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EFFECTS OF STRUCTURAL CHANGES IN THE ECONOMY OF THE REPUBLIC OF SERBIA: OLD PROBLEMS, NEW REFORM CHALLENGES

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Structural changes in the economy directly affect macroeconomic and financial stability, income growth, productivity and economic efficiency, social inclusion, and the improved quality of life. The global contraction in 2020, caused by COVID-19, the deepest since the Second World War, will cause a great global economic reset, extreme poverty will increase, and the biggest permanent loss will be in human capital. The biggest consequences for the Serbian economy will be a slowdown in structural reforms. The key performance of the economy in the conjunctural period was positive and affected the growth of the resilience of the economic system, but the research showed that the implemented structural reforms were insufficient and slow, that the old problems are still the causes of low competitiveness. In the context of new reform challenges, the focus of activities needs to be shifted towards creating a stimulating environment for the development of domestic entrepreneurship and the growth of private investment in order to increase trust in the entrepreneurship-institution relationship.

Keywords: the macroeconomic and reform balance of the economy, effects of the structural performance of the economy and the manufacturing industry, qualitative indicators, structural problems, reform challenges

JEL Classification: L32, M21, O11, P11

INTRODUCTION

Structural reforms and the economic recovery of the Republic of Serbia have been stopped as a result of the economic shock caused by the 2020 global pandemic. An economic recession, the largest since World War II, has affected all segments of public life all over the world (IMF, 2020, 10-12). The focus of the government's economic interventions was directed toward the measures for encouraging enterprise liquidity (in order to avoid bankruptcy and provide support to workers in attenuating the loss of income), preventing an increase in unemployment, and avoiding a financial crash. The old structural problems in the economy have escalated, and the economy has faced new challenges.

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The subject of this study are the effects of structural changes in the economy of the Republic of Serbia on economic growth, i.e. a dynamic structural analysis of the economy's qualitative performance in the period of conjuncture over the last five years. Based on a critical review of the effects of the key structural performance of the economy, the aim of the research is to point out the reform bottlenecks to economic policy makers, as well as the need to implement structural reforms in those areas whose segments constantly make losses and burden the rest of the economy. The structural analysis included an overview of the economy's performance according to the size, ownership and the technological structure. A special analytical point of view was directed toward the process industry.

The study tests the hypotheses which originate from the very purpose of the study:

H1: The economic situation did not contribute to the expected structural changes. Structural changes in certain economic segments have yielded positive results and contributed to faster economic growth and macroeconomic stability.

H2: The private sector operations are more efficient than the state sector operations, and within it, the operations of majority foreign-owned enterprises are more efficient than the operations of majority domestic-owned enterprises.

Within these hypotheses, the following sub-hypotheses were analyzed:

H11: In the boom period, the qualitative performance of certain economic structures, primarily profitability, liquidity and indebtedness, improved.

H21: Within the manufacturing industry, the technological structure improved in favor of more technologically intensive branches.

The methodological instrumentarium was based on the structural and dynamic analysis of the key indicators from the economic-financial analysis of the final accounts of the Republic of Serbia's companies in the period of the economic conjuncture 2015-2019.

The basic coordinates of the research determined the structure of the paper. The paper consists of the three interrelated units: the first gives a brief theoretical and methodological context of structural changes; in addition to the macroeconomic and reform cross-section, the second contains the results of the research of the complex and comprehensive structural analysis of the Serbian economy, while the third analyzes the key (old) problems n the economy. Finally, the reform structural challenges in and priorities of the economy of the Republic of Serbia are given in the Conclusion.

THE THEORETICAL-METHODOLOGICAL CONTEXT

The analysis of the effects of structural changes in the economy includes the qualitative and quantitative transformations of the economy. In the theoretical context, the basic methodological characteristic of structural analysis refers to the notion of the "relative structural immutability" that is essential for determining a set of the possible transformations that a particular economic system can go through. "Relative structural immutability" enables the study of structural changes through a "time-differentiated" description of the interrelationships between the elements of the economic system (Schilirò, 2012, 20-21).

Structural changes in the economy essentially point to the degree of the economic system's qualitative transformation, which is determined by different factors, primarily by technological innovations and changes in the organizational structure. Structural changes in the economy are the generator of the strengthening of macroeconomic performance and the provision of strong, sustainable and balanced growth (IMF, 2015, 6).

Over the past several decades, the trends have suggested that reform efforts are often narrowly related to macroeconomic conditions, development stages, and global integration. Basically, it is difficult to measure structural reforms because they often include the policies or questions not easy to quantify. The most powerful momentum of the reforms overlapped with the periods of economic stress or turbulences. The acceleration of structural reforms in several fields is influenced by the processes of economic integration.

Any discussion on macroeconomic policies lays special stress on structural policies (IMF, 2014, 5-6). Policy makers are becoming ever more focused on the complementary role of structural policies in the promotion of sustainable and balanced growth, which provides new jobs.

Structural policies may affect macroeconomic stability in several ways (IMF, 2015, 12):

- the prevention of the efficient allocation of resources could bring about the creation of imbalances, for example obstacles to the competition and the protection of the non-tradable sector may prevent the development of the tradable sector, or the implications of inadequate income redistribution may cause economic inequalities (Lekovic, 2015, 92) and so on;
- the limitation of flexibility might prevent timely adaptation to shocks and might weaken the resistance of the economy, for example the rigidity of the labor market, say, in terms of determining salaries, unemployment compensation or severance pay, may contribute to high unemployment and the low growth of productivity. In a similar fashion, the balance sheets (with nonperforming loans and an excessive debt) of the weakened state sector may prevent loans and investments, thus limiting the passage of easy financial conditions;
- the limitation of potential growth affects macroeconomic stability - for instance, investment bottlenecks, which limit productivity and the growth of production, may contribute to an increase in the debt, the worsened conditions of financing, and the growing instability of the financial sector; and
- the creation of an imbalance in a member-state or a group of states that affect global economic and financial stability.

