

# СУЧАСНІ ПРОБЛЕМИ РЕГІОНАЛЬНОГО РОЗВИТКУ

## MODERN PROBLEMS OF REGIONAL DEVELOPMENT

UDC 339.133.2

### UKRAINIAN AUTOMOTIVE MARKET FORECAST FOR 2014

Iryna O. Zlatova

*Odessa National Polytechnic University, Odessa, Ukraine*

*Златова І.О. Прогноз розвитку автомобільно-го ринку України на 2014 рік.*

В статті розглянуто основні тенденції автомобільного ринку України, а саме потенціал ринку, фактори впливу на обсяги продажів. Систематизовано дані автомобільних продажів в Україні за період з 2009 р. по третій квартал 2013 р. Автомобільний ринок України проаналізовано у порівнянні зі світовими ринками. Здійснено прогноз обсягів продажів нових авто на 2014 рік.

*Ключові слова:* прогноз продажів легкових автомобілів, автомобільний ринок, прогноз на 2014 рік, тенденції ринку нових легкових авто

*Златова И.А. Прогноз развития автомобильного рынка Украины на 2014 год.*

В статье рассмотрены основные тенденции автомобильного рынка Украины, а именно потенциал рынка, факторы влияния на объемы продаж. Систематизированы данные автомобильных продаж в Украине за период с 2009г. по третий квартал 2013г. Автомобильный рынок Украины проанализирован в сравнении с мировыми рынками. Произведен прогноз объемов продаж новых автомобилей на 2014 г.

*Ключевые слова:* прогноз продаж легковых автомобилей, автомобильный рынок, прогноз на 2014 год, тенденции рынка новых легковых автомобилей

*Zlatova I.A. Ukrainian automotive market forecast for 2014.*

The article contains the main trends of Ukrainian automotive market, specifically market potential, influence factors of sales volume. 2009-2013 sales volume data are systematized. Ukrainian automotive market is compared with world markets. New cars sales volume forecast is made.

*Keywords:* forecast of passenger car market, automotive market, forecast for 2014, automotive market trend

The development of Ukrainian automotive market in direct ratio affect on the economic situation in general. In fact, according to the State Statistics Service of Ukraine, the sales of cars and parts are on average 10% of annual retail turnover state. In the group of non-food products, the figure just ahead of the share of sales of motor petrol, which is 11,7% per a year and are fully dependent on car sales. So, the car market controls at least 20% of retail turnover, that is why it is strategically important for Ukraine.

New car market in Ukraine is one of the most dynamic market in Europe. In 2005 Ukraine took 12<sup>th</sup> place at volume of car sales in Europe. Ukraine becomes more attractive for importers of motor technology. However, recent changes in the law limit the rate of growth in car sales in general. Predicting the market situation in 2014 will help Ukrainian automotive industry enterprises plan their activities more legibly and find new ways of marketing.

#### Analysis of recent research and publications

Many professionals are interested in dynamics of European and world car market. The latest market research and surveys was made by professors such as Bryuhovetska N., Bubnov Yu., Prydatko A., Moroz L. and etc.

They were devoted to the situation in the domestic and global markets, they have studied the distribution of Ukrainian automakers forces. At Morozs' study was conducted the prediction on 2012, which didn't come true. Namely, it was announced 280 thousand units of car sales per year, while sales was actually no more than 235 thousand. Perhaps there was not studied all factors, that influence on the market. What is more, not enough time has passed after the crisis of 2008-2009, in order to get enough data to make a prediction. Prediction could not be made no more that 30% of retrospective.

#### Unsolved aspects of the problem

Retrospective and current situation of the automotive market was analyzed in previous studies.

Not enough attention was endowed on prognostication (predictions) as one of the most important features of the economy. Prognostication allows domestic producers to find the rate of market growth and develop plans sales and activities to increase their market share.

Some consulting and auditing agencies conducted prognostication of car market.

Auditing company Ernst & Young predicted that car market will increase in 2014 by 5%. Macroeconomic indicators were analyzed and prognostication was made on their basis. Also, MPP Consulting company was made a prediction for the period 2009-2019. However, in a dynamic and unstable political and economic situation in the country, 10 years – is too long period for prognostication, so it could be unreliable.

