



## ANALYSIS THE PROSPECTS OF THE NEW CARS SALES MARKET DEVELOPMENT IN RUSSIA

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### ABSTRACT

The role of the automotive industry for the Russian economy has been proved. The stages of the automotive market over the past ten years have been analyzed. The prospects of the new cars sales market development in Russia have been presented. The key trends for the development of the Russian automotive market have been identified – the need and background of these trends have been analyzed. The factors causing a direct impact on the development of the Russian automotive market have been presented and analyzed. The global trends that influence the development of the automotive industry in Russia have been revealed.

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## 1. INTRODUCTION

The automotive industry is one of the most important and key sectors in the Russian economy. The need for cars creates demand for products in the metallurgical, electrical and other industries, as well as creates jobs (Omelchenko, 2015). In recent years, the Russian automotive industry has gone through the difficult stages of development. The number of assembly plants has increased significantly, the market has become more diverse – multi-brand automakers began to work in Russia. There have also been structural changes - every year the share of domestic car production is reduced, giving way to foreign brands.

In the development of the automotive market over the past 10 years, we can describe the key stages of market development in accordance with the dynamics of development and the volume of car sales and production: (Gusev, 2015)

- 2008 – market saturation (maximum peak in car production and sales);
- 2009 – crisis (minimum number of cars produced and sold);
- 2010 – 2011 – the gradual recovery of the market;
- 2012 – market saturation (maximum peak in car production and sales);

2013-2014 – market decline (decrease in production and sales);  
2015-2016 – crisis (minimum number of cars produced and sold);  
2017 – present - market recovery.

In 2011-2013 Russia ranked second of car sales Europe. In 2015 this rating was updated – 12th place in car sales in the world, 5th place in car sales in Europe (Prokudin, 2010).

The reasons for this wave-like development were the following: the unstable situation in the country's economy, as well as geopolitical situation, economic downturn, growth of oil prices, volatility of the national currency. All these factors have led to a decrease in customers' purchasing power and, as a result, a reduction in demand for vehicles.

## **2. METHOD**

The methods of system and logical analysis, comparison and generalization, statistical analysis of the works of domestic and foreign scientists and specialists in the field of automotive business, as well as materials of scientific and practical conferences, published data of agencies, reports of the Federal State statistics service of the Russian Federation, legal and regulatory documents of the Russian Government were used as a research tool.

## **3. MAIN STRATEGIC TASKS RELATED TO RUSSIA DEVELOPMENT OF THE AUTOMOTIVE INDUSTRY**

In Russia the main directions of development of the automotive industry are determined by the document approved by the government of the Russian Federation. On April 28, 2018 the Russian government approved the “Strategy of the development of the automotive industry in Russia up to 2025”. This document was developed jointly with the Ministry of economic development of the Russian Federation, the Ministry of industry and trade of the Russian Federation and automobile manufacturers. [Strategy of the development of the automotive industry in Russia up to 2025]

The main tasks of the strategy are the following:

- the improvement of technological competencies due to localization increasing to 70-85%;
- expansion of the product line due to production of electric and pilotless vehicles;
- increase of automotive components production;
- increase of export share at least 12-14% of produced cars.

The strategy is valid until 2025. Strategy's financial support will be provided from the Federal budget, budgets of subjects of the Russian Federation and other sources. The volume and sources of financial support will be fixed and specified in the Russian state programs and in the action plan and activations within fulfillment of this strategy. The strategy includes analysis, data forecasting, identification and minimization of risks associated with Strategy's execution.

Analyzing the actual state of the Russian automotive industry, we see that foreign manufacturers

in Russia invest up to 4% of revenue per year in product development and research, while domestic producers invest only 1-1.5%. [Strategy of the development of the automotive industry in Russia up to 2025] This is largely due to orientation of foreign automakers to internal market. The Strategy provides of the development of research in the automotive industry by increasing the level of localization, achieving results which will be competitive in other international markets. This Strategy's direction is called innovative. To improve this innovative direction of the automotive industry development several factors are provided:

- improving the ecological indicators of cars and bringing them to international standards;
- creation and modernization of technologies of hybrid and electric vehicles;
- development of driver assistance and road safety systems;
- using of new design materials in car production in order to reduce its weight, etc.

