# "Analysis of chicken production trends in Ukraine"

AUTHORS	Alla Fatenok-Tkachuk Myroslava Kulynych Anna Safarova Nadiya Bukalo
ARTICLE INFO	Alla Fatenok-Tkachuk, Myroslava Kulynych, Anna Safarova and Nadiya Bukalo (2017). Analysis of chicken production trends in Ukraine. <i>Problems and Perspectives in Management</i> , <i>15</i> (4), 302-316. doi:10.21511/ppm.15(4-1).2017.14
DOI	http://dx.doi.org/10.21511/ppm.15(4-1).2017.14
RELEASED ON	Wednesday, 27 December 2017
RECEIVED ON	Wednesday, 25 October 2017
ACCEPTED ON	Friday, 22 December 2017
LICENSE	This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License
JOURNAL	"Problems and Perspectives in Management"
ISSN PRINT	1727-7051
ISSN ONLINE	1810-5467
PUBLISHER	LLC "Consulting Publishing Company "Business Perspectives"
FOUNDER	LLC "Consulting Publishing Company "Business Perspectives"

o <sup>©</sup>	B	===
NUMBER OF REFERENCES	NUMBER OF FIGURES	NUMBER OF TABLES
30	8	4

© The author(s) 2024. This publication is an open access article.





#### **BUSINESS PERSPECTIVES**



LLC "CPC "Business Perspectives" Hryhorii Skovoroda lane, 10, Sumy, 40022, Ukraine

www.businessperspectives.org

**Received on:** 25<sup>th</sup> of October, 2017 **Accepted on:** 22<sup>nd</sup> of December, 2017

© Alla Fatenok-Tkachuk, Myroslava Kulynych, Anna Safarova, Nadiya Bukalo, 2017

Alla Fatenok-Tkachuk, PhD in Accounting and auditing, Lesya Ukrainka Eastern European National University, Lutsk, Ukraine.

Myroslava Kulynych, PhD in Accounting and auditing, Lesya Ukrainka Eastern European National University, Lutsk, Ukraine.

Anna Safarova, PhD in Accounting and auditing, Lesya Ukrainka Eastern European National University, Lutsk, Ukraine.

Nadiya Bukalo, PhD in Accounting and auditing, Lesya Ukrainka Eastern European National University, Lutsk, Ukraine.







This is an Open Access article, distributed under the terms of the Creative Commons Attribution-Non-Commercial 4.0 International license, which permits re-use, distribution, and reproduction, provided the materials aren't used for commercial purposes and the original work is properly cited.

Alla Fatenok-Tkachuk (Ukraine), Myroslava Kulynych (Ukraine), Anna Safarova (Ukraine), Nadiya Bukalo (Ukraine)

# ANALYSIS OF CHICKEN PRODUCTION TRENDS IN UKRAINE

#### **Abstract**

Poultry farming is one of the most promising areas of production not only in Ukraine, but also in the world. This is due to the high demand for protein products and increased consumption. Ukraine does not use enough of its export potential in the agrarian sector. It is precisely these circumstances that lead to choosing the mentioned direction of production by domestic producers as the basis for the research.

The tendencies of the Ukrainian poultry enterprises development and features of the chicken market are generalized, namely the volume of cultivation and sale on the slaughter of poultry by Ukrainian producers, the cost price and profitability of poultry meat production have been analyzed; the specific features of the products range are defined in all competitor companies and products offered for export. The competitiveness of domestic poultry production in comparison with domestic and foreign analogues has been investigated. For the study, such enterprises as the LLC Poultry Complex "Gubin", TM "Pan Kurchak", slaughterhouse "Piorkowscy" and JSC "Superdrop" were taken. It is established that domestic products are competitive both in terms of price and taste properties. The dynamics of export and import of poultry meat in Ukraine and abroad is analyzed. Significant growth of poultry meat export as compared to previous periods has been revealed, which is explained by obtaining permission documents and implementation of measures by domestic producers to bring poultry products closer to international standards. The prospects for the development of the investigated production direction are designed.

**Keywords** analysis, market of poultry breeding production, competitiveness, development tendencies

JEL Classification Q18, F13

#### INTRODUCTION

Under current conditions, poultry sector in Ukraine and abroad is one of the main producers of important protein products that are marked by biological full-value for the human organism and economic availability for most consumers. In the context of Ukraine's accession to the WTO, the poultry companies should prove their viability, the ability to maintain adequate competition through effective use of resources within a market economy. At the stage of fierce foreign competition, domestic producers have received certain benefits, as evidenced by the annual increase in production of eggs and poultry. In 2008–2012, poultry industry occupies a leading position in the sector of meat production in Ukraine (34-36% of the overall production), and in 2013–2014, it outruns the traditional industries, both cattle farming and pig farming.

It is necessary to identify the main tendencies of the state and outline the main development directions of domestic producers in order to improve the efficiency of the poultry industry functioning.

#### 1. LITERATURE REVIEW

The problems of potential development of the Ukrainian agricultural complex enterprises have been the research objects of leading scientists. In their works, there has been perfectly revealed one of the development issues – expansion of sales channels, increasing of competitiveness or quality of poultry breeding production.

The scientists have noticed that issues of enterprises and meat manufacturers have caused the state, when nowadays there is a keen industrial problem including population growth and improvements in people's well-being and therefore quantity and quality of products consumption. Almost half of 6 billion of people suffer from protein lack, which is estimated at 10-25 million per year. Topikha and Topikha (2006) researched the issue of swine breeding branch in Ukraine and in the world. The results of their research have become methodological recommendations relating to animals' selection, which brings the maximum increase for industries that deal with their growing. The authors have noticed that branch issues are approximately the same in the whole world, consequently, Ukraine has a great probability to enter the global market with this kind of production.

