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MARKET DYNAMICS OF THE GLOBAL CAR INDUSTRY

РИНКОВА ДИНАМІКА СВІТОВОЇ АВТОМОБІЛЬНОЇ ПРОМИСЛОВОСТІ

Abstract. *The modern world cannot be imagined without convenient and mobile transport, and the passenger car has long been an integral part of it. The passenger car market is a dynamic and multifaceted field that is constantly developing, and facing new challenges and opportunities. It covers not only the production and sale of new cars, but also trade in used cars, service, infrastructure, and many other aspects. The passenger car market is an important economic system component that interacts at the national and global levels. On the one hand, the passenger car market contributes to overall economic development by creating jobs in manufacturing, logistics, trade, and services. On the other hand, economic conditions such as increases or decreases in production, unemployment, and inflation significantly impact the passenger car market. Indeed, the car market is closely tied to a country's overall economic situation. Economic factors such as consumer confidence, interest rates, employment levels, and disposable income all play a significant role in shaping the demand for cars. When the economy is strong and people feel financially secure, they are more likely to make big-ticket purchases like cars. Therefore, economic development initiatives that promote overall growth, stability, and prosperity can have a positive impact on the car market. Policies that encourage investment, job creation, and income growth can stimulate demand for cars and drive sales in the automotive industry. Additionally, improvements in infrastructure, such as roads and transportation networks, can also contribute to the development of the car market by making car ownership more attractive and convenient for consumers. By focusing on improving the economic conditions of the country, policymakers can help support the growth and development of the car market, ultimately benefiting both consumers and businesses in the automotive industry.*

Анотація. *Сучасний світ неможливо уявити без зручного та мобільного транспорту, а легкові автомобілі давно стали його невід'ємною частиною. Ринок легкових автомобілів – динамічна та багатогранна галузь, що постійно розвивається та стикається з*

новими викликами та можливостями. Він охоплює не лише виробництво та продаж нових автомобілів, а й торгівлю вживаними автомобілями, сервісне обслуговування, інфраструктуру та багато інших аспектів. Ринок легкових автомобілів є важливою складовою економічної системи, що взаємодіє на національному та глобальному рівнях. З одного боку, ринок легкових автомобілів сприяє загальному економічному розвитку, створюючи робочі місця у виробництві, логістиці, торгівлі та сфері послуг. З іншого боку, економічні умови, такі як зростання чи скорочення виробництва, безробіття та інфляція, значно впливають на нього. Доведено, що автомобільний ринок тісно пов'язаний із загальним економічним станом країни. Економічні показники, такі як споживчі настрої, процентні ставки, рівень зайнятості та доходи населення, відіграють значну роль у формуванні попиту на автомобілі. Коли економіка стабільна, і люди почуваються фінансово захищеними, вони частіше здійснюють великі покупки, такі як автомобілі. Тому ініціативи економічного розвитку, що сприяють загальному зростанню, стабільності та процвітання, можуть позитивно впливати на автомобільний ринок. Політика, яка приваблює інвестиції, створення робочих місць та зростання доходів, може стимулювати попит на автомобілі та збільшити продажі в автомобільній промисловості. Крім того, покращення інфраструктури, наприклад, доріг та транспортних мереж, також може сприяти розвитку автомобільного ринку, а купівля автомобіля стає більш привабливою та зручною для споживачів. Зосереджуючись на покращенні економічних умов країни, уряд може допомогти підтримати зростання та розвиток автомобільного ринку, що в кінцевому підсумку принесе користь як споживачам, так і підприємствам автомобільної промисловості.

Introduction. "The passenger car market is a segment of the global transport market, which consists of corporations, manufacturers, sellers, buyers, and importers specializing in passenger cars" [10].

- It meets the needs of consumers in personal transport. Passenger cars provide convenience and comfort for travel, especially over long distances or in bad weather conditions. Cars allow consumers to move freely from one place to another, regardless of public transport or schedules. Owning your car gives a sense of freedom and independence, as the choice of route and travel schedule depends on the consumer. Passenger cars allow consumers to travel privately without having to share space or time with other passengers. Cars allow consumers to conveniently transport large loads and personal belongings, which is not always possible with public

transport. Some consumers see car ownership as a status and lifestyle symbol that reflects their taste and success.

