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QUALIFICATION PAPER

on the topic " INTERNATIONAL USED-CAR MARKET "
Specialty 292 "International Economic Relations"

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Group IE-61a

It is submitted for the Bachelor's degree requirements fulfillment.

Qualifying Bachelor's paper contains the results of own research. The use of the ideas, results and texts of other authors has a link to the corresponding source
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ABSTRACT

on bachelor's degree qualification paper on the topic
«INTERNATIONAL USED-CAR MARKET»
student Liashenko Alina Volodymyrivna

The main content of the bachelor's degree qualification paper is presented on 54 pages, including references consisted of 36 used sources, which is placed on 2 pages. The paper contains 5 tables, 1 figure that are presented on 7 pages.

Keywords: CAR MARKET, TRENDS DEVELOPMENT, PRICE DYNAMICS, DEVELOPMENT PROSPECTS, FORECASTING, RANKING OF MANUFACTURERS.

The purpose of the bachelor's degree qualification paper is to identify the main problems of the functioning of the international used-car market and to develop recommendations for their solution based on the world and national practices.

The object of research is the international used-car market as a component segment of the world market.

The subject of the research is theoretical and practical principles of functioning of the international used-car market of Ukraine in the conditions of financial globalization.

In the process of research depending on the goals and objectives, we used relevant methods of studying economic processes, including systematization and generalization (in the theoretical justification is the concept of the international used-car market), the comparative method (if ...), method of quantitative analysis, methods of induction and deduction.

The information base of the work is legislative and regulatory documents on the functioning of the international used-car market, analytical reviews and reports of international financial organizations, data of information and analytical bulletins, as well as periodicals publications and scientific publications of domestic and foreign authors.

According to the results of the study the following conclusions are formulated:

1. At the present stage, the international currency market is redeploying international currency reserves in favor of developing countries, as well as

reducing the share of major currencies in the structure of the turnover of the world foreign exchange market.

2. The main changes in the market in the future will concern the transformation of the mechanisms of trade, and the growth of the economic impact of individual states on the world scene will lead to the reform of the world monetary system.

The obtained results can be used in the process of development of the strategy of foreign economic development of Ukraine and the evaluation of the effectiveness of conducting policy in the field of currency regulation.

The year of qualifying paper fulfillment is 2020.

The year of paper defense is 2020.

TASKS FOR BACHELOR'S DEGREE QUALIFICATION PAPER

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TASKS FOR BACHELOR'S DEGREE QUALIFICATION PAPER

(specialty 056 " International Economic Relations ")

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1. The theme of the paper is International used-car market approved by the order of the university from « 7» April 2020 №516-III
2. The term of completed paper submission by the student is «21» June 2020
3. The purpose of the qualification paper is to detect the impact of international used-car market on global economics.
The object of the research is is the international used-car market as a component segment of the world market
5. The subject of research is theoretical and practical principles of functioning of the international used-car market of Ukraine in the conditions of financial globalization.
6. The qualification paper is carried out on materials of the work is legislative and regulatory documents on the functioning of the international used-car market, analytical reviews and reports of international financial organizations, data of information and analytical bulletins, as well as periodicals publications and scientific publications of domestic and foreign authors.
7. Approximate qualifying bachelor's paper plan, terms for submitting chapters to the research advisor and the content of tasks for the accomplished purpose is as follows:

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(title, the deadline for submission)

Chapter 1 deals with the current situation in the international automotive market and the share of international used-car market in it.

(the content of concrete tasks to the section to be performed by the student)

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Chapter 2 deals with socio-economic consequences of used car imports and liberalization of car customs clearance conditions in Ukraine

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INTRODUCTION

First of all we must admit that used cars slow down the international used-car market and global economy at all, thus the demand for cars in the world is declining. Some experts consider that this is a temporary phenomenon and attribute it to a slowdown in the global economy. But the automotive sector also faced a number of structural problems - the toughening environmental standards makes cars more expensive and markets saturated. For instance, such driver call services like Uber are very popular in recent years. I want to draw your attention to the fact that all these affects negatively to car sales and thereby contributes to a slowdown in the economy.

The crisis situation in the world has affected all sectors of the national economy, including the automotive market. International used car market has many buyers, who simultaneously put a new and an old car on different scales. And the renewed demand for new cars will have a negative impact on the dynamics of the secondary. Government support programs and discounts and special offers stimulate sales of new cars. Following the fall in demand for cars with mileage, we will see a correction in prices, but do not expect large discounts, as there is a shortage of supply

In contrast to the new car market, in the secondary market there is a decline in sales of domestic cars, and the drivers of demand are foreign cars.

I should note here that the used car market has a great influence on the automotive market in the whole world.

SECTION 1

THE CURRENT STATE OF THE INTERNATIONAL USED-CAR MARKET AND ITS IMPACT ON THE GLOBAL ECONOMY

1.1 The contribution of the international used car market to the world economy

The global car sales fell from 79 million in 2017 to 78.6 million in 2018, and this year they may fall to 77 million, according to the world statistic. Sales will decrease in 2020 according to forecasts by Moody's Investors Service [1].

“The peak in demand for automobiles was recorded in 2016 in the United States, in the European Union in 2000, and in Japan in 1990” - The Wall Street Journal writes. It was assumed that emerging markets would provide sales growth, but even there the situation worsened. Approximately 26 million vehicles were sold for 12 months, according to CEIC. This is 12.5% less than in June in China [2].

On the other hand, international used-car market is closely connected with the automotive industry in the world. Let's consider the following statements:

- The global automotive industry tends to grow. The world car market has increased by about a third over the past ten years. According to global analysts, by 2030 the global market for automotive products may increase by 40-45% compared to 2015 and reach 125-130 million units.

- International used-car market refers to the oligopoly market, which is characterized by a high degree of monopolization. 10 automotive concerns occupy the dominant position in the world automotive market and control about 70% of this market.

- An automotive industry with high fixed costs including R&D. There were 20 largest automotive TNC companies in terms of R&D expenditures, and total industry expenditures accounted for 15% of global R&D expenditures. Toyota

Motor Corporation is the leader in this indicator within the Japanese automakers, which took 6th place in the ranking with a budget for R&D of 8546 million dollars USA [2].

– An active change in quality and sales is played by the change of leading countries both in car production and in sales. The change of leading countries in car production leads to change priorities in the quality of automotive products and of shifting the emphasis from expensive cars to cheaper ones, and vice versa. China's influence has grown car production in recent decades.

– The modern technological innovations and STP and have a significant impact. Now the creation of ecological cars can bring the greatest success to automotive industry, also the unification and "Chineseization" of automotive products. For the operation of production at lower cost production is being transferred to China, where already today there are 23 large joint ventures. Despite falling sales in the Chinese market, local producers continue to develop and even buy European companies (for the sake of technology) [5].

Due to the COVID-19 pandemic in February 2020, It is important to note that used car and new ones sales fell by 79% compared with the same period in March 2019, - by 49 % in China. Car dealers` sales of in March fell from 40% to 80% in France, Spain, Italy, Germany and the UK. At the same time, some company analysts note that global car sales will return to pre-crisis levels no earlier than in the middle of 2021, due to the main facts of the decrease in the purchasing power of the population as a result of the pandemic crisis [8].

Automakers planned a reduction of a total of 80 thousand jobs throughout by early December 2020. One of the reasons for such massive layoffs is that companies overestimated the number of employees, which were needed to develop different electric and unmanned vehicles.

I should remind here that at the end of 2019, Daimler and Audi announced the reduction of about 20 thousand working places and Nissan laid off about 12.5 thousand people in factories around the world. Nissan was at the forefront of the electric car market, but subsequently things went wrong with the Japanese giant:

profits fell to a 10-year low, this scandal broke out with the arrest of the head. I must note here that the release of the updated Nissan Leaf electric car was delayed. It is interesting to note, Nissan Leaf is one of the most popular cheap electric cars in the world. Although most of all liquidated jobs are concentrated in Germany, the USA and the UK. We must admit that fast-growing economies are also not immune of such consequences, and auto giants have begun to reduce their business.

For instance, NIO, the Chinese manufacturer of electric vehicles, after multibillion-dollar losses and falling quotes on the New York Stock Exchange, reported that after 20 percent reduction in headcount by the end of September 2019 - more than 2 thousand employees lost their jobs [7].

Gillian Davis [], an analyst at Bloomberg Intelligence, said: “Many vehicle manufacturers have focused on reducing costs to prevent lower margins. The long-lasting slowdowns in the global markets will continue to affect the profitability and profits of automakers, who have already been hit by increased R&D spending in autonomous driving technology”. The global car sales in 2019 will amount to 88.8 million units, decreasing by 6% compared to 2018 due to the forecasts of the analytical company IHS Markit.

Car makers faced a serious threat - young people do not want to buy constantly expensive cars, preferring taxi booking services, car sharing and electric scooter rental at the end of 2019. Ford's marketing director, Joy Falotico, held several meetings focusing on an issue that could be critical for the future of the company, understanding the needs of generation Z (people born in the late 1990s and early 2000s). Falotico notes that although the Z generation is still very young, they already have their own point of view on various brands. At the same time, they grew up on social networks, so for them everything looks different. Detroit has been trying to regain young buyers since the baby boomers switched to Japanese brands after the oil crisis of the 1970s. It was also impossible to come to an agreement with millennials - the small runs released at the beginning of this decade turned out to be unclaimed in the world of cheap and affordable fuel, where

off-road cars rule the ball. But as soon as the Detroit automakers decided to switch from sedans to highly profitable SUVs and trucks, it turned out that the limited-income Generation Z prefers compact cars. Honda, Toyota and Hyundai still adhere to this strategy, believing that “cars are the gateway to the industry, at the same time attracting young customers with cheap small cars is a time-tested way to build brand loyalty, which is becoming more profitable as young consumers grow up and start buying more and more expensive cars of the same brand [10].

