



The Economic Impact of the COVID-19 Pandemic on the Russian Automotive Industry

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INTRODUCTION

Economic crisis is an integral part of the market system and has many causes, including wars, political contradictions, natural disasters, epidemics, the economy's structural deformation, etc. The causes of economic crisis in different countries in different historical periods differ.

Globalization, especially intensive in the late twentieth—early twenty-first centuries, was expressed in production becoming internationalized, deepening international division of labor, markets' becoming more interdependent—all these factors determine the consequences of economic crises.

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Until today, the 2008 global financial crisis has been considered the worst one since the Great Depression of the 1930s (Dullien et al., 2010). The crisis emerged in the US financial sector in the summer of 2007 and quickly spread to other economies, manifesting itself in the form of strongly declining main economic indicators, which later turned into a global economic recession.

The global financial crisis of 2008 affected the manufacturing industry, including the automotive industry, decreasing production and sales, as well as the automotive companies profitability, and reduced the number of employees in the industry (Madugba et al., 2016). The crisis accelerated the automotive production shifting to developing countries with high demand for cars and low wage costs (Pavlínek, 2015; Sturgeon & Van Biesebroeck, 2010), accelerated the global supply chain consolidation and final assembly, as well as automotive companies integration (Sturgeon & Van Biesebroeck, 2010). The governments of the countries where large car companies were located took unprecedented measures to support the automotive industry (Klier & Rubenstein, 2012; Sturgeon & Van Biesebroeck, 2010).

In contrast to the 2008 crisis, the 2020 crisis is associated with world-class epidemiological risk—the rapidly spreading new type of infection—the COVID-19 pandemic. The current crisis is very different from the financial crisis of 2008: It is more extensive, as it has simultaneously affected all countries and all sectors of the economy.

At the same time, the epidemiological risk is taken when the world economy is weak and one can witness a slowdown in the global economy, growing trade barriers, increasing geopolitical tensions, mainly due to the US-Chinese confrontation, and the economic sanctions against Russia in response to the Ukrainian conflict. The risk of stagnation in the global economy is growing.

In this regard, the question arises: What the economic consequences of the COVID-19 pandemic will be for the global and national economies. It is also rather interesting if the declining demand for global and Russian automotive products and destroying the global value chains can cause the recession in the automotive industry?

The paper analyzes the impact of the COVID-19 pandemic on the performance of the global and Russian automotive industry, identifies the key problems and risks that this branch of the Russian economy can face, and outlines the main ways of improving state regulation mechanisms that can contribute to further developing Russian automotive industry.

METHODOLOGY

We used the data obtained from the Federal State Statistics Service (Rosstat), the Russian Industry and Trade Ministry, the International Monetary Fund (IMF), the Organization for Economic Cooperation and Development (OECD), the United Nations Industrial Development Organization, the International Labor Organization (ILO), as well as the data provided by the “ASM-holding” analytical company and the Automobile Manufacturers’ Committee of the European Businesses Association. We also used public reports of automotive industry corporations.

The study was conducted using the systematic approach and comparative analysis. It was based on the principles of consistency and complexity. General scientific methods were used: dialectical approach, system analysis and synthesis, formal-logical analysis, statistical and comparative analysis.

RESULTS

Economic and Social Consequences of COVID-19 Pandemic in Russia and Globally

The impact of the pandemic on the global economy was so strong that the IMF officially recorded the beginning of a global recession in the spring of 2020. The IMF’s April report described the current crisis as the worst since the Great Depression, with the global economy (real GDP) projected to contract sharply by 3% in 2020 as a result of the pandemic (IMF, 2020a).

Demand recovery in the third quarter of 2020 after the lifting of quarantine restrictions was accompanied by increasing economic activity. If we take the October IMF report, the global economy was predicted to contract in 2020 by 4.4%. The IMF expects a partial recovery from a deep recession in 2021, with real GDP growth projected at 5.2% (IMF, 2020b).