- It stimulates the development of the machine-building industry. Competition on the market forces manufacturers to constantly improve technologies, and introduce new innovative solutions and improvements. This can cover various aspects from the improvement of engines to the development of safety systems and electronics. Car manufacturing requires a large number of different materials and components, such as steel, plastic, glass, electronics, and more. This stimulates the development of the supply chain and production of these materials.

- It promotes job creation and economic development. The automotive industry creates a significant number of jobs in the production, distribution, service, and support of automobiles. This includes engineers, factory workers, logistics workers, salespeople, mechanics, etc. The high level of competition in the market forces manufacturers to invest in research and development of new technologies and innovations, which contributes to the general scientific progress in mechanical engineering. The automotive industry significantly impacts national and global economies due to the large volume of production, export, and consumption.

Literature review. Some of the famous authors and researchers who have written about the car market include the following: Michael E. Porter (2008) - a well-known expert on strategic management, he has written several articles and books where he examines competitive advantages in the automotive industry [17]; David Halberstam is the author of the book "The Reckoning" (2012), which examines the history and formation of the automobile industry in the USA [7]; John Krafcik (2015) is an automotive industry and business expert researching automotive trends and innovations [5]; Maryann Keller (1993) is the author of books on the automotive industry and automotive business, which examines development strategies and trends [11]; Clayton M. Christensen (2019) is a researcher and author of books on innovation in technology and business, including the automotive industry [20]. These authors have significant expertise in the automotive industry and conduct research that points to key aspects and trends in the passenger car market both nationally and internationally. Their works can be useful for gaining a deeper understanding of this industry.

There are also researchers in Ukraine who study the car market and write on this topic. Some of the Ukrainian authors and researchers actively working in this field include: Rogovskyi I., Titova L., Nadochii O. (2021) are the authors of several studies and publications devoted to the automotive industry and the car market in Ukraine [18]; Myroshnychenko G., Maryna A., Chernyshov O. (2024) analyzed development trends of the global car

market [16]. Shuba O., Karabanov O. (2021) researched the current state of the world automotive market and trends that will determine its development [19].

These Ukrainian researchers have significant experience in the field of the automotive market and actively help in understanding and analyzing the trends of this industry in Ukraine and the global car market. Their works can be useful for gaining insights into the development of the automotive market in our country.

Materials and methods. The study of the car market is relevant for several reasons: the auto industry plays a vital role in the global economy, generating billions of dollars each year and creating millions of jobs; automobiles are one of the main sources of greenhouse gas emissions and air pollution, so the issue of environmental friendliness of vehicles is becoming more relevant; the automotive industry is constantly evolving, introducing new technologies such as electric vehicles, autonomous driving and connected cars; the availability and safety of cars has a significant impact on people's quality of life. The purpose of this paper is a comprehensive study of the passenger car market, both at the global and Ukrainian levels.

The paper tasks are the study of different market segments, such as primary and secondary markets, distribution by classes and types of cars, geographic structure, etc.; study of the dynamics of market development, key trends, factors influencing its development, and the problems it faces; determination of potential directions of market development, expected changes and innovations that can transform it.

Research methods:

- system approach: study of the passenger car market as a whole system consisting of interconnected elements;
- methods of empirical and theoretical analysis: collection and analysis of data on the car market, formulation of theoretical conclusions and generalizations;
- research and analysis of dynamic indicators: study of the dynamics of passenger car market development using statistical data and other indicators;
- use of graphics: visualizes passenger car market data using graphs, charts, and other visual tools;
- methods of formalization and generalization: formulation of clear and concise conclusions based on the conducted research.

Theoretical and methodological basis of research:

- dialectical method of cognition: the study of the passenger car market from the point of view of its development, interconnection, and contradictions of its elements;

- method of theoretical and empirical analysis: combining theoretical knowledge with empirical data to obtain objective conclusions about the car market;

- method of comparing macroeconomic indicators: comparison of passenger car markets in Ukraine and the world using macroeconomic indicators;

- a systematic approach to the study of economic processes: the study of economic relations in the car market as a system consisting of interconnected elements;

- comparative economic and legal analytical studies: comparison of legal and economic aspects of the functioning of passenger car markets in Ukraine and the world.

Results. In many countries, the automotive industry plays an important role as a driving force for economic growth and progress. As a major producer of vehicles, it also has a positive impact on the development of other sectors of the economy, employment, and technological innovation.