In particular, Andriichuk (2006) has clarified the efficiency issues of agricultural enterprises of different activity directions and has emphasized the necessity of their assets capitalization. The separate attention is paid to analysis of financial and economic activity of the separate enterprises for finding out development reserves, but there are not taken into consideration factors of outer environment and their influence on the activity of agricultural enterprises.

Opposing such position, in the scientific researches and in the analysis of outer environment, there has been defined only one of the outer influence factors or agricultural complex enterprises, which are important to be taken into consideration for development in general and foreign economic affairs in particular. For example, in the work of Lipych, there has been emphasized the necessity of non-tariff barriers analysis, which merge at the external markets and have a great influence on the state and development priorities of external eco-

nomic affairs of poultry breeding enterprises. In turn, the main factor of high competitive position of meat production enterprises, in accordance with Lisitsyn, is considered to be the production congruence, which is offered at the internal and external markets, to the quality standards, which are valid at each market. The purpose of his research is the congruence of meat production to requirements of processing enterprises. We share the opinion that production quality should be a key factor for development and therefore we consider quality as an essential analysis object for finding out development tendencies.

The part of the authors are analyzing poultry breeding from the point of view of defining problems that are slowing the development down. In particular, Melnyk has clarified the ways of increasing manufacture volumes of poultry breeding enterprises through the intensification of poultry breeding and according to this, analysis in his work is conducted in the extract of the individual enterprises from the point of view of feeding organization. Yaroshenko (2003) concentrates on facilities of state support and regulation that will promote the reorganization of organizationallegal structures on the basis of different property forms, targeting financing involvement of energy intensity decrease of meat production, modernization and equipment replacement. That is why, according to the author, this promotes gaining of new development priorities.

The part of works of domestic scientists are dedicated to one development direction of agricultural complex enterprises. For example, Datsii (2008) reveals methodological analysis recommendations of innovative development of agricultural economic branches. In the research, there has been conducted the analysis of innovative technologies implementation state and their influence on the enterprise efficiency in the extract of the separate production directions. The author doesn't concentrate on analysis peculiarities of each separate branch, in particular poultry breeding, which would be relevant for our research, but only gives general methodology.

So if there is increased attention on analysis of poultry breeding enterprises, there is emphasized the separate problematics. For example, in the works of Tereshchenko (2011), there is analyzed the poultry breeding enterprises state at the internal market, especially in the extract of enterprises with a huge production volume, underlined the selection necessity. The author states that "Huge goods production of eggs and poultry meat mostly is becoming overstate phenomena. The following poultry breeding development is possible by the external markets expansion". So the external economic activity should become the separate kind of activity that promotes development, that's why analysis results of this direction should the element of complex analysis methodology.

There have remained issues about complex estimation of poultry breeding domestic enterprises potential, the results of which can be used for formation of strategies of enterprise development on the stage of external environment analysis.

#### 2. METHODS

The following methods such as the systematic approach to the formation of the study sequence of the investigated enterprises, namely, the methodology of analysis was determined; induction and deduction for synthesis of the research results and formation of prospects for development of the production direction; economic and statistical analysis for the study of trends in poultry industry development – ABC analysis of net income for 2016, as well as analysis of the production volumes, volume and value of exports and imports, export prices for the period under study; classical statistical methods at the stage of the analysis of the products competitiveness were used in the course of the research article writing.

### 3. RESULTS

Nowadays an international poultry meat trade is becoming increasingly important despite the fact that only 14% of poultry products are sold on the international market. The world's largest exporters of poultry meat is the U.S. amounted to 46% of world exports, Brazil (up to 22%), China (up to 9.1%) and Thailand (up to 9%), and in Central and Eastern Europe, Hungary is the largest poultry producer (up to 1%).

In the EU, meat production is characterized by certain features: almost all poultry stock tends to decrease; broiler meat production is concentrated in a limited number of countries such as Great Britain (up to 19.1%), France (up to 17.4%), Spain (up to 15.2%), Italy (up to 11.2%). In recent years, due to compliance with the requirements of the World Trade Organization, 15 EU countries have lost a segment of the meat market and promote the access of other countries to the market (Shchetinina & Diachenko, 2008).

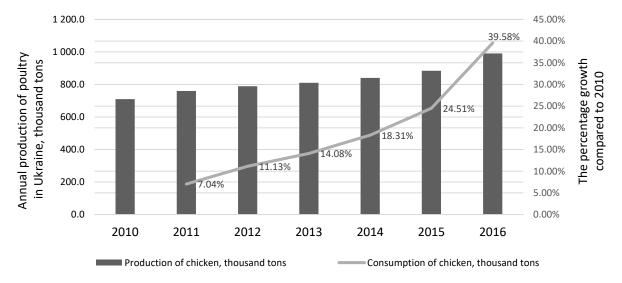
Since then, Ukraine has become a member of the World Trade Organization and according to the Article 7 of the Law of Ukraine "On Foreign Economic Activity", all goods originating in the territory of the WTO member states are granted the MFN treatment, i.e., levying reduced customs duty rates regarding Ukraine's Customs Tariff.

Agricultural exports potential of Ukraine is realized not in full due to the lack of integration in the global agricultural market. This is evidenced by the low share of exports in the value of gross agricultural production up to 12%, while, for example, in Poland and Hungary, the figure is 25% and in Germany, it's above 50% (Kopytecz, 2010).