Structural changes affect the basic macroeconomic outcomes:

- an increase in revenue, productivity and economic efficiency (Foster-Mcgregor & Verspagen, 2016, 92-93);
- the promotion of equity (e.g. the reforms of taxes and subsidies, social spending, gender equality);
- economic and financial stability (e.g. the diversification of export, financial supervision, the regime of insolvency, the management of capital flows); and
- the improvement of the quality of life (e.g. education, healthcare, ecological issues).

A more powerful impact of structural reforms on macroeconomic performance began with the intensification of the transitional processes during the 1990s, when many countries commenced broad programs of economic reforms, often initiated by the worsening of the economic conditions (Drazen & Easterly, 2001). The 2008 global recession and the escalation of the external debt gave an additional emphasis to the theoretical momentum of the significance of structural reforms (Agnello, Castro, Jalles & Sousa, 2015, 134). Numerous theoretical papers emphasize the fact that there is no strict relatedness between the initiators of structural reforms and their actual application, or in other words, every country's experience reflects its own institutional characteristics, history and political systems, interest groups, and the like (Haggard & Vebb, 1993).

The theoretical perspective on structural changes was gradually being directed toward the analyses of growth and toward the microanalyses which explain causality more clearly.

The theoretical considerations of individual reform segments are mostly focused on reforms in the financial sector and their positive effects (Galindo, Schiantarelli & Weiss, 2005, 87), foreign-trade liberalization (Dollar & Kraay, 2004; Vacziarg & Velch, 2008; Estevadeordal & Tailor, 2013, 1669), and investment policies (Acemoglu, Johnson & Robinson, 2002; Bekaert, Harvey & Lundblad, 2005, 35, 37, 41). Many papers emphasize the fact that the effects of structural changes depend on the attained level of the development of a country (Klein & Olivei, 2008, 862). Institutions are an important factor of the dynamics of structural changes (Acemoglu *et al*, 2002), long-term sustainable growth, and investments, in relation to which the paper shows the latest reform comparative section of the situation in the countries of the region. It is shown by many studies that the focus of structural changes is directed toward structural changes at the local level and their importance for labor productivity (Bouis & Duval, 2011, 6, 8, 25).

An ever-increasing number of studies are directed toward the complementarity of structural changes and the significance of the so-called waves of (multiple) structural reforms for labor productivity (Christiansen, Schindler & Tressel, 2013; Prati, Onorato & Papageorgiou, 2013, 947, 967).

Studies on the priorities of reforms are still in the initial phase - allow us to say that trade reforms have a tendency to precede domestic financial reforms (Hauner, Prati & Bircan, 2013, 896). Depending on economic cycles, some structural reforms have a more powerful effect, whereas others have a weaker effect - for instance, structural reforms on the labor market in the period of conjuncture have more powerful effects and smaller costs in comparison with a period of recession (Bouis & Duval, 2012, 15, 25).

Transition reform experiences show that the determination of priorities is a central issue when efficient application is in question. Studies have shown differentiated priorities in the fields of reforms, depending on the degree of development and the phase of development in different countries (Table 1). Nevertheless, some shared reform priorities appear, where there is a probability of a broader interest across the membership.

Table 1 The priorities of structural reforms depending on the level of development

REFORMS	Underdeveloped countries	Developing countries	Developed countries
Technology & Innovation			
Industry regulation			
Job market			
Business regulation			
Fiscal structural reforms			
Infrastructure			
Banking sector			
Other finance and capital market			
Legal System & Property Law			
Trade liberalization			
Agriculture			

Note: The darker shadow indicates that the reform areas most often rank among the three main reform priorities within each group of countries.

Source: IMF, 2015, 30

THE MACROECONOMIC AND REFORM BALANCES OF THE REPUBLIC OF SERBIA IN THE PERIOD OF ECONOMIC CONJUNCTURE

In the period 2015-2018, conjuncture at the global level contributed to the acceleration of growth. As early as in 2019, however, the first signals of slowing growth appeared, the global GDP growth of 2.9% being the lowest since the global financial crisis. The global stagnation in 2019 hit the most developed economies the most (the USA and the Eurozone) and Asian developed economies to a somewhat lesser extent, primarily due to the slowdown in industrial production due to weaker external demand, trade tensions and increasing uncertainty in terms of trust and investment (World Bank, 2020). The economies of the European Union and the Eurozone recorded an average growth of over 2% by 2019 (except for Italy and France), when recession signals appeared (first in Germany, then in Italy and France).

In the boom period (2015-2019), the countries of our region had average economic growth rates exceeding 3% (except Croatia), the fastest growth having been achieved by Romania (5%). However, they also noticed a slowdown in growth in 2019 (Table 2).

In the same period, Serbia's economic growth was cumulatively 14.6%, the average rate 3.5% (Table 3). Thanks to the high rate of economic growth in 2019 of 4.2% of the GDP, Serbia reached EUR 45.9 billion.

Based on the trend of the key macroeconomic aggregates (Table 3) it can be concluded:

- From the point of view of the contribution of expenditure aggregates to economic growth, the largest contribution to growth was made by investments and personal consumption. The investments increased by an average 11.5% per year, and personal consumption by 2.4%. In 2019, the investment growth of 15.6% and the personal consumption growth of 3.1% influenced domestic demand so that it contributed to the GDP growth of 5.8 percentage points. The net exports made a negative contribution.
- The most important effect of the implemented fiscal consolidation in the period 2015-2019 is the reduction of the internal and external macroeconomic imbalances. For the first time since 2005, a fiscal surplus was recorded in 2017 (1.1% of the GDP), whereas in 2019, an almost zero fiscal result (-0.2% of the GDP) was registered.