China was the first to suffer from the coronavirus pandemic. As a result of quarantine measures against infected cities, shutting down enterprises in the first quarter of 2020, China’s GDP decreased by 6.8% compared to the same period in 2019, while increasing by only 3.2% in the second quarter, and the growth in the third quarter was 4.9%. If we take the situation in the United States and the European Union (EU), it was more difficult there. EU GDP declined by 2.7% in the first quarter of 2020, by

13.9% in the second quarter, and by 3.9% in the third quarter. US GDP increased by 3% in the first quarter of 2020, decreased by 9% in the second quarter, and decreased by 2.9% in the third quarter (OECD, 2020).

The COVID-19 pandemic has most strongly affected such sectors of the economy as tourism and transport, as well as the service sector, restaurant and hotel business. The real sector is also experiencing serious difficulties (Iida, 2020).

For example, global manufacturing output in the first quarter of 2020 decreased by 6% compared to the same period last year due to measures to contain COVID-19 (UNIDO, 2020a), while in the second quarter of 2020, the decline was already 11.2% compared to the same period last year (UNIDO, 2020b).

The pandemic and its associated controls have dramatically reduced consumption and investment and undermined labor markets. The total loss of working time in the world amounted to 495 million full-time equivalent jobs in the second quarter of 2020, while in the third quarter of 2020 it amounted to 345 million jobs. This, in turn, resulted in a 10.7% reduction in labor income (excluding income support measures) during the first three quarters of 2020 (compared to the corresponding period in 2019), equivalent to US \$ 3.5 trillion, or 5.5% of global GDP for the first three quarters of 2019 (ILO, 2020a).

The COVID-19 pandemic has also had a serious negative impact on the Russian economy. Restrictions on the work of enterprises in some sectors of the economy, as well as other measures introduced to prevent the coronavirus from spreading, have affected the country's economic performance.

According to the Russian Federal State Statistics Service, the real GDP volume in Russia decreased by 3.4% or the first half of 2020 compared to the same period in 2019, the volume of investments in fixed assets decreased by 4.0%. Russian manufacturing industry's production volume increased in the first quarter of 2020 by 5.9% compared to the same period in 2019, while decreasing by 5.1% in the second quarter, and decreasing by 0.4% in the third quarter. The unemployment rate increased from 4.7% in January 2020 to 6.3% in September 2020. The real disposable income of the population for January–September 2020 decreased by 4.3% compared to the same period of 2019 (Rosstat, 2020a).

Thus, the COVID-19 pandemic and efforts to contain its spread have significantly affected economic activity and the population's income in all regions of the world.

The Impact of COVID-19 on the Global Automotive Industry

The automotive industry makes a significant contribution to global economic production. The automotive industry accounts for about 5.7% of global production, according to the global input–output database (Timmer et al., 2015) and 8% of global exports in 2018 (IMF, 2019). In 2017, the number of people directly employed in the global automotive industry was estimated at 14 million (ILO, 2020b).

The automotive industry is deeply integrated into global value chains. The global COVID-19 pandemic that broke out in China first had a serious economic impact on the Asian automotive industry, and then on the global one.

The city of Wuhan, which was the center of the coronavirus outbreak in China, has car and automotive component factories of several Chinese, European, American, Japanese corporations (Dongfeng Motor, SAIC Motor, General Motors, Honda Motor, Nissan Motor, Peugeot Group (PSA), Renault), which had to stop working to prevent COVID-19 from spreading. Then the plants in other Asian countries began to close, as well as the ones in Europe and North and South America.

As a result of government measures to contain COVID-19, car producers have been hit by production suspensions or cuts, mainly due to restrictions on employee travel to work sites and delays in parts delivery. Some dealers had to suspend their operations, reduce their opening hours, or reduce the number of services, such as warranty service and repairs.

Overall, the automotive industry has taken a triple hit: Factories closed, global supply chains were disrupted, and demand fell. As a result, the decline rate of the global automotive industry (production of cars, trailers, and semi-trailers) in the first quarter of 2020 was 15.7% compared to the same period last year (UNIDO, 2020a), while the decline rate was already 37.3% in the second quarter of 2020 (UNIDO, 2020b).