In a period of 2010–2016, an increase of meat production in Ukraine happens mostly due to poultry meat against an annual decline in beef and veal production. In general, the following features of poultry sector in Ukraine can be highlighted.

1) A significant increase in the poultry breeding and sale for slaughter by Ukrainian producers. Slaughter output of eviscerated chickens, geese, ducks and turkeys made up to 57-60%, and sales share of partially eviscerated poultry reached 77-80%. Leaders in the volumes of sold broilers in slaughter weight are Cherkasy, Dnipropetrovsk and Kyiv regions. Their percentage in the volume of sold broilers in slaughter weight during the sale period was about 70%. In 2016, the volume of poultry meat production in Ukraine grew by 39.58% as compared to 2010 and made up 991 thousand tons (Figure 1).

In 2015, Ukraine produced an average of 29.2 kg of chicken meat per person and consumption was 25.1 kg per person. For comparison, in the U.S.,



\*Note: Developed by the author based on State Statistics Committee of Ukraine (2003).

Figure 1. Annual production of poultry for Ukraine in 2010–2016

chicken consumption per person is 42.3 kg per year.

- 2) The systematic increase in the cost of livestock production, particularly poultry production by 8% annually on average (in 2015, by 7.6%). The main factors are the increase in prices for crop production, combustible and lubrication materials, utilities, a sharp rise in the dollar, etc. (Zabolotnyi, 2016).
- 3) Slow growth of poultry profitability. During 2008–2010, poultry production was not profitable. Since 2011, an increase in figures annually by about 1.5% is observed. Today the profitability rate of this production direction is 7.8%.

Based on the results of 2015, the following companies of the agricultural holding "Myronivskyi khliboprodukt" (МНР) such as "Vinnytsya Poultry" (with profit of UAH 7.45 billion / net profit of UAH 1.3 billion) and "Myronivska Poultry" (with profit of UAH 6.85 billion / net profit of UAH 630.5 million) became the most profitable enterprises of this industry. Top 30 producers of poultry in Ukraine in 2016 are classified under the ABC analysis net income (Figure 2). Group A includes poultry farms with share of net profit up to 77.4%. The group B comprises the businesses with share of net profit up to 25.6%. The group C consists of poultry producers with share of net profit up to 5.4% (Рейтинг Топ30- птахофабрик за чистим

доходом в 2015 [Reitynh Top-30 ptakhofabryk za chystym dokhodom v 2015]).

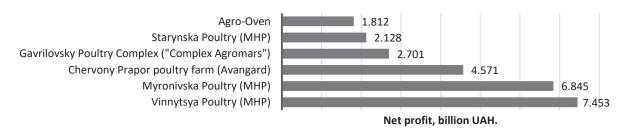
Although it should be noted that only a few companies that produce poultry meat operate nationwide, the others serve the certain regions.

5) The main feature of poultry products market is that the range of products in all competing businesses is the same: heads of broiler chickens, drumsticks of broiler chickens, wings of broiler-chicken, cooking sets, legs of broiler-chickens, liver of broiler-chickens, hearts of broiler-chickens, thighs of broiler-chickens, frozen carcasses of broiler-chickens, chilled broiler carcasses, fillets of broiler-chickens, quarters of broiler-chickens, necks of broiler-chickens, gizzards of broiler-chickens.

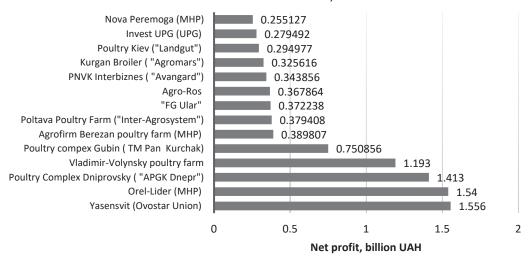
Range of poultry meat for export varies depending on the consumer country. Eastern markets mainly demand quarters of broiler-chickens, thighs of broiler-chickens and frozen carcasses of broilerchickens. European countries, mainly Georgia, demand fillets of broiler-chicken.

The high level of competition in the domestic market for the last 15 years contributed to the continuous improvement of final products quality. The following features such as high-quality of products; modernization of production equipment; continuous improvement of technological processes;

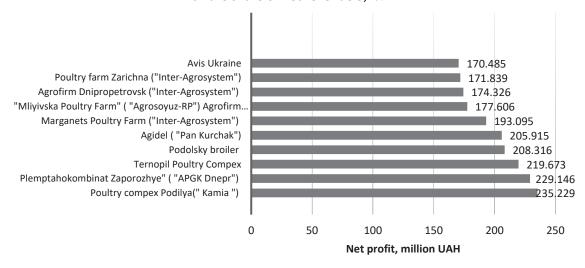
TOP 30 profitability of poultry complex in Ukraine: Group A -poultry compex in which the share of net revenue 77.4%



TOP 30 profitability of poultry complex in Ukraine: Group B -poultry compex in which the share of net revenue 25,6%



TOP 30 profitability of poultry complex in Ukraine: Group C -poultry compex in which the share of net revenue 5,4%



<sup>\*</sup>Note: Developed by the author based on Association "Union of Poultry Breeders of Ukraine" (2004), Law of Ukraine "About foreign economic activity" (1991).

Figure 2. Poultry producers ABC analysis in 2016

#### **Poultry Complex** ■ JSC "MHP" 60.6% Agro-Ov PF Varto 0,6% Gubyn 2,8% 5,4% ■ Complex Agromars 12.3% APGK Dneprovskaya ■ Vladimir-Volynskaya PF 6.4% 5.7% ■ APGK Dneprovskaya 5,7% Vladimir-Volynskaya PF Agro-Oven 5,4% 6.4% ■ Poultry Complex Gubyn 2,8% ■ PF Varto 0,6% Complex Agromars 12.3% JSC "MHP" 60.6%

Chicken producers in Ukraine, (share%)

\*Note: Developed by the author based on Association "Union of Poultry Breeders of Ukraine" (2004).