Table 2 Regional economic growth

	Average GDP growth rate 2015-2019
Albania	3.3
Bosnia and Herzegovina	3.1
Bulgaria	3.4
Hungary	4.1
Romania	5.1
Northern Macedonia	2.3
Slovakia	2.8
Slovenia	3.6
Serbia	3.5
Croatia	3.0
Montenegro	4.1

Source: European Commission, 2020

Table 3 The macroeconomic balance 2015-2019

	2015	2016	2017	2018	2019
GDP (in billion EUR)	35.7	36.7	39.0	42.9	45.9
GDP (rates in %)	1.8	3.3	2.0	4.4	4.2
GDP/capita in EUR	5,034	5,203	5,581	6,138	6,610
Manufacturing industry	5,7	6.0	6.3	1.9	0.2
Registered employment, total (thousands)	1,990	2,010	2,063	2,131	2,173
Net earnings (real growth, %)	-2.1	2.5	0.9	4.4	8.5
Gross investment (% of GDP)	16.8	16.9	17.7	20.1	22.4
Exports of goods and services (in billion EUR)	15.7	17.4	19.3	21.2	23.4
Imports of goods and services (in billion EUR)	18.6	19.6	22.3	25.3	28.0
Current account of the balance of payments (% of GDP)	-3.5	-2.9	-5.2	-4.8	-6.9
Fiscal deficit / surplus (% of GDP)	-3.5	-1.2	1.1	0.6	-0.2
Public debt (% of GDP)	70.0	67.8	57.9	53.7	52.0
External debt (% of GDP)	73.5	72.1	65.1	62.2	61.9
Inflation (the end of the period)	1.5	1.6	3.0	2.0	1.9

Source: Republički zavod za statistiku, 2020; Narodna banka Srbije, 2020; Ministarstvo Finansija, 2020.

The current account deficit increased due to the growth of the foreign trade deficit, amounting to 3.2 billion euros (6.9% of the GDP).

- FDIs made the key contribution to macroeconomic stability - the average net FDI inflow in 2015-2019 amounted to 2.6 billion euros, which provided the coverage for the current account deficit. The structural aspect of FDIs is especially important as the inflow was mainly directed to the export processing industry. Given the scale of the global recession in 2020, the findings of the research on FDI behavior in recession periods are important for Serbia, showing that FDIs in developing countries do not differ between the periods of crisis and normal periods (Alquist, Mukherjee & Tesar, 2016, 106, 112);
- Fiscal discipline and balanced public finances contributed to the reduction in the public debt (from the 70% share of the public debt in GDP in 2015 to 52% at the end of 2019). A similar positive trend is observed in the decrease in the share of the external debt.
- The positive macroeconomic results in the period 2015-2019 most reflected in the labor market. The number of employees increased, the unemployment rate decreased (from 17.7% in 2015 to 10.4% in 2019), and the average growth of net wages in 2015-2019 was 4.0%. Net wage growth in 2019 was 8.5%.

According to the Global Competitiveness Index (GCI), the Serbian economy fell by 7 places in 2019 (Table 4) compared to 2018 and ranked 72nd in the world (out of 141 countries) due to a reform backlog in certain areas. Of the transition countries in the region, the economies of Slovenia (35), Hungary (47), Bulgaria (49), Romania (51) and Croatia (65) are ahead of Serbia. The most problematic of the mentioned 12 pillars of competitiveness relate to institutions, ICT application (Zecevic, Radovic Stojanovic & Cudan, 2019, 289), the development of the financial market, health and the market size.

The structural reforms of the regulatory framework for business conditions are an extremely important

Table 4 The Global Competitiveness Index (GCI) for the countries in the region, 2019

Indicators	ALB	BUG	HUN	ROM	SLO	CRO	SERBIA		
							Rank	Value	Distance from the leader by value
GCI	81	49	47	51	35	63	72	60.9	24
Subindex: SUPPORTING ENVIRONMENT									
Pillar 1: Institutions (20 ind.)	76	57	63	52	33	77	75	52.5	29
Pillar 2: Infrastructure (12 ind.)	98	56	27	55	33	32	51	73.8	22
Pillar 3: ICT implementation (5 ind.)	75	30	54	32	40	60	77	52.6	40
Pillar 4: Macroeconomic stability (2 ind.)	104	43	43	56	1	43	64	75.0	25
Subindex: HUMAN CAPITAL									
Pillar 5: Health (1 ind.)	46	81	70	83	36	47	76	79.0	21
Subindex: MARKET									
Pillar 7: Commodity Market (8 ind.)	75	63	91	64	30	86	73	54.6	27
Pillar 9: Financial Market (9 ind.)	102	73	66	86	61	63	82	57.4	34
Pillar 10: Market size (2 ind.)	111	64	48	41	82	78	74	51.8	48

Source: The Global Competitiveness Report 2019 factor in investment activities and attracting FDIs. Serbia has made significant progress in this segment during the economic recovery period. The World Bank's Doing Business Report 2020 composite index ranks Serbia 44th out of 190 countries (Table 5). Serbia continues to record the most unfavorable rank in the area of obtaining electricity connections (94th position), obtaining loans (down from the 60th to the 67th), whereas the biggest setback in Serbia is registered in the field of starting a business (decrease for 33 positions).