The main aim of the article is to find the equation of the trend line to predict changes in the automotive market and identify factors influencing the demand for new cars. Due to the construction of an economic model it is possible to predict future fluctuations in demand. However, the mission of this study is to find the factors that may affect the constructed model, because the market is very active and sensitive in changes in the society. Therefore, it is necessary to correct the mathematical prediction in the context of public attitudes, public policy and other changes.

**The main part**

To make a prediction, let’s consider the monthly sales statistics in 2009-2013 according to

UkrAutoprom and Autoconsalting. Sales of automotive market is very difficult to analyze as they are inhomogeneous because of the many situational factors. These dissonant factors are introduction of special duty and fee utilization.

So, April and August 2013 were months of excessive demand, May and September 2013 - months of market stagnation. We can clearly see awareness of population for legislative reform in the country. Consumer expectations led them to an excessive demand on cars for the introduction of fees and charges, that was compensated in next months, causing a reduction in the market for almost all brands represented brands. ZAZ and Geely brands have shown the increasing of sales. If we consider the example of the Odessa region, according to beginning of October 2013. ZAZ has sold about 30 cars. While many multi-brand car dealers for several brands have just realized no more than 20 cars. Most of the players suffered a decline in sales.

The purpose of the introduction of additional duties on cars was to support domestic producers, as well as increasing the share of revenue. Then at this level it is planed to introduce recycling collection for domestic car assembly and production. It could increase revenues. But consequences of such policy can be merciless to the market as a whole .If surcharges for domestic car brands will be imposed, as a result of higher prices, they will lose their popularity among consumers and risk being left outside sales leaders in Ukraine.



Fig. 1. Monthly sales volume of new motor cars in 2009 – III quarter 2013, thousands

A significant decline in the market is also characterized for this period in 2009, linked to the crisis of 2008, which also introduces disorder in the natural rate of growth in demand, its frequency and seasonality, connected with the crisis of 2008, which

also introduces disorder in the natural rate of demand growth , its frequency and seasonality. However, sales have gone up gradually in 2012

For a better understanding of the principles and laws of the automotive market, let's consider sales in

terms of blocks (Fig. 2).

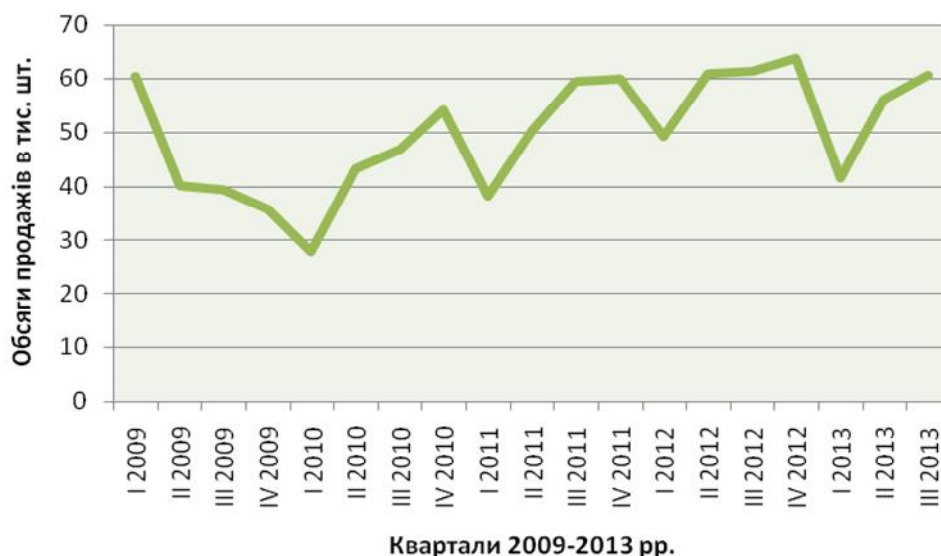


Fig. 2. Quarterly sales volume of new motor cars in 2009 – III quarter 2013, thousands

So it is clearly to see a trend decline in sales in the first quarter of each year. This is due to the fact that in the IV quarter of each year is an increase in sales due to the sell-out car models of this year, these types of discounts and sales promotion as loans, installments, that carried out before the launch of new models at the beginning of each next year.

The decline in the I quarter changes into the lift of the second quarter, growth are continuing in the third quarter and in the IV quarter reach the peak and then fall off early at the beginning of next year. This variations can be called as "natural", because supply and demand are the main influence and also competition among dealers for buyers' attention to their car brands in different periods of the year.

