HIGHLIGHTS

Highlights 1. Profitability analysis of the Serbian economy

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In 2018, the profitability of the Serbian economy improved slightly, continuing the positive trend present since 2014. Unlike the earlier years, in which companies' profitability was strongly influenced by changes in financial markets and changes in market prices of energy and raw materials, profitability growth in the previous year was primarily determined by the growth of business activities.

Profitability analysis of the overall economy

At the very outset of the analysis of profitability trends of the Serbian economy, it is necessary to study the profitability trends at the level of the overall economy by using, on the one hand, profitability margins, that is, using the operating profit margin and the net profit margin and, on the other hand, using rates of return, such as the Return on Assets (ROA) and the Return on Equity (ROE). In addition, the profitability of the overall economy, and individual economic activities in Serbia are compared with the profitability being achieved globally.

Operating profitability vs. overall profitability

In order for the profitability analysis to be clearer, it is necessary to differentiate the profitability of the core business from the overall profitability of companies, taking into consideration the different relative importance of these two types of profitability, as well as the various factors which affect these two types of profitability.

Improving the *profitability of the core business* of companies in the 2014-2018 period, measured by the *operating profit margin*[2], is stable and can be explained by the cyclical recovery of the Serbian economy within the context of the expansion of European economies. Nevertheless, the growth of operating profit margin was relatively low during this period, which was a result of the modest growth of the local economy. Modest growth of operating profitability does not present a problem for now, and does not put the overall economic profitability at risk, as macroeconomic variables, such as low interest rates and a relatively strong and stable dinar exchange rate against the euro and the dollar, are beneficial for local companies and have a positive impact on overall profitability. However, any potential deterioration of macroeconomic conditions combined with the current relatively low growth rates of operating profitability, could, in the future, endanger the profitability status of the economy.

As opposed to 2017, when a slight drop in operating profitability was recorded, in 2018, it recovered. This resulted in the operating profit margin in 2018 of 5.6%, taking it back up to the level recorded in 2016. Although the reasons for a slight increase in operating profitability will become clearer once we go into a more detailed analysis by sectors, we will present some general conclusions here.

In 2018, unlike 2017, operating income increased at a higher rate (7.1%) compared to operating expenses (6.8%). For the second consecutive year, as part of operating income, income generated from sale of products and services grew at a higher rate (7.6%) compared to income generated from sale of goods (5.2%). These trends can also be a signal of refocusing from growth based on trade in goods to growth based on production of products and services.

On the side of operating expenses, looking at the overall economy, the most significant operating expenses had a relatively uniform growth, 5% - 8%. It is interesting to note that the costs of materials, fuels, and energy in 2018 increased at a significantly lower rate (6.1%) compared to the growth recorded in 2017 (12.4%). Several factors influenced the noticeably slower growth of costs in this category. First of all, unlike 2017, when severe drought saw a decrease in the physical volume of agricultural production of 11.9%, in 2018, there was a 16.3% increase in agricultural production. The increase in supply led to the decline in prices of agricultural products, and producer prices of agricultural products in 2018 were 4.2% lower than the previous year. The drop in the price of agricultural products has affected the reduction in the cost of raw materials for companies from the manufacturing industry which use agricultural products as their main production inputs. Also, according to global market data, in 2018, the prices of almost all industrial metals dropped, which additionally resulted in the reduction of input prices in certain segments of the manufacturing industry. When it comes to energy prices, the price of electricity further increased in 2018, while the price of oil steadily grew until the beginning of the 4th quarter, when it began to drop sharply. Changes in energy prices did not affect any significant increase

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2 The operating profit margin is the ratio of operating profit to operating income. The operating profit is the difference between operating income and operating expenses.

in the cost of materials and fuel and energy at the level of the overall economy but did have a significant impact on the performance of certain sectors. It is interesting to note that in 2018, salary costs grew at a rate of 10.3%, faster than was the case in 2017, as well as in relation to operating expenses and operating income in 2018. The high rise in salary costs in companies is the result of a decline in the labour market supply due to emigration, the increase in salaries in the public sector and a reduction of the informal economy sector.