THE EFFECTS OF STRUCTURAL CHANGES

The positive business performance of the economy in the period 2015-2019 are mostly the result of the more efficient business operations of the company in its core business, and partly due to external effects as well (conjuncture in global markets, falling interest rates, the exchange rate policy and the appreciation of the dinar). The key performance of the economy is positive: the growth of gross value added (GVA), employment, the net profit 2.4 times higher than the net loss, and a real decline in the cumulative loss. The net profit was realized by 60% of the companies in which 84% (i.e. 980 thousand) workers in the economy were employed, the net loss reported in 25% of the companies with 190 thousand employees, while 15% of the companies with 2.5 thousand employees showed a zero financial result. The business performance of large companies shows an increase in the number, employment and the total income, and a reduction in the accumulated loss. The MSME sector increased its resilience, especially medium-sized enterprises in all the segments: growth in the number, employment, a positive financial result, the growth of the GVA and capital, and a reduction in the total liabilities.

The net profit of the economy

Throughout the transition until 2015, the economy operated with a net profit only three times, namely in 2006, 2007 and 2011. For the first time in the two decades of the transition, the economy made a net profit for the four consecutive years (2015-2019), which was the result of the continuous economic growth and improvement of the performance of macro- and micro-businesses (Figure 1). The net financial result increased 6 times (in euros), i.e. 5.4 times in real terms.

In addition, the economic and financial analysis of the economy highlights the following trends:

- The real growth of the net profit of the economy in the period 2015-2019 amounted to 38% (the average annual 8.4%), while the net economic losses decreased by 30.9% in real terms (having decreased by 8.8% on average).
- The overall positive business image of the economy is disturbed by the trend of a gradual decline in the positive net financial result in 2018 and 2019. The real chain indices show a trend of a decline in the net profit, with the trend of the growth of the net loss, resulting in the lower positive financial result of the economy.
- In the period 2015-2019, Serbia's economy produced 85.8 billion euros of new value, i.e. the GVA of the economy increased by 35.3% in real terms, with an average annual rate of 7.8%.

Table 5 Business conditions - the most critical factors in 2020

Ease of doing business - ranking in the world	Starting a business	Paying taxes	Registration of property rights	Obtaining of electricity connection	Obtaining a loan	Execution of a contract
44	73	85	58	94	67	65

Source: Doing Business Report, 2020

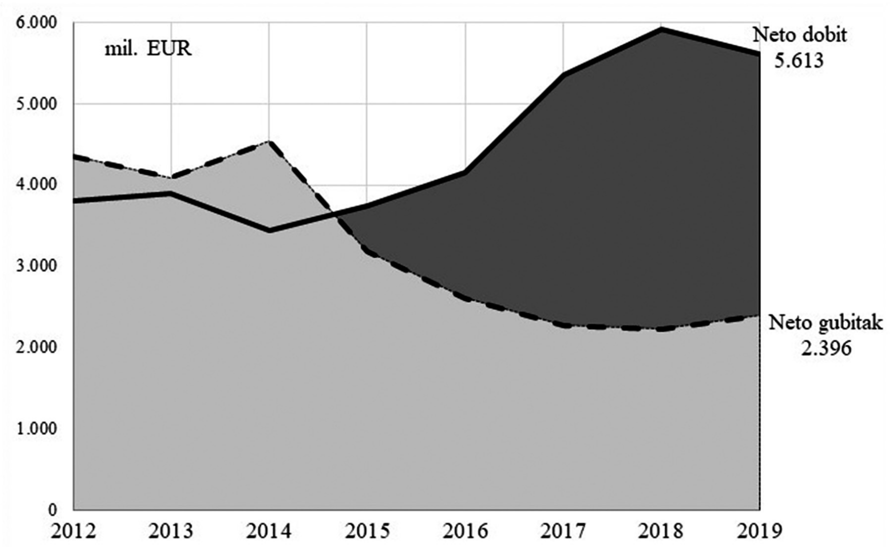

Figure 1 The positive net result of the economy in the period 2015-2019

Source: Author, based on the SBA data

The qualitative structural performance of the economy

The qualitative economic and financial performance of the economy shows a positive trend in the period of economic recovery from 2015 to 2019 (Table 6). Productivity (14.4%), the economy and solvency improved, profitability significantly increased (5 times), liquidity slightly improved, the net profit rate increased 4.5 times (the operating profit rate having slightly increased), and the increased net loss rate almost halved. The most significant is the fact that the rate of return on business assets (Return on Assets - ROA) doubled, and the rate of return on equity (Return on Equity - ROE) increased as much as 4.2 times.

The structural performance of the economy, depending on the size of the company

Conjuncture did not significantly improve the qualitative performance of the entrepreneurial sector (MSME). The structural analysis showed that the basic qualitative performances of the large enterprises were at a higher level than those in the MSME sector:

Table 6 The qualitative performance of the economy

	2015	2016	2017	2018	2019
Productivity (in thousand dinars)	1,662	1,827	1,888	1,977	2,067
Economy	1.01	1.03	1.05	1.05	1.04
Profitability	1.11	2.84	5.46	6.13	5.22
Solvency	1.54	1.57	1.59	1.63	1.63
General liquidity ratio	0.87	0.91	0.93	0.95	0.97
Reduced liquidity ratio	0.60	0.63	0.63	0.64	0.64
Net profit rate	0.79	2.07	3.83	4.29	3.47
Business profit rate	4.73	5.59	5.31	5.37	5.06
Net loss rate	4.21	3.26	2.60	2.40	2.41
ROA (rate of return on operating assets)	1.56	2.17	3.43	3.64	3.12
ROE (rate of return on equity)	1.65	3.96	7.36	8.06	6.91

A methodological note: For the period 2015-2018, the final financial reports of APR (Serbian Business Registers Agency) were used, and for 2019, financial reports for statistical purposes were used due to the comparability of profitability indicators. As a rule, a profit is always higher in statistical reports than in final ones.