The automotive industry is constantly looking for new technologies and materials, which stimulates the development of related industries such as mechanical engineering, electronics, and chemistry. It creates millions of jobs in the field of production, sales, and service of vehicles. The production and sale of vehicles contribute significantly to the country's GDP and generate tax revenue. New technologies and approaches used in the automotive industry encourage other sectors of the economy to improve their production processes and technologies, increasing the productivity and competitiveness of the country as a whole.

In developed countries such as Europe and the USA, the used car market plays an important complementary role to the primary market. Used car markets are less dependent on credit and purchasing power and are therefore more resilient to economic fluctuations and crises.

In fig. 1 presents the dynamics of global car production for the period from 2012 to 2022. The conducted trend analysis provides a forecast of the growth of global car production in the world until 2025 with a probability of 93%.

Passenger cars are the leading category in global vehicle production, accounting for more than 70% (61 million units) of the 85 million vehicles to be produced in 2022. This reflects the important role of passenger cars in ensuring mobility and economic development.

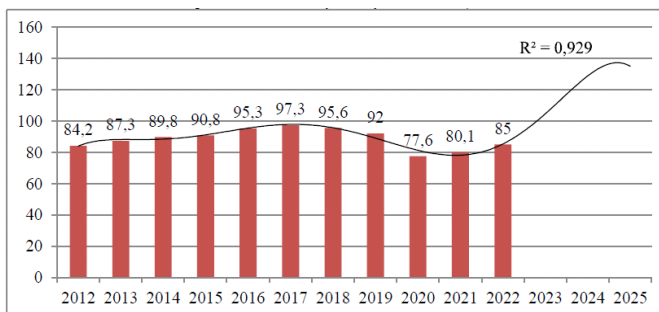


Fig. 1. Dynamics and forecast until 2025 of global car production, million units, [19]

The regional structure of world car production (Table 1) includes manufacturers from Europe, North and South America, Africa, Asia, and Oceania.

Table 1

Regional structure of world automobile production, billion of units, [19]

Region	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Europe	19,8	20,4	21,1	21,7	22,2	21,3	21,6	16,9	16,3	16,2
North America	16,5	17,4	17,9	18,2	17,5	17,4	16,8	13,3	13,4	14,8
South America	4,6	3,8	3,0	2,7	3,2	3,4	3,2	2,3	2,7	3,0
Asia & Oceania	45,8	47,4	47,8	51,8	53,4	52,4	49,3	44,3	46,7	50,0
Africa	0,6	0,7	0,8	0,9	0,9	1,1	1,1	0,8	0,9	1,0
World index	87,3	89,8	90,8	95,3	97,3	95,6	92	77,6	80,1	85,0

Analyzing the production volumes of individual regions for 2022, the following regions can be distinguished (Table 1):

– Asia and Oceania. The region is a dominant leader in the production of passenger cars, producing 50 million units in 2022. Stable growth in recent years confirms its importance in the global automotive market.

- Europe. Europe is in second place with 16.2 million vehicles but is well behind Asia. However, it remains an important manufacturing center with a long history and innovative potential.

- North America. North America ranks third with 14.8 million vehicles. The once-leading region is now facing some stagnation.
- South America and Africa. These regions produce fewer cars but continue to develop and have further growth potential.

In 2020, the global production of passenger cars suffered a significant decline due to the COVID-19 pandemic. The drop was about 15% in all regions. The largest declines, exceeding 20%, occurred in Europe and North America, indicating that these regions are more vulnerable to the crisis.

Table 2

Leading car-producing countries, billion of units, [19]

Country	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
China	22,1	23,7	24,5	28,1	29,0	27,8	25,7	25,2	26,1	27,0
USA	11,1	11,7	12,1	12,2	11,2	11,3	10,9	8,8	9,2	10,1
Japan	9,6	9,8	9,3	9,2	9,7	9,7	9,7	8,1	7,8	7,8
India	3,9	3,8	4,1	4,5	4,8	5,2	4,5	3,4	4,4	5,5
South Korea	4,5	4,5	4,6	4,2	4,1	4,0	3,9	3,5	3,4	3,7
Germany	5,7	5,9	6,0	6,1	5,6	5,1	4,7	3,7	3,3	3,7

Fig. 2 provides data on the production of cars, including passenger cars, from which it is clear that China is also the leader.