To form a clearer picture of the level and dynamics of the operating profitability of companies doing business in the local economy, it is necessary to perform appropriate comparisons with other economies. A comparison of the levels of operating profitability is often not very informative, as operating profit margins are strongly influenced by the structure of a particular economy in terms of sectors. However, a comparison of the dynamics of operating profitability can reveal what direction the economic activity of a particular economy is moving in, compared to reference economies, and if, and to what extent, interdependence is present in this respect.

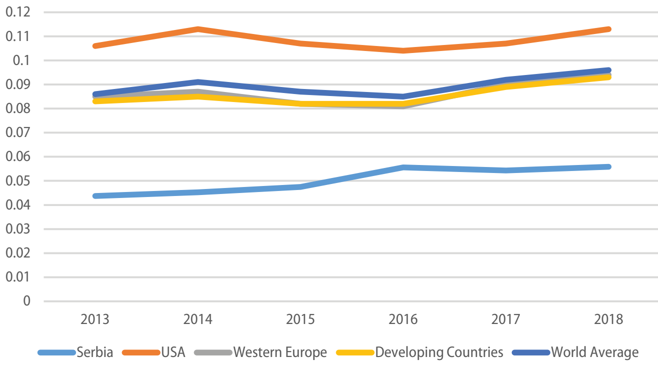
Table 1. Rate of business profit Serbia and the world - comparative analysis, 2013 - 2018

	Serbia	USA	Western Europe	Developing Countries	World Average
2013	4.4%	10.6%	8.5%	8.3%	8.6%
2014	4.5%	11.3%	8.7%	8.5%	9.1%
2015	4.7%	10.7%	8.2%	8.2%	8.7%
2016	5.6%	10.4%	8.1%	8.2%	8.5%
2017	5.4%	10.7%	9.0%	8.9%	9.2%
2018	5.6%	11.3%	9.4%	9.3%	9.6%

Source: Author based on SBA data and http://people.stern.nyu.edu/adamodar/New_Home_Page/datacurrent.html

As expected, companies operating in the local economy have lower operating profit margin compared to companies operating in markets in the USA and Western Europe. What may be less expected is that the operating profitability of the local economy also lags significantly behind the profitability of developing countries. What is commendable is the fact that local companies recorded an almost constant increase in the operating profit margin over the analysed period, while globally it fluctuated, corresponding to business cycle trends. Although changes in operating profitability levels of the local economy and economies used as the basis for comparison are generally different from year to year, if we look at the entire period, we can see that the operating profit margin in all economies analysed increased by about 1 percentage point – which means that trends are very similar. This could imply that, within a very short period of time, certain factors have different impacts on the profitability of the local economy and global economies analysed, while in the medium term, this impact is identical. What can be potentially worrying is the fact that, at the global level, there has been a significant increase in operating profitability in the period which includes 2017 and 2018, while operating profitability in Serbia in 2018 is at the same level as it was in 2016, primarily due to the drop in operating profitability in 2017.

Graph 1. Rate of business profit - comparative analysis, 2013 - 2018



Source: Author based on SBA data and http://people.stern.nyu.edu/adamodar/New_Home_Page/datacurrent.html

The overall economic profitability, measured by the *net profit margin*[3], after increasing strongly in the 2014 – 2017 period, achieved barely noticeable growth over the past year. The strong growth in overall profitability in the 2014 – 2017 period was dominantly influenced by temporary trends in financial markets, such as strengthening of the real value of the dinar and the drop of real interest rates. In 2018, real interest rates stagnated compared to the previous year, so they did not significantly impact the costs of the economy. Trends of the real exchange rate against the euro and the dollar had moderately positive effects on the profitability of the economy. The real value of the dinar against the euro and the dollar in 2018 was 3.6% higher than in the previous year, which resulted in lower interest costs on foreign currency loans, and consequently, on improving the financial result. However, the value of the dinar against the weighted average euro and dollar at the end of 2018 was unchanged compared to the end of 2017, and this is why the effects of positive exchange rate differences were lower by as much as 83% compared to the previous year. All this has resulted in the fact that local companies in 2018 had a negative financing result[4] which significantly slowed down the growth of the overall economic profitability.