Source: Author, based on the SBA data

- The productivity gaps between the MSME sector and the large enterprises sector did not change throughout the period - the productivity of large enterprises was continuously higher by 1/3 of the productivity of the MSME sector.
- The efficiency of micro-enterprises was constantly below the average of the economy, while the efficiency of the large enterprises was higher than the economy of the MSME sector.
- Except for the year 2016, the MSME sector was constantly below the average profitability, primarily due to the unprofitability of the micro-enterprises.
- The large enterprises were the most solvent, whereas the MSME sector was constantly solvent below the average, solely due to the low solvency of the micro-enterprises.
- The micro-enterprises had a chronic liquidity problem, and the medium-sized enterprises were the most liquid part of the economy, whereas the large ones had a pronounced liquidity problem.
- The micro-enterprises constantly operated unprofitably in the zone of the deep negative financial leverage. The small companies operated most profitably in the zone of the positive financial leverage (the rate of return on equity was constantly twice as high as the rate of return on business assets). The medium-sized companies operated profitably, with a positive financial leverage, but with unchanged ROA and ROE during the period 2016-2019. The large companies operated profitably on average, with a sharp decline in 2019 (Table 7).

Sectoral changes

The structural analysis showed that, in the structure of the GVA of the economy, in addition to the continuation of the trend of the strengthening of the service sector, which is the key determinant of the "structural change paradigm" (Islam & Iversen, 2018, 4), the growth of the construction sector growth of employees in the manufacturing industry and in some service activities (tourism, professional, scientific and innovation services and administrative services) is evident. There is an evident structural decline in the transport, agriculture, mining and electricity supply sectors.

The sectoral analysis of liquidity (Table 8), showed that the most liquid sectors were the mining sector (the general liquidity ratio 1.46 and the reduced ratio 0.75), the manufacturing sector (1.04 and 0.63) and the trade sector (1.11 and 0.68), whereas the most illiquid sectors of the economy were the traffic sector (0.75 and 0.66), the electricity sector (0.82 and 0.62) and the construction sector (0.94 and 0.60).

The sectoral analysis of profitability signals that the trade sector consistently had high business profitability, the manufacturing sector achieved high rates of return on equity, i.e. high business profitability, in the period 2016-2019, and the construction sector improved the performance of

Table 7 The profitability of the economy by the size of the company

	2015					2016					2017					2018					2019				
	P	Mk	M	S	V	P	Mk	M	S	V	P	Mk	M	S	V	P	Mk	M	S	V	P	Mk	M	S	V
Net profit	0.8	-3.0	3.1	-1.5	2.7	2.1	-3.6	3.0	4.0	2.8	3.8	-1.6	4.1	4.3	5.6	4.3	0.1	3.6	4.4	6.2	3.5	0.0	5.1	4.4	3.3
Business profit rate	4.7	2.7	5.1	4.5	5.5	5.6	3.2	5.7	5.6	6.6	5.3	3.3	5.3	5.2	6.2	5.4	3.7	5.2	5.4	6.1	5.1	4.4	5.8	5.8	4.4

Note: E - the economy; ME - micro-enterprises; SE - small enterprises; ME - medium-sized enterprises; LE - large enterprises

Source: Author, based on the SBA data

Table 8 The sectoral changes in liquidity in the period 2015-2019

	Opšti racio likvidnosti						Reducirani racio likvidnosti					
	2015	2016	2017	2018	2019	2015 2019	2015	2016	2017	2018	2019	2015 2019
Economy	0.87	0.91	0.93	0.95	0.97	0.06	0.60	0.63	0.63	0.64	0.64	0.04
Agriculture	0.90	0.95	0.97	1.00	1.05	0.15	0.53	0.57	0.56	0.58	0.61	0.08
Mining	0.70	0.95	0.97	1.26	1.46	0.76	0.53	0.72	0.69	0.74	0.75	0.22
Manufacturing	0.79	0.87	0.93	0.98	1.04	0.25	0.49	0.56	0.57	0.59	0.63	0.14
Electricity	0.73	0.68	0.62	0.60	0.82	0.09	0.57	0.57	0.51	0.48	0.62	0.05
Water supply	0.78	0.73	0.72	0.70	1.06	0.28	0.61	0.57	0.56	0.54	0.53	-0.08
Construction	0.74	0.77	0.80	0.84	0.94	0.20	0.45	0.48	0.45	0.52	0.60	0.15
Trade	1.01	1.02	1.05	1.08	1.11	0.10	0.63	0.62	0.63	0.66	0.68	0.05
Traffic and storage	0.89	0.84	0.78	0.96	0.75	-0.14	0.78	0.74	0.69	0.82	0.66	-0.12

Source: Author, based on the SBA data

both the total profitability and business profitability from year to year, but was still below the average of the economy. The electricity, agriculture and water supply sectors operated in the zone of low profitability and the negative financial leverage. The transport sector showed volatility (Table 9).

Structural changes in the manufacturing industry

The key lever in the new economic growth model is based on the performance improvements and structural changes in the manufacturing industry. In the period of economic recovery, the number of enterprises in the manufacturing industry increased by 5.1%, the number of employees increased 27.2%, income increased 17.9%, the net result increased 35.4%, the GVA increased 16.8%, capital increased 32.7%, while the cumulative loss (-18.6%), as well as the total liabilities (-1.7%), decreased (Table 10).