At the moment more than 60% of passenger cars produced in Russia are vehicles with a high level of localization (more than 50%). They are designed on the basis of platforms of leading automakers, and the largest volume of production is based on such platforms as B0, owned by the alliance Renault – Nissan, KP2 Hyundai, PQ25 Volkswagen. About 29% of the passenger and light commercial vehicles production are designed on the basis of domestic automotive platforms (1118, Lada B, Lada 110, etc.). (Report 2018 Russia Automotive Industry - Emerging Dynamics and Future of Russia Passenger Cars and Commercial Vehicles, February 2018)

It is necessary to attempt to increase production of vehicles that are produced on the unique platform. The larger the volume, the more efficient automotive company is. At the same time, vehicles are becoming cheaper, as large batches of components are more profitable to buy from suppliers, and localization of new components is more profitable for suppliers.

According to the study, car production on a foreign platform on the territory of the Russian Federation pays back when the volume of production achieves more than 100 – 150 thousand pieces annually. In the case of domestic platform, this production volume doubles, about 200 – 450 thousand pieces per year due to development costs.

With a forecasted market volume of 2.5 million vehicles per year platforms cannot be more than 8 pieces. It suggests that a very small number of automakers will agree to this approach. For example, Ford produces its cars using 5 platforms. The government is interested in reducing the number of car manufacturers, and only those who have mass platforms will be able to count on governmental support. (Prokudin, 2017)

In Russia most of automakers have signed an agreement with the Government on industrial assembly. This agreement meant that the government provides customs benefits and access to subsidies to those automakers who have created vehicle production capacity of 300 – 350 thousand cars per year, opened engine production factories, as well as increased localization to 60% (automakers are free to choose which components they want to localize). Producers reported on the achieved level of localization by the average share of local components in the cost of all models. Most of these agreements are valid until 2020. After expiration of these agreements automakers need to sign special investment contracts with the government to stay a local supplier of cars. According to

these contracts the localization will be counted on each model separately, but the main feature will be a list of units and assemblies which production must be mastered in Russia as well as some advanced technologies that the automaker has the right to choose himself. Probably this agreement will affect such units of the car as transmission, engine management system, battery cells, hybrid drives, electric motor-wheels, as well as automatic driver assistance systems. The transition from industrial assembly agreements to special investment contracts will take at least 3-5 years and during this time automakers should seriously think about the future prospects of their production and sales policy. Nowadays in terms of market capacity Russia remains one of the most attractive countries in the world. But the risk of non-return of funds spent on development of scientific and technical centers, venues for the production of large power units and assemblies remains very high.

Speaking about the forecasts of car production volumes, it is expected that production of passenger cars will increase to 1.6 million units by 2020, light commercial vehicles will increase to 0.17 million units. The volume of production of passenger cars will be 2.21 million units, and light commercial vehicles will be 0.22 million units by 2025. [Strategy of the development of the automotive industry in Russia up to 2025 ]

The positive dynamics of car sales has impact on the growth of car production. It is expected that the volume of passenger cars will reach 1.72 million units by 2020, and to 2.23 million units by 2025, which is less than the maximum which was reached in 2012 (2.76 million units). Sales volume of light commercial vehicles is expected at 0.17 million units by 2020 and at 0.22 million by 2025. [Strategy of the development of the automotive industry in Russia up to] These sales figures are quite optimistic, and the government expects to increase car sales to pre-crisis levels in the early 2000s by 2025. This growth of car sales is predicted due to expectations of growth in effective demand for cars, as well as investment activity in the economy. So experts predict the most optimistic sales volume under the condition of a positive macroeconomic environment (average annual growth of real disposable income at 2.5% and growth of investment in fixed assets at 5.5%) - the growth of the automotive market to 2.9 million cars by 2025. With a more restrained forecast of real disposable income growth at the level of 1.5-2% per year and the level of investment in fixed assets at the level of 3.8% the automotive market can reach figure of 2.6 million cars by 2025. Analysts from Ernst & Young agency predict that the average sales of passenger cars and light commercial vehicles will rise to 200 thousand units per year in the optimistic scenario: 2018 – 1.8 million PCs, 2019 – 2 million units in 2020 and 2.3 million units, 2021 – 2.5 million pieces. The growth of incomes and availability of credit are the key factors to achieve these figures. (Overview of the Russian and CIS automotive industry, March 2018)