The People's Republic of China (PRC) is the leading country in the production of passenger cars. Production in the country is growing every year and is ahead of other countries: by 2023, China produce more than 30, 160 million cars and take an unshakable leadership position in the world market. The United States, with an indicator of 10.611 million cars produced in 2023, is in second place. Japan ranks 3rd with 8,997 million cars. Known for its innovative technology and high-quality cars, Japan continues to be an important player in the global market. India is booming with 5,851 million vehicles and has significant growth potential. South Korea with 4,243 million units and Germany with 4,109 were once leaders but are now facing increasing competition from new entrants (Table 2 and Figure 2).

These data testify to the dynamism and competitiveness of the world car market, where countries strive to maintain their positions and strengthen their influence.

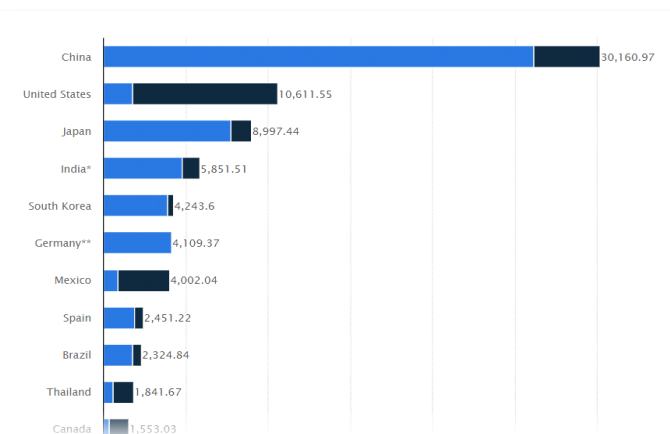


Fig. 2. Moto vehicle production volume worldwide in 2023, by country (in 1000 units), [14]

The growth in car imports and exports reflects the resilience of this market despite challenges such as the pandemic and a changing economic environment. The fact that the market recovery is happening differently in different regions emphasizes the importance of regional analysis and consideration of the specific factors affecting each market. Management and investment decisions require a deep understanding of these factors and the ability to predict their impact on market dynamics. The introduction of new technologies and changes in consumer demand also play an important role in shaping market trends. Therefore, manufacturers must be ready for constant innovative development to meet the needs of the market and remain competitive. The largest car exporting countries, such as Germany, Japan, the USA, South Korea and Mexico, occupy a significant share of the world car market (Table 3). For example, in 2021, they exported more than half of all car production. However, it is important to note that these countries may rank differently in terms of the value of vehicles exported, number of vehicles exported and number of vehicles produced. This can depend on several factors, such as the type of car (premium or cheap), pricing policy, and the size of the domestic market. For example, Japan may have an advantage in the number of cars exported but may lag behind Germany in the value of exports due to differences in the types of cars exported. China, the leader in the production of automobiles, was not among the top 5 exporters in 2018-2020, since most of its products are consumed in the domestic market. Moreover analyzing 2021-2023 we can

say that China is the 10th largest exporter of cars in the world. This breakthrough is possible as the shift away from fossil fuels has helped fuel the rise of China’s motor industry. The largest percent change in 2021-2022 of global car exports was in South Korea (+24,4%) and the US (+19%) (Figure 3). Analysis of the dynamics of exports from these countries provides important information for understanding the global automotive market and making management and investment decisions.

Table 3

The leading countries in the exports of cars, thousands of \$ US, [19]

Exporting country	2018	2019	2020	2021	2022
Germany	155037984	143430200	122286386	139131672	155687138
Japan	99123167	98043242	80914491	85589575	87198901
USA	51414521	56163761	45642596	54681915	57850861
South Korea	38249258	40458289	35638512	44318347	51680334
Mexico	49406392	50631190	39476275	39909676	46924135
China	8626679	8633018	9927709	24389059	44687899
Belgium	21930281	24578930	22767547	31838112	33891693
Spain	35713457	34360714	31510812	33943702	32901492
United Kingdom	42042944	38583888	26573200	30186374	29479694
Canada	40994067	40713873	32030549	29152548	29462272



Fig. 3 Global car exports by country in 2022, [6]

The modern passenger car market is constantly developing due to new technologies, changing consumer attitudes, and economic factors. Among the main trends, the following can be distinguished:

1. Competition between leading car manufacturers in different countries is intensifying, which leads to the constant improvement of technologies, prices, and model range. Multinational companies from

developing countries such as China and India are also aggressively entering the global market.