In China, the production and sales of passenger cars decreased by 15.5% and 15.4%, from January to August 2020, respectively, compared to the same period last year (CAAM, 2020).

In Japan, passenger car sales decreased by 19% from January to September 2020 compared to the same period last year (JADA, 2020).

If we take the EU, from January to September 2020, production losses due to COVID-19 accounted for 22.3% of the total production of passenger cars and light commercial vehicles in 2019 (ACEA, 2020).

The economic impact of the COVID-19 crisis on the automotive industry is very significant. The decline in car sales lowered the revenue and affected the corporate financial results.

In particular, Toyota Group consolidated sales for the fiscal year that ended on March 31, 2020. They amounted to 8,958 thousand vehicles, which is 0.2% less than in the previous fiscal year—the revenue decreased by 1.0% (Toyota Motor Corporation, 2020a). Toyota Group sales decreased by 19.9% in April–September 2020, compared to April–September 2019, and amounted to 4,366 thousand units, resulting in a 25.9% decrease in sales revenue and a 45.3% decrease in net profit (Toyota Motor Corporation, 2020b).

Volkswagen Group's consolidated sales decreased by 21% to 6,311 thousand units for the three quarters of 2020, revenue decreased by 16.7%, and net profit decreased by 84.5% compared to the same period of 2019 (Volkswagen Group, 2020).

According to the consolidated financial statements of Renault Group, car sales (including Nissan and Lada cars) sales decreased by 26% to 2,063 thousand units for the three quarters of 2020, resulting in a 26.8% decrease in consolidated revenue compared to the same period of 2019 (Renault Group, 2020a).

The automotive sector has thus emerged as one of the ones hardest hit by the COVID-19 pandemic. Declining demand and disruption to global supply chains have put pressure on the sector that had already faced huge changes to its traditional business model.

The key trends in the automotive corporations' strategic development in recent years include intensifying innovation (producing electric vehicles, unmanned vehicles), improving eco-friendliness and product safety (Zhurova & Turova, 2020). The COVID-19 crisis is driving fundamental changes in demand. Automotive corporations should focus on managing customer relationships and digital demand, as well as providing flexible offerings with low upfront costs, to actively counteract growing consumer uncertainty and purchases based on the total car ownership cost (KPMG, 2020). Dealmakers have to change their M&A strategies to reconnect their production and supply chains while keeping their technology strategies and investments in mind as the pandemic accelerates the new technologies adoption (PWC, 2020).

The Impact of COVID-19 on the Russian Automotive Industry

The automotive industry in Russia is represented by enterprises in all its segments (producing passenger cars, light commercial vehicles, trucks, buses). Both domestic and foreign-brand vehicles are produced in the territory of Russia. The production facilities of the world's leading automobile corporations—Renault, Volkswagen, Toyota, Hyundai, Nissan, etc.—are located in Russia (joint ventures, as well as enterprises wholly owned by foreign corporations), the predominant share of which operates in the industrial assembly mode.

The coronavirus pandemic and the subsequent restrictive measures have had the most negative impact on the car manufacturers and car dealers in Russia. The key reasons include the suspension of enterprises' activities due to non-working days, the lack of imported components, and decreasing demand.

According to Rosstat, the volume of motor vehicles produced in Russia decreased by 20.9% for the first nine months of 2020 compared to the same period in 2019 (Rosstat, 2020a). The decline in motor vehicles manufacturing had a negative impact on manufacturing automotive components: the number of components and accessories for motor vehicles in the first nine months of 2020 decreased by 16.5% (Rosstat, 2020c).

Table 14.1 shows the change in the manufacturing of new vehicles in Russia based on the data provided by the “ASM-holding” analytical company (the company has not published the statistics for the first six months and three quarters of 2020 on its Web site).