From the position of a net loser in 2015, the manufacturing industry entered the positive zone of net profits in the period 2016-2019, the net result in 2019 amounting to EUR 940 million, i.e. 28% of the net result of the economy. The metal product industry, the non-metal industry, the pharmaceutical industry, the beverage industry, the tobacco industry, the paper and paper product industry, the machinery and equipment industry and the wood industry were constantly net winners, without any major oscillations. The rubber and plastic industry recorded a record high net result in 2019 (EUR 282 million, i.e. 30% of the manufacturing industry), and the constant net losers were the coke and petroleum product industry and the metal industry. In the largest number of the areas of the manufacturing industry, the operating profit was higher than the net profit, which was mainly due to the negative financial result (the higher financial expenses than the financial income). The biggest disparities in the net results and the operating profit were registered with the food industry. Significant disparities between the core business and the total operating profit in favor of the core business were registered in the areas of the beverage industry, the clothing industry, the chemical industry, the paper and paper product industry, the non-metal industry, the metal product industry, the electrical equipment industry, and the machinery and equipment industry. In the period 2015 – 2019, the processing industry of Serbia produced EUR 24.8 billion of a new value, i.e. the GVA of the manufacturing industry increased by 16.8% in real terms, with an average annual rate of 4% (Table 11).

The qualitative economic and financial performance of the manufacturing industry shows a positive trend in the period 2016-2019, with many oscillations. Solvency and profitability, and the net and operating profit rates improved, whereas the operating rate of return on operating assets (ROA) and the rate of return on equity (ROE) show oscillations. What was the most positive was the decline in indebtedness, especially the ratio of the total liabilities and the capital. The most liquid areas of the manufacturing industry were Pharmacy, Rubber and Plastics, Paper Industry, Tobacco, Leather, Clothing, Food Industry and Computers and Electrical Equipment. The biggest liquidity problems were present in the motor vehicle industry, Traffic Assets, Machinery and Equipment, Coke and Oil and the Metal industry. The most profitable areas of the manufacturing industry were Pharmacy, Rubber and Plastics, Machinery and Equipment, the paper industry and the tobacco industry. Pharmaceuticals, Rubber and Plastics, Paper and Tobacco had the highest ROA rates, whereas in addition to the mentioned areas, the highest rates of return on capital were those in the machinery and equipment industry and the non-metal industry.

In general, the structural changes in the economy were not effective, because they were not driven by drivers, primarily innovation and R&D (Mićić, 2017, 44). The technological structure of the processing industry

Table 9 The sectoral changes in profitability in the period 2015-2019

	ROA (rate of return on operating assets)					ROE (rate of return on equity)				
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Economy	1.56	2.17	3.43	3.64	3.12	1.65	3.96	7.36	8.06	6.91
Agriculture	59.92	1.95	1.42	0.25	1.06	119.08	2.39	1.58	-0.37	1.28
Mining	2.54	3.56	3.75	20.47	3.67	3.61	7.18	5.53	40.96	5.53
Manufacturing	0.40	3.60	5.67	3.78	3.82	-4.25	11.23	17.72	9.85	9.69
Electricity	2.08	1.69	2.31	0.82	0.85	2.37	1.95	3.37	0.72	0.62
Water supply	89.88	1.61	1.74	1.12	2.15	137.64	1.87	2.32	1.38	3.25
Construction	-0.13	0.00	1.05	2.10	2.49	-2.78	-2.30	0.83	4.50	6.37
Trade	2.98	2.31	3.80	3.12	3.55	8.49	7.20	12.93	9.88	11.18
Traffic and storage	3.30	2.74	2.82	7.34	2.84	5.25	3.80	4.10	12.96	5.34

Source: Author, based on the SBA data

Table 10 The performance of the manufacturing sector

	No Company	No Employees	Income	Net Profit	Net loss	Net result	GVA	Cumulated loss	Liability
2019 (million EUR)									
Economy	104,487	1,171,890	102,931	5,805	2,478	3,327	20,602	29,697	82,073
Manufacturing	17,548	381,012	27,476	1,674	734	940	5,681	8,375	18,889
2019/2015 (rates in %)									
Economy	10.4	18.3	20.9	38.0	-30.9	435.0	35.3	-8.6	6.9
Manufacturing	5.1	24.7	17.9	27.6	-52.2	35.4	16.8	-18.6	-8.8

Source: Author, based on the SBA data

Table 12 The performance of the technological structure of the manufacturing industry

	Enterprises		Employment		GVA		
	Number	%	Number	%	2017	2018	2019
Low-Tech	9,737	55.5	171,449	45.0	43.2	43.2	43.9
Medium-Low Tech	4,497	25.6	108,065	28.4	29.8	29.2	28.0
Medium-High Tech	2,404	13.7	89,372	23.5	22.3	22.5	22.6
High-Tech	910	5.2	12,126	3.2	4.7	5.1	5.5
Total	17,548	100.0	381,012	100.0	100.0	100.0	100.0

Source: Author, based on the SBA data

was constantly unfavorable and the low technological complexity branches were predominant (Table 12). Although there was a noticeable improvement in the technological structure in the high-tech branches in the period 2017-2019 namely the growth of participation in the structure of the GVA from 4.7% to 5.5%, in 2019, more than 80% of the companies employ 73.4% of workers in the areas of low and medium-low technological intensity, and create 73% of the GVA of the processing industry.

Changes in the ownership structure of the economy

The performance of the ownership structure of the economy (Table 13) shows a trend of strengthening the influence of the companies with majority foreign capital on the business of the economy. The research study shows that foreign acquisitions from multinational companies had better business performance, not only better than average domestic firms at the time of purchase, but they also improved their post-purchase performance faster than domestic firms did (Ragoussis, 2020, 77). Foreign private companies constantly increased their contribution to economic growth, increasing employment by more than 50%, their income, the GVA and capital having grown above the average, as well as their accumulated losses and liabilities. The domestic private sector improved its performance, achieved a significant net result, and reduced losses. The public sector reduced the number of employees by 1/5, as well as losses and liabilities, but still operated at a loss. The share of the majority foreign-owned companies in the GDP constantly increased from 12.3% in 2015 to 15.9% in 2019. The share of domestic private companies in the GDP increased from 17.5% to 21.4%, while the share of the state-owned enterprises simultaneously fell from 8.3% to 7.3%. In the period 2015-2019, the increase in the number of foreign private companies was 8.1% and the 18.3% increase in the number of employees in the economy mostly related to foreign companies (a 53.1% increase), in which about 300,000 workers work today. Foreign privately-owned enterprises (i.e. foreign POEs) increased the newly created value (GVA) by 50%, which was significantly more than the domestic privately-owned enterprises (41.1%) did. They increased capital twice as much as domestic POEs did (55% *versus* 27.8%).