The new generation is much more conservative in relation to money: two-thirds buy used cars, and most choose compact small runs or medium-sized sedans. It is well-known fact that in Ukraine, VW Golf, Jetta and Passat is the most popular among youth with average age 23-27 years old. For Generation Z, car cost is far more important than for millennials — as rule these are poor students, who are burdened with school debts, who often watched their parents lose their jobs or fight to make ends meet during the Great Economic Recession [11]. However, generation Z is still far from the peak earnings age, but everything can be changed. In the end, the millennials were initially considered car haters, while it turned out that they simply set aside money for big purchases. Nevertheless, technological innovations in the automotive business can significantly change the relationship between automakers and generation Z. These people will reach the peak of financial prosperity by 2030, when drones will finally become massive. But even long before this, the Z generation may prefer alternative vehicles such as Uber and electric scooters. Concerns fear that the new generation will simply never enter the car market. In my opinion, the point of view among generation Z will be divided in several groups, cause lots of factors influence on their minds such as county of living, occupation sphere and also personal preferences.

Automakers are convinced that they can win this battle if they bet on cars that reflect of Generation Z's passion preferences for social change. New cars should be environmentally friendly and charge as easily as smartphones. Z generation will account for 40% of consumers, Detroit has no choice but to revise its sales strategy given that by 2020. As José Luis Valls, chairman of the North

American division of Nissan, noted, automakers need to not only use new technologies, but also understand how new customers will behave, and adapt equipment and services accordingly. The car purchase and sale market is a multi-billion dollar industry covering almost all countries. The state of the market for new cars is one of the most objective indicators of the level of development of the economy of individual states and the global economic system as a whole. Passenger cars occupy a significant share of this market: in the past 10 years, the share of their sales was 70–76% of the total number of cars sold in physical terms [13].

The automotive industry has a significant impact on other sectors of the economy, because in addition to car assembly plants, a large number of industries from related industries are involved in the car manufacturing process, and manufacturers of gasoline and oils, spare parts and components, maintenance centers, etc. work to ensure the operation of cars. , cars are high-tech products, the creation of which uses the latest achievements of science and technology. At the same time, the automotive industry not only uses existing scientific and technological developments, but also stimulates the further development of science through targeted research.

Consider the trends and patterns of development of the global market for new cars in its division into five regions: Asia and Oceania, the European Region, NAFTA countries, countries of South and Central America, the African continent [19].

The research was based on data on world production, consumption, export and import of cars, as well as on the number of cars in use. These data are most fully presented on the website of the International Organization of Motor Vehicle Manufacturers, OICA. Data on world trade, including trade in new cars, is provided by the UN as part of its UN Comtrade project [17].

It is important to note that in the data structured on the OICA website, the territory of the CIS countries, including Kazakhstan and Uzbekistan, is included in the volume of passenger car production in the European region. The volume of

production in the latter two territories is insignificant both on a European and a global scale. In addition, for almost the entire period 2007 - 2017, most of the cars produced in these two countries were produced jointly with other countries, mainly European.

Among the publications of domestic researchers there are works on the analysis of the national and 3-5 world markets for new cars. Market research of new cars was carried out at the Higher School of Economics. Related developments are carried out by companies in the commercial sector, such as PwC and Automotive World Ltd. Almost all researchers note increased competition in the global and national markets for new cars. In addition, the significant dependence of the automotive market on the socio-economic situation in the country is usually emphasized, and government opportunities are noted for measures to support the industry and limit consumer demand, and assumptions are made regarding possible scenarios for the development of the automotive market [22].

We live in the world of double standards. You are free to disagree with me but it is obvious. For example, in your daily routine you can see lots of cars with foreign license plates in every corner of your city. If we investigate Ukrainian used car market, I can tell you for sure that this tendency increases with every year.

Imagine the situation: when Ukrainian consumer imports the car from USA, Europe or Korea. He releases foreign used-car market from cars with mileage, provokes its consumers to buy new car, which is mostly produced in the country. As the result the economic situation is going better due to such operations. On other hand, a happy Ukrainian owner of "new" used car enjoys his purchase. Their prices are more than attractive, and sellers insist that the cars are unbroken and unpainted. If the Ukrainian driver buys this car in an official dealer center, it is far expensive, but in such way Ukrainian economics has got more profit and also helps to bring more benefit to foreign cooperation [26].

However, curiosity and distrust of fairy tales did not leave me alone. I decided to find out why cars from America are cheaper.

Everything turned out to be quite simple: almost all cars in the USA are insured. After a serious accident, it is cheaper for insurance companies to pay the insurance amount to the client than to restore a car [13].

The remains of the car are written off and sold at auction. These are the beaten and decommissioned cars that are being restored and sold in Ukraine.

32 936 units of a second-hand automobile hand from the USA got to Ukraine for 9 months of 2019. Its total value is 352 million 247 thousand dollars [25].

The share of registrations of new cars for the specified period amounted to only 16%. The remaining 84% are used cars.

For the most part, Americans do not repair cars. There is insurance. After the accident, he gave tkeys, the insurance company reimbursed the residual value of the car. Americans bought a new one. And the old car is at auction parking.

Data on each unit of transport is on the company's website. By a special VIN-code of a car, it is easy to see its entire history and initial price [18].

Everyone can buy a car by participating in an auction and offering an amount greater.

As we can see it is a perfect way to relese from “car rubbish” and also bring money to USA economics. Despite the possible risks - from the auction stage to delivery across the Atlantic, - Ukrainians buy American second-hand goods in thousands per month.

As the real practice of those in this business shows, sometimes it’s possible to make profitable deals.

The crisis of 2007-2008 adversely affected industrial production worldwide, and the passenger car market was no exception. From the table. Table 1.1 shows that the global passenger car market in 2010 overcame the crisis of 2007–2008, exceeding pre-crisis sales (consumption) indicators in real terms. In subsequent years, sales growth continued, so that sales in physical terms in 2017 were 39% higher than sales in 2007. It should be emphasized that the dynamics in the regions

is heterogeneous and ranges from a fall of 14% to an increase of 130%, but in fact global sales growth was provided by one region - Asia and Oceania.

Table 1.1. – Dynamics of world car sales by region in 2009–2018, million units [16]

Region	2009	2010	2011	2012	2011	2013	2014	2015	2016	2017	2018	2018y. to 2009 y. %
Asia and Oceania	17,8	18,4	21,9	27,3	27,7	30,2	32,5	34,8	36,1	39,5	40,7	130
Europe	19,6	18,8	16,6	16,5	17,2	16,2	15,9	16,2	16,4	17,3	17,9	–9
North America	9,0	8,2	6,6	6,8	7,4	8,6	9,0	9,2	9,1	8,6	7,8	–14
South America	3,5	3,6	3,7	4,3	4,6	4,7	4,8	4,3	3,5	3,1	3,5	2
Africa	0,9	0,9	0,8	0,9	1,1	1,2	1,2	1,2	1,1	1,0	0,9	–8
World at large	50,8	50,0	49,7	55,8	57,8	60,9	63,4	65,7	66,3	69,5	70,8	39

It reflects the changes even more clearly. Thus, according to OICA, Asia and Oceania have gradually increased their share in world sales from 34% in 2009 to 58% in 2019, and this region has become the leader in the number of cars purchased. The share of the former leader, Europe, decreased from 39 to 25%. The share of North America fluctuated significantly and ultimately decreased from 19 to 10%. The share of South American countries remained virtually unchanged and amounted to 5% in 2019 (despite an increase in 2011 to 8%). The share of African countries on a global scale was extremely small in 2007 and remains the same in 2017 - less than 2% of global passenger car sales. The data on the world production of cars are completely consistent with the sales data: over 10 years, world production of cars in physical terms grew by 38%, which is comparable to the growth in world sales. Regional trends here vary widely - from a fall of 12% to an increase of 114%. To understand the reasons for the changes and predict the future development of the market, you need to consider the dynamics of the number of cars in use. Unfortunately, such OICA data for 2016 and 2017 is not available in all countries, so you have to rely on data from 2009–2019.

Table 1.2 – Dynamics of the use of cars by region in 2009–2019 [17]

Region	2009	2008	2009	2010	2011	2012	2013	2014	2019	2019 y. to 2009 y, %
Asia and Oceania	18,1	19,1	20,6	22,6	24,8	27,0	29,2	31,8	34,4	91
Europe	28,6	29,5	29,8	30,3	31,0	31,5	32,1	32,7	33,4	17
North America	17,2	17,5	17,3	17,0	17,1	16,5	16,6	16,8	17,1	0
South America	4,2	4,5	4,8	5,2	5,5	5,9	6,2	6,5	6,7	59
Africa	2,1	2,2	2,3	2,4	2,5	2,6	2,8	2,9	3,1	49
World at large	70,2	72,7	74,8	77,6	80,8	83,5	86,9	90,7	94,7	35

Kindly note here that the right away that the number of cars in use is subject to much less variability than their sales and production volumes. This is due to the fact that car sales are declining and growing, quickly responding to changing economic conditions (economic forecasts, changes in customs duties, state programs to support manufacturers, fluctuations in the refinancing rate, economic growth, etc.), and production is forced to respond to changes demand. The number of cars in use responds to economic changes much more slowly, so global indicators are continuously growing during 2007–2015, and the postponed impact of the 2008 crisis was fully offset by subsequent positive changes in the global economy. The total growth in the number of used cars in the world for the specified period amounted to 35%. The increase in the number of used cars were observed in all regions except the countries of North America, where there was a slight decrease (less than 1%). In 2015, the share of this region was 18% (against 25% in 2009) [21].

Let us pay attention to the change in 2015 of the region - the leader in the number of used cars. The former leader, the European Region, increased the number of used cars over the period by 17%, but its share in world indicators fell from 42 to 35%. The new leader, the region of Asia and Oceania, over the same period increased the number of used cars by 91%, and its share increased from 25 to 36%. In South America and Africa, the number of cars used increased by 59 and

49%, respectively. At the same time, their shares in world indicators remained almost unchanged and in 2015 remained insignificant - 7 and 3% [24].

As it could be remarked from the graph, the economic crisis of 2007-2008 had a deferred effect on the export of cars and proved to be only in 2009: world exports decreased by 30%. TOP-10 exports by 31%. In 2011, both world exports and exports from the TOP 10 countries exporting cars exceeded pre-crisis indicators. During 2010–2014 export volumes grew, in 2015 there was a decrease in world exports by 4%, TOP-10 exports by 5%. The total volume of world exports in 2015 fell by 14% and affected most economies in the world. It can be noted that the decline in exports of cars was 3.5 times weaker than exports for all groups of goods. In 2016–2017 export growth resumed, as the result of which, in 2017, the world passenger cars` exports reached their historic highs of \$ 755.7 billion [23].