The plan for the development of the country's automotive industry is to reduce the gap between the global automotive market and Russian automotive market in the share of electric vehicles sales by 4 years. So the volume of electric vehicles sales is predicted to be 1-1.5% by 2020, i.e. from 15 to 25 thousand units. In 2020 it is assumed that these will be cars of the premium segment due to the high cost of batteries. But it is forecasted a decrease in the cost of batteries and an increase in demand for electric vehicles to 5% by 2025. [Strategy of the development of the automotive industry in Russia up to ] Of course the development of electrification in Russia will strongly depend on the appropriate infrastructure – the availability of charging stations for electric vehicles. In 2017 there

were 130 stations throughout the country. Experts from the analytical agency KPMG conducted a survey, where 55% of respondents have believed that the sales launch of electric cars would be impossible without the necessary infrastructure. Before producing such vehicles, it is necessary to fully establish the infrastructure – “infrastructure first, e-mobility second”. (Global automotive executive survey 2018)

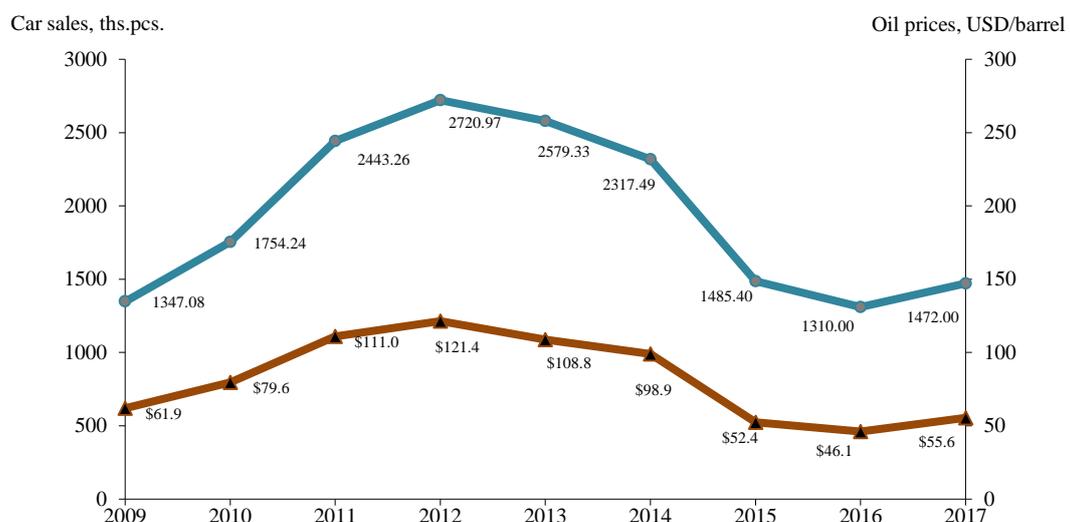
In order to increase the share of electric vehicles sales, a number of demand stimulating measures are provided, such as:

- transportation tax benefits;
- free public parking for electric vehicles;
- possibility of access to public transport lanes;
- insurance policies preferential registration, etc.

There are also benefits for manufacturers of automotive components (batteries, charging elements).

The key factors that have a significant impact on the development of the automotive market are oil prices, the ruble exchange rate and the level of inflation. These factors are closely related to each other. (Panova, 2016)

It is revealed that significant changes in the price per barrel of oil by 10-15% affect all economic indicators, including the ruble exchange rate. The change in the exchange rate of the ruble against foreign currencies affects the level of prices for new cars on the Russian automotive market, and accordingly, the level of car sales. The weakening of the Russian ruble leads to an increase in inflation. It is possible to identify the dependence of growth and depression of the automotive market on the dynamics of these factors by comparing all factors and new cars sales for the analyzed periods (Figure 1).