The number of motor vehicles produced decreased by 14.8% in the first quarter of 2020, compared to the same period in 2019 due to the shrinking car and truck manufacturing. A sharp decline could be seen in April–May 2020 due to the measures to contain COVID-19 and suspend or reduce manufacturing. When the quarantine measures were eased, there were signs of market recovery: In general, the number of all types of vehicles decreased by 28.7% in January–August 2020 compared to the same period in 2019.

The largest share of manufacturing foreign-made vehicles is accounted for by the passenger car industry (over 70%). Passenger cars and light commercial vehicles of domestic brands are produced by the AVTOVAZ Group (the LADA brand), the Sollers Group (the UAZ brand), and the GAZ Group (commercial vehicles). Russia is very attractive for foreign

Table 14.1 Manufacturing new motor vehicles in the Russian Federation

<i>Types of motor vehicles</i>	2017	2018	2019	January–March 2020	January–May 2020	January–July 2020	January–August 2020
Passenger cars, thousand units	1348.0	1 563.6	1523.6	323.0	405.7	626.3	708.3
change, %*	+19.9	+15.9	-2.6	-15.6	-37.1	-29.8	-29.8
Domestic brands, thousand units	349.8	414.9	410.7	866	105.6	171.1	191.3
change, %	+16.9	+18.1	-1.0	-18.7	-38.8	-29.2	-29.6
Foreign brands, thousand units	998.2	1 148.7	1112.9	236.4	300.1	455.2	517
change, %	+21.0	+15.1	-3.1	-14.5	-36.4	-30.0	-29.9
<i>Share of foreign brands, %</i>	<i>74.1</i>	<i>73.5</i>	<i>73.0</i>	<i>73.2</i>	<i>74.0</i>	<i>72.7</i>	<i>73.0</i>
Trucks (including category N1)	160.8	156.7	155.3	27.0	43.6	63.7	76.1
change, %	+18.6	-2.6	-0.9	-8.1	-21.7	-22.1	-19.6
Domestic brands, thousand units	133.0	127.4	127.2	21.1	35.6	52.2	62.4
change, %	+8.3	-3.5	-0.2	-11.5	-20.7	-21.0	-18.5
Foreign brands, thousand units	28.8	29.3	28.1	5.9	8.0	11.5	13.7
change, %	+2.1 times	+1.6	-4.0	+6.4	-25.6	-27.0	-24.2
<i>Share of foreign brands</i>	<i>17.9</i>	<i>18.7</i>	<i>18.1</i>	<i>21.6</i>	<i>18.4</i>	<i>18.0</i>	<i>18.0</i>
Buses (including the M2 category)	42.9	47.8	41.2	7.0	11.6	16.9	19.2
change, %	-2.6	+12.5	-14.8	+1.8	-9.2	-13.6	-16.5

<i>Types of motor vehicles</i>	2017	2018	2019	January–March 2020	January–May 2020	January–July 2020	January–August 2020
Domestic brands, thousand units	32.5	38.9	33.1	5.7	9.6	13.3	15.1
change, %	-5.8	+21.0	-16.2	-1.4	-11.1	-18.0	-18.0
Foreign brands, thousand units	10.4	8.9	8.1	1.3	2.0	3.6	4.1
change, %	+9.2	-13.7	-8.8	+18.2	+1.0	+7.1	+7.1
<i>Share of foreign brands, %</i>	24.3	18.7	19.8	18.6	17.7	21.5	21.1
Total:	1551.7	1768.1	1720.1	357.0	460.9	706.9	803.3
change, %	+19.0	+13.9	-2.8	-14.8	-35.4	-28.8	-28.7

* Compared to the same period of the previous year

Source: Created by the authors on the base of data provided by the “ASM-holding” analytical company, available at <http://asm-holding.ru/info/news/> (accessed 15 October 2020)

corporations' setting up passenger car manufacturing due to its large population, low motorization, and low labor costs.

Trucks and buses in Russia are dominated by domestic brands (about 80% each).