Table 1.3 – Leaders in the global car sales market for 2009–2019 [23]

Country	2009 year		2019 year		2019 year to 2016, %	2019 year to 2009 , %
	Export,mlrd \$.	Share in the global export, %	Export,mlrd \$	Share in the global export, %		
Germany	141,6	22,6	156,9	20,8	3,1	10,8
Japan	118,6	18,9	108,8	14,4	4,4	-8,3
USA	41,5	6,6	58,5	7,7	3,4	40,9
Canada	39,1	6,2	46,3	6,1	-5,0	18,5
Great Britain	31,9	5,1	46,2	6,1	2,1	44,9
Mexico	20,2	3,2	45,6	6,0	34,2	125,5
South Korea	33,0	5,3	39,5	5,2	5,8	19,5
Spain	32,0	5,1	36,6	4,8	3,6	14,2
France	36,1	5,8	24,8	3,3	19,1	-31,3
Belgium	25,2	4,0	21,9	2,9	4,0	-13,1
TOP-10	519,4	82,9	585,2	77,5	5,3	12,7
Czech Republic	9,5	1,5	20,2	2,7	9,4	111,5
Italy	11,56	1,8	18,7	2,5	22,6	61,1
Slovakia	8,7	1,4	15,0	2,0	3,3	71,8
World at large	626,6	100,0	754,7	100,0	7,2	20,4

Data analysis of countries – the leaders in the global car sales market for 2009–2019 shows that TOP-10 throughout the entire period includes the same

countries: Germany, Japan, USA, Canada, Great Britain, Mexico, South Korea, Spain, France, Belgium, with Germany always occupying the first place, Japan the second, and all subsequent countries came from them by a wide margin. So, although German passenger car exports grew from 2007 to 2017 by only 10.8%, while Japanese cars even fell by 8.3%, other countries will not be able to catch up with these leaders soon. The USA occupied the third place over almost the entire period under review, and only in 2010 Canada took the third place. The stability of the leaderboard indicates the significant difficulties faced by automakers and governments in promoting the national auto industry products on the world market. The growth of world exports over the period amounted to 20.4%, while exports from the TOP-10 grew by only 12.7%. As a result, the share of TOP-10 countries in global exports from 2007 to 2017 gradually decreased by 5.4%: from 82.9 to 77.5%. It is likely that the decline in the share of leaders in global exports will continue. Also in the following years, a change in the TOP-10 list is possible. The most likely candidates are the Czech Republic, which in 2017 by export already almost caught up with Belgium, and Italy. Even if such changes occur, the list of countries that are leaders in the export of cars will include EU countries, NAFTA countries, as well as Japan and South Korea. It turns out that for the successful export of cars to the world market it is important not only to have a developed national automobile industry, but also to enter into trade unions with other countries with developed economies. Five countries were arranged in descending order of their share in global passenger car imports in 2019 [28].

Table 1.4 – Change in the volume of passenger car imports to the leading countries in 2009–2019 [28]

Country	2009 year		2019 year		2017 to 2016, %	2017 to 2007, %
	Import, mlrd\$	Global import share, %	Import, mlrd\$	Global import share, %		
USA	138,3	22,1	176,4	23,4	3,1	27,5
Germany	49,9	8,0	63,6	8,4	4,4	27,5
Great Britain	46,3	7,4	50,8	6,7	3,4	9,7
China	9,8	1,6	44,2	5,9	-5,0	351,0
France	35,9	5,7	35,9	4,8	2,1	0,0

Continuation of table 1.4

Italy	37,7	6,0	31,3	4,1	34,2	-17,0
Canada	25,4	4,1	27,4	3,6	5,8	7,9
Belgium	19,0	3,0	22,8	3,0	3,6	20,0
Spain	28,1	4,5	19,8	2,6	19,1	-29,5
Australia	12,0	1,9	18,6	2,5	4,0	55,0
Russia	23,0	3,7	8,2	1,1	9,4	-64,3
New Zeland	13,0	2,1	12,6	1,7	3,3	-3,1
TOP-10	416,6	66,5	490,8	65,0	5,3	17,8
World at large	626,6	100,0	754,7	100,0	7,2	20,4

Unlike the list of countries that are leaders in the export of cars, the list of leaders in imports has undergone significant changes. But in 2017, China and Australia appeared among the leaders in the import of cars, and if Australia took the tenth place, then China - the fourth. The historic maximum of passenger car imports to China was recorded in 2014, when China imported cars for \$ 53.9 billion. Some countries managed to enter the TOP-10 of importing countries and exit from it (for example, Saudi Arabia). In addition, car imports are much less concentrated - the top ten countries in 2019 imported 66% of global car imports compared to 77.5% of world exports from the TOP 10 exporting countries. The share of TOP-10 in global imports from 2007 to 2017 also decreased - from 66.5 to 65%. The United States' first place among importers of cars remains unchanged: over 10 years, their share in global imports grew from 22.1 to 23.4%. All other countries go by a wide margin from the United States [22].

However, it is quite feasible to reduce the share of sales of imported cars in favor of cars of domestic assembly. It could be done under the external circumstances` pressure of depreciation of the national currency, lower prices for raw materials, the imposition of sanctions on the supply of cars, a slowdown in the growth of the national economy and a fall in solvent demand, or it may result from the actions of national governments, which were providing benefits to foreign manufacturers in the opening of screwdriver assembly workshops within the importing country, subsidizing retail customers with the purchase of domestic automobile products, and increasing import duties on cars. But in some cases

(China, for example), import growth can occur simultaneously with the dynamic growth of domestic production [29].

Asia and Oceania. Most analysts identify in the region the three most important countries for the car market: China, India and Japan. Consider car sales in these countries in more detail. Asia and Oceania is the only region where car sales and production grew steadily, even during the crisis of 2008. 6 (according to OICA) it is clearly seen that sales growth in the region correlates well with sales growth in China. Indeed, as our calculations showed, the correlation coefficient between these two curves is 0.998, and the determination coefficient is 0.999. Moreover, the correlation between global sales and sales in China also turns out to be extremely high: 0.997. For the period 2007–2017 sales in China grew by 18.7 million units, and in the world - by 20 million units. - These are quite comparable figures. So we can confidently say: most of the positive dynamics of global passenger car sales in 2007–2017 due to sales growth in China. A decrease or increase in sales in China in the coming years will almost inevitably cause an increase or decrease in global performance [26].

The car markets in China and India are very similar. In both countries, the consumption and production of passenger cars increased proportionally over the period (5 times in China, 3 times in India), as a result, in 2018 these countries produced about the same amount of cars as they had consumed. Such growth could not but affect the number of cars in use - from 2008 to 2018, their number grew 7 times in China and 3 times in India. In terms of motorization, these countries are significantly inferior to the leading countries, but the reserves of the domestic market are not still utilized. In 2007–2017 imports to China significantly exceeded exports from the country - despite rapidly growing production, the Chinese auto industry cannot satisfy consumer demand. So, in 2017, China exported passenger cars worth \$ 0.7 billion, and its imports amounted to \$ 5.9 billion. The main buyers of Chinese cars in 2017 were (in decreasing order of export volumes) Iran, the USA, Mexico, Belgium, Chile, Russia, and the main suppliers (in decreasing order) were the USA, Germany, Japan, Great Britain, Italy [24].

The situation is similar with the import and export of cars in India: here, too, import stably exceeds export. In 2017, India exported US \$ 0.2 billion worth of passenger cars (which is almost insignificant not only on the global market, but even the Indian automobile market), while the rest of the countries sent 6.3 million passenger cars to India billion US dollars. The main export destinations for Indian passenger cars were Mexico and South Africa, and the main importers are the UK, Germany, Sweden, Japan, Thailand, and the USA. Chinese and Indian national automakers are not yet able to cater to demanding customers with the quality of their products, and therefore countries that are able to produce better and more convenient (as well as more expensive) cars are successfully selling their products in China and India. Exports from China and India mainly go to countries with undeveloped economies, where consumers are forced to pay attention primarily to the price of a new car [28].

Researchers note a close correlation between the level of well-being of the population and the dynamics of the car market. That is, the growth of the country's GDP and the welfare of the population will increase the solvent demand of the population for cars, and vice versa - in the unfavorable economic situation within the country, passenger car sales will decrease. Although the growth in domestic demand for cars in China and India is not guaranteed (it also depends on internal factors - GDP growth, changes in tax rates, customs duties, adoption of laws aimed at reducing the amount of automobile emissions, etc.), it is domestic demand that is the determining factor in the development of the automotive markets of these countries. So, according to Bloomberg, the Chinese government intends to reduce the tax on the purchase of new cars from 10 to 5% and change customs duties on imported cars to compensate domestic producers for the consequences of a trade war with the United States. The growth of the population and its well-being in these countries has a positive effect on the demand for cars, and at the same time on their production and quantity in use. Therefore, in general, the forecast for the development of automotive markets for China and India is positive, which does not exclude short-term fluctuations in consumer demand. Japan is one of the highly

developed countries, its exports largely consist of high-tech products, and imports from raw materials, materials and fuels. Japanese automakers set the modern standard in car manufacturing, and their products are in demand all over the world. This defines Japan's place in the global car market as one of the leading exporters: the production of passenger cars in the country, according to OICA, almost doubles consumption. In 2017, 337 thousand cars were imported to Japan (or 8% of the total sales in Japan), and 12.5 times more were exported - 4218 thousand. The largest exporter, who consumed 40% of the new from Japan in 2017 cars are the United States. In second place (with a wide margin from the first) - Australia, then - China, Canada, UAE. By the number of cars in use, Japan is a country with one of the highest levels of motorization. At the same time, domestic demand is likely to expect a mild drop: population decline and aging, the high cost of owning a car in large cities, as well as well-developed public transport will contribute to this. Therefore, in the coming years, Japan's automotive industry will depend heavily on the state of the global economic system as a whole, as one of the determining factors in demand for Japanese cars [29].