2. Mergers and acquisitions to optimize resources, reduce costs, and access new technologies continue to be a trend in the passenger car industry. Examples are Chrysler's acquisition of Fiat and PSA's merger of Peugeot Citroën and Opel.

3. Car sharing is becoming increasingly popular as a form of short-term car rental, potentially reducing the number of private cars but also driving demand for new vehicles due to the need to replace them.

4. Demand for electric and hybrid vehicles is driven by environmental concerns, rising fuel prices, and government incentives, and manufacturers are investing significant resources in the development and production of these vehicles.

5. Software is becoming an increasingly important element of modern vehicles, especially for "smart" and autonomous vehicles, which require the development of advanced software solutions and create new opportunities for software developers.

6. Growing requirements for environmental friendliness, fuel efficiency, and safety of vehicles force manufacturers to constantly improve their technologies and adhere to standards.

Unfortunately, the passenger car market in Ukraine is not very developed and does not play a significant role in the formation of the country's economy. One of the main reasons for this is the inability of the local auto industry to meet the needs and tastes of Ukrainian consumers. Therefore, cars are actively imported from European countries. As for the peculiarities of the domestic automotive industry, there is currently only one enterprise in Ukraine with a full cycle of passenger car production. However, the ZAZ model range does not always meet the expectations of many buyers, which limits demand and reduces the competitiveness of domestic cars on the market. The structure of the Ukrainian car market is characterized by the low purchasing power of the population, which forces most Ukrainians to rely on the secondary market when buying a car. The average age of vehicles in Ukraine is significantly higher compared to developed countries: 22.2 years in 2024 compared to 12.6 in the US and 9.7 in Europe. This reflects the low purchasing power of the population and the aging of the car fleet. Since 2001, the Ukrainian passenger car market has demonstrated dynamic development with annual sales growth of more than 30%. Due to the economic crisis of 2008, the market fell sharply to the level of 2003. Since then, the market has gradually recovered.

"The relative stability in Ukraine, taking into account the military circumstances, brought a certain predictability to the automobile market,

and the result was not long in coming. The constant growth of sales of new vehicles brought the statistical indicators almost to the pre-war state. According to the results of the first three quarters of 2023, customers found 46,915 passenger cars, which is 60% higher than the same figure last year." [22].

GDP growth in Ukraine in the first quarter of 2024 was 2.3%, which is positive for the car market.

It is worth noting that the secondary car market is developing progressively. Therefore, consumers prefer cars of premium and middle segments of well-known manufacturers in the secondary market instead of purchasing new cars from the low-price segment.

The Ukrainian market of spare parts for passenger cars has undergone significant changes in recent years and plays an important role in the country's automotive industry. The market is characterized by dynamic development, a unique structure, and several features.

Until 2009, the secondary market was mostly informal and did not attract much interest from dealers. The situation changed during the economic crisis of 2009 when the primary market fell by 74% and the secondary market by 19.4%. The secondary market was less dependent on loans and therefore more resistant to the economic crisis. The decline in purchasing power has led to people buying more affordable used cars. The used car market in Ukraine currently accounts for more than 60 percent of the total volume of sales. The majority of used cars (over 99%) are imported, mainly from the EU. The practice of importing cars with European registration to avoid customs payments is common. Dealers actively use trade-in schemes to stimulate sales of new cars. According to the Association of Used Car Dealers, the used vehicle market includes the following categories: used cars purchased in Ukraine (up to 50%); used cars imported from the EU (up to 40%); used cars imported from the USA (up to 5%); used cars imported from other countries (up to 5%).

Dealers sell 1.25 to 2 used cars for one new car.

Thus, the Global market for passenger cars is developing dynamically, facing new challenges such as intensifying competition, increasing mergers and acquisitions, the spread of car sharing, increasing demand for electric vehicles, increasing requirements for software, environmental friendliness, fuel economy, and safety. The Ukrainian car market, on the contrary, has a low level of development, and its participation in the formation of the national economy is not significant. The main problems include the inability of the domestic car industry to meet the needs of consumers, the low purchasing power of the population, and the focus on car imports. The passenger car market is undergoing significant changes as the demand for

environmentally friendly models increases. Electric vehicles are becoming increasingly affordable and attractive to buyers and will be a key factor in determining market trends in the passenger car segment in the coming years.