Based on these annual fluctuations in sales volumes, importers have formed a their goods policy. This level of development, sales of models of this year during November and December allowed to develop Ukrainian automotive market at European level even outperform it. The situation in the domestic car market in 2013 is formed largely under the influence of legislative initiatives, sales volume ranged wrongly among months of a block, as a result, the traditional stages of sales fluctuations were broken. On the one hand, it required considerable flexibility in the product pricing and sales, on the other hand- almost exhausted their tools stock to attract potential buyers. Most importers did not conduct a traditional launch of new car models in 2013, because it always requires significant financial and marketing effort. Some importers conducted only a «facelift» of models of the old lineup, choosing more practical and predictable method.

Thus, due to artificial changes in the market, the terms of cars launch is completely changed, the number of modified older models are increased. Ukrainian market is at risk to be overflowed from lagging innovating technology cars and stay behind European and even Russian market. The Russian Federation has been implemented government program by recycling old cars. In March 2010, the state allocated funds that provided savings of approximately 50,000 RUR when buying a new car produced in Russia, provided that they will recycle their old car. This policy has led to the growth of the market, which positively affected the situation of the Russian car industry. Even despite the fact that 2012 was introduced similar Ukrainian utilization fee for foreign cars, and since January 2014 – also for Russian cars, the market show rather good results in general.

Let's turn to the construction of the model. Periodicity of the data is seen in 2010-2013 and try to maximize the precision and reliability of model. This will help to identify persistent patterns that have been affected due to the crisis factors.

15 blocks were presented for the analysis. This amount of data makes it possible to forecast a maximum of 5 periods: the IV quarter of 2013, which will be the control and the four quarters of 2014. We found out that data has specific seasonality. Therefore, the method of moving average was selected seasonal indices, namely the first quarter = 0,78, = 1,028 second quarter = 1,028, third quarter = 1,077, fourth quarter = 1,089.

Most accurately describes this power function curve, which corresponds to more than 83% of the

data. Figure 3 also presented a trajectory prediction power function for 5 periods ahead. Trend equation has the form  $y = 37,1 \times x^{0,175}$ , where  $x$  – is the

number of years from 1 to 20 (number of quarters in 2010, 2014).

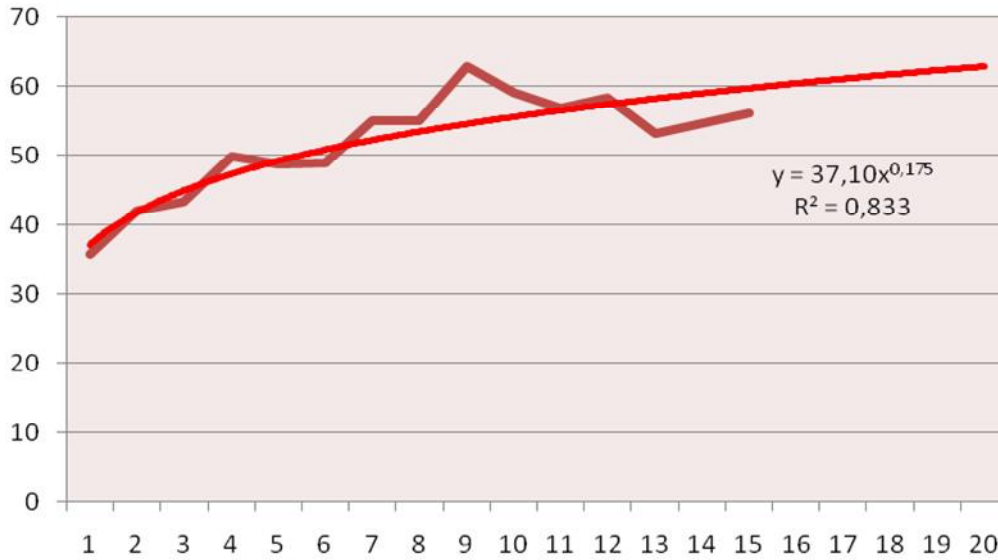


Fig. 3. Trendline without seasonality and power function

This trend does not account for seasonality, so the data must be multiplied by the seasonal indices in accordance with belonging to the quarters. Based on

seasonal demand curve indices in 2009-2014 it will have the form shown in Fig. 4.