A comparison of the motor vehicles output structure shows that the share of foreign car and truck brands for January–August 2020 remained at the level of 2019, while the share of the foreign-brand buses output had increased slightly.

The overwhelming share of foreign ownership and control in the automotive industry contributes to the transfer of profits to the home countries of the world's leading automotive corporations. In this situation, it is clear that the future success of the automotive industry in Russia will be tightly linked to the competitive success of the Western European, American, Japanese, and Chinese automotive industries.

Sales of new vehicles in Russia, according to calculations made using the data provided by the “ASM-holding” analytical company, amounted to 983,781 thousand units in January–August 2020 (–12.2% compared to the same period in 2019).

Automotive products produced in Russia are mainly focused on meeting the domestic market needs and do not have significant export prospects. The volume of deliveries of passenger cars for export in January–August amounted to 40.4 thousand units, there was a decrease of 45.0% compared to the same period last year, trucks—7.3 thousand units, with a decrease of 16.3% (Federal Customs Service, 2020), which accounted for 5.7% and 9.6% of the car and truck output, respectively.

Table 14.2 shows the sales of new passenger cars and light commercial vehicles in Russia in terms of the top 10 groups of automakers—leaders in terms of sales in the Russian market by the end of 2019.

The biggest share of car sales is accounted for by the AVTOVAZ/ Renault –Nissan-Mitsubishi alliance—over 36% in 2017–2019 and January–September 2020. The share of Lada cars produced by the AVTOVAZ Group in the Russian market was 21.1% at the end of 2019, and 20.8% at the end of the first nine months of 2020.

Car sales in the Russian market increased by 1.8% in the first quarter of 2020 compared to the same period in 2019.

After high sales in March 2020, dealers had to suspend or significantly restrict their activities in April, due to the situation with COVID-19, their sales fell by 72.4% compared to the same month a year before.

Table 14.2 Sales of new passenger cars and light commercial vehicles in Russia sorted by car manufacturer groups

No	Automaker groups	Measurement 2017 unit	2018	2019	1st quarter of 2020	2nd quarter of 2020	1st half of 2020	3rd quarter of 2020	January–September 2020
1	AVTOVAZ/ Renault- Nissan-Mitsubishi incl.:	Units	648,795	639,464	148,596	89,040	237,636	160,424	398,060
		change, %*	+12.2	-1.4	+0.1	-42.0	-21.3	-11.8	-14.3
	Lada brand	Units	311,588	362,356	79,600	52,996	132,596	95,065	227,661
		change, %	+17.0	+0.6	-3.4	-42.3	-23.9	+4.5	-14.2
2	Hyundai-Kia Automotive Group	units	357,586	406,986	93,877	51,864	145,741	108,756	254,497
		change, %	+21.3	-0.2	-1.2	-50.9	-27.3	+6.2	-15.7
3	VW Group	units	175,639	216,931	50,227	30,505	80,732	69,087	149,819
		change, %	+12.1	+2.6	+10.6	-44.5	-19.6	+27.9	-3.0
4	Toyota Motor Corp	units	117,931	125,992	31,794	18,389	50	30,134	80,317
						183			
5	GAZ Group (commercial vehicles)	change, %	-0.6	-5.1	+24.5	-39.1	-10.0	-12.0	-10.8
		units	58,617	63,910	11,097	8,751	19	11,899	31,747
						848			
6	Daimler Group	change, %	+5.0	+5.3	-2.9	-39.1	-23.5	-27.7	-25.2
		units	44,246	44,822	10,705	6,283	16	11,719	28,707
						988			
7	BMW Group	change, %	+0.8	-1.0	14.4	-41.9	-15.8	+29.6	-8.4
		units	31,598	37,949	11,633	6,581	18	13,277	31,491
						214			

(continued)

Table 14.2 (continued)