**Figure 1:** Dynamics of new cars sales in connection with the dynamics of oil prices for 2009-2017 (Panova, 2016, Press-releases of the Association of European Business - 2009-2017).

The crisis of the automotive market in 2009, the recovery and saturation of the market in 2010-2012, the fall of the market in 2013-2014 and a significant drop in 2015 go in parallel with the change in oil prices. The same clear correlation of the automotive market can be observed with the ruble exchange rate and inflation rate.

The change in the exchange rate of the ruble against foreign currencies affects the level of prices for new cars on the Russian automotive market.

The development of the Russian automotive industry is influenced by global trends, which in the future will be able to contribute to changes in the car design, the principles of their production and the quality of car users' life. Experts have identified a number of global trends:

- electrification of cars - creation of production lines for electric vehicles;
- increasing the level of cars autonomy;
- exploration of telecommunication technologies in automotive systems.

The reasons for these global trends are very simple and occur from the current realities and lifestyle of the world's population:

1) Electrification of vehicles occurs due to climate change, depletion of natural fuel reserves. It is also influenced by various environmental organizations that call for the preservation of the environment, improving environmental performance in all spheres of activity.

2) Increasing the level of cars autonomy is dictated by the needs of consumers – improving road safety, saving driver's time, the desire to own modern technology, convenience for persons with disabilities. The government also needs to increase the level of security, the interaction of cars on the road, etc. The consulting company PwC in its report "Five trends transforming the automotive industry" predicts that 55% of new cars sold in Europe will be fully electrified by 2030. This is due to the rapidly developing technologies in digital sphere, autonomous cars control of various devices. [ Five trends in the transforming the automotive industry 2018]

The obstacles that exist now in the development of cars autonomy are the lack of legal and regulatory framework that controls liability of a traffic accident with an autonomous vehicle. On which side the responsibility must lie, while the answer doesn't exist (the passenger, the driver or the manufacturer). And also it is necessary to improve information protection from hacker attacks of such autonomous cars.

3) The exploration of telecommunication technologies in automotive systems is a consequence of the increase in the level of automobilization, which requires the normal functioning of the transport complex. It means various technologies in the field of cars control in real time, emergency response to a traffic accident (V2I data transmission technology by car-infrastructure, V2V car-car, data exchange tools, with which the car accurately determines the location of all other cars in the traffic flow). (The future of mobility. How transportation technology and social trends are creating a new business ecosystem)

## 4. CONCLUSION

The automotive sector plays an important role in the Russian economy. Determining the prospects for the development of this sector is a complicated process. It is important to understand that a wrong and incorrect understanding of the current situation and mistaken analysis of the previous experience may have a negative impact on the industry and set it back in development for several years in the future.

## 5. SUMMARY

The analysis and comparison of the passed stages by the Russian automobile market allow setting conclusions, what prospects of the new cars sales market development in Russia expect:

- sales growth of new cars equipped with local power units and units - engine, transmission, clutch (localization level up to 70-85%);
- growth in sales of electric vehicles, the appearance of pilotless vehicles;
- growth in sales of vehicles equipped with telecommunication technologies produced in Russia;
- increase in sales of vehicles designed on a unique platform;
- the optimistic forecast for new car sales - to reach the sales volume of 2.9 million cars by 2025.

It is also worth paying attention to factors that may have a negative impact on these forecasts:

- the automotive industry is too dependent on domestic demand because the level of exports is low;
- availability of car manufacturers that do not work at full capacity;
- the lack of budget for investment in research and development projects of domestic enterprises;
- the impact of the economic situation on the development of the market, consumer demand and the dependence of the Russian ruble on the oil prices and inflation in the country;
- growth of automotive products prices - in 2018-2019 automakers plan to raise prices by about 5-7% which will have a negative impact on sales growth;
- the tendency to reduce governmental support (recycling program, trade-in, preferential car loans).

The positive factors include:

- delayed consumer demand for cars during the last crisis;
- systematic reduction of rates on car loans, as well as reduction of refinancing rates;
- cost increasing of main export goods (oil, natural gas, hydrocarbons), increasing of world demand for oil and oil products;
- strengthening of the Russian ruble against the US dollar and the Euro.

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