large FMCG retail chains in the Republic of Serbia in 2023.

Retail company	Annual sales revenue (in thousands rsd)	ROA (%)	ROE (%)	Net profit margin (%)	Asset turnover ratio	Fin. Leverage (Equity multiplier= assets/equity)
A	153,071,396	7.5	15.91	4.88	1.54	2.12
B	103,150,985	2.35	4.89	1.73	1.36	2.08
C	100,796,846	3.1	129.33	1.6	1.94	41.67
D	37,257,327	3.14	12.29	2.19	1.43	3.92
E	29,810,869	4.66	13.28	2.8	1.67	2.85
F	25,192,277	2.93	7.3	1.7	1.72	2.5
G	21,871,061	5.42	22.26	2.35	2.31	4.11
H	8,169,257	4.68	29.91	2.1	2.23	6.39
Average	59,915,002	4.22	29.40	2.42	1.78	8.21

Source: Authors on the basis of (Agency for Economic Registers, 2025).

On the basis of table number 2, the first three leading retail chains in the Republic of Serbia in 2023 achieved sales revenue slightly higher than 357 billion rsd. All 8 analyzed chains operated profitably in 2023. The largest return on assets was also achieved by the largest retail chain marked with „A“, which amounts to 7.5%, which means that it made 0.075 rsd of net profit per unit of its assets. The average return on assets of these 8 chains is 4.22%. The highest return on equity (own source of assets) was recorded by the retail chain marked with „C“ and was 129.33%, this means that this chain achieved 1.29 rsd of net profit per unit of its equity. The average return on equity of these 8 retail chains was 29.4%. The highest net profit margin, similar to the return on assets, was recorded at the largest retailer marked with „A“ and amounted to 4.88%. In practice, this means that the retailer managed to turn 4.88% of the total revenue into a net profit. The average net profit margin was 2.42%. The highest asset turnover ratio was recorded by retail chains marked with „G“ and „H“, which are at the same time the smallest in terms of sales revenue, amounting to 2.31 and 2.23, respectively. In practice, this means that these two chains generated as much as 2.31 and 2.23 rsd of revenue per unit of their assets. The average asset turnover ratio was 1.78, while none of the analyzed chains achieved an asset turnover ratio less than 1, which in practice means that not a single chain achieved an annual revenue lower than the size of its reported assets at the end of the business year. When it comes to financial leverage, if the equity multiplier is greater than 2, it means that retail chain has more liabilities than equity, which is the case with all analyzed retail chains. The retail chain marked with „B“ has the lowest financial leverage and it amounts to 2.08. The average leverage was 8.21, the average leverage is raised by the chains marked with „C“ and „H“.

The state of the FMCG retail market, when it comes to the displayed indicators, is slightly better in 2023 compared to 2022. The chains recorded growth in average return on assets, return on equity, average net profit margin and average asset turnover ratio. The average financial leverage increased to 8.21. However, a higher financial leverage ratio is not necessarily bad if a company with borrowed assets (i.e. debts) can achieve significant returns.

Table 3: Presentation of EBIT values, revenue to costs ratios, commodity stock turnover rates and liquidity indicators of 8 large FMCG retail chains in the Republic of Serbia in 2022.

Retail Company	EBIT (in thousands rsd)	Total revenue to total costs ratio	Financial revenue to financial costs ratio	Commodity stock turnover rate	Total liquidity (current assets – current liabilities)	Liquidity with commodity stocks excluded (accelerated liquidity)
A	9,068,737	1.06	1.37	11.48	0.99	0.69
B	4,907,448	1.03	0.21	6.87	0.9	0.13
C	3,498,953	1.01	0.05	7.89	0.59	0.29
D	1,381,977	1.03	0.24	9.11	0.65	0.26
E	1,595,911	1.04	0.01	10.14	0.79	0.22
F	978,844	1.02	0.06	9.52	0.67	0.27
G	760,830	1.02	0.21	8.72	0.9	0.47
H	285,597	1.01	0.12	6.85	0.69	0.24
Average	2,809,787	1.03	0.28	8.82	0.77	0.32

Source: Authors on the basis of (Agency for Economic Registers, 2025).

On the basis of table number 3, it can be concluded that the total EBIT of the three largest retailers amounted to slightly more than 17 billion rsd in 2022. The largest EBIT was achieved by the largest retail chain in the Republic of Serbia, amounting to 9,068,737,000 rsd. When it comes to total revenue to total costs ratio, all analyzed retail chains operated economically in 2022. The highest ratio was recorded at the largest retail chain marked with "A" and it amounted to 1.06 (i.e. 1.06 rsd of revenue for each 1 rsd of costs). When it comes to financial revenue to financial costs ratio, it compares revenue with costs from financing, such as revenue and costs from interest or revenue and costs generated by changes in the exchange rate, etc. With the exception of the retailer marked with "A" (which is also the largest), all retail chains achieved the ratio values below 1, which means that all retail chains (except the largest) operate with higher costs from financing compared to revenues from financing in 2022. The commodity stock turnover rate is one of the primary indicators of success in retail sector. Only 2 retail chains have a turnover rate greater than 10 and they are the chains marked with "A" and "E" and it is 11.48 and 10.14 respectively. In practice, this means that the largest retail chain in the Republic of Serbia turns over its entire stock of goods in an average of slightly more than 31 days (more precisely, 31 days and about 19 hours). For the sake of comparison, the average commodity stock turnover rate was 8.82, so the time of one turnover lasted a little more than 41 days on average (more precisely, 41 days and about 9 hours). When it comes to the liquidity of these 8 trade chains, which are taken as a representative of the retail sector, the data are a bit concerning. The total liquidity indicator is less than 1 for all analyzed retail chains. The best result was recorded by the chain marked with "A" (also the largest) and it was 0.99. From a strictly formal point of view, none of these 8 chains meets the liquidity requirement, so we could draw the conclusion that the entire retail branch may have problems with illiquidity. When it comes to the indicator of accelerated liquidity (commodity stocks are subtracted from the short-term assets as their least liquid part), the best result is achieved by the chain marked with "A" (also the largest in Serbia) and it was 0.69, the average of 8 chains is 0.32. This result is expected since most of the short-term assets of retail companies are made up of commodity inventories (other inventories such as inventories of materials and parts were excluded from the analysis also).

Therefore, since these 8 retail chains are among the largest (some of them are), we can conclude that the retail market for FMCG products in the Republic of Serbia in 2022 was economical, effective in terms of commodity stock turnover, but the companies operated with less liquidity.

Table 4: Presentation of EBIT values, revenue to costs ratios, commodity stock turnover rates and liquidity indicators of 8 large FMCG retail chains in the Republic of Serbia in 2023.

Retail Company	EBIT (in thousands rsd)	Total revenue to total costs ratio	Financial revenue to financial costs ratio	Commodity stock turnover rate	Total liquidity (current assets – current liabilities)	Liquidity with commodity stocks excluded (accelerated liquidity)
A	11,782,410	1.06	1.8	11.48	1.01	0.75
B	5,244,771	1.02	0.06	6.93	1.05	0.54
C	4,072,625	1.02	0.07	7.95	0.59	0.32
D	1,741,729	1.03	0.19	9.3	0.66	0.32

E	1,591,495	1.03	0.09	10.56	0.78	0.46
F	1,084,179	1.02	0.05	9.46	0.73	0.39
G	925,528	1.03	0.78	7.44	0.92	0.45
H	399,346	1.02	0.05	6.27	0.79	0.25
Average	3,355,260	1.03	0.39	8.67	0.82	0.44

Source: Authors on the basis of (Agency for Economic Registers, 2025).

On the basis of table number 4, it can be concluded that the total EBIT of the three largest retailers amounted to slightly more than 21 billion dinars in 2023. The largest EBIT was achieved by the largest retail chain in the Republic of Serbia, amounting to 11,782,410,000 rsd. When it comes to total revenue to total costs ratio, all analyzed retail chains operated economically in 2023. The highest ratio was recorded at the largest retail chain marked with "A" and it amounted to 1.06. When it comes to financial revenue to financial costs ratio, with the exception of the retailer marked with "A" (which is also the largest), all retail chains achieved ratio values below 1, which means that all retail chains (except the largest) operate with higher costs from financing compared to revenues from financing in 2023. When it comes to the commodity stock turnover rates, same as in 2022, only 2 retail chains achieved a commodity stock turnover rate greater than 10 and those are the chains marked with "A" and "E" and the rates were 11.48 and 10.56 respectively. In practice, this means that the largest retail chain in the Republic of Serbia turns over its entire commodity stocks in an average of slightly more than 31 days (more precisely, 31 days and about 19 hours). For the sake of comparison, the average commodity stock turnover rate was 8.67, so the time of one turnover lasted on average a little more than 42 days (more precisely, 42 days and about 2 hours). When it comes to liquidity in 2023, a slightly better situation was recorded compared to 2022. The first two retail chains marked with "A" and "B" meet the liquidity requirements, and the total liquidity ratios were 1.01 and 1.05 for these chains, respectively. The average liquidity ratio was 0.82, which is an improvement compared to 2022. When it comes to the indicator of accelerated liquidity (commodity stocks were taken from the short-term assets as their least liquid part), the best result is achieved by the chain marked with "A" (also the largest in Serbia) and it amounted 0.75, the average ratio of 8 chains was 0.44.

Therefore, in 2023, a significant increase in EBIT was recorded in all retail chains with the exception of the chain marked with "E". A better condition of the branch was recorded when it comes to financial revenue to financial costs ratios and when it comes to liquidity. However, the total revenue to total costs ratios of the branch did not change significantly, while the average commodity stock turnover rate slightly decreased.

Table 5: Presentation of the number of employees and productivity of 8 large retail chains in the Republic of Serbia.

Retail Company	2022		2023	
	Number of employees	Productivity (sales per employee)	Number of employees	Productivity (sales per employee)
A	11426	11,703,348	12399	12,345,463
B	3562	26,046,146	3415	30,205,266
C	7950	11,323,255	7372	13,672,931
D	2912	10,683,485	3065	12,155,735
E	2935	9,415,790	2858	10,430,675
F	1343	16,828,322	1480	17,021,809
G	2378	7,923,216	2472	8,847,517
H	802	8,614,378	844	9,679,214
Average	4,163.50	12,817,242.50	4,238.13	14,294,826.25

Source: Authors on the basis of (Agency for Economic Registers, 2025).

On the basis of table number 5, it can be concluded that the highest productivity in both observed years was achieved by the retail chain marked with "B", which is also the second largest retail chain in terms of sales revenue. The productivity of all individual retail chains increased in 2023 compared to 2022. Average productivity in 2023 increased to 14,294,826.25 rsd from 12,817,242.50 rsd in 2022. The total number of employees in these 8 retail chains increased to 33,905 in 2023 from 33,308 employees in 2022.

Table 6: Presentation of gross margins and gross margin rates of 8 large retail chains in Serbia for 2021, 2022 and 2023.

Retail Chain	2021		2022		2023	
	Gross Margin (in thousands rsd)	Gross Margin Rate	Gross Margin (in thousands rsd)	Gross Margin Rate	Gross Margin (in thousands rsd)	Gross Margin Rate
A	35,231,862	43.30	40,629,050	43.64	46,954,001	44.25
B	17,760,136	33.26	22,160,243	31.38	24,285,072	30.79
C	20,802,205	34.96	23,804,414	35.95	26,957,306	36.51
D	6,616,399	34.45	8,095,823	35.18	9,899,376	36.18
E	3,720,357	17.52	4,563,976	19.78	5,029,550	20.30
F	2,340,644	13.22	3,037,983	15.53	3,572,355	16.52
G	3,106,502	24.09	3,837,499	25.58	6,347,380	40.89
H	1,650,446	42.58	2,140,535	44.89	2,605,761	46.84
Average	11,403,569	30.42	13,533,690	31.49	15,706,350	34.03

Source: Authors on the basis of (Agency for Economic Registers, 2025).

Based on table number 6, it can be concluded that the three largest retail chains in the Republic of Serbia achieved the highest gross margins in all three observed years. When it comes to the gross margin rates, the highest gross margin rates were recorded by the trade chains marked with "A" and "H", the largest retail chain and the smallest retail chain among the 8 analyzed. The average gross margin and the average gross margin rate tended to increase year by year.

Table 7: Presentation of changes in gross margins and gross margin rates of 8 large retail chains in Serbia in 2022 compared to 2021 and in 2023 compared to 2022.

Retail Chain	2022/21		2023/22	
	Change in gross margin (in thousands rsd)	Change in gross margin rate in percentage	Change in gross margin (in thousands rsd)	Change in gross margin rate in percentage
A	5,397,188	0.35	6,324,951	0.60
B	4,400,107	-1.88	2,124,829	-0.59
C	3,002,209	0.99	3,152,892	0.56
D	1,479,424	0.73	1,803,553	1.01
E	843,619	2.26	465,574	0.51
F	697,339	2.31	534,372	0.99
G	730,997	1.48	2,509,881	15.31
H	490,089	2.31	465,226	1.94
Average	2,130,122	1.07	2,172,660	2.54

Source: Authors on the basis of (Agency for Economic Registers, 2025).

Based on table number 7, it can be concluded that the gross margins of 8 large retail chains in 2022 compared to 2021 increased by an average of 2,130,122,000 rsd. In 2023, compared to 2022, the gross margins of 8 large retail chains increased by an average of 2,172,660,000 rsd. All 8 retail chains recorded growth in gross margin. On the other hand, the gross margin rates increased by an average of 1.07% in 2022 compared to 2021, while they increased by an average of 2.54% in 2023 compared to 2022. As many as 7 retail chains recorded an increase in the gross margin rates, while only the chain marked with "B", also the second largest in terms of sales revenue, recorded a decrease in the gross margin rate of 1.88% in 2022 compared to 2021 and 0.59% in 2023 compared to 2022.

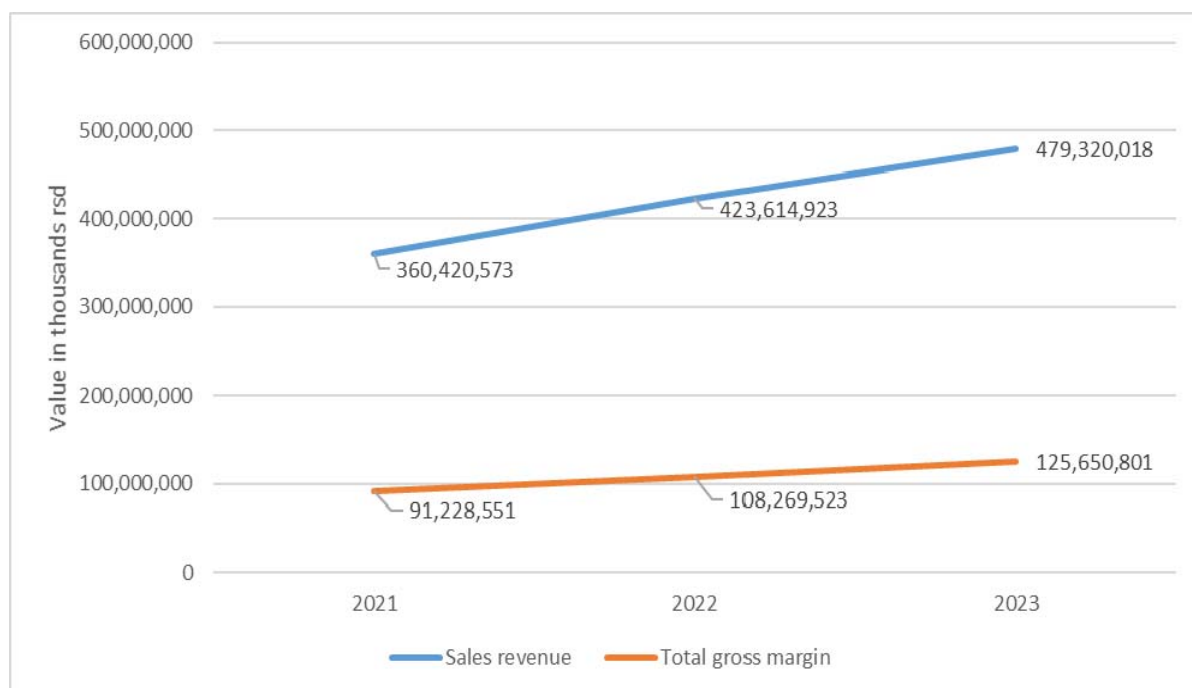


Chart 1: Presentation of trends in total sales revenue and total gross margin for 8 large retail chains in Serbia.

Source: Authors on the basis of (Agency for Economic Registers, 2025).

From chart number 1, it can be seen that the total sales revenue and the total gross margin (collectively for all 8 retailers) from 2021 to 2023 had a constant tendency to grow. The total sales revenue increased by a total of 118,899,445,000 rsd in two years, while the total gross margin increased by a total of 34,422,250,000 rsd in two years. In other words, the total sales revenue increased by a total of 32.99% in two years, while the total gross margin increased by 37.73% in the same period. The total gross margin grew percentageally faster than the total sales revenue.

2. ANALYSIS OF GROWTH OF FMCG RETAIL PRICES IN THE REPUBLIC OF SERBIA

2.1. The general rate of inflation and the rise in food prices

Inflation is a real phenomenon in developing economies, while the inflation rate is one of the most important macroeconomic indicators. „The Executive Board of the National Bank of Serbia, at the meeting of the Executive Board on December 7, 2023, determined the target rate of total inflation for the period from January 2024 to December 2026 at 3%, with a permissible deviation of $\pm 1.5\%$ “ (National Bank of Serbia, 2025).

Table 8: Annual inflation rates in the Republic of Serbia from 2020 to 2024.

Year	Annual inflation rates in % (the growth in prices in current month compared to the same month in last year)											
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
2020	2.0	1.9	1.3	0.6	0.7	1.6	2.0	1.9	1.8	1.8	1.7	1.3
2021	1.1	1.2	1.8	2.8	3.6	3.3	3.3	4.3	5.7	6.6	7.5	7.9
2022	8.2	8.8	9.1	9.6	10.4	11.9	12.8	13.2	14	15	15.1	15.1
2023	15.8	16.1	16.2	15.1	14.8	13.7	12.5	11.5	10.2	8.5	8	7.6
2024	6.4	5.6	5	5	4.5	3.8	4.3	4.3	4.2	4.5	4.3	4.3

Source: (Republic Institute of Statistics, 2025).

According to the data of the Republic Institute of Statistics, the National Bank of Serbia managed to adjust the actual inflation rate to the target limits in May 2024, while rates were higher than the projected upper limit of 4.5% as of September 2021 (bold rates in the table). When we look at consumer prices indicators related to food (FMCG), the situation is even more unfavorable. For example, the increase in food prices in November 2024 compared to November 2023 amounted to 4.3%, which is in line with the general inflation rate, but in November 2023 compared to November 2022, it was 9.1%, which is higher than the general rate of inflation of 8%. Also, the increase in food prices in November 2022 compared to 2021 amounted to 23.5%, which is also higher than the general inflation rate of 15.1%. Therefore, food prices grew faster compared to the general annual inflation rate. When looking at individual food categories, the biggest price increase in November 2024 compared to November 2023 was in the category "sugar, jam, honey and chocolate" and it amounted to 14.5% and in the category "fruit" 10.2%. Also, in November 2023, compared to November 2022, the category "vegetables" had the highest price growth of 16.5% and the category "coffee, tea and cocoa" 12.8%. Then, in November 2022, compared to November 2021, the category "milk, cheese and eggs" had the highest price increase, amounting to 43.1% and the category "fish" 25.9%. This situation is caused by a large number of different factors, some of which we will discuss below (Republic Institute of Statistics, 2025).

Therefore, inflation as a macroeconomic phenomenon was present especially in 2022 and 2023. The causes of inflation can be different. The term „imported inflation“ is increasingly being used to describe the rise in the prices of imported products. Since Serbia is a net importer, this may be one of the factors. Of course, the rise in prices is often caused by the rise in the prices of raw materials and energy products such as fuel. Also, many macroeconomists believe that the primary source of inflation is excessive money printing by governments in order to finance budget deficits. However, there is another obvious cause, the "greed" of retailers and their hunger for extra profits. We will consider last one in next paragraphs.

2.2. Restrictive agreement and comparison of domestic and foreign prices

On 10th of October in 2024 the Commission for the Protection of Competition made an unannounced raid on the headquarters of 4 large retail chains in order to prove the existence or non-existence of forbidden restrictive agreement on retail prices. Together, these 4 retail chains have over 50% of the FMCG market share in the Republic of Serbia. The Commission was determining whether the chains concluded a restrictive agreement and thereby violated Article 10 of the law on competition protection. According to Article 10 of the law on the protection of competition, "restrictive agreements are agreements between market participants that have the aim or effect of significantly limiting, distorting or preventing competition on the territory of the Republic of Serbia." Restrictive agreements are considered prohibited and void by the same article of law, except in special cases“ (Law on Protection of Competition, 2025).

In order to prove the existence of a restrictive agreement, the Commission for the Protection of Competition monitored the price changes of 35 products in the period of several months before October 10th and determined that the prices were identical for all 4 retail chains. After that, the Commission expanded the analysis to 45 more products during August 2024 and included in the analysis another retail chain of the same format for the purpose of comparison. The results of the investigation showed that the retail market in Serbia achieved value sales growth from April 2023 to March 2024 with a simultaneous decrease in volume sales. Also, it was established that in this period the price increase in FMCG retail chains was almost twice as high as the official inflation rates, and that in the period from 2016 to 2023, an unusual growth of sales revenues and gross margins were recorded in these retail chains (Commission for the Protection of Competition, 2025).

The commission further proved that the prices of basic foodstuffs such as milk, yogurt, oil, flour, sugar, eggs, coffee and bananas in the period from April to September 2024 were the same or similar with different procurement conditions of these 4 retail chains. The value of the consumer basket composed of 45 products is similar between the observed 4 retail chains, while this value is significantly lower in the fifth retail chain that has the most unfavorable procurement conditions and which was taken for the purpose of comparison.

The Commission further stated that the value of the consumer basket for the analyzed 45 products ranged from 35,161 rsd to 38,830 rsd, which is significantly higher than the value of the same basket in the fifth retail chain that was taken for the purpose of comparison, where the value of the basket was 30,523 rsd. This difference is even more highlighted since the fifth retail chain had the worst commercial procurement conditions compared to the 4 chains that were under the supervision of the Commission. Taking all of the above into account, the Commission "reasonably assumed that the indicators found on the retail market are the result of the absence of mutual competitive pressure of the observed retailers and that the listed companies concluded a restrictive agreement from Article 10 of the Law on the Protection of the Competition." This situation resulted in multi-day boycotts of large retail chains by consumers at the beginning of 2025 (Commission for the Protection of Competition, 2025).

A topic that is becoming more and more relevant after the scandal in Serbia regarding the price fixing of retail chains is the comparison of domestic and foreign prices of FMCG, especially when it comes to food. It is not a rare case that on social networks citizens from abroad take pictures of prices in foreign retail chains in order to show much lower prices compared to those on the shelves of domestic retail chains. However, the answer to the question of whether this is really the case was given by the Republic Institute of Statistics in its publication "Trends". Based on data from the publication "Trends" from the first quarter of 2024, the prices of "food and non-alcoholic beverages" and the prices of "alcoholic

beverages and tobacco" in the Republic of Serbia were lower compared to the prices of the same categories in most European countries.

European Union countries have higher food prices compared to Serbia by an average of 9%. Switzerland is more expensive than Serbia in the category of "food and non-alcoholic beverages" by 81%, Iceland by 51%, Norway by 39%, Luxembourg by 30%, Malta by 29%, Finland by 23%, Denmark by 30%, France by 16%, Germany by 15%, Sweden by 15%, Slovakia by 13%, etc. While Serbia was more expensive in this category compared to Turkey by 45%, Romania by 19%, Poland by 15% and Bulgaria by 3% (Republic Institute of Statistics, 2025).

European Union countries have higher prices of „alcoholic beverages and tobacco“ compared to Serbia by an average of 37%. Iceland by 197%, Ireland by 187%, Norway by 180%, Finland by 133%, Denmark by 83%, France by 80%, Belgium by 65%, Latvia by 35%, Portugal by 31%, Greece by 31%, Croatia by 23%, Cyprus by 22%, Austria by 20%, Slovenia by 19%, Slovakia for 19%, etc. While Serbia was more expensive in this category compared to North Macedonia by 18%, Turkey by 17% and Bulgaria by 11% (Republic Institute of Statistics, 2025).

Therefore, Serbia, in relation to European countries, with the exception of certain countries such as Turkey or Bulgaria, has nominally lower prices for "food and non-alcoholic beverages" and "alcoholic beverages and tobacco." But the most realistic picture can only be obtained if other factors such as average or medial salaries are compared.

CONCLUSION

Although FMCG prices in the Republic of Serbia, at least officially, are not nominally higher than the prices of most European countries, there is certainly a significant price increase in previous years (see table 8). The reasons for these price increases are numerous. So, although most of the public blames the big retail chains for the price increases, the reality is that they are not the only ones who have contributed to this. In the years when the real (official) inflation rate was the highest in 2022 and 2023, the average gross margin rate for the 8 analyzed chains increased by 1.07 percentage points and 2.54 percentage points respectively, while the average gross margin of these chains for those two years increased from 11.4 billion to over 15.7 billion (by 37.7%). This increase in the average gross margin is not only caused by the increase in the margin rates of retail chains, but most probably also by the increase in wholesale prices of commodities. In other words, higher wholesale prices of commodities increased the basis for calculating the trading margins, which resulted in higher gross margins and, of course, higher retail prices. Retail chains, especially large ones, are responsible for the rise in prices, especially when we consider the price agreements proven by the Commission for the Protection of Competition, but they are not the only factor. A whole range of manufacturers, distributors and wholesalers also significantly influenced the growth of retail prices. Some retailers have recently announced to their suppliers that they will no longer accept further increases in wholesale prices, while many retailers have complained that they are having to raise retail prices as wholesale prices are also rising. In the paper, the authors did not comment on the justification of the trade margins of these 8 retailers (whether they are large or not), but only proved to what extent the chains were responsible for the retail price increase in previous years.

FMCG price increases mainly affect the poorer segments of the population (Paul & Sharma, 2019). Fortunately, there are many ways in which society and governments can help detect and suppress unjustified price increases. The intervention of society (boycotts of chains, highlighting price increases, etc.) and the government (inspections by the Commission for the Protection of Competition, etc.) are of crucial importance in this regard.

REFERENCES

- Agency for Economic Registers. (2025, 01 29). *Publicly published financial statements and other searches*. Retrieved from: Agency for Economic Registers: <https://www.apr.gov.rs/>
- Commission for the Protection of Competition. (2025, 02 28). *Proceedings initiated against four retail chains*. Retrieved from: Commission for the Protection of Competition: <https://kzk.gov.rs/2024>
- Končar, J., Vučenović, S., Vukmirović, G., & Marić, R. (2020). *Marketing channels strategies*. Subotica: Faculty of economics in Subotica.
- Marić, R. (2019). *Commercial product knowledge*. Subotica: Faculty of Economics in Subotica.
- Marić, R., Vukmirović, G., Nuševa, D., Vučenović, S., & Macura, N. (2024). The Functioning Of Retail Stores Of Fmcg In Circumstances Of Crises In The Republic of Serbia. *Strategic Management and Decision Support Systems in Strategic Management* (str. 175-182). Subotica: Faculty of economics in Subotica.
- National Bank of Serbia. (2025, 02 25). *Targeted and actual inflation*. Retrieved from: National Bank of Serbia: <https://nbs.rs/sr/ciljevi-i-funkcije/monetarna-politika/inflacija/projekcija->

inflacije/#:~:text=do%20decembra%202026.,procentualnom%20promenom%20indeksa%20potro%C5%A1a%C4%8Dkih%20cena.

Paul, M., & Sharma, P. (2019, 02 06). Inflation Rate and Poverty: Does Poor become Poorer with Inflation? *SSRN*, str. 1-16.

Republic Institute of Statistics. (2025, 02 26). *Trends, Q1, 2024*. Retrieved from: Republic of Serbia, Republic institute of Statistics: <https://www.stat.gov.rs/sr-latn/publikacije/publication/?p=15821&tip=8>

Law on Protection of Competition. (2025, 02 27). *Law on Protection of Competition*. Retrieved from: Commission for the Protection of Competition: <https://www.kzk.org.rs/kzk/wp-content/uploads/2011/07/ZAKON-O-ZASTITI-KONKURENCIJE.pdf>