Figure 3. The structure of the poultry market in 2015

planning documents system; clear organizational structure of management, as well as an enterprise activity control system; constant monitoring of the market, the development of competitive strategies; qualified personnel, effective system of motivation are considered to be the strong points of domestic poultry producers.

Together with the mentioned features, there are also weak ones such as low profitability of products, partial failure to keep with targets, significant bank indebtedness, and incomplete computerization of the production process, isolation of sales network, division on informal groups that hinders cooperation with formally constructed groups, insufficient motivation of highly skilled staff.

We examined the competitiveness of domestic poultry sector in comparison to analogue in the Polish market to determine its competitiveness on the international market. Analysis of competitiveness was carried out through study of such chicken fillets producers as LLC Poultry Complex "Gubin", TM "Pan Kurchak", slaughterhouse "Piorkowscy" and JSC "Superdrop" (Lipych et al., 2014).

The study was conducted on the basis of quality indicators assessment of chicken fillets namely in re-

lation to the appearance and color of the surface; flavoring properties; odor and flavor; expiration date; texture of meat; clearness of broth; price in UAH with VAT. The group index calculation of the chicken fillets quality parameters is given in Table 1.

**Table 1.** Calculation of the quality parameters group index for the examined chicken fillets

Indicator	JSC "Superdrop"	Slaughterhouse "Piorkowscy"		
Appearance and color of the surface	0.333	0.233		
Flavoring properties	0.360	0.360		
Odor and flavor	0.100	0.080		
Expiration date	0.100	0.100		
Texture of meat	0.063	0.056		
Clearnessof broth	0.050	0.050		
Quality parameters group index	1.006	0.880		

Based on the calculations, we can see that the index of quality parameters for the examined chicken fillets at slaughterhouse "Piorkowscy" is less than unity. It is evidence that quality parameters of these products are lower than at LLC Poultry Complex "Gubin". The value of calculated index for chicken fillets JSC "Superdrop" indicates a higher quality sample compared with domestic counterparts.

As you can see, the JSC "Superdrop" products are characterized by the highest level of the competitiveness. Products of other foreign producers including domestic chicken fillets show inferior quality features. Products of LLC Poultry Complex "Gubyn", TM "Pan Kurchak" are inferior to products of JSC "Superdrop" for such characteristics as meat texture and appearance and color of the surface, but the products of both LLC Poultry Complex "Gubin" and TM "Pan Kurchak" have lower price and good taste properties.

Calculation of the group index by economic parameters for generalizing integral index for competitiveness is given in Tables 2 and 3.

**Table 2.** The results of calculation of the group index for economic parameters

Indicator	TM "Pan Kurchak"	JSC "Superdrop"	Slaughterhouse "Piorkowscy"
Consumer total costs	38.05	41.90	34.43
Index for economic parameters		1.101	0.905

\*Note: TM "Pan Kurchak" is a basis and an index for it is 1.

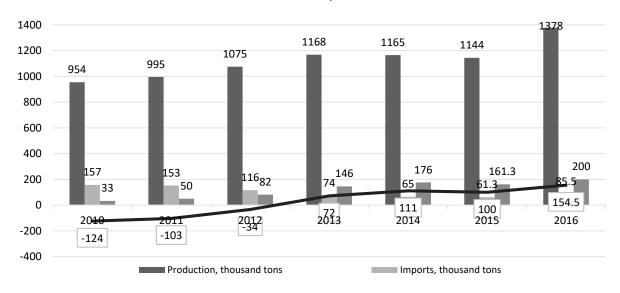
**Table 3.** The results of calculation of integral index for competitiveness

Indicator	JSC "Superdrop"	Slaughterhouse "Piorkowscy"		
Integral index	0.913	0.972		

The calculations make it possible to draw the following conclusions: products of LLC Poultry Complex "Gubin" are competitive compared to similar products of JSC "Superdrop" and Slaughterhouse "Piorkowscy" (competitiveness index is less than one), but the products of JSC "Superdrop" have better quality characteristics, and on economic parameters, JSC "Superdrop" is behind the Poultry Complex "Gubin". Thus, one can consider possibility of price competition in this field. LLC Poultry Complex "Gubin" should also focus on improving the quality parameters of some their products to get greater competitive advantage in the international poultry market.

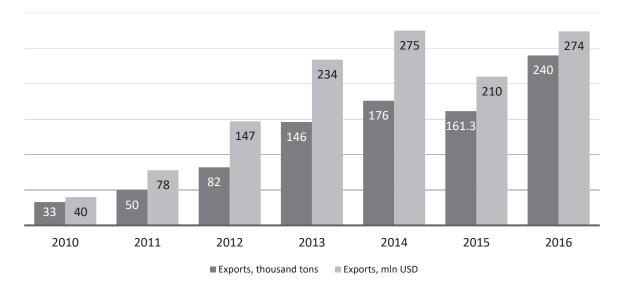
Today foreign trade of domestic enterprises depends not only on quotas, but on the demands of the exporting market. For example, eastern markets require a certificate of quality Halal, and there are many technical constraints and requirements of the process of breeding birds on the EU markets. Despite the fact that the G-20 countries speak out in favor of trade without barriers, they establish more than 120 non-tariff barriers (Fatenok-Tkachuk et al., 2016).