Europe. The automobile market in Europe, although it has lost ground, remains one of the largest automobile markets in the world, and the automotive industry is one of the largest industries in the region. So, according to the European Automobile Manufacturers Association, in 2019, 2.5 million people had been employed in the production of cars in the European Union. - 8.3% of all employed. According to OICA, in 2019, passenger car production in the EU countries amounted to 87% of all passenger car production in the European region, and sales - 85% of all European region sales. At the same time, in 2015 the number of cars in use in the EU countries amounted to 77% of the total number of cars in use in this region. Given that the total area of the EU countries is approximately 5 times smaller than the area of the European region, we can say that the European Union passenger car market determines the passenger car market of the entire region. EU countries produce more cars than they consume, so exports from this region exceed imports. So, in 2017, the European Union imported about 3 million passenger cars,

the main importer being in the European region - this is Turkey, which provides 24% of all car imports to the EU countries. Turkey took first place among car exporters in 2014, overtaking Japan and South Korea, and since then has only strengthened its position [28].

Other leading exporting countries in 2019 were Japan (19%), South Korea (14%), as well as Morocco, Mexico and the USA (9%). Exports from EU countries exceed imports by almost 5 times - in 2015, 5.4 million passenger cars were exported. The United States has been the main importer of cars from the EU for a long time - in 2017, the volume of exports to this country amounted to 21% of all exports of cars from the EU. Other major importers of cars from the EU in 2017 were China (10%) and Japan (5%) [31].

A significant part of exports in 2019 was directed to countries of the European region that are not members of the European Union - Turkey (9%), Switzerland (5%). The main supplier of European cars to the world market is Germany - this country in the last 10 years annually provides about 30% of the total production of passenger cars of the EU countries [32].

The German automobile products are in demand within the EU countries and throughout the rest of the world. This provides Germany with first place in the number of cars exported in the world. At the same time, the domestic market of the EU countries (and the European region as a whole) is not stable in demand. In these countries, the level of motorization is very high, but the uncertainty of consumers in the future leads to an increase in the life of cars. From 2012 to 2016, the average age of cars in the EU countries grew from 10.4 years to 11 years. Although servicing a high-mileage car is more expensive, many are willing to put up with these expenses so as not to take the risk of buying a new car on credit. In addition, in most countries of the European Region, the indigenous population, the birth rate is falling, which will negatively affect domestic demand, even despite a significant migration influx. European governments periodically take measures to increase demand for new cars, including through tax breaks, and usually such measures lead to success - there is a temporary increase in consumer demand. As

the result of these measures, car sales in some EU countries may increase, while in others they may fall at the same time, depending on the policies of their governments.

Nevertheless, the automotive market in the European region is unlikely to expect major changes. Domestic demand is likely to remain stable, albeit uneven across countries. Exports will largely depend on the international situation, and in particular on the customs duties of the main importer of European-made cars - the United States.

NAFTA. The countries of North America (especially the USA) are highly motorized. Model Ford T, created in the USA, became the first model produced in millionth series. It was this model that transferred a personal car from a luxury item to an affordable product for the masses, which made the United States one of the constant leaders in motorization - in 2014, the dwarf states of Monaco and San Marino were in the ranking of countries in terms of motorization ahead of the USA. The same circumstance significantly increased the motorization of the closest neighbors of the United States - Mexico and especially Canada. However, now the US auto industry has lost its leading position, and the country imports passenger cars significantly more than it exports. The next table shows data on sales of cars in the NAFTA countries according to OICA [21].

Table 1.5 – Dynamics of passenger car sales in NAFTA countries in 2007–2017, million units [14]

Country	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average	Share in 2017, %
USA	75,6	67,7	54,0	56,4	60,9	72,4	75,9	76,9	75,2	68,7	61,0	67,7	79
Canada	8,4	8,7	7,3	6,9	6,8	7,5	7,6	7,6	7,1	6,6	6,4	7,4	8
Mexico	6,4	5,9	4,4	5,0	5,9	6,5	7,0	7,5	8,9	10,7	10,2	7,1	13
NAFTA	90,5	82,3	65,7	68,3	73,6	86,4	90,4	91,9	91,2	86,0	77,5	82,2	100

According to experts, the dynamics of car sales in the United States is subject to a seven-year cycle, and its new round began in 2017 with a decline. The data of table 5 confirm this - passenger car sales in the USA fluctuate relative to the average annual sales of 67.7 million units. When calculating the trend of US

sales for the period under review, an almost horizontal line was obtained. Despite the cyclical demand, the average age of cars in the United States is growing steadily, and over this period has increased from 10 to 11.6 years. As the matter of fact, the US passenger car market has run out of reserves to increase domestic demand. A similar picture is observed in the car market in Canada - annual passenger car sales fluctuate relative to an average of 7.4 million units. Although, according to some experts, Canada's motorization has not yet reached its maximum and will grow [9]. In Mexico, obviously, low motorization contributes to the growth of demand for new cars - their sales in Mexico are growing steadily and have not yet reached their maximum. The NAFTA agreement helped Mexico integrate into the US and Canadian automotive supply chains, making Mexico a major auto parts manufacturing center. In 2016, automobiles and auto parts accounted for 20% of Mexico's total trade with the USA and Canada, which made them the largest category of goods turnover between these countries. The United States has long been a major consumer of export products from car factories in Canada and Mexico. In 2017, 70% of the total volume of cars exported from Mexico and 95% from Canada were shipped to the United States. In addition, in 2017, 5% of the total volume of cars exported from Mexico exported to Canada. It turns out that the traditionally large shares of Mexico and Canada in the global export of cars are explained by trade within the NAFTA countries, more precisely, the car manufacturers of.

The political decisions of Donald Trump, the current President the USA, don't allow to confidently predict the future of the used-car market in the NAFTA countries. Representatives of the US automotive industry are concerned about the proposal to raise duties on cars and especially on auto parts to 25%, including from NAFTA countries. According to experts, this decision will not only help increase the price of cars for retail customers and significantly reduce the production of new cars in the United States, but also reduce the number of American workers engaged in car manufacturing. The forecast for the car market development in NAFTA

countries remains pessimistic and will depend on the political decisions of the US leadership until 2020 [22,34].

South American countries. In this region, there is practically no own auto industry, although governments have attempted to create it. A few private car brands practically do not go for export and are in low demand within the region. This is due, among other things, to the presence of a widely developed automotive industry among its northern neighbors and to the fact that many of the largest automakers have moved their plants to the countries of South America (primarily to Brazil and Argentina). These factories are mainly engaged in screwdriver assembly from imported parts, and their products intended for sale within the region. Some car manufacturers develop models of cars exclusively for the local market, taking into account its features. The region distinguished by political stability, and regular crises and military conflicts have an extremely negative impact on the automobile market of the entire region and its individual countries. For example, in Venezuela, according to OICA, passenger car production decreased from 2007 to 2017 by 99%, sales - by 98%. The leading country in the automobile market in South America is Brazil, and after a four-year fall in 2013–2016 car sales began to grow here. Further growth is expected in the next few years, which will significantly affect the automotive market of the entire region. The main danger to this growth is the possibility of exacerbation of political conflicts in South and Central America [33].

African region. Despite the growth of production, services, investments, modern technologies, high-tech products, and labor on the African continent noted by researchers, Africa still produces about 1% of the global passenger car production and consumes about 2% of global sales. In addition, the political, economic and military situation in many countries of the region does not contribute to the growth of well-being of the population, and without this, a significant increase in demand for cars is impossible. In the coming years, the region is unlikely to become a prominent player in the passenger car market. I should note here that, Asia and Oceania, especially China, were the drivers of growth in the

global passenger car market from 2007 to 2017 and are likely to remain so in the near future. In the mature markets of the USA and the European Union, motorization of the population is close to its limit, sales of new cars fluctuate relative to the average level depending on the phase of the economic cycle, and the average age of cars in use increases from year to year. In South America, political instability limits opportunities for economic growth and, at the same time, to increase consumer demand for cars. The African region is practically not involved in the global car trade, and the situation will not change in the coming years. The leading countries in the export of cars to the world market has been occupied by the same countries for many years, which indicates the significant difficulties that other automakers and governments face in promoting the national auto industry products on the world market. In fact, the market divided, and in order to increase its share in global exports, huge efforts must have been making for years. It is not important only to have a developed national automobile industry, but also to enter into trade unions with developed countries. The production of cars is concentrated in the regions with the highest sales: manufacturers prefer to transfer the final assembly to the territory of the proposed sale of cars. The governments facilitated that the consumer`s countries interested in job creation and in investing in the national economy. Automotive markets in individual countries are highly dependent on the age composition of the population, the dynamics of its change, the growth of welfare, and government policy. The passenger car market becomes increasingly to globalize, and decisions by the government of one country can significantly affect automotive enterprises in many other countries and remote regions. The settled supplies` chains within a single automobile concern often span several countries crossing oceans. Military conflicts in one of the countries of the region have negative consequences for the market of the entire region [6].

1.2 Implementation of new ecological norms on the international automobile markets and their consequences

To begin with the difference between Euro standards in cars` fuel system. In the European Union. You may know that the initial Euro 1 requirements were implemented in July of 1992. Manufacturers began to abandon carburetor engines and switch to fuel injection systems that could reliably maintain the correct composition of the fuel mixture. At the same time, catalytic converters began to appear, afterburning unburned fuel residues in the exhaust system [5].

Europe has shifted to stricter Euro-2 standards, which required precise distributed fuel injection systems since the beginning of 1996. Euro-3 standards were implemented four years later for the sake of which the engines began to be equipped with dual exhaust diagnostic systems and quickly warming up collectors, since the new regulation required the neutralization system to enter operating modes as soon as possible. The Euro-4 standards introduced in 2005 required the installation of electronic gas pedals for more optimal injection systems. Even stricter Euro-5 standards, which were introduced in September of 2009 and provided longer mileage without compromising environmental performance [7].

Finally, the Euro-6 most stringent regulation has been in force in Europe today since 2015, which imposes a very serious restriction on diesel engines and requires additional use of urea for them in the exhaust gas aftertreatment system. You must know that diesel cars are at risk. Manufacturers prepared in advance for the introduction of Euro standards, so in the case of cars imported into Ukraine from abroad, we can assume compliance with certain standards depending on the year of manufacture.