No Automaker groups	Measurement 2017 unit	2018	2019	1st quarter of 2020	2nd quarter of 2020 **	1st half of 2020	3rd quarter of 2020 **	January–September 2020
8 SOLLERS Group (UAZ brand)	change, % units	+20.1 41,252	+16.1 38,892	13.2 7 293	-38.9 4991	-13.4 12 284	+20.2 9334	-1.9 21 618
9 Mazda Motor Corp	change, % units	-14.8 25,910	-5.7 30 576	-5.7 7 585	-44.9 4293	-26.8 11 878	-2.2 6282	-17.9 18 160
10 GM Group	change, % units	+20.3 33 436	-3.5 22 796	+15.4 554	-38.7 225	-12.5 779	-23.8 636	-16.8 1 415
Other	change, % units	5.4 1,017,660	-6.7 1,120,068	-90.9 249,922	-95.8 148,401	-93.2 398,323	-88.4 298,422	-91.6 696,745
Total	units	1,595,737	1,800,591	1,759,532	398,518	237,441	635	458,846
	change, %	+11.9	+12.8	-2.3	-45.7	-23.3	+3.7	-13.9

*Compared to the same period of the previous year

**Authors' calculations using the data provided by the Automobile Manufacturers Committee of the Association of European Businesses

Source Created by the authors using the data provided by the Automobile Manufacturers Committee of the Association of European Businesses, available at <https://acbrus.ru/en/media/press-releases/> (accessed 19 October 2020)

The market volume of new passenger cars and light commercial vehicles for the first half of 2020 decreased by 45.7% compared to the same period in 2019. Sales of all groups of automakers declined.

The gradual lifting of restrictive measures, resuming the production of all types of cars and automotive components in Russia and abroad, the return of dealers to offline car sales, the impact of government measures to support the automotive industry, as well as the deferred demand of previous months, increased car sales in the third quarter of 2020.

The pandemic has revealed another risk, where force majeure in different countries can prevent them from supplying automotive components and disrupt global supply chains.

The regime of foreign-brand cars industrial assembly in Russia has resulted in reducing the share of domestic car platforms and as a result, reduced the demand for Russian automotive components. Producing the components for foreign cars mainly involves creating 100% subsidiaries of foreign manufacturers without access to the domestic partners' know-how. If we take many models of foreign-brand cars, their automotive components' localization degree does not reach even 50%. The Renault-Nissan-AVTOVAZ alliance has made the localization the deepest—it's degree was 68% in 2019.

The low localization of automotive components provides for the added value formed abroad and low resistance to the external macroeconomic factors' negative impact.

To support the automotive industry, the Russian government has repeatedly allocated significant funding for implementing several programs (programs for passenger cars' disposal, subsidizing interest rates on loans issued for purchasing Russian-built cars, direct subsidies, and guarantees provided by AVTOVAZ JSC).

In April 2020, the Industry and Trade Ministry approved an expanded list of strategic enterprises that can count on state support in times of crisis (soft loans to replenish working capital, a six-month moratorium on filing bankruptcy cases). There were 12 automobile companies, including those that produce cars of foreign brands (JSC AVTOVAZ, PJSC GAZ, PJSC KAMAZ, JSC Ural, PJSC Sollers, CJSC Renault Russia, LLC Volkswagen Group Rus, LLC PSMA RUS, LLC Hyundai Motor Manufacturing Rus, LLC Nissan Manufacturing Rus, LLC Toyota Motor, JSC Avtotor Holding).

As of October 25, 2020, more than 220 thousand cars had been sold as part of state programs to stimulate demand for cars in Russia (preferential

car loans, preferential leasing, subsidies for gas-powered vehicles) (Russian Ministry of Industry and Trade, 2020).

17.5 billion roubles should be allocated in 2021 for systemic state support measures for the automotive industry (in particular, about 9 billion roubles should be allocated for the preferential car loan program, which will allow selling about 90 thousand cars).

The economic consequences of the COVID-19 crisis are also very serious for the Russian automotive industry.