Let's analyze the use economic potential in foreign trade activity by the domestic producers of poultry meat.



\*Note: Developed by the author based on State Statistics Committee of Ukraine (2003), The Ministry of Agrarian Policy and Food of Ukraine (1997).

**Figure 4.** Analysis of the meat poultry production in Ukraine in 2010–2016 and volume of imports and exports



\*Note: Developed by the author based on State Statistics Committee of Ukraine (2003), The Ministry of Agrarian Policy and Food of Ukraine (1997).

Figure 5. The volume of poultry export in 2010–2016

Dynamics of poultry meat exports-imports in Ukraine for 2010–2016 is given in Figure 4. Thus, total export of poultry meat in 2015 was made up 161.3 thousand tons, which is by 8.4% less than in 2014 and more by 10.5% than in 2013. In 2016, Ukraine had the largest chicken export for the period under study, which was 27% higher than in 2014. Total production increased by 12% in Ukraine. Compared to 2010, the export of poultry meat has increased almost eightfold.

A significant increase in export compared to 2015 year took place in 2016 based on the data obtained from the Union of Poultry Breeders of Ukraine. Nowadays the largest consumer of Ukrainian poultry is Iraq with 30 thousand tons. It was less exported to Uzbekistan (23 thousand tons), Kazakhstan (19 thousand tons), the Netherlands (11.5 thousand tons), Moldova (10 thousand tons), Georgia (8.8 thousand tons). Potential markets for exports are African countries such as Egypt, Oman, Libya, Cote d'Ivoire, and Middle East economies such as Syria, Jordan, UAE (Lisitsyn, 2016).

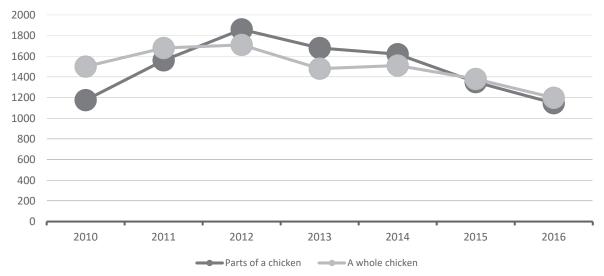
In the last three years, the export share is kept in the total structure of poultry meat production on average by 13.9 % (in 2013 – by 12.5%, in 2014 – by 15.1% and in 2015 – by 14.1%).

In 2015, total imports compared to 2010 dropped by 2.5 times. The decrease occurred on average

by 16% annually. In 2013, volume of imports decreased twice compared to 2012 (from 116 thousand tons to 74 thousand tons), decrease in imports was 5.7% in 2015 compared with the 2014. An increase in poultry production within the country allowed assuring of the domestic market to a greater extent. Besides, protection measures were applied for exports quotas in the 2012–2013. As a result, significant volumes of products planned for exports remained within the national market.

In 2010-2012, the significant increase in volumes of poultry meat imports can be explained by the lack of raw materials for meat processing plants, fall of imports tariff burden after Ukraine's accession to the WTO, the purchase of large amounts of poultry at SE "Resurspostach" by the State Committee for Reserves to stabilize prices in the domestic market. From 2008 to 2011, the U.S. was the largest exporter of poultry to Ukraine. In 2010, Ukraine occupied the 4th place after Russia, China and Mexico in the consumers rating of chicken from the United States.

So in recent years, balance of the export and imports for poultry meat in this period has changed in Ukraine. And, as a result, a sizeable excess of imports over export during 2010-2012 takes place, as well as positive meaning is observed during 2013-2015. Year 2013 is marked by dramatic change when negative balance in 34 thousand



\*Note: Developed by the author based on State Statistics Committee of Ukraine (2003), The Ministry of Agrarian Policy and Food of Ukraine (1997).

Figure 6. Dynamics of export prices headings in US\$ / ton in 2010–2016

tons was replaced by positive balance into positive one in 72 thousand tons. In 2016, there was a positive balance of foreign trade in domestic poultry industry in 154 thousand tons.

The main items of domestic poultry for export are "poultry cuts and offals, frozen" (code according to the UCG FEA-207140000) and "whole birds, frozen" (code 207120000). The first products made up approximately 55-58%, the latter – 40%. This significantly reduced the exports value as compared to fillets and chicken quarters exports.

The value of exports has the same dynamics with volumes (Figure 5).

During the analyzed period, poultry export value is characterized by minor trends (Figure 6). The prices for some items reduce that is a natural phenomenon when profits rise not through price, but due to turnover. Therefore, we can assume that domestic manufacturers have already taken a certain competitive position.

In 2015, "poultry cuts and offals, fresh and chilled" (code 207130000) take up a significant position for the first time. Over the past 11 months, the share of export of this item made up to 5.6%. EU countries, especially the Netherlands and Germany, are the largest exporters of these poultry products. The price of chilled meat is about 80% higher than

frozen. Fluctuations range of exports positions lead to changes in the value of poultry products export.

In 2015, Ukraine became the third major chicken supplier to the European Union market, behind Brazil and Thailand. Konstiantyn Yeliseev, the representative of Ukraine to the EU, gave such information to UNIAN correspondent in Brussels. Ukrainian diplomat explained this by the existence of two factors: the opening of access for Ukrainian poultry to EU markets and the introduction of autonomous trade preferences, which actually meant unilateral use of the EU conditions of a free trade agreement with Ukraine.

Yeliseev also said that potential importers "extremely interested" in the Ukrainian poultry products. According to him, within the framework of import quotas for these products the EU Commission established the so-called distribution coefficients – the percentage of the excess of demand over the amount of available volume quotas for the corresponding quarter.