All European models since 1996 have Euro-2, since 2000 - Euro-3, since 2005 - Euro-4, and 2009 - Euro-5. Almost simultaneously, similar standards were introduced in the USA and Japan. But in the case of foreign cars that were officially sold in Russia, you should focus on the schedule for introducing Euro standards in our country, since manufacturers supplied cars with engines adapted

to current conditions. In Russia, the Euro-2 standard adopted only in the fall of 2005. All new cars were supposed to comply with Euro-3, Euro-4 was introduced in 2013, and since 2016, Euro-5 has been operating. For example, “dirty” is the first generation Ford Focus, which was produced in Vsevolozhsk from 1998 to 2005 with Euro-2 engines of 1.6, 1.8 and 2.0 liters. Second generation cars for Russia were already equipped with Euro-4 engines. Another popular option is the Toyota Corolla. Corolla's Euro-4 engines appeared in 2004 on the ninth-generation model (E120), popular in Ukraine [37].

Two more second-hand bestsellers of the secondary market, Kia Rio and Hyundai Solaris, are mainly represented by models of the two previous generations of the 2011 and 2016 model. Accordingly, therefore, they comply with the Euro-4 and Euro-5 standards. Older Kia Rio, like the Hyundai Accent of the Taganrog assembly, had Euro-2 engines in Ukraine. Have you ever wondered why environmental standards are needed? Why do automakers spend so much on environmental protection? Why are car exhaust standards constantly tightened? We will try to answer these questions, especially since in the next five years at least two events will occur that will change the established canons. Europe’s carbon dioxide emissions from new cars would be reduced to 95 g / km. Automakers from other continents will strive for such indicators by 2020. The current emission rating is 130 g/km. The standard level of CO₂ emissions depends on the curb weight and is calculated for each car according to the formula: $CO_2 = 130 + a * (M - M_0)$, where M is the curb weight of the car in kilograms, $M_0 = 1372$ kg, and $a = 0.0457$.

In 2016, the value of M_0 will be revised.

- Volkswagen Golf 1.4, power - 150 hp, average fuel consumption - 5.0 l / 100 km; CO₂ emissions - 116 g / km
- Renault Logan 1.6, power - 102 hp, average fuel consumption - 7.1 l / 100 km; CO₂ emissions - 167 g / km
- Mercedes-Benz C-Class 1.6, power - 156 hp, average fuel consumption - 5.5 l / 100 km; CO₂ emissions - 126 g / km

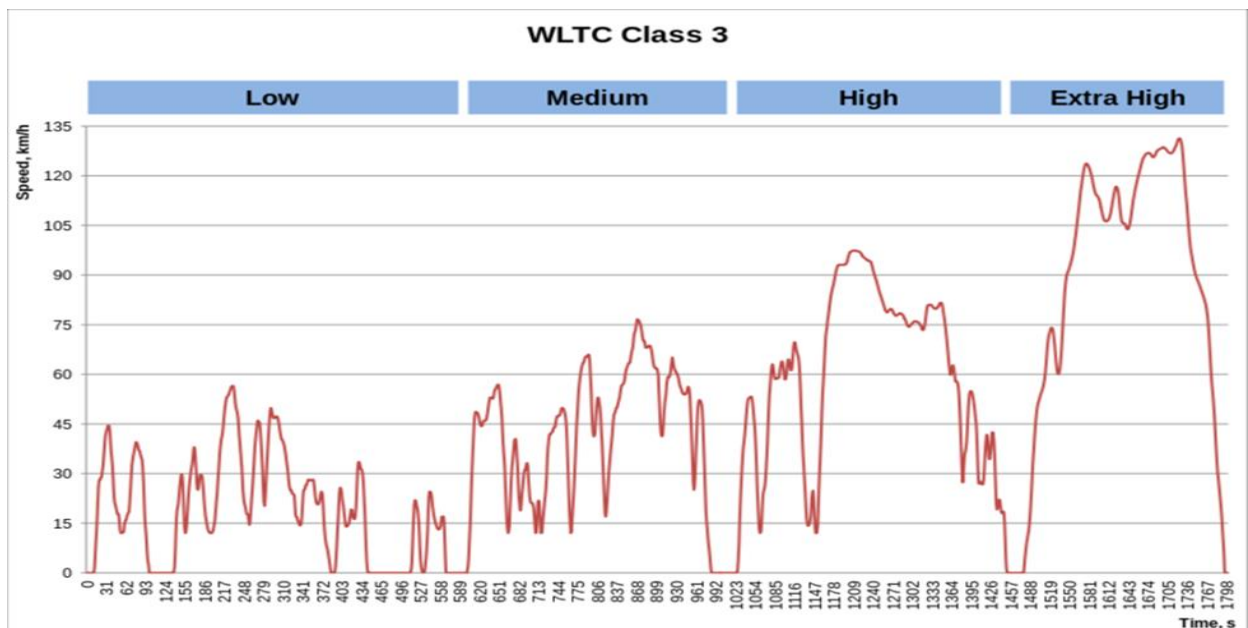
– Porsche Cayenne S E-Hybrid, power - 333 hp, average fuel consumption - 3.4 l / 100 km; CO₂ emissions - 79 g / km; power consumption - 20.8 kWh / 100 km; efficiency class: A + Please note that the most powerful Porsche Cayenne S E-Hybrid easily overcomes the future emission standards barrier. Both breakthrough in automotive technology or craftiness of car manufacturers [12].

As an example, at the beginning of the article, we cited the Porsche Cayenne S E-Hybrid with an average consumption of 3.4 l / 100 km and a CO₂ emission of 79 g / km. You are free to believe it not. Take the usual Porsche Cayenne with a gas engine of 300 hp for comparison. Its average consumption is declared at 9.2 l / 100 km, and CO₂ emissions - 215 g / km. The difference in CO₂ consumption and emissions is almost three times. Is it the technology or the imperfection of the NEDC test? Obviously, on a highway, a hybrid car will lose all its environmental friendliness, because the amount of emissions directly depends on fuel consumption. Think about it, the new Ford Fiesta during the recent endurance marathon “60 hours at the wheel” had an average consumption of 16.8 liters per 100 km, and CO₂ emissions significantly exceeded the norm. This is the picture of almost every car [23].

From MPs passed a bill to strengthen the adaptability and phased introduction of international environmental requirements for vehicles in Ukraine. According to a Ukrinform correspondent, the decision was supported by 247 people's deputies. The main purpose of the bill is to increase the level of environmental friendliness of the car fleet of Ukraine by stimulating the development of the market of vehicles of environmental standard "Euro-5". The main task of the bill is to environmental regulations for wheeled vehicles, "the explanatory note to the document reads. January 1, 2020, a new eco-standard "Euro-6" should start operating in Ukraine when importing new cars and for new cars of national production, but deputies propose to postpone its introduction to the first of January of 2025 [15].

Verhovna Rada of Ukraine Committee on Finance, Tax and Customs Policy considered the relevant bill №2078-1 and recommended to adopt it as a basis and in general. The authors of the project believe that the introduction of the "Euro-6" standard will increase the cost of domestic cars and overshadow the import of new ones (they will be imported as used with environmental standards much lower than "Euro-6"). Also in the explanatory note it is noted that for the last four years the structure of the market (in connection with import "Eurobills") has considerably changed and the average age of a car in Ukraine makes about 19-20 years, that is cars actually correspond to Euro-0 standards - "Euro-2". Therefore, we should not expect an increase in the level of environmental friendliness of the car fleet by updating it with new cars. In addition, Ukraine has no obligations to bring national legislation in line with EU technical regulations related to the implementation of the "Euro-6" standard [13].

Deputies consider it expedient to postpone the introduction of "Euro-6" until 2025, thus ensuring the replenishment of Ukraine's fleet by importing new cars and cars of national production with environmental standards "Euro-5". Note here that new environmental standards do not apply to imports of used cars [29].



SECTION 2

TRENDS AND PROSPECTS FOR THE DEVELOPMENT OF THE USED CAR MARKET IN UKRAINE

2.1. Socio-economic consequences of used car imports

It is an interesting fact that the modern automotive products of Ukraine are a oligopoly market, domestic products and foreign manufacturers, both primary (new and used), and divided into 3 absolutely different segments - cars, trucks and buses as well.

The commodity markets` characteristics are based on the statistical indicators` system, which includes the following indicators: number of manufacturers, sales and production , working capital and cost of fixed capital, profit from sales, efficiency, absolute and relative, current and dynamic performance of market participants, the effectiveness` government regulation, as well as purchasing power and activity of the population, price indices, coefficients of price elasticity and elasticity of demand for income, turnover, inventories, ratio, frequency of turnover in days, the ratio of demand through own production etc [17].

These market characteristics should be accompanied by assessments of market conditions: its openness, levels of monopolization and competition.

As for the characteristics of automotive products, as of 1.04.2020 in the domestic market, the average age of domestic brands cars was 14-16 years, foreign brands - 10-12 years, while in the EU - 8 years, which indicates slow renewal of the car fleet in Ukrainian used-car market.

We must admit that after the abolition of import duties in 2016, sales of electric vehicles increased rapidly: new - more than 2.5 times; used - 6.5 times, but the share of their sales in the domestic market of automotive products remains insignificant.

After the excise tax rates reduction of used foreign cars, the most popular car brands imported by Ukrainians were Volkswagen (22%), Renault (21%), Skoda (20.8%) and Opel (20.9%), Mercedes-Benz (6,6%), BMW (4.9%), Audi (4.6%). The most popular models were Renault Megane, Volkswagen Passat and Skoda Octavia. Between 2016 and 2019, Ukraine had a negative balance of foreign trade in automotive products. This means that import dependence in this industry has increased over the period [32].

Based on the ABC analysis, the entire passenger car market can be divided into three groups: high, medium and low demand. Class C cars and SUVs (practical sports cars) occupy 73.06% of the market. The group of average demand consists of cars of class B, class D and multi-purpose vehicles MPV (multi-purpose vehicle), which account for 26.94% of the market. In 2016, only two of the domestic enterprises increased their market shares, namely: PJSC Eurocar - from 24.5% to 74.8% and Bogdan Corporation - from 0.72% to 1.5%. The largest losses were suffered by: PJSC "ZAZ" - from 47.48% to 10%; HC "AvtoKrAZ" - from 16.9% to 9.1%; CJSC "Chernihiv Automobile Plant" - from 3.6% to 0.1%. The market leader in terms of average market share among domestic manufacturers of automotive products in Ukraine for the period from 2010 to 2016 is PJSC "ZAZ", whose average market share (dser) was 7.53% of total sales of passenger cars in Ukraine, and the average market the share of DAEWOO for the specified period was 1.75% [35].