The qualitative business performance of the ownership structure of the economy showed that the business performance of the foreign POEs was at a higher level than the business performance of the domestic POEs (Table 14). The productivity of the foreign private companies was constantly higher than the domestic ones, the economy was slightly higher with the foreign companies, the profitability of the foreign companies was 8 times higher in 2015, and the disparities in 2019 were reduced to 30%. The solvency of the private foreign sector was consistently higher than that of the domestic private sector. Also, the liquidity of the foreign companies was constantly at a higher level, especially if the sharper liquidity through a reduced liquidity ratio is analyzed. The profitability of the foreign companies was higher, especially so the total profitability. The disparities in the return on business assets (ROA) of the foreign companies in relation to the domestic companies gradually decreased from year to year, but they were still significant (5.4% vs. 4.2%). The disparities in return on capital (ROE) were lower. The indebtedness of the foreign companies, with slight oscillations, was at a lower level than the indebtedness of the domestic private sector. The public sector operated unprofitably, with illiquidity and unprofitably.

Table 13 The performance of the ownership structure of the economy in the period 2015-2019

	No Company	No Employees	Income	Net Profit	Net loss	Net result	GVA	Capital	Cumulative loss	Liability
Economy	10.4	18.3	20.9	38.0	-30.9	187.0	35.3	13.6	-8.6	6.9
POE	10.4	29.9	28.0	51.6	-32.9	135.7	44.8	27.8	2.8	17.0
Foreign POE	8.1	53.1	36.4	67.5	18.8	95.2	50.0	55.0	25.6	31.5
Domestic POE	10.5	21.9	23.1	42.1	-45.0	183.0	41.1	15.4	-6.6	10.9
SOE	7.6	-20.3	-17.3	-39.4	-26.8	-	1,5	-6.1	-21.9	-16.1

Note: POE - privately-owned enterprises; SOE - state-owned enterprises

Source: Author, based on the SBA data

Table 14 The qualitative indicators of the ownership structure of the economy

	2018			2019		
	PS	PD	DP	PS	PD	DP
Efficiency	1.05	1.05	1.04	1.06	1.05	0.97
Profitability	9.6	9.1	1.0	10.4	8.0	-1.7
Solvency	1.6	1.5	1.9	1.7	1.5	1.9
General liquidity ratio	1.13	1.06	0.53	1.18	1.07	0.51
Reduced liquidity ratio	0.77	0.69	0.41	0.81	0.69	0.38
Net profit rate	4.1	4.7	2.8	4.9	3.9	-4.8
Business profit rate	5.8	4.6	8.7	5.7	5.4	0.2
ROA	4.8	4.8	1.1	5.4	4.2	-0.7
ROE	11.3	13.1	1.3	12.1	11.2	-2.4
Indebtedness 1	58.7	60.8	46.1	56.6	61.7	47.3
Indebtedness 2	141.9	154.9	85.4	130.3	160.8	89.6

Note: Foreign POE - foreign privately-owned enterprises; Domestic POE - domestic privately-owned enterprises; SOE - state-owned enterprises; ROA - rate of return on operating assets; ROE - return on equity; Indebtedness 1- the ratio of the total liabilities and the total sources of financing; Indebtedness 2 - the ratio of the total liabilities and capital.

Source: Author, based on the SBA data.

STRUCTURAL PROBLEMS IN ECONOMIC BUSINESS

The structural analysis of the performance of the economy pointed out the problems that continuously burdened the business of the economy and that related to the problems of illiquidity and indebtedness, i.e. the amount of losses and liabilities. The concentration of problems was found in the groups of the companies without employees and in the micro-companies. A significant group of the companies without employees, or with one employee, increasingly burden the business of the economy. Namely, more than 50% of companies in the economy without employees, or with one employee, constantly generate 1/3 of current and more than 40% of accumulated losses. All qualitative business performance of almost 90,000 micro companies (companies with up to 9 employees) is below the average of the economy and their business is insolvent, unprofitable, illiquid, low profitable and burdened with losses and indebtedness.

The growth trend of the total liabilities and the amount of indebtedness is the key problem in the business of the economy that has been present for decades. The total liabilities of the economy have, in the past five years, increased by 7% in real terms, the indebtedness of the economy is still high, despite a relative decrease due to favorable sources of financing. The accumulated losses of the economy are high - in 2019 they amounted to almost 30 billion euros. In the structure of accumulated losses, 48.6% are located in micro, 10% in small, 11.9% in medium and 29.4% in large enterprises. The fact that the rate of lost capital in the economy is constantly high (36.6%) should be noted as such.

The amount of the external debt narrows room for maneuvering intended to improve the performance of the economy, increase investment and increase the living standards. In the period 2015-2019, the external debt of Serbia increased by EUR 2.18 billion, the corporate debt by EUR 2.44 billion, the public sector reduced its debt by EUR 1.43 billion, whereas the bank debt increased by EUR 1.17 billion.