"From the first year of supply Ukrainian chicken showed its opportunistic ability to compete with products from other importing countries. We understand that the growth of poultry supplies to the EU will be restrained by the tariff quota provided for the Association Agreement between

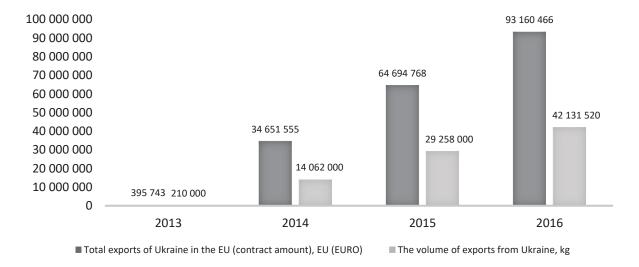


Figure 7. Analysis of Ukraine's chicken meat exports to the EU in 2013–2016

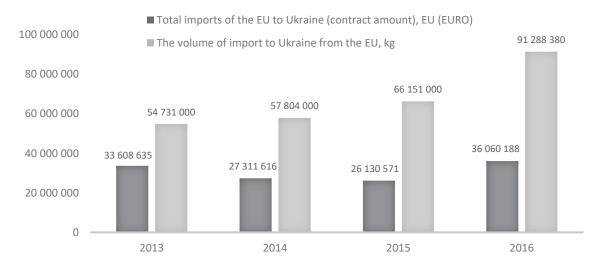
Ukraine and the EU, and therefore does not hide that the increase in the quota for chicken will be included in the main pool of the proposals of the Ukrainian side regarding the transformation of the "tariff package" in the implementation of the Agreement on free trade zone, which will start in 2016", as Yeliseev claimed (Ukraine became the third largest supplier of chicken in the European Union, 2015).

As can be seen from Figure 7, total value of exports cost increased by 86.7% in 2015 compared to the year 2014 and as compared to 2013, it increased by 163 times. Weight of exports increased twice in 2015 as compared to 2014. In 2016, the same

growth was not observed as in 2015, but it still was accounted for 44%.

Accordingly, in 2013, the value of imports from the EU was 85 times higher than the value of exports (Figure 8). The situation changed in 2014, the excess of exports over imports was 27%, and in 2015, the imports of the relevant product in Ukraine were only 40% of exports to the EU. In 2016, the same tendency was carried on.

During 2015, we observed reduction in import price, namely in 2014, it was 0.47 Euro / kg, in 2015, 0.4 Euro / kg, while in 2013, the price was 0.61 Euro / kg. This contributed to the price lower-



\*Note: Developed by the author based on База данных доступа к рынку EC [Baza dannykh Dostupa k rynku ES] (n.d.), The European Commission (n.d.).

Figure 8. Analysis of chicken meat import from the EU in 2013–2016

ing of the domestic chicken meat in the domestic market and increasing of competition.

The growth of Ukrainian exports is explained by the entrance of domestic poultry farmers to markets in East Asia. All major manufacturers were granted Halal Certificates. The word "halal" (from Arabic "al-halal" – "permissible") is a term that means safety, purity, health benefits, the lack of food harmful preservatives and additives above all. In the Muslim way of life, "halal" usually refers to animal meat, the use of which does not violate the Islamic food ban and meets the shelf life and storage for the relevant products and is carefully controlled by Halal-Committee (Центр досліджень та сертифікації Халяль (2016) [Tsentr Doslidzhen ta Sertyfikatsii Khalial (2016)]).

The global halal food market is estimated at USD 500 billion a year, and the number of potential customers can reach 1.5 billion – so much of the Earth inhabitants profess Islam. The Muslim population of the "old world" is variously estimated from 51.2 to 52 million people, and together with its constant growth it makes this niche very attractive for investors.

Recently Ukrainian producers have increasingly directed their ambitions towards this direction and strived to compete for this niche of global market. In addition, Europe owns a huge "halal" potential: today the experts estimate the turnover of the "halal" European market approximately up to USD 66 billion. And in the next decade, this market is expected to increase by another 20-25%.

The main measure of tariff regulation of foreign economic activity of the EU market is quotas.

All exports quotas are implemented under two basic principles. The principle of "first come, first served" (2016). According to this principle the quotas are allocated on a common basis at customs handling of products. The second one is a license to use. This type of quota is more complex. It works as follows: the EU importer appeals to the Directorate General of the European Commission with a request to import from Ukraine of a number of products in a given period of time. In this case, almost nothing depends from the Ukrainian ex-

porter, while all necessary documentation is given by the importer, including documentary evidence of their ability to import from Ukraine. Thus, the use of quotas under this principle depends primarily on the importer. The license for use was chosen for Ukraine, because there are a number of "indicative" groups of goods in the European Union and their import is strictly regulated. Applying of this approach allows to make the imports of such products into the EU more controllable and predictable. Within the licensed quota Ukrainian agricultural producers can export 11 groups of products: beef; pork; chicken; eggs; wheat barley; corn; milk, cream, condensed milk, yogurt; milk powder, butter and dairy spreads.

An export permission for livestock products is issued to the country. After obtaining permission, Ukrainian enterprises, focused on export of such products must go through a certification process and get "euronumber" and only then start exporting.

Currently Ukraine has already got a permission to export chicken meat. It is also possible to import livestock by-products not intended for human consumption (technical casein, down and feather, skins and other by-products).

As for poultry, the document that defines the main producers entitled to export their products to the EU is given in Table 4 (Volyn poultry producer LLC Poultry Complex "Gubin" was granted euronumber for their products only in April and May 2016).