"In the modern automobile market, there are several important factors that influence the development of new products and the production and marketing policy of corporations" [19]:

1. Cost of fuel (diesel and electric cars). As fuel prices continue to rise, fuel costs are becoming one of the most important factors when choosing a car. Diesel engines, which use 40-50% less fuel than petrol, remain a popular choice. Electric cars with their low charging cost are a promising option for conscious consumers due to their efficiency and environmental friendliness.

2. Access to the Internet and digitization of society. At first glance, Internet access may seem unrelated to cars. However, the digitalization of society also has a significant impact on this sector. Internet in cars is not only about comfort but also about functionality and access to new opportunities. Today, people spend a lot of time on the road, and access to the Internet allows them to stay connected, work, have fun, and stay up to date with the latest news. The car becomes not only a means of transportation but also a mobile office, a place for rest and communication. Therefore, more vehicles are equipped with Internet access, which has become an integral part of the modern car. The Internet is used not only by consumers but also for service, navigation, security, etc.

3. Environmental protection. The increase in the global population and the pollution of the environment by exhaust gases have forced many countries to tighten CO₂ emission standards. Electric cars are becoming more popular because they do not pollute the atmosphere and meet environmental standards.

4. Safety. Safety is one of the most important factors when choosing a car. The automotive industry is constantly improving safety systems, making vehicles more reliable and safer. Safety standards are becoming increasingly strict, which prompts car manufacturers to develop new solutions.

5. Transfer of production to low-cost regions. Automakers are targeting international markets and expanding their production facilities in countries with low labor costs. The opening of new factories in such countries leads to a decrease in car prices and an increase in demand. Thus, globalization makes cars more accessible to more people around the world.

6. The use of lightweight materials for the production of cars makes cars cheaper, more economical, and more environmentally friendly.

Lightweight materials are easier to dispose of, which reduces the negative impact on the environment. Car manufacturers are constantly looking for new light and strong materials, such as composite materials, aluminum, and carbon.

The global market for hybrid and electric vehicles is showing significant growth but China's lead is gradually shrinking: in 2023, China will account for 27% of the global market, while Europe and the US will rapidly accelerate to 25% and 22%, respectively. Sales of these vehicles are projected to grow by 60% compared to 2022 and account for 10% of all vehicle sales in 2025. Electric vehicles are becoming increasingly attractive due to their low cost and environmental benefits. Many countries actively support the development of this sector of the market by offering tax incentives and investing in infrastructure. Several automakers have already announced plans to launch new models of electric vehicles in the coming years. The Ukrainian car market is showing signs of recovery after the decline caused by the war. Sales are growing both in the secondary and primary markets. Ukrainian consumers are increasingly interested in electric cars, similar to the global trend. Although the number of electric cars on the streets of Ukrainian cities is still small, this reflects the new reality in the automotive sector. But this is only the beginning. Electric cars are becoming more affordable due to their simplicity, efficiency, and competitive prices. Today, the Ukrainian electric car market is represented by such models as Nissan Leaf and Tesla. Shortly, with the rapid development and introduction of new technologies in the transport sector, the number of electric vehicles on the market is expected to increase significantly. The passenger car market in Ukraine differs from the markets of Europe and the USA by its specific characteristics. The difference is that until now the main focus in the automotive sector has been on sales of new cars by car dealers. However, the used car market has been growing recently. Buyers increasingly prefer used cars of the premium and middle segments of well-known brands and no longer buy new cars from the budget segment.

There are several factors influencing these changes:

1. A weak primary market forces dealers to actively seek alternative sources of income, including in the growing used car sector.
2. Falling purchasing power means that a large part of the population can no longer afford a new car, but still needs one.
3. The used car market is less prone to credit risks and therefore more resistant to changes in the economic environment.