CONCLUSION

In the period 2015-2019, the global economy contributed to the acceleration of growth in Serbia, with the average GDP growth of 3.5% being higher than the average growth in the countries of the region, bearing in mind the fact that there were signs of slowing growth even before the global recession. The largest contribution to growth was made by macroeconomic aggregates, investment and personal consumption. The implemented fiscal consolidation contributed to the reduction in the internal and external macroeconomic imbalances. The budget has been balanced since 2017, but the chronic problem of the foreign trade deficit is still present. FDIs, especially their structural aspect, made a key contribution to macroeconomic stability, thus amortizing the problem of covering the current account deficit. It is extremely important that the increase in fiscal discipline and balanced public finance have contributed to a reduction in the public debt and the external debt. From the social point of view, the most important is the fact that the positive macroeconomic results had the greatest impact on the labor market.

Given the huge transition gap, as well as the peripheral status of the entire SEE area, the speed, commitment and capacity of the state to implement structural reforms in the past conjuncture were not in the function of economic catching up and strengthening economic competitiveness. The main contribution of the research to the effects of structural changes in the economy is the confirmation of the hypothesis that the implemented structural reforms in the boom period were insufficient, i.e. that the economic boom did not contribute to the expected structural changes (Hypothesis H1). The entrepreneurial sector slightly improved its performance, the resilience being mostly improved by the segment of medium-sized enterprises. The conjuncture had a positive effect on the business of large companies.

For the first time in two decades of transition, the economy of the Republic of Serbia have had a net profit for four years in a row, which is the result of continuous economic growth and the improvement of macro- and micro-business performance. The additional contributions of the research study are the findings of the qualitative performance of the economy, which show that the key qualitative economic and financial performance of the economy has improved, namely productivity, the economy, solvency and profitability, while profitability has recorded a high growth, although a slight trend of positive improvements has been registered (H21).

On the one hand, the structural analysis of the economy showed the continuation of the strengthening trend of the GVA of the service sector and the construction sector, in the employee structure and growth in the manufacturing industry (Hypothesis H1), whereas on the other, there is a structural decline in Transport, Agriculture, Forestry and Water Management, Mining and Electricity Supply. The conjuncture had a positive effect on the growth of the profitability of the trade, manufacturing and construction sectors (H1). Since the key lever in the new model of economic growth is based on improving performance and structural changes in the manufacturing industry, the research study showed that, in the boom period:

- the most liquid areas were Pharmacy, Rubber and Plastics, Paper Industry, Tobacco, Leather, Clothing, the food industry, Computers and Electrical Equipment, and
- the most profitable were Pharmacy, Rubber and Plastics, Machinery and Equipment, the paper industry and the tobacco industry.

That structural changes in the economy were not driven by the factors driving economic growth (i.e. innovation and R&D) is shown by the findings of the research in the technological structure of the manufacturing industry, which is constantly unfavorable and in which low technological complexity has a dominant share (H21).

The research in the structural performance of the ownership structure shows a trend of strengthening the influence of companies with majority foreign capital on the economy and also that multinational companies have better business performance, not only better than an average domestic company at the time of purchase, but they also improve their performance faster than domestic companies do. The share of foreign POEs in the GDP constantly increases, foreign POEs having increased the newly created value by 50%, which is significantly more than in the domestic private sector (41.1%). The key qualitative business performance of foreign POEs is at a higher level than the business performance of the domestic private sector (H2). The public sector operates unprofitably, with illiquidity, and unprofitably.

The old structural problems that burden the business of the economy are related to the chronic problem of illiquidity and indebtedness, i.e. the amount of losses and liabilities. Companies without employees or with one employee constantly represent a transitional burden (generating more than 40% of cumulative losses). The qualitative performance of almost 90,000 micro-enterprises is below the average of the economy, they continuously operate insolvently, unprofitably, with illiquidity and low profitability, and they are burdened with losses and indebtedness. The rate of lost capital in the economy is still extremely high. The level of the external debt is one of the biggest challenges narrowing room for maneuvering intended to improve the performance of the economy and increase investment and the living standards.

The empirical research required going through complex databases and the classification of business entities according to different methodologies. The main limitation was the methodology for classifying business entities according to the ownership structure. Since the coverage of state-owned enterprises is a rather diversified category, the research applied the sectoral classification of institutional units, which included public, state-owned non-privatized and bankrupt or liquidated enterprises under the category of state-owned enterprises.

Given the unpredictability of the global recession caused by the consequences of COVID-19 (Guerrieri, Lorenzoni, Straub & Werning, 2020, 34), the focus of the economic policy in the forthcoming period will be directed towards a targeted aid package for the economy and health. The structural analysis of economic performance detected the key (old) problems and the causes of low competitiveness. Priority reform activities should provide an environment conducive to the development of domestic entrepreneurship and the growth of private investment in order to increase trust between entrepreneurship and institutions. In this context, it is necessary to institutionally unite the key structural reforms that contribute to economic growth, which includes the transformation of public enterprises (Jakopin & Čokorilo, 2019, 66-67) and encouraging a faster development of domestic entrepreneurship.

Further research studies should be directed towards systemic reforms in the following areas: improving the efficiency of the management of state property; increasing the efficiency of public management through the introduction of an integrated system of strategic planning and the management of economic, regional and sectoral development (Ristic, Boskovic & Despotovic, 2019, 70); the formation of financial development institutions (the Developmental Bank of Serbia, the Guarantee Fund); encouraging the growth of those areas of the manufacturing industry and the specific domestic companies that have a potential for the growth of the core business; the formation of sectoral industrial zones; the improvement of the business environment in order to relieve entrepreneurs from administrative and financial burdens; an education reform in line with the needs of the economy; creating incentive packages for business entities and sectors in order to improve resource efficiency through the use of clean technologies and environmental protection. Progress in all relevant reform areas will primarily depend on institutional reforms, the biggest challenges being in the two reform areas, namely in the rule of law and the control of corruption.

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