According to Federal State Statistics Service, the turnover of the companies engaged in producing cars, trailers, and semi-trailers in January–September 2020 decreased by 12.9% compared to the same period in 2019. The balance of profits and losses of the companies engaged in this industry amounted to minus 4.1 billion roubles in January–August 2020 (compared to a positive balance of 40.5 billion roubles for the same period in 2019). The share of unprofitable organizations in the industry increased by 17%—from 25.1% in January–August 2019 to 48.1% (Rosstat, 2020a, b).

The average working time per employee in the first half of 2020 decreased by 9.5% compared to the first half of 2019 (from 819.9 h to 742.3 h), which affected the number of employees. The number of jobs filled at the industry's enterprises in August 2020 amounted to 246.8 thousand, having decreased by 7.9% compared to January. The average monthly salary in the industry for January–August 2020 remained at the level of the same period in 2019 (Rosstat, 2020a, b).

The decline in car sales lowered revenue and affected the automotive corporations' financial results.

For example, according to the results of the first half of 2020, the volume of sales of Lada cars (the AVTOVAZ Group—part of the Renault Group), including sales for export, decreased by 23.3% compared to the first half of 2019, and amounted to 152,714 units. The revenue of the AVTOVAZ Group for the first half of 2020 decreased by 30%, the corporation received a net loss of 316 million euros (Group Renault, 2020b). In January–September 2020, sales decreased by 14.6% compared to the previous period last year, reaching 259,167 units, the revenue decreased by 25.4% (Group Renault, 2020a).

Due to smaller foreign direct investment in the Russian automotive industry (according to the results of the first half of 2020, the decrease was 55.8% compared to the same period in 2019 (Bank of Russia,

2020a)) the Russian automotive industry is likely to be limited mainly to assembling low-value vehicles in the supplier sector.

Prospects for the Russian Automotive Industry Development

The global economy will recover gradually and we should not expect it to revive as soon as possible—the coronavirus pandemic has not ended and the second wave of the pandemic came in autumn 2020.

If we take the IMF October report, the world economy contracted was projected to contract by 4.4% in 2020, while in 2021, the growth rate of world GDP should reach 5.2%. The decline in Russia’s real GDP should be 4.1% by the end of 2020, and in 2021 the GDP growth rate should reach 2.8% (IMF, 2020b).

According to the Bank of Russia’s baseline scenario, Russia’s GDP should grow by about 3–4% in 2021 after a decline of 4–5% in 2020, and 2.5–3.5% in 2022. In the worst-case scenario, the economy should have recovered to pre-crisis levels only by 2024 (Bank of Russia, 2020b).

The determining factor driving changes in the automotive corporations’ strategies is the change in demand. In September, Moody’s rating agency updated its forecast for a 19%-decline in the global market in 2020 to about 73 million passenger cars, while in 2021 sales are expected to grow to 80 million (Moody’s, 2020).

The demand for lower-cost models is expected to increase after the pandemic, and consumers should buy more cars online. Interest in cars may be stimulated by another reason: The car seems more reliable than crowded public transport in the COVID-19 world. The Chinese producers are actively advertising the car as a reliable means of protection against the virus, for example, Geely advertises its products under the brand name “Project Healthy Car”.

The Russian consulting agency Russian Automotive Market Research has created several scenarios for forecasting new car sales in the Russian market in 2020. According to the baseline forecast scenario, the decrease in passenger car sales should be 29.1% compared to 2019 (reaching 1,124.3 thousand units), the decrease in truck sales should be 18.0% (65.6 thousand units), the decrease in light commercial vehicle sales should be 21.9% (92.8 thousand units). Subject to re-introducing restrictive measures related to the second wave of COVID-19, the decline in passenger car sales may amount to 38.7%, while this rate may be 25.3% for trucks, 30.9% for light commercial vehicles (Russian Automotive Market

Research, 2020). The agency expects that car sales in 2021–2022 should be negatively affected by the current outstripping state purchases of automotive equipment, respectively, the demand of various departments and state-owned companies for the coming years must have already been met. That is why car sales will be slowly recovering and it should not be enough for positive market dynamics.

In this regard, the competition in the Russian automotive market is expected to further tighten, and automotive corporations have to adjust their development strategies.