Fig. 4. Sales volume of new motor cars in 2009-2014, thousands

Thus, the results of the model in the IV quarter of 2013 we should expect sales volumes to 65.7 thousand vehicles in the first quarter of 2014. - 47.5 ths .. in the second quarter of 2014 - 63.3 thousand

pieces .. in the third quarter of 2014 - 66.9 thousand pieces .. in IV quarter 2014 - 68 3 thos . In addition to the likelihood of this prediction mathematical laws affect a number of other factors. In particular, their

level of motorization of the population policy of state regulation of the market, level of income and others.

According to the State Statistics Service of Ukraine, Ukrainian incomes grow by an average of 10% on a quarterly basis, indicating the potential for development, including the new car market.

According to IA «Autoconsalting» in November 2012, the motorization of the Ukrainian population is 187 cars per 1,000 people. It is a low rate compared to the U.S. and European countries, which ranks first in the ranking of car ownership according to the UN parameters of maximum 765 cars per 1,000 people. With this motorization the potential of Ukrainian automobile market reaches a minimum of 8 million units. cars. Utilization fee continues to influence on the cars demand. Consumers who purchased the car in September, had difficulty with registration domestic cars and imported cars. This is due to the imperfect development of the law and uncorrected work of the relevant parts. So, many buyers delay the purchasing of a car because of the problems with registration. Given the large number of law opponents and in contravention of World Trade Organization, the collapse of the market for more than 14%, could be cancel the collection and utilization special duty. However, introduction of new environmental tax is expected. On the other hand, a law on subsidies putting old cars in recycling also is preparing. According to news agency «Interfax-Ukraine», the government plans to compensate about 12 thousand. during the purchasing of new domestic vehicles provided in putting the old car in recycling. This information may put the car market in standby and suspend the growth of car demand. Given the low volume of sales in October, should expect the volume safe for sales in the IV quarter 2013 at the level of the third quarter, which will be 60 thousand or a slight increase of 1-2 thousand. The situation in 2014 may respond to the results of the forecast due to the gradual stabilization of the market, viz., annual sales amount to approximately 240 thousand cars, the market growth rate – 8% from the previous year. The main question is who from representatives of the automotive industry will take advantage of the growing market and meet the newly created demand.

First, the increasing in market share in a growing market is possible with low prices. This can be implemented on condition of cars assembled in the territory of Ukraine. According to the group «Bogdan» in Ukraine, namely the factory in Cherkassy, are engaged in the collection of cars *JAC* and *Great Wall*, the city hatchbacks, crossovers, compact MPV low price range that will compete *ZAZ* and *Geely*. It is also planning a collection of some models of the brand *Lifan*. Cars *Opel AstraClassic* and *Chevrolet Lacetti* are planned the factory assembly and basic models of brand *Kia*. The above brands are in demand due to satisfactory quality and low price. Thus, if we consider the performance rates, maximum speed, fuel consumption and power the best selling cars in Ukraine, we can see an insignificant difference characteristics and significant

differences in prices that range from 60 thousand. to 200 thousand. The main differences between the cars are in their configuration and teachers. It can be concluded that Ukrainian appreciate comfort and ready to pay for it. Domestic automakers should focus on comfort for a low price.

Car at a low price (*ZAZ Sens* 57,900 UAH) in the minimum configuration includes: Remote control trunk opening electrocorrection headlights, heated rear window, 3-point seat belts, fabric seat cover, rear fog lights, steel wheels, a chrome grille, turn, the vehicle with a similar number of horsepower, maximum speed, fuel consumption but cost 151 thousand. In turn, the vehicle with a similar number of horsepower, maximum speed, fuel consumption but with of cost 151 thousand. (*Volkswagen Polo*) in addition to the above has the following Options: caps on wheels, air conditioning, ABS, heated front seats, halogen headlights, airbags for driver and front passenger. Minor differences in configuration, at least no difference at 90 thousand. We can conclude that this is the price for a brand that is merit communications policy. It follows that excellent communication policy – is another method of increasing sales and profits.

Communications Policy of domestic producers should be:

1) Informative – because consumers do not always realize that for \$7000-8000 you can buy a new car as an alternative to a used car 90 years by the same amount. You must show all the advantages of a new car, you can even hold a separate campaign for that purpose.

2) Flexible in terms of buying – permanent lending, leasing, installment and other incentives. Thus not only conduct sales promotion, we should actively disseminate information on all such discounts, special offers and promotions.

3) Emotionally - rational factors during buying a car is not available. Few consumers really compare the performance of the car before buying.