In 2016, export of meat and all kinds of offal from Ukraine increased by 23% compared with the previous year and reached 285.95 thousand tons. This figure is also 37% higher than the volume of meat exports from Ukraine in 2014.

It was reported by the analytical department on food exports of the UFEB, referring to the starting data of the State Fiscal Service.

The basis of exports is still making poultry meat up to 84% or 240.2 thousand tons that is 49% more than in 2015 and 37% more than in 2014. The basic product proceedings abroad came to Ukraine from Iraq (USD 78.4 million or 26.8%), Egypt (USD 36.1 million or 12.4%) and the Netherlands (USD 32.7 million or 11.2%) (2017).

Table 4. List of poultry producers that are allowed to export to EU

COUNTRY SECTION Ukraine			Validity date May 25, 2016 Date of publication May 10, 2016 00010			
List in force Approval number	Name	City	Regions	Activi-ties	Remark	Date of request
02-29-03 PM	PM Branch 'Pererobnii Kompleks' Of Limited Liability Company "Vinnytska Ptakhofabryka"	Ladyzhyn	Vinnytsia region	CP, CS, SH	Α	September 25, 2014
03-20-08 PM	LLC Poultry Complex "Gubin"	Nowowo-lynsk	Volyn region	CP, CS, SH	Α	April 4, 2016
09-12-01 PM	Ptakhofabryka Sniatynska 'Nova' LLC	Sniatyn	Ivano-Frankivsk region	CP, CS, SH	Α	June 6, 2013
10-20-03 PM	LLC "Complex Agromars"	Gavrylivka	Kyiv region	CP, CS, SH	Α	June 6, 2013
23-07-32 PM	Myronivska Ptakhofabryka PrJSC	Stepantsi	Cherkasy region	CP, CS, SH	Α	June 6, 2013
24-06-09 PM	"UPG-Invest" LLC	Mamaivtsi	Chernivtsi region	CP, CS, SH	Α	April 4, 2016
Activities Legend CP Cutting Plant CS Cold Stores SH Slaughterhous			Remarks legend: A Poultry			

Note: The European Commission (2016).

Thus, during the analyzed period, there is a clear tendency to increase exports and reduce imports of poultry meat. The main reason for such dynamics of the analyzed parameters was the approach to the price of domestic raw materials to prices in major exporting countries and improve the competitiveness of domestic poultry in the domestic and foreign markets by meeting western standards. Besides, there is the increased global demand for domestic poultry meat, which positively affects the level of exports of these products.

The gradual decline in the share of imports and raise of domestic production lead to a complete filling of the Ukrainian market with the products of own production. The demand for imported products is reducing. The main areas of the poultry farming development, as well as growth of its effectiveness in Ukraine, should be:

- 1) increase in the number of chickens livestock (especially meat), geese, ducks and turkeys;
- rise in production capacities of broiler meat, bringing the overall daily live weight gain up to 35 g and upraise of its share in the structure of poultry meat;
- full support of the poultry farms with fullbalanced commercial mixed feed, and special commercial mixed feed for young birds;

- expansion of the network of branded trade of poultry products, especially near large cities, industrial centers and other populated areas;
- 5) technical modernization and automation of production processes at poultry farms;
- 6) extension of the use of laying chickens to 14 months against the current 10 months;
- 7) assistance to farmers in buying young birds livestock, the improvement of their breeding, purchase and sale of farmed products (Підсумки року: експорт м'яса виріс на 23 2017,% [Pidsumky roku: eksport miasa vyris na 23 %, 2017]).

According to forecasts of meat and meat products balance for Ukraine in 2017 as compared to the previous period, we can say that for the first time for the last three years Ukrainian meat market will live in excess of demand over supply. The upward trend in meat consumption grows gradually, while the number of pigs livestock in the country has fallen to the lowest level since 2009, and a number of cattle livestock is now the lowest in the history since Ukraine independence. Thus new opportunities for poultry producers appear.

Last year was also marked by growth in consumption and decrease in livestock. But firstly, then there was no potential for maintaining or even increasing production levels from existing resources and improving its efficiency, and secondly, the deliveries to Russia stopped and that meat was left for domestic consumption. That was as compared to the previous year there additional volume "appeared". This year in terms of production resources would be more difficult with lack of additional volumes from reduced exports. Therefore, consumption growth became possible due to increased imports (Прогнози балансу попиту і пропозиції м'яса в Україні в 2017 [Prohnozy balansu popytu i propozytsii miasa v Ukraini v 2017]).

On the one hand, the world market is saturated, competition among suppliers is constantly increasing. On the other hand, modern and effective Ukrainian producers have shown their capabilities through increasing exports by 1.5 times or by 80 thousand tons during last year. Here we have two scenarios of the forecast – exports remain on the same level as compared to last year and a new substantial increase of exports. The first version of the forecast has the highest chances.

The total growth of poultry meat and offal imports by 20%, or 30 thousand tons is predicted as a result of the limited capacity of producers to increase production of pork and cattle meat and increase in consumption.

A slight increase in the consumer market is fore-casted due to the minimum wage raise. Overall Ukrainian revenues gradually increase along with the recovery of economic activity. GDP growth for 2017 is forecasted up 2.3% as compared to 1.2% in 2016. The costs also grow. But such indicator as trade turnover increased in 2016 for a total up to 4.5% in comparable prices. So, most likely, demand for cheap meat products will increase.