The Russian market is still interesting for large automotive corporations: In 2019, two new full-cycle car factories were opened—one produces German Mercedes-Benz passenger cars and the other deals with Chinese Haval crossovers. In 2019, Hyundai Motor began constructing a plant for producing car engines in Sestroretsk. In July 2020, Hyundai Motor filed a petition with the Federal Antimonopoly Service to buy out the closed General Motors plant in St. Petersburg.

High competition in the market which is also aggravating, intensifying foreign car and automotive component manufacturers expansion, the deteriorating macroeconomic situation and the decline in population's income increase the role of the state in regulating the Russian automotive industry's development, requires a coordinated state and regional policy for developing this sector, balanced sectoral programs for developing the automotive industry.

However, the analysis of existing territories' strategic development programs (e.g., conducted by Moshkova and Afonichkin (2020) using the example of the Samara region) indicates a weak consistency of hierarchically related strategies for the regional development and projects for developing the regional automotive cluster.

The Russian automotive industry can gain a competitive advantage by improving the domestic automotive component industry (by increasing localization, reducing the car production cost, minimizing the impact of external macroeconomic factors).

To support the automotive component industry, the Russian Industry and Trade Ministry, together with the Industry Development Fund, plan to implement a grant program in 2021 for implementing investment projects to localize automotive component manufacturing (1 billion roubles are given for implementing the program, which is not enough to support the industry).

If we want to develop the domestic automotive component industry, we should encourage creating joint ventures of foreign and domestic automotive component manufacturers, provide Russian component manufacturers access to OEM supplies, create a preferential tax regime for joint ventures, provide them with access to preferential loans, primarily to support the purchase of modern technological equipment. In this regard, it is relevant to study the successful foreign experience in developing the automotive component industry, in particular, the Chinese one.

CONCLUSIONS

The results of the study allow us to formulate the following conclusions:

- The COVID-19 pandemic has affected all countries and industries and has had a strong negative impact on the global economy, accompanied by a decline in global GDP, a decline in industrial production, loss of working hours, and decreased household incomes. The IMF's April reports described the current crisis as the worst since the Great Depression. Restrictions on the work of enterprises in several sectors of the Russian economy, as well as other measures introduced to prevent the coronavirus from spreading, have also significantly affected economic activities and the population's income;
- the automotive industry was one of the sectors most severely affected by the COVID-19 pandemic, due to the factories' closing due to measures to counter coronavirus infection, reduced demand, and global supply chain disruption. The decline in car production and sales has affected the automotive corporations' revenue and financial results;
- the COVID-19 pandemic highlighted the existing problems and risks of the Russian automotive industry: its dependence on the world's top automotive corporations; the dominance of the foreign-made vehicles' share in manufacturing and sales; the focus of automotive products produced in Russia, mainly to meet the needs of the domestic market without significant prospects to start exporting their products; import dependence on critical automotive components, which caused supply disruptions. The mode of foreign-brand car industrial assembly and the low automotive components' localization mean that the added value will be created abroad and the

Russian automotive industry cannot resist the negative impact of external macroeconomic factors;

- rating and analytical agencies predict a slow recovery of the automotive market, including the Russian one, which is why further tightening the competition in the Russian automotive market is expected, the development strategies of automotive corporations should be changed to minimize risks in the supply chain and reduce costs. High competition in the market, which is getting even severer, the expansion of foreign car and automotive component manufacturers, the deteriorating macroeconomic situation, and the declining household incomes require coordinated state programs, sectoral, regional, and cluster strategic plans for developing the automotive industry. Further state support for car and automotive component manufacturers should be aimed at localizing automotive components to reduce import dependence, ensuring the growing automotive equipment and components exports (in this regard, it is very important to study the successful foreign experience in developing the national automotive industry, in particular, the Chinese one); creating the technologies for electrifying vehicles (electric vehicles, hybrids), in order to create prerequisites for creating a carbon-neutral transport complex by 2050.

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