The launch of new models is one of the methods to increase market share. New model car is a chance to win the unreached niche in the market, both to draw attention to the older models. The largest prime number can be seen at the Metropolitan Motor Show on September 14 in Kiev, where he presented the *Mercedes-Benz S-Class*, *Opel Mokka*, *Opel Adam*, facelift *Opel Insignia NEW* and *Opel Insignia Country Tourer 4X4*, *Kia Carens*, *KIA Optima FL*, *Chery Arrizo 7*, *Chery A19*.

## Conclusions

As a result of economic and mathematical analysis of the third quarter of 2013. In IV quarter 2014 projected the following sales of new cars in Ukraine (Table 1).

In the absence of government interference prediction for 2014 will meet the proposed model. In case of any legislative changes it is necessary to correct prediction for maximum accuracy.

Thus, for the growth of the automobile market it is necessary to cancel undemocratic laws that restrict freedom and affordability during buying cars.

Table 1. Forecast of sales of passenger cars in Ukraine 2013-2014 years

Sales volume, thousands	Period (quarters)
62,5	IV 2013
47,5	I 2014
63,3	II 2014
66,9	III 2014
68,3	IV 2014

It should release the market to restore the natural order cycle development. In this case, market growth will be due to increased demand for low price car segment, cars with convenient conditions of purchase, credit installments. The positive trend of the market is manufacturing plants in Ukrainian foreign car brands, making a significant contribution to the state's economy. This means that importers are profitable to produce cars for domestic plants than paying all customs duties on imports. This trend will create additional jobs and give an experience to domestic automakers. However, in the future, having enough experience in the production of foreign models, you

can go to production and implementation of their own development car.

In future studies should focus on developing methods for the promotion of domestic producers, because at this stage they are entirely dependent on foreign models development. Among them there are models developed by *Daewoo*, *Hyundai*, *JAC*, *Great Wall* and others. Domestic car design is a future of automotive industry in Ukraine. Given that the market has a potential, you should start designing new car models, to develop its product policy, present to the market really Ukrainian car.

#### References:

1. Брюховецкая Н.Е. Анализ ведущих производителей легковых автомобилей на мировых рынках / Н.Е. Брюховецкая // Бизнесинформ. – 2010. – № 8. – С. 119-124.
2. Бубнов Ю.В. Анализ мирового рынка легковых автомобилей [Электронный ресурс] / Ю.В. Бубнов, А.О. Кизим, Н.О. Старкова // Политематический сетевой электронный научный журнал Кубанского государственного аграрного университета. – 2013. – № 88(04). – Режим доступа до журналу: <http://ej.kubagro.ru/2013/04/pdf/25.pdf>
3. Придатко А.А. Автомобильный рынок Украины [Электронный ресурс] / А.А. Придатко // Глобальні та локальні проблеми соціально-економічного розвитку: нові виклики та рішення: тези доповідей Всеукр. наук.-практ. конф. студентів, аспірантів і молодих учених, 6-7 квітня 2012 р. / М-во освіти і науки, молоді та спорту України, Харків. нац. ун-т ім. В.Н. Каразіна. – Х. : ХНУ імені В.Н. Каразіна, 2012. – Режим доступу: <http://dspace.univer.kharkov.ua/bitstream/123456789/6751/2/Pridatko.pdf>
4. Мороз Л.А. Тенденції розвитку українського автомобільного ринку і маркетингова комунікаційна політика його учасників / Л. А. Мороз // Вісник Національного університету «Львівська політехніка». Логістика. – 2012. – № 735. – С. 154-159.
5. AUTO-Consulting. Інформаційно-аналітична група [Електронний ресурс]. Режим доступу: <http://www.autoconsulting.com.ua>
6. УкрАвтопром. [Електронний ресурс]. Асоціація автопроизводителей Украины. Киев, Украина. Режим доступу: <http://ukrautoprom.com.ua/index.php>

Надано до редакції 24.08.2013

Златова Ірина Олександрівна / Iryna O. Zlatova  
[zlatovararabota@gmail.com](mailto:zlatovararabota@gmail.com)

#### Посилання на статтю / Reference a Journal Article:

Ukrainian automotive market forecast for 2014 [Електронний ресурс] / I.O. Zlatova // Економіка: реалії часу. Науковий журнал. – 2013. – № 3 (8). – С. 166-171. – Режим доступу до журн.: <http://economics.opu.ua/files/archive/2013/n3.html>