Today, the used car market in Ukraine is in a stage of active development. According to experts, the volume of the used car market in Ukraine in 2023 is estimated at approximately 400,000 cars. More than 90%

of used cars in Ukraine were registered in the past years. Due to high customs tariffs, the import of used cars from abroad is less than 1% of the total market volume. Official dealers are the main source of used cars in Ukraine, and trade-in services provided by official dealers are becoming more popular. There are 1.25-2 used cars for every 1 new car in the world. In Ukraine, this ratio is much lower, which is determined historically.

In 2023, the share of trade-in agreements in the turnover of official dealers increased but remains relatively low - about 15-20%. Experts see great potential for the development of the used car market in Ukraine and predict prospects for further growth and expansion of this segment.

The Ukrainian passenger car market is facing challenges today that hold back its development, namely:

1. The war and economic difficulties led to a decrease in the income of the population, which, in turn, decreased the demand for cars. High interest rates on loans have made buying a new car unaffordable for many Ukrainians. Rising prices for goods and services limit the disposable income people can spend on transportation.

2. The lack of modern car manufacturing means that most cars on the market are imported and have a higher cost due to customs duties and transport costs. The recession in the domestic nuclear industry led to the loss of thousands of jobs in the sector.

3. High customs duties significantly increased the cost of importing cars into Ukraine, which made cars cheaper for consumers. High tariffs contribute to the development of a shadow market in which cars are sold without official customs clearance, which negatively affects government revenues and creates unfair competition for legal operators. People who do not want to pay high tariffs buy vehicles from abroad, thereby diverting capital to other economies.

4. The use of outdated equipment at car factories leads to a decrease in productivity and product quality. Old production technologies also lead to high energy intensity, which increases costs and harms the environment. Low wages and poor working conditions at domestic car factories force qualified workers to go abroad in search of better working conditions.

5. Outdated equipment used in national factories limits the ability to produce modern cars that meet global quality standards. Outdated production technology also leads to low labor productivity and higher costs. The delay in technological development means that domestic cars cannot compete with foreign cars in terms of price and quality.

6. Lack of funds makes it difficult to modernize production, introduce new technologies, and develop new car models. This means that domestic

manufacturers are forced to purchase components abroad, which increases costs and makes them more vulnerable to changes in the world market.

To improve the situation in the passenger car market in Ukraine, comprehensive measures aimed at:

1. Attraction of investments, namely: reduction of taxes and fees for investors in the automobile industry; provision of state guarantees for investments in the construction and modernization of new car factories; simplification of administrative procedures for entrepreneurs working in this sector.

2. Support of domestic manufacturers: purchase of Ukrainian cars by state order; preferential financing of domestic car manufacturers; funding of research projects for the development of new models and technologies.

3. Stimulating the demand for new vehicles: initiation of programs for the disposal of old cars to compensate for the purchase of new ones; reduction of interest rates on car loans; creating favorable conditions for the development of the leasing market.

4. Transition to electric vehicles: lower taxes and fees on electric vehicles to make them more affordable; invest in charging station infrastructure; gradually remove restrictions on the sale of cars with internal combustion engines in favor of electric cars.

5. Integration of international experience: to analyze the experience of successful countries in the development of the automobile industry; involvement of foreign experts in the implementation of best practices.

"The car market is very dependent on the economic situation in the country. Therefore, the main thing that can contribute to its development is the development of the country's economy as a whole" [10].

Conclusions. In this paper, a comprehensive study of the passenger car market was conducted, both at the global and Ukrainian levels. First of all, it should be noted that the Ukrainian market lags behind developed countries, especially Europe and the USA. This is reflected in the dominance of the secondary market and the high average age of cars, which exceeds 20 years. However, the global passenger car market is experiencing an intensive development process due to the growing demand for electric vehicles, increasing environmental requirements, the development of online shopping sites, and product customization. This indicates that electric and hybrid vehicles are a promising direction of development that will replace traditional diesel and gasoline vehicles. To overcome the backwardness of the Ukrainian market and stimulate its development, it is necessary to actively promote innovations and provide them with state support. This means investing in new technologies, launching own projects for the production of electric cars, and stabilizing the economic situation in the

country. From an investment point of view, the production of electric vehicles and the development of innovative technologies related to the automotive industry are promising directions. However, it is important to remember that the market is constantly changing, and a thorough analysis of the situation is necessary before making an investment decision.

Overall, the success of the passenger car market depends on an integrated approach that includes innovation, government support, environmental responsibility, and social focus.

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