3 The net profit margin illustrates how much of each dinar in revenue translates into profit. The net result, in addition to operating results, is influenced by other elements, such as positive and negative exchange rate differences, interest income and expenses, changes in the value of assets, gains and losses from the sale of assets.

4 The result from financing is the difference between income from financing and financing costs.

What marked 2018, when it comes to the analysis of the overall economic profitability, is the strong growth of other income, which, in 2018, was higher by as many as 108 billion dinars, compared to 2017. The increase in other income was mostly affected by the mining sector, where an unusually large increase in this income category was recorded, in the amount of about 100 billion dinars[5]. Two things should be taken into consideration here. Firstly, the growth of other income is mostly once-off, and cannot be relied on as a permanent source of increase in profitability. Secondly, the increase in other income in 2018 distorted the picture of the overall economic profitability. Had this increase not happened, the overall profitability in 2018, measured by the net profit margin, would be by one percentage point lower than the amount calculated, and by 0.6 percentage points lower than it had been in 2017.

In order to gain a clearer picture of the level and dynamics of the overall profitability of companies operating in the local economy, it is necessary to make appropriate comparisons with other economies.

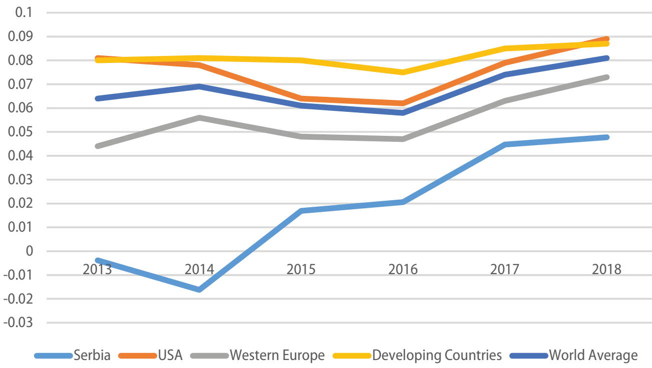
Table 2. Net profit margin - comparative analysis, 2013 - 2018

	Serbia	USA	Western Europe	Developing Countries	World Average
2013	-0.4%	8.1%	4.4%	8.0%	6.4%
2014	-1.6%	7.8%	5.6%	8.1%	6.9%
2015	1.7%	6.4%	4.8%	8.0%	6.1%
2016	2.1%	6.2%	4.7%	7.5%	5.8%
2017	4.5%	7.9%	6.3%	8.5%	7.4%
2018	4.8%	8.9%	7.3%	8.7%	8.1%

Source: Author based on SBA data and http://people.stern.nyu.edu/adamodar/New_Home_Page/datacurrent.html

As noted earlier, the Serbian economy significantly improved the overall profitability measured by net profit margin in the period 2013-2018, thus managing to reduce lagging behind observed economies as well as the global average, which is, however, still 40% lower than the global average. We can notice that, during the analysed period, in addition to Serbia and the Western European economies, there has been a significant increase in overall profitability. This could mean that the overall profitability of the local economy and the Western European economies is affected by the same factors.

Graph 2. Net profit margin - comparative analysis, 2013 - 2018



Source: Author based on SBA data and http://people.stern.nyu.edu/adamodar/New_Home_Page/datacurrent.html

As noted earlier, the Serbian economy significantly improved the overall profitability of the measured net profit margin in the 2013 – 2018 period, thus managing to reduce the lag behind economies being analysed and the global average, but is still 40% lower than the global average. We can observe that, in the analysed period, besides Serbia, the Western European economies also recorded a significant increase in overall profitability. This could mean that the overall profitability of the local economy and the Western European economy are impacted by the same factors.