Today, there are about 30 countries in the world to be net exporters of meat, i.e., they sell abroad more products than they import. In 2014, Ukraine joined the list of such countries for the first time and took 24 th place in the world, as well as for 9 months of 2016 – 21nd place. Because of the significant potential of poultry industry in the next 5 years, Ukraine can enter the 15 top net exporters of the world (Lisitsyn, 2016).

#### CONCLUSION

As a result of the conducted research, it can be stated that domestic poultry producers have significant prospects for the development. This confirms the high competitiveness of domestic products both in the domestic and foreign markets in terms of price and taste properties. Despite the systematic increase in the production cost over the past 6 years, a significant increase in production volumes was observed. The volume of poultry meat production in Ukraine in 2016 increased by almost 40% compared to 2010. A producer group has been formed in Ukraine that holds leading positions. These include JSC MHP Complex Agromars, Vladimir-Volynskaya PF, APGK Dneprovskaya, Agro-Oven, Poultry Complex Gubyn, PF Varto. The high competitiveness of domestic products, the wide assortment offered for export, the granting of the corresponding quality certificates and European numbers to the Ukrainian enterprises contributed to a significant increase in export volumes. Compared to 2010, the export of poultry meat has increased almost eight times and amounted to 240 thousand tons. Exports exceed imports almost three times. The decrease in imports on the domestic market is also expected due to the growth of the leading enterprises capacities and the number of small farms by improving the situation on the poultry market. The export vector has also changed. Every year, sales of chicken to the EU countries are increasing. The biggest breakthrough took place in 2015. Despite the increase in the price of chicken meat in the domestic market, the external, in terms of dollars, is decreasing.

Having analyzed the revealed tendencies, it is possible to expect increase of volumes in poultry meat production due to foreign markets access. Thanks to increased competition, manufacturers will be forced to improve the quality and range of their own production. Such changes in general will lead to the development of poultry industry in Ukraine.

## REFERENCES

- Agricultural Information Agency "Agraveri" (2016). Retrieved from http://agravery.com/uk/posts/ show/ukrainski-virobniki-pocalivikoristovuvati-dodatkovu-kvotuna-eksport-kuratini-v-es (accessed June 9, 2016).
- 2. Andriichuk, V. H. (2005). Ефективність діяльності аграрних підприємств: теорія, методика, аналіз [Efektyvnist diialnosti ahrarnykh pidpryiemstv: teoriia, metodyka, analiz] (292 р.). Kviv.
- Buriak, R. (2017). Research and forecasting of conditions of Ukraine poultry products market. Retrieved from https://www.journals.nubip. edu.ua/index.php/Economica/ article/.../8134
- 4. Datsii, O. I. (2008). Методичні основи дослідження інноваційного розвитку галузей сільського господарства [Metodychni osnovy doslidzhennia innovatsiinoho rozvytku haluzei silskoho hospodarstva]. AhroSvit, 4, 15-18.
- 5. Fatenok-Tkachuk, A. A., & Lipych, L. G. (2016). The assessment methodology of non-tariff measures by poultry enterprises as a manifestation of political risks in the environment. *Eastern Europian scientific journal*, *6*, 34-40 [in Ukrainian].
- Коруtесz, N. (2010). Ринок м'яса птиці [Rynok miasa ptytsi]. Propozytsiia, 7, 36-38.
- 7. Kyryliuk, O. F. (2009).

  Формування ринку продукції птахівництва в контексті продовольчої безпеки України [Formuvannia rynku produktsii ptakhivnytstva v konteksti prodovolchoi bezpeky Ukrainy].

  Retrieved from http://www.nbuv.gov.ua/portal/chem\_biol/nvnau/2009\_141/09kof.pdf
- 8. Law of Ukraine "About foreign economic activity" (1991).
  Retrieved from http://www.rada. kiev.ua
- 9. Lipych, L. G., Fatenok-Tkachuk, A. O., & Kutykina, K. M.

- (2014). Формування системи розвитку зовнішньоекономічної діяльності підприємств птахівництва на засадах нетарифного регулювання [Formuvannia systemy rozvytku zovnishnoekonomichnoi diialnosti pidpryiemstv ptakhivnytstva na zasadakh netaryfnoho rehuliuvannia] (208 р.). Lutsk: Vezha-Druk Press.
- 10. Lisitsyn, A. B. (2016). Мировая практика формирования качества мясного сырья и требования к нему перерабатывающей промышленности [Mirovaya praktika formirovaniya kachestva myasnogo syrya i trebovaniya k nemu pererabatyvayuschey promyshlennosti]. Myasnaya industriya, 9, 6-9.
- Margasova, V. G., Rogovyi, A. V., & Vygovska, V. V. (2009).
   Аналіз фінансових результатів зовнішньоекономічної діяльності суб'єктів господарювання [Analiz finansovykh rezultativ zovnishnoekonomichnoi diialnosti subiektiv hospodariuvannia]. Aktualni problemy ekonomiky, 3, 24-30.
- Mbuza, F., Manishimwe, R., Mahoro, J., Simbankabo, T., & Nishimwe, K. (2017). Characterization of broiler poultry production system in Rwanda. *Tropical Animal Health and Production*, 49(1), 71-77. Retrieved from https://www.ncbi.nlm.nih. gov/pmc/articles/PMC5203843/
- Melnyk, В. А. (2005). Організація інтенсивного вирощування м'ясних видів птиці в Україні [Orhanizatsiia intensyvnoho vyroshchuvannya myasnykh vydiv ptytsi v Ukraini]. Visnyk ahrarnoi nauky, 2, 66.
- 14. Official website of the Association "Union of Poultry Breeders of Ukraine" (2004). Retrieved from http://www.ptaha.kiev.