Will you please notice that Toyoya (8.46%), Hyundai (7.65%), Vaz (6.95%), Renault (6.51%) became leaders among foreign car in the used market for the period 2016-2020), Volkswagen (5.52%), Skoda (5.40%), Kia (5.16%), as well as Ford (4.95%), Nissan (4.91%) and Geely (4.59 %), which demonstrated the stable dynamics of sales of automotive products in the Ukrainian market [34].

An important characteristic of the market is the indicator of the car saturation (motorization) per 1000 people. Please note that in the EU it is 400 cars per 1000 people, on the other hand in Ukraine according to 2016 - 202 cars per 1000 people. You must know that, the market is saturated mainly due to imports,

which is facilitated by the openness of the domestic market, which is characterized by the degree of imports`penetration , which shows a negative growth trend from 0.47 in 2008 to 0.95 in 2016 [27].

It is based on the research, it was found that the supply of automotive products exceeds the demand for it and the absolute market conditions are characterized by a cyclical wave-like character. In the presence of a clear tendency to reduce sales of domestic products, there are structural changes in the distribution of market shares of enterprises.

The price of the market is the most important characteristic. The number of distribution formation of the car brands at the selling price in 2016 allowed us to establish that the typical car selling price is in the modal range (350; 500) thousand UAH, and for half of the car brands the price does not exceed 575 thousand UAH.

Nevertheless, the analysis of the dynamics of the annual growth of used-car market rates during 2008-2016 gives grounds to assert the existence of an unstable (declining) trend and a high intensity of competition in all three market segments. I'd like to make some remarks concerning as for analysis and evaluation of intensity of competition, monopolization and concentration show that domestic automotive companies operate in a monopolistic market with a high degree of concentration and a very high competition, which is observed in all of the market segments. I want to draw your attention to “Tools for the formation of the market of automotive products of Ukraine” used to assess and forecast the market of automotive products of Ukraine static and dynamic approaches, improved the provisions for identifying patterns of change in supply and demand for automotive products using 6 nonlinear trend models and research methods , developed provisions for establishing the main characteristics of automotive products and assessing their impact on consumer choice using the means of combinatorial analysis, improved the method of forming the market of automotive products on a modified multicriteria optimization model of partial economic equilibrium of the automotive market.

Above all studies have shown that of the set of possible elementary functions to describe the market situation in automotive products in Ukraine, the most adequate are exponential and power functions. An important conjunctural factor is a consumer demand, the choice of which is influenced by product characteristics, the most important of which are: reputation (image) of the manufacturer, price, energy source (gasoline, electricity, gas, diesel fuel), safety characteristics and performance costs. Optimization of these parameters significantly affects consumer choice and, consequently, the formation of market conditions [27].

An effective tool for determining the relative weight of the characteristics of automotive products is a combination analysis, the application of which revealed that for cars the highest weight is inherent in the "reputation of the manufacturer", for trucks - "operating costs", and for buses - "safety characteristics".

The method of formation of the market of automobile products on the modified multicriteria optimization model of partial economic equilibrium of the automotive market, based on the model of general equilibrium of Walras, Arrow-Debre, and describes the interaction of market economies in production and distribution processes. annual cycle and, in contrast to the existing ones, reflects the peculiarities of the functioning of the domestic market and ensures the achievement of the interests of the parties to the interaction.

Actually, the car is one of the most popular durable goods, so seeking to attract funds to the national economy, all countries are trying to develop their own automotive industry in the modern world.

According to Deloitte & Touche USC, companies in the industrial sector of Central and Eastern Europe in 2015 showed the most dynamic revenue growth - by 7.4%. Moreover, revenues increased in 102 out of 126 companies, which is 80.9%. Significant growth rates were provided by companies in the automotive industry, whose average growth rate was 12.9%. In the Czech Republic, revenues of the automotive sector, which accounts for 18% of all companies in the country,

increased by 19.2%. In Hungary - by 13.3%, and in Poland - by 8.5% (Deloitte, 2016) [5].

It is important to note that own car is a "golden dream" for many Ukrainian people. An important point is that if this car is new, reliable and for a reasonable price. However, taxes at customs clearance of 30-80% of the cost of the car force many potential car owners to turn to shadow schemes. Our state with its too high extortion instigates honest citizens, who are willing to pay reasonable taxes, to look for "back roads" [27].

As a result, bypassing the state budget` money settles in the pockets of corrupt officials and clever businessmen.

In short, the mass tax evasion in car imports indicates the need to reduce them. It is obviously that all these excises and duties play no role but to maintain inefficiency and inequality in society. There is not any national car In Ukraine, which is manufactured and does not consist of different imported car kits, and which must be protected from other imported counterparts.

From the 1st of January 2016, the taxes on car customs clearance became less, but the final cost of cars has not changed dramatically. It seemed that, the special duty - 2,15% for new cars with the petrol engine in volume of 1000-1500 cub. sm, 4,32% - 1500-2200 cub. sm - on foreign cars is canceled since the 30th of September 2015, and the additional import duty - 5% - from the 1st of January 2016 [8].

Also, the reduced duty rates on cars from the EU also came into force: 8.8-9.1%. In early January, the MEDT website published a schedule for reducing and imposing import duty rates on new and used cars manufactured in the EU. They will be applied in 2016 in the framework of free trade between Ukraine and the EU. Rates are differentiated depending on the type of car, condition, type of fuel and engine capacity [9].

The high cost of customs clearance is explained by the fact that among all payments, the excise tax increases the price of a foreign car the most, and it has not changed. The share of excise duty in the cost of used five- and six-year-old cars is

especially significant. Older people should not be taken into account, as from January 1, 2016 it is allowed to import only cars of the "Euro 5" standard, ie not older than 2010. A gradual reduction of the excise tax on car imports can bring the cost of customs clearance to a reasonable and acceptable level, and then everyone will benefit - both ordinary Ukrainians and the budget [11].

All because the excise tax on car imports in the Ukrainian reality does not protect the budget, but the interests of the private domestic car business. However, the development of the excise industry does not stimulate. In addition, the amounts of tax paid by importers are almost invisible and have not a special fiscal value for the budget: 2.2 billion uah of excise duty for 11 months of 2015 and 0.8 billion uah in 2016.

Why is it expensive to legally transport a foreign car in today's conditions? For example, a used VW Passat 2012 with an engine capacity of 2.0 in Poland costs about 8 thousand euros. If you import it to Ukraine, clear customs and pay all taxes, the cost of the car will increase to 15 thousand euros. The import duty is 9.1% of the customs value of the car - 736 euros, excise tax - 1,923 euros per cub. sm, which depends on the age of the car, volume and engine power - 3,846 euros, as well as 20% VAT, which is charged on the cost of the car with duty and excise duty is 2,534 euros. That is an additional 7.1 thousand euros from the buyer's pocket [15].

As a result, Ukrainians use different numerous schemes under which cars can be imported at lower costs, or without paying customs taxes at all. Below are the most interesting schemes for underestimating the value of cars for import and transactions with preferential imports without paying taxes. I want to draw your attention to the most popular schemes:

- The simplest- work under the guise of social care.

In each such body there is a queue of people with disabilities for a free car. The advantage is that the legislation provides benefits for the taxation of vehicles imported as charitable assistance. In Europe, a "philanthropist" buys a car, gives it to a charity and, after customs clearance, gives the car to "a needy person". The

person passes the car to another person, who, in fact, bought the car abroad. The main thing is that according to the documents of the social security body, everything was "clean". After the death of the person who received the car, the vehicle must be returned to the social welfare authority to provide other persons in need, but in practice this requirement is not met.

- The most popular. The temporary import of a car by a non-resident without the obligation to re-export under the Istanbul Convention. According to the "Technology of border and customs control at border crossings", approved by the order of the State Border Guard Service and the State Customs Service, a non-resident citizen who temporarily imports a personal vehicle, which is permanently registered with the registration authorities of foreign countries, provides a written commitment to re-export the vehicle. In total, a non-resident citizen temporarily imports a vehicle, does not provide a written commitment. Then he sells the car for cash and leaves Ukraine, usually by air. Even if border guards have questions about the need to remove the car, the non-resident explains that he will definitely do it next time. Meanwhile, the car is disassembled.

- Import of a car by a resident - co-owner of a non-resident company.

A citizen of Ukraine becomes a co-owner of a foreign firm or is employed by a foreign firm. The company buys a car and issues a travel document for a citizen of Ukraine who imports a car into Ukraine and uses it for up to a year. The border areas` residents have some popular schemes when the citizen of Ukraine and a foreign citizen buys cars in joint ownership. Thus, the citizen of Ukraine is entered in the technical passport, and he can use the car in transit for up to ten days.

- Import of the body for the cars` re-equipment.

According to the law, taxes on customs clearance of vehicle units are significantly lower than for the whole car. How the scheme works: a citizen buys a vehicle "under the documents", ie scrap metal, of which only the technical passport remains. The legislation allowed to re-equip the car body with a newer modification. It is necessary to import a body from abroad and to put it allegedly

instead of existing for this purpose. This should be done by specially certified companies. After that it is necessary to reissue the technical passport with a new body number. According to the law, the body is a car without a motor, transmission, muffler system, rear and front suspension, fuel tank, electrical appliances, engine ignition [14].

The scheme has several varieties:

- A disassembled car was imported, but all its spare parts followed it and were designed as separate spare parts with a small tax burden. At the special enterprise the car was going and then it could be registered in The Main Service center of the Ministry of Internal Affairs

- The whole car with the removed wheels was imported, according to documents it was issued as the disassembled body. After customs clearance, the wheels were tightened, the car was ready for registration, and a special assembly plant issued a "fake" certificate.

- The most brazen schemes, such as the import of cars under the guise of trucks.

Passenger cars (passenger minibuses) are imported to Ukraine, which must be classified under code 8703 according to UKTZED with payment of excise duty. Instead, such cars are declared as trucks under code 8704 without paying excise duty. The scheme has several varieties.

1. Cars can be both passenger and cargo, for example, VW Transporter. Such cars remove the rear rows of seats and interior trim, which gives them the appearance of trucks. After customs clearance the certificate on conversion to passenger is "made" and on the basis of this document the car is registered in Main Service Center of the Ministry of Internal Affairs of Ukraine as passenger

2. In fact, such cars as Chrysler Voyager, Chrysler Grand Voyager, Kia Carnival, which are made in the USA, are declared as trucks, but the VIN-code does not decipher the body type. I have some interesting examples as for such scheme. One of the most popular four-wheels-drive Toyota Sequoia and pickup Toyota Tundra can be officialy declared as trucks. You must note here that the

VIN-code of the body allows to bring in to Ukraine as a truck but in fact it is used like normal car. When crossing the border, a "correct" inspection report is drawn up, which indicates the absence of signs of a car - the presence of passenger seats, mountings for them, side and rear windows. In addition, customs did not have programs to decrypt VIN codes (the state did not allocate funds for this), and programs available on the Internet could not serve as an official basis for concluding on the type of body.

3. The most «impudent scheme»

For example, all cars with removed rear seats, such as Peugeot 206 or Opel Astra, were imported unquestionably. On the side glass was glued a polymer film of body color to give the car the appearance of a truck or other cars` type.

As a rule, during the customs control the car is photographed, its photo is attached to the customs clearance documents and served as a basis for the decision to register the car as a truck without paying the excise duties. These schemes clearly demonstrate the absurdity of the existence of excise duty on imported cars. You are free to disagree with me but it is my point of view: “He, who wants to bypass the high excise tax, he will do it at any case”. The officers customs will help those, who wish for a certain "thanks". It is well-known fact that the schemes were, are and will be under such conditions.

To draw the conclusion, the damage is greater than the profit from the excise tax. At any case, the schemes make the budget to lose money that honest citizens could pay for customs clearance at reasonable rates. You must know that in same time, the own car production does not stimulate the excise taxes, because such production has not existed in Ukraine for a long time [20].

2.2 Liberalization of car customs clearance conditions in Ukraine

It is interesting to know that at the end of the year, there 408.1 thousand cars were switched in operation to Ukrainian license plates, which is 3.5 times more than a year earlier. This was reported by Ukravtoprom.

I should note here that almost 3/4 of this number covered cars originating from EU countries. At the same time, 30.7 thousand old used cars received Ukrainian registration during December 2019. Thus, registrations of old cars imported from abroad increased by 44% compared to the previous year. Also, this result is the largest in the last nine months. Instead, Ukrainians registered 9.2 thousand new cars [24].

Such surge of imported second-hand registrations was provoked by the liberalization of customs conditions for used cars and the possibility given by the state to legalize cars that violated the conditions of the transit or temporary stay in Ukraine.

We can note the result of 2019, the registrations of used cars exceeded almost in 5 times sales of new ones and the leading brand was Volkswagen, the first registered in Ukraine among passenger cars with the mileage.

It is important to notice that Ukrainians registered 74,856 imported not the first freshness` Volkswagen, which amount is 16 times more than new cars of the same brand in 2019 [23].

Opel has the second place is with 34,893 used cars. The initial registrations of used Opels were higher in 93 times than the new ones. Renault took the third place - 31,994 cars with mileage (twice the sales of new Renault). Skoda became the fourth most popular, 31,920 Ukrainians chose the imported second-hand of this brand - more than 5 times more than those who chose the new Skoda. Ford passenger cars with a result of 28,202 cars. I want to add that new Fords were realized 16 times less last year closes the top five in the primary market [26].

I must remind here that, the law on customs clearance of cars on foreign registration was accepted in November last year. The car could be cleared through customs with a 50% discount, and from February to May 24 there was a transition period during which drivers could still clear the car through customs, but at full cost.

On the 12th of September, it was accepted in Ukraine to extend the grace period for owners of cars with foreign license plates. Thus, 284 deputies voted for

the corresponding law. Thus, fines from owners of "eurobills" didn't had not been collected till 22th of November 2019 [32].

At the same time, the Cabinet of Ministers of Ukraine decided not to apply penalties for violating the conditions of customs import of cars with foreign registration

The relevant decision was made during a government meeting on the second of October. The main result of 2019 for motorists was that the authorities failed to resolve the issue of cars with EU license plates.

According to the most modest estimates, there are several hundred thousand such cars in Ukraine. The Office of the President assured that the postponement of fines until the end of 2019 will be the last.

However, since 2020, "Euro-blasphemers" have not been fined - an agreement was reached with the participation of Prime Minister Oleksiy Honcharuk, Ministers Arsen Avakov, Vladyslav Kryklyi and members of the public [33].

Officials also promised that the problem would be resolved at the legislative level by mid-February, but this did not happen.

The epic with the "Eurobonds" began during the presidency of Arseniy Yatsenyuk. In recent years, this phenomenon has become so large that it could not but affect the entire automotive market. At the end of 2019, the government again made concessions to owners of duty-free cars, promising not to fine them after January 1 and to consider bills №2342 and №2345 as soon as possible.

Some deputies had to amend the Tax Code, others - to the Customs Code. The first simplifies the procedure of customs clearance of the car, the second - postpones the application of fines for another 180 days. In terms of taxation, the key changes will relate to two points. First of all, it is proposed to determine the rates of excise duty for cars without taking into account the age factor within 180 days from the date of approval of the project. Secondly, it is proposed to suspend the norm, which provides for the application of coefficients to excise different duty rates: for cars aged 5 to 8 years - 40, over 8 years - 50. Officials have promised that

the government will consider bills on 14th of January, and the parliament will settle it questions for a month [36].

As result, the "Eurobonds" disappeared from the list of priority bills, and other issues took their place: the land market, gambling of legalization, personnel changes in the government. Whether the used car bills will be considered in the near future and whether it will solve the problem of cars with EU license plates is an open question. However, it needs an immediate solution, as in recent years the "Eurobonds" have created significant distortions in the country's car market.

According to the in 2019 report of Ukravtoprom Association, the total import of passenger cars cost Ukraine 3.6 billion dollars. This amount includes both new and used cars.

It is interesting to know that 544 thousand cars were being imported to the country during year, which was almost 2.4 times more than a year earlier

At the same time, purchases of new cars increased up to 28% to 95.6 thousand, and of a used car import increased 2.9 times compared to the previous year and amounted to a record 448.8 thousand units.

In such way, used cars were registered almost in five times more in Ukraine than new ones. This is also an absolute record.

Participants of international used car market explain this of imported second-hand by liberalizing the conditions of customs clearance of used cars and the ability to legalize cars that violated the conditions of transit or temporary stay in the country. The same trend is observed in early 2020: January was 4: 1 in favor second hand.

Japan became the largest supplier of new cars in 2019. Almost 20,000 cars, which worth almost 470 million\$ were Japanese[29].

Ukrainians imported 118.6 thousand used cars for more than 536 million dollars from Germany[28].

Ukrainians preferred cars running on diesel fuel: half of the registered vehicles were equipped with diesel engines in 2019. More than 88% of old used imported cars were diesel, which provided diesel with market leadership. The share

of registered gasoline cars was 39%, in 2019 they were chosen by almost 192 thousand motorists. At the same time, among the new cars, gasoline models were clear favorites - their share was 57%.

Ukrainian license plates received almost 39 thousand cars with HBO, only 5.5 thousand of them were new during the year [31].

The share of hybrid cars slightly exceeded 2% of the primary car market. Electric cars accounted for 1% of the primary market. However, the demand for "green" cars in Ukraine has shown positive dynamics for several years in a row. Some drivers prefer used electric cars and the demand is constantly growing for in Ukraine.

Thus, in 2019, 7,542 "green" cars were registered in Ukraine, of which:

- 7,012 were electric cars
- 530 were commercial.

This allowed the electric car market to grow by almost the third in a year, commercial - one and a half times.

The structure of the car market with zero emissions continues to dominate cars with mileage, but on other hand the demand for new car also is growing. This share in 2019 was 92% in electric cars and 96% - in commercial [17].

The average age of electric second-hand cars was four years in the segment of passenger cars and six years - in the segment of commercial vehicles in 2019. Nissan Leaf traditionally remains the most popular electric car in Ukraine. The value of Nissan Leaf is attractive for Ukrainians because of its price.

The top five included Tesla Model S, Volkswagen e-Golf, BMW i3 and Fiat 500e. The best result in sales of new electric cars belongs to Jaguar I-Pace, which was chosen by 145 buyers [30].

Domestic production capacity allows to produce more than 30 thousand units of cars per month, but the results of 2019 were more modest. In 2019, 7,265 vehicles were manufactured in Ukraine., The growth was 10% compared to 2018, but the use of domestic production capacity in 2019 did not exceed 2%.

All statistics on passenger cars are formed by a large assembly at the Eurocar plant, which produces Skoda cars.

Ukrainian plants started a new year with a decline: in January, only 849 cars were produced, which is 5% less than in the same month of 2019 [16].

The production of passenger cars in Ukraine is constantly approaching zero, a trend that dates back to 2008. It seems that it is the "Eurobonds" that can drive the last nail into the coffin of the domestic car industry in the near future.

CONCLUSIONS

To draw the conclusion I want to tell that we live in the world of dual standards. I have shown in my work all advantages and disadvantages of international used car market, and also its influence on the global economic. I should to draw your attention to the fact that 2020 has become a period of legal choice. To buy a car, you can use the services of the domestic market (resale), buy a car abroad and clear it in Ukraine or contact the official operator. The client consciously leans in favor of the used car. The first motivation: ready to spend 50 thousand euros for a new one, but decided to save, finding the same for 40 thousand euros with mileage in excellent condition. Motivation of the second: for the same price it is possible to receive a five-year model of a class above or with the improved complete set. A separate solution is to buy a car abroad on your own or through an intermediary or use the services of an official dealer and buy a used car from him. Ukrainians have been making this choice since the late 1990s, when the main struggle unfolded between official and gray traders in the new car market. Gray imports dominated, with individual brands reaching 80% of sales. Currently, the car market with mileage is going through the same stages and the updated stage of the competition has a positive effect on it. The average age of cars is decreasing, there are more quality cars, and this encourages official dealers to improve the quality of services. Now they are forced to keep a competitive price and provide additional services: a warranty on used cars and support on the road. If the owner wants to protect himself from risks, he turns to official dealers. They will offer to buy a car immediately or sell it with a commission. Purchase here and now: for a day evaluate the car and usually offer a fair market price. The owner receives funds on a bank card or account. Due to the legal prohibition, no official dealer pays in cash. Sale with commission: the owner determines the price himself, for example, the one he was going to announce on Auto.ria or Olx, and the car is sold by a dealer. Dealers of different brands work with a market commission of 3-5%. Most

often, it justifies the time spent and potential risks: now the dealer is responsible for sales, banking and advertising on aggregator sites.

Dealers are interested in selling as soon as possible, so inform potential customers, place ads with quality photos, descriptions, a note of official inspection and the absence of legal risks during working in a highly competitive environment. We must remember that the speed of sales depends on the cost. In order not to wait two or three months, you need to pay attention to the terms of the contract and set acceptable time limits for the sale. Announcing a higher price than the market average, the owner will wait longer. The discount of \$ 500 will allow you to sell the car the next day. Terms of official purchase of used cars are similar among car brands. In general, there is a gold standard: cars under the age of five with a mileage of up to 150 thousand km. Professional dealers can immediately buy a car from the owner, offering funds on the spot. Most often, these are mutually beneficial agreements, because only an official dealer who knows everything about this car can immediately pay without a shadow of a doubt. It is not possible to officially buy or sell a used car during the quarantine period. Service centers of the Ministry of Internal Affairs register and re-register only new cars. Ukrainians sell cars under a temporary power of attorney with the obligation to re-register as the new owner after the resumption of full-fledged service centers. This is a serious risk: in the event of an accident, the administrative report and the receipt for the payment of fines will be given to the owner, not the person behind the wheel. In the next three years, electrification and hybridization technologies will affect the used car market in Ukraine. The trend is moving from the European Union, which has been affected by "dieselgate" scandals. After we can note that the demand for diesel cars and their cost fell. Before EU residents receive a calculation from the dealer of the cost of ownership, based on the price, projected service life and mileage. The calculation became part of the purchase of a car in the Western market. It includes the cost of maintenance for the period of operation, fuel for the planned mileage, insurance, financing, as well as the projected final cost. The owners had hoped to sell the diesel car for a certain price in five years

according to the calculation, but as a result of the "diesel gate" diesel cars suddenly fell in price by thousands of dollars. The owners tried to get rid of them quickly, that's why so many of these cars were imported to Ukraine - they were sold more expensively here. As we are catching up with all the trends of the European Union, it will start in Ukraine as well but later. Everyone, who plans to buy a car should calculate its market value in three to five years, taking into account the trend of electrification.

REFERENCES

1. Mačaitytė, I., Virbašiūtė, G. (2018). Volkswagen Emission Scandal and Corporate Social Responsibility – A Case Study. *Business Ethics and Leadership*, 2(1), 6-13. Doi: 10.21272/bel.2(1).6-13.2018 Namita, Ms., Gupta, Ms. Arzoo. (2019).
2. Cross Border Acquisition of JLR: A Boon or Pain for Tata Motors. *Financial Markets, Institutions and Risks*, 3(2), 52-58. [http://doi.org/10.21272/fmir.3\(2\).52-58.2019](http://doi.org/10.21272/fmir.3(2).52-58.2019).
3. Kaya, H.D. (2019). Government Support, Entrepreneurial Activity and Firm Growth. *SocioEconomic Challenges*, 3(3), 5-12. [http://doi.org/10.21272/sec.3\(3\).5-12.2019](http://doi.org/10.21272/sec.3(3).5-12.2019).
4. Hrytsenko, L., Petrushenko, M., Daher, K. (2017). The necessity of socio-ecological modification of two-tier economic model of secondary resources management in Ukraine. *SocioEconomic Challenges*, 1(1), 68-76. Doi: 10.21272/sec.2017.1-08.
5. Sahqani, G. B. (2017). Aid and Governance: issues in developing countries. *SocioEconomic Challenges*, 1(2), 34-38. Doi: 10.21272/sec.1(2).34-38.2017.
6. Louis, R. (2017). A new economic order for global prosperity. *SocioEconomic Challenges*, 1(2), 52- 58. Doi: 10.21272/sec.1(2).
7. Vieira, P.C., Matvieieva, Yu., Myroshnychenko, Iu. The World's New Vehicle Market: Outlook for 2018 Access mode:[<http://www.acs-giz.si/resources/files/research-the-worlds-new-vehicle-market-utlook-for-2018.pdf>]
8. OICA. Sale statistics cars by country and type. URL: <http://www.oica.net/category/sales-statistics/>.
9. OICA. Production statistics car by country and type. Access mode:[<http://www.oica.net/production-statistics/>].
10. OICA. Vehicles in use by country and type. Access mode:[<http://www.oica.net/category/vehicles-in-use/>].

11. UN Comtrade. Access mode:[<https://comtrade.un.org/labs/data-explorer>].
12. Гладков И.С. Международная товарная торговля 2001–2015: тренды и провалы 2015 г. // Власть. – 2016. – № 6. – С. 92–100.
13. Bloomberg News: China Regulator to Propose 50 % Cut to Car Purchase Tax. Access mode:[<https://www.bloomberg.com/news/articles/2018-10-29/china-regulator-is-said-to-propose-50-cut-to-car-purchase-tax>]
14. Liker J.K. The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer. N.Y.: McGraw-Hill, 2004.
15. Motor Vehicle Statistics of Japan. 2018. URL: <http://jama-english.jp/publications/MVS2018.pdf>
16. Motor Vehicles per 1000 People: Countries Compared. URL: <https://www.nationmaster.com/country-info/stats/Transport/Road/Motor-vehicles-per-1000-people#date>.
17. The World's New Vehicle Market: Outlook for 2018. URL: <http://www.acs-giz.si/resources/files/research-the-worlds-new-vehicle-market-outlook-for-2018.pdf>.
18. ACEA. URL: <https://www.acea.be>
19. Average Age of Light Vehicles in the U.S. from 2003 to 2016 (in Years).URL: <https://www.statista.com/statistics/261881/average-age-of-light-vehicles-in-the-united-states/>.
20. NAFTA and Motor Vehicle Trade. URL: <https://fas.org/sgp/crs/row/R44907.pdf>.
21. Atiyeh, C. (2017). Everything you need to know about the VW Diesel-Emissions Scandal. Resource document.<https://blog.caranddriver.com/everything-you-need-to-know-about-the-vw-diesel-emissionsscandal/>. Accessed 10 November.
22. Barnett, M. L. (2007). Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. *Academy of Management Review*, 32(3), 796 p.

23. Boston, W. (2017). VW sales rise in 2016 despite the scandal. Resource document. URL: <https://www.marketwatch.com/story/volkswagen-sales-rise-in-2016-despite-scandal-2017-01-09F>. Accessed 11 November 2017.
24. Catherine, J., Sanker, S., & CB, B. (2014). Corporate crises in the age of corporate social responsibility. *Business Horizons*, no. (3).
25. Chatterji, A., & Listokin, S. (2007). Corporate social irresponsibility. *Democracy Journal*, pp. 52-63.
26. CNBC, 2017. VW takes new \$3 billion hit over diesel emissions scandal. Resource document. <https://www.cnbc.com/2017/09/29/vw-takes-new-3-billion-hit-over-diesel-emissions-scandal.html>. Demandt, B. (2017). Volkswagen. Resource document. <http://carsalesbase.com/european-car-salesdata/volkswagen/>. Accessed 11 November 2017.
27. European Commission. (2017). Corporate Social Responsibility. Resource document. https://ec.europa.eu/growth/industry/corporate-social-responsibility_en. Accessed 10 November 2017.
28. FTSE Russell. FTSE4Good Index Series. Resource document. <http://www.ftse.com/products/indices/FTSE4Good>. Accessed 12 November.
29. Hull, R. (2015). German vehicle regulator broadens investigation: 23 carmakers including BMW, Ford, Mercedes and Toyota being tested. Resource document. URL: <http://www.thisismoney.co.uk/money/cars/article3315123/23-carmakers-including-BMW-Ford-Toyota-emissions-tested-watchdog.html>. Accessed 11 November 2017.
30. Interbrand. Methodology. Resource document. <http://interbrand.com/best-brands/best-globalbrands/methodology/>. Accessed 12 November.
31. Mocciano, Li Destri A. (2013). Managerial irresponsibility and firm survival. Pivoting the company in the aftermath of a social scandal, Franco Angeli, Milano.

32. Ranking The Brands, (2017). Rankings per brand. Resource document. <https://www.rankingthebrands.com/Brand-detail.aspx?brandID=189>. Accessed 11 November 2017.
33. Reputation institute. About RepTrak. The gold standard for reputation measurement. Resource document. <https://www.reputationinstitute.com/reputation-measurement-services/reptrak-framework>. Accessed 12 November.
34. Volkswagen Annual Report (2009). Strategy 2018. Resource document.
<http://annualreport2009.volkswagenag.com/servicepages/search.php?q=strategy+2018&pageID=33738&ca t=b>. Accessed 10 November 2017.
35. Weber, M. (2008). The business case for corporate social responsibility. *European Management Journal*, 26(4), 247-261.
36. Xueming, L., & Bhattacharya, C. (2006, October). Corporate Social Responsibility, Customer Satisfaction, and Market Value. *Journal of Marketing*, 70(4), 1-18.

APPENDIX A

SUMMARY

Liashenko A. V. International used-car market.

Qualification bachelor paper. Sumy State University, Sumy, 2020.

Qualifying bachelor is devoted to the study of the role of the International used-car market and its impact on the global economy. An analysis of the the international used car market contribution to the world economy, implementation of new ecological norms on the international automobile markets and their consequences, liberalization of car customs clearance conditions, trends and prospects in Ukraine was conducted.

Key words: car market, trends development, price dynamics, development prospects, forecasting, ranking of manufactors

АНОТАЦІЯ

Ляшенко А. В. Міжнародний ринок вживаних автомобілів.

Кваліфікаційна бакалаврська робота. Сумський державний університет, Суми, 2020 рік.

Кваліфікаційна бакалаврська робота присвячена вивченню ролі міжнародного ринку вживаних автомобілів та його впливу на світову економіку. Проаналізований внесок міжнародного ринку вживаних автомобілів у світову економіку, впровадження нових екологічних норм на міжнародних автомобільних ринках та їх наслідків, лібералізації умов митного оформлення автомобілів, тенденцій та перспектив в Україні.

Ключові слова: ринок автомобілів, розвиток тенденцій, динаміка цін, перспективи розвитку, прогнозування, рейтинг виробників