Return on Assets (ROA) vs. Return on Equity (ROE)

Operating and net profit margins are important indicators of the profitability of companies, but they do not provide us with the information on returns on investments generated by key stakeholders in companies (owners and creditors). For these purposes, Return on Assets (ROA)[6] and Return on Equity (ROE)[7] are used. The ROA and the ROE continued to increase steadily in the 2013 – 2018 period, with the exception of 2014, when these rates recorded a drop and had negative values that could be associated with the consequences of the floods that affected some regions of Serbia during that year. Although the efficiency of asset and equity management over the observed period generally slightly increased, growth of observed rates of return was nevertheless predominantly determined by the increase in net profit. However, we should take into consideration the fact that the key factors leading to the growth of net profit are those on which companies have relatively little influence. This primarily refers to strengthening of the local currency against the euro and the dollar and the constant decline in interest rates, whereby it is relevant that in the future, the dinar may weaken, and

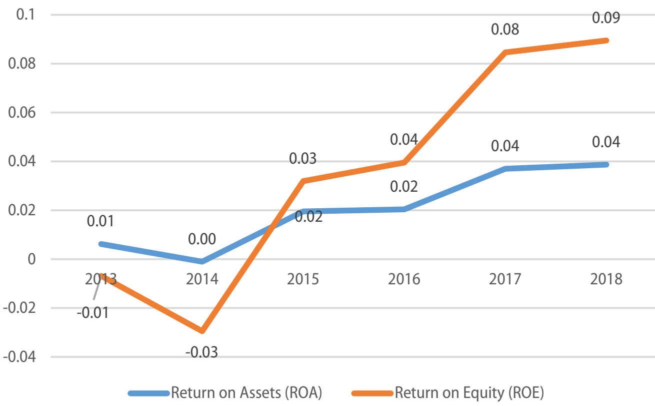
5 It can be assumed that this amount is associated with other income from RTB Bor in 2018, as this is the year when it was privatized. After official publication of financial statements, it will be possible to explain the origin of this amount more precisely.

6 The ROA is the ratio between the net income increased by the cost of interest rates and the company assets.

7 The ROE is the ratio between net income and own equity.

interest rates may start to rise. It can also be noted that in 2013 and 2014, the ROA was higher than the ROE. From 2015, this relation changed and the ROE became higher than the ROA. This relationship between the ROA and the ROE implies that, by 2015, the negative effect of financial leverage was present at the level of the economy, meaning that debts were too large a burden on the economy, resulting in its being less profitable, i.e., the proceeds from total assets of companies were lower than the cost of financing those assets. Since 2015, the positive effect of financial leverage has been present in the economy, meaning that debts had a positive impact on the profitability of equity. This is largely due to the lower relative indebtedness of companies as a result of the strengthening of the local currency, and the continuous decline in interest rates, being actually the price of debt.

Graph 3. Return on Total Assets (ROA) and Equity (ROE), 2013 - 2018



Source: Author based on SBA data

As the database used for the purposes of comparing the profitability of the local economy and economy of selected countries does not contain data on the ROA, the ROE will be used for the purpose of comparing achieved rates of return.

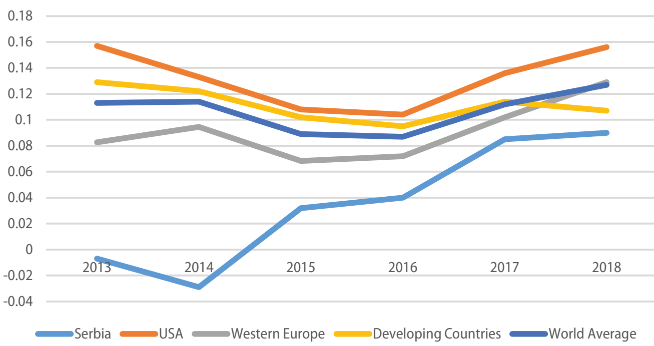
Table 3. Return on Equity - comparative analysis, 2013 - 2018

	Serbia	USA	Western Europe	Developing Countries	World Average
2013	-0.7%	15.7%	8.3%	12.9%	11.3%
2014	-2.9%	13.3%	9.5%	12.2%	11.4%
2015	3.2%	10.8%	6.8%	10.2%	8.9%
2016	4.0%	10.4%	7.2%	9.5%	8.7%
2017	8.5%	13.6%	10.2%	11.4%	11.2%
2018	9.0%	15.6%	12.9%	10.7%	12.7%

Source: Author based on SBA data

It should be considered that the ROE, similar to the operating profit margin, is significantly influenced by the branch of the economy within which companies operate and therefore by the structure of the economy whose performance is being measured and analysed. This, on the one hand, diminishes the informational power of the ROE when it is being used for comparing the profitability of different countries while on the other hand, it allows comparison between profitability trends measured by this indicator. Although a constant increase in the ROE was present in the local economy, throughout the analysed period, similar to previously analysed indicators, it is below the values identified in the observed economies and is below the global average. In order to analyse the leverage of growth of ROE, it is often decomposed down to: (1) the net profit margin indicating the extent to which companies are able to manage total income and expenditure; and (2) the equity turnover ratio indicating the extent to which companies are capable of managing assets and liabilities. What is interesting is that the local economy, although it has a lower net profit margin than the economies analysed, records greater efficiency in managing its own equity, reducing the lag behind the global average when it comes to ROE. As local companies are characterized by less effective asset management than observed economies, greater efficiency in managing their own equity is likely to be associated with a significant protraction of the time taken to pay suppliers and the use of non-interest-bearing sources of financing. For the sake of comparison, the average time taken to pay suppliers in Serbia is almost twice longer than the global average[8].

Graph 4. Return on Equity - comparative analysis, 2013 - 2018



Source: Author based on SBA data

Profitability analysis per sector

In the second part, the focus is on analysing profitability indicators for individual economic activities. The analysis covered the last two years, 2017 and 2018, taking into account only those activities that have a significant impact on total economic trends (all activities which generated at least 100 billion in total income in 2017).

8 The average time for collection of receivables in the local economy in 2018 was 66 days, while the average time for paying suppliers in the same year was 137 days.

Although there was a slight increase in operating profitability in 2018 at the level of the economy, when the analysis is applied at to the level of individual sectors, it can be noticed that a decline in profitability of the core activity is, in fact, recorded for most sectors. The growth of operating profit margin was recorded in transport and storage, construction, professionals and scientific activities, and clerical support and service sectors. This growth was sufficient to neutralize the decline in operating profitability recorded in other sectors and to result in a slight increase in the profitability of the core business at the level of the economy as a whole.

The greatest growth, by far, in operating profitability was identified in the transport and storage sector where the operating profit margin recorded a significant growth of almost 9 percentage points, from 5.1% in 2017 to as many as 13.8% in 2018. This increase was largely driven by strong growth in operating income of 16% (in 2017, this growth was 7.4%) while operating costs grew at an almost identical rate as they did in 2017 (around 7%). From the data available from the Statistical Office for the first half of 2018[9], it can be concluded that this increase was mainly affected by the increase in the volume of freight transport, since the volume of passenger transport in this period slightly decreased. The construction sector is increasing the profitability of the core business for the second year in a row, with growth in 2018 being significantly higher than that identified in 2017. It can be assumed that the administrative reforms of 2015, which led to simplification of procedures for issuing building permits, and the continuing of the low interest rate trend as well as the absence of alternative sources for placing surplus cash due to the insufficiently developed local financial market, allowed further improvement of the profitability of the core business in the construction sector. According to the Statistical Office, the value of construction works completed in 2018 in Serbia increased by 13.9%, compared to the previous year, i.e., by more than 40 billion dinars. In addition to the construction industry, the operating profit margin has been increasing for the second consecutive year in the sector of expert and scientific activities as well. In 2018 it was 8%, which is one percentage point higher than in 2017, and two percentage points more than in 2016. The fourth sector that generated the profitability of core business is the sector of administrative and service activities. The operating income rate in this sector increased from 5.8% in 2017 to 6.4% in 2018. As the last two analysed sectors are relatively heterogeneous in terms of their structure, it is difficult to identify in more detail the sources of growth of their operating profitability. However, what can certainly be concluded is that companies from these sectors are engaged in the provision of services as their core business, which confirms the narrative of the growth of the economy based on the production of goods and the provision of services as opposed to trading in goods.

By far the most significant drop in operating profitability in 2018, at almost 7 percentage points, was recorded in the mining sector, which is particularly interesting, considering that this is the sector which recorded the most significant increase in operating profitability in 2017. This decline in profitability could be linked to the slowdown in business processes in RTB Bor, taking into consideration that 2018 was the year in which the privatization of this company was finalized. It should also be noted that, at the level of the sector, operating income growth of about 20% was achieved, which is higher than the growth recorded in 2017 (18%). However, at the same time, there was a sharp increase in operating expenses (29%), which is far more than the increase experienced in 2017 (12%). Significant income growth could be associated with those companies in the analysed sector which deal with processing and sale of oil and oil derivatives, as there was a significant increase in fuel prices in 2018. Other companies in this sector, especially those engaged in the exploitation of ores and metals, had significantly higher operating expenses due to the increase in the costs of materials, fuel and energy caused by a sudden jump in fuel prices, as well as an increase in the price of electricity for the industry.

In other sectors where operating profitability declined, this drop was between 0.2 and 1.4 percentage points. Similar to 2017 and in 2018, the water supply sector recorded a drop in operating profitability. A fall in operating profitability of 1.2 percentage points was caused by the growth of operating income in 2018 being half of what it was previously, as well as the growth of operating expenses which was higher than the growth of operating income. This is, on the one hand, a consequence of the fact that water consumption decreases from year to year, both in households and in the industry, and that the price of water per cubic meter is often below a cost-effective price, especially with regard to prices for individuals. On the other hand, only 65% of the water consumed is water which generates income, while the remainder is water which is not invoiced and therefore, although it causes an increase in operating expenses, does not generate income. The sector of electricity supply, after the drop in operating profitability in 2017, continues with the same trend in 2018. The main causes of the fall in operating income in these two years are almost the same and are associated with an increase in operating expenses which was not followed by a corresponding increase in operating

9 Data for the entire 2018 is still not available.

income. The growth of operating costs in this sector is primarily due to the decline in the production of electricity, which, with the aim of ensuring a regular and safe supply of customers, is compensated by obtaining electricity on local and foreign stock markets where a significant price jump was observed in the second half of 2018. The agricultural sector, which was the sector with the largest decline in operating profitability in 2017, continues to record a decline in operating profitability in 2018. Unlike 2017 in which a decrease in the physical volume of agricultural production of 11.9% was recorded due to severe drought, in 2018, there was a 16.3% increase in agricultural production. However, the increase in the supply led to a drop in agricultural product prices, and producer prices for agricultural products were therefore 4.2% lower in 2018 than the previous year, which resulted in the growth of income in 2018 to be lower than the growth operating expenses. After a successful 2017 when the growth of operating profitability was achieved, the accommodation and food service sector recorded a decline in the operating profit margin in 2018, taking it back to the 2016 level of 2.7%. Operating expenses growing faster than operating income contributed to a decline in the profitability of the core business. It can be assumed that the operating income growth of 19.3%, which was somewhat lower compared to 2017, contributed to the continuing trend of an increase in the number of tourists, taking into account that according to data from the Statistical Office, the number of tourist arrivals and overnight stays increased in 2018 by 11% compared to the previous year. However, it should be emphasized that the sector of accommodation and food services is characterized by a constant increase in competition, since the growth rate of companies registered for this activity is higher than the overall economy average. This could lead to a decline in service prices and a lower growth in operating income despite the higher demand for this type of service. The increase in operating expenses (20%) was largely due to an increase in intangible costs (51.2%), which are the most significant item of operating expenses for companies in this sector. This category of expenses includes fees which hotels pay to travel agencies and other agents in the process of doing business. In the information and communication sector, core business profitability has been declining since 2016, with the decline in 2018 higher than the one recorded in 2017. Starting from 2013, a vast majority of European Union countries experienced a decline in income in this sector due to the drop in income from voice and fixed telephony services. Although the income from data transmission via the mobile network in total income in the EU market is increasing, it is not sufficient to compensate for the loss of income from voice traffic. According to RATEL's report, in the Serbian market, unlike the EU market, income continues to increase, but it is possible that the trends described are preventing faster growth of income. Operating income in 2018 grew at a higher rate than it did in 2017. It can be assumed that segments related to cable telecommunications, programming,

Table 4. Profitability of selected sectors of the economy of Serbia 2017 - 2018

	Profitability indicators							
	Business Profit Rate		Net gain rate		Return on Assets		Return on Equity (ROE)	
	2017	2018	2017	2018	2017	2018	2017	2018
Agriculture	3,5%	2,5%	3%	-0,3%	1,7%	0,2%	2,2%	-0,2%
Mining	12,4%	5,7%	10,9%	31,9%	6,5%	20,4%	15,7%	42,9%
Manufacturing	6%	5,6%	5,6%	3,8%	5,9%	4,1%	19,4%	11,3%
Supply of el. energy	6,6%	5,5%	5,8%	1,3%	2,3%	0,7%	3,5%	0,7%
Water supply	6,3%	4,9%	3,8%	2,1%	1,8%	0,9%	2,4%	1,6%
Construction	3,8%	5,3%	1,5%	4,1%	1,2%	2,4%	1,6%	4,6%
Wholesale and retail trade	3,6%	3,4%	2,4%	2,3%	4,1%	3,7%	14,4%	12,6%
Traffic and storage	5,1%	13,8%	3,7%	11,5%	3,1%	7,8%	4,7%	14,3%
Accommodation and food services	3,6%	2,7%	2,8%	2,1%	2,2%	1,7%	4,2%	3,5%
Information and communication	11,8%	11,1%	11,4%	9,4%	8,2%	6,9%	23,2%	19,2%
Professional and scientific activities	7,1%	8,0%	6,2%	7,1%	2,5%	3,1%	5,9%	7,1%
Administrative and service parts	5,8%	6,4%	7,2%	4,9%	8,2%	5,0%	28,8%	14,4%

Source: Author based on SBA data

and consulting services in the field of information technology have contributed to this. However, although operating income in this sector increased, this growth was lower than the rise in operating expenses, which led to a drop in operating profitability. Manufacturing and wholesale and retail sectors experienced a slight decline in operating profitability of 0.4 and 0.2 percentage points.

As opposed to 2017, when all sectors recorded increase in net profit margins, primarily due to exogenous factors, in 2018, the trend of overall profitability was the same as the trend of operating profitability in almost all sectors. This should indicate that in 2018 the operating result was what determined the overall profitability of the company. The service and clerical support activities sector was the exception, where the net profit margin was dropping, even though operating profitability grew, and the mining sector where although there was a significant drop in operating profitability, the net profit margin increased by almost 300%[10]. The agricultural sector is the only sector that had a negative net result and consequently a negative net profit margin.

Sectors which recorded increase in ROA and ROE in 2018 are mining, transport and storage, construction, professionals and scientific activities. In the mining sector, significant growth of these indicators is a consequence of the increase in net profits mentioned before, which was the result of the growth of other income, while for the remaining three sectors the growth of these indicators coincided with the growth of operating and the net results. In all other sectors, the decline in the ROA and the ROE was recorded. What could be concluded, by dividing ROE into net profit margin and equity turnover ratio is an enviable efficiency in the management of equity in the manufacturing, wholesale and retail, as well as information and communication sectors. For all these sectors, what is characteristic is the delay in paying suppliers which is above average, which is where the main reasons for the high efficiency of equity management should be sought. The poor efficiency of equity management, which led to the ROE being lower than the net profit margin, is characteristic for the electricity and water supply sector, primarily due to the low efficiency of collection of receivables.

10 This is related to the increase of other income in the amount of RSD 100 billion in the mining sector, which significantly increased the net profit achieved at the level of this sector. See footnote 2.

Table 5. Comparison of the profitability of selected sectors of the Serbian economy with the world average for 2018

	Profitability indicators					
	Business Profit Rate		Net gain rate		Return on Equity (ROE)	
	2018 (Serbia)	2018 (World average)	2018 (Serbia)	2018 (World average)	2018 (Serbia)	2018 (World average)
Agriculture	2,5%	6%	-0,3%	4%	-0,2%	9%
Mining	5,7%	9% - 18%	7,1%	6% - 7%	9,6%	11% - 15%
Manufacturing	5,6%	6% - 21%	3,8%	3% - 13%	11,3%	7% - 22%
Supply of el. energy	5,5%	12%	1,3%	6%	0,7%	8%
Water supply	4,9%	28%	2,1%	16%	1,6%	10%
Construction	5,3%	11%	4,1%	8%	4,6%	15%
Wholesale and retail trade	3,4%	4%	2,3%	3%	12,6%	11%
Traffic and storage	13,8%	5% - 22%	11,5%	15% - 23%	14,3%	19%
Accommodation and food services	2,7%	14%	2,1%	10%	3,5%	27%
Information and communication	11,1%	14% - 24%	9,4%	8% - 17%	19,2%	11% - 34%
Professional and scientific activities	8,0%	10% - 26%	7,1%	6% - 17%	7,1%	10% - 28%
Administrative and service parts.	6,4%	n/a	4,9%	n/a	14,4%	n/a

Source: Author based on SBA data

In previous analyses, we could see that the local economy is lagging behind the global according to all applied indicators. However, in the end, we will still have to compare the performance of selected sectors of the local economy with the success of the same sectors at the average global level in order to determine if, and to what extent, selected sectors of the local economy are more or less profitable compared to the global average. The varying levels of disaggregation of the economy to individual sectors somewhat reduce the informative power of analysis. The classification of sectors applied in Serbia uses a much lower level of disaggregation in some sectors than the international database used in this analysis. Due to this, the values of individual indicators, calculated for comparison purposes, are approximated and presented in appropriate ranges. Also, the ROA and clerical support and service activities sector are left out, since these data are not available in the database which was used.

When it comes to operating profit margin, the biggest lag behind the global average was identified in water supply sector, which should not be surprising, considering that there is a natural monopoly on the local market in this sector, and prices are generally below the cost-effective market prices. Significant lagging also exists in electricity supply sector, which should again be associated with low electricity prices, as well as considerable inefficiency in managing the main electricity producer in the local economy (EPS). Also, there is a noticeable lag in accommodation and food service sector and construction industry. Other sectors record slightly smaller lags in operating profitability. The only sector which achieved operating profitability within the range of the global average in 2018 is transport and storage sector.

When it comes to overall profitability, measured by net profit margin, the situation is drastically better compared to operating profitability, which would indicate that current trends in macroeconomic variables are more in line with the local economy compared to the global average. Several sectors, such as mining, information and communication, professionals and scientific activities and manufacturing industry fit into intervals identified at the global average level. Of course, as noted earlier, caution is advised, because for these sectors, intervals were indicated for which the overall profitability varied within different sub-sectors. Similar to the case of operating profitability, what remains unchanged is that the largest lag is in water supply sector.

In the end, we compare return on equity (ROE) between selected sectors of the local economy and the global average. Wholesale and retail trade sector exceeds the global average, and this is the result of more efficient equity management and a significantly longer delay in paying suppliers, as well as a lower degree of competition. Sectors of information and communication and manufacturing fit into intervals identified at the global average level. In these two sectors, the ROE is even closer to the average than the net profit margin, which indicates more efficient equity management compared to the global average[11]. Again, it is assumed that this is linked to considerably longer delays in payments to suppliers compared to the global average. The biggest lag is present in the sector of accommodation and food service, followed by construction, agriculture, water supply, and electricity supply.

References

1. Malinić, D., Milićević, V., Stevanović, N., 2012, *Upravljačko računovodstvo*, Beograd: Centar za izdavačku delatnost Ekonomskog fakulteta u Beogradu.
2. Penman S., (2003), *Financial Statement Analysis and Security Valuation*, second edition, McGraw-Hill, 348-381
3. Todorović, M., Ivanišević, M., (2017), Poslovne finansije, Centar za izdavačku delatnost, Ekonomski fakultet u Beogradu
4. http://www.apr.gov.rs/
5. http://ec.europa.eu/eurostat
6. https://www.nbs.rs/internet/cirilica/index.html
7. http://people.stern.nyu.edu/adamodar/New_Home_Page/datacurrent.html
8. http://www.ratel.rs
9. http://www.stat.gov.rs/

11 Although it is not possible to state this with certainty until a more detailed analysis and comparison of the efficiency of management and certain categories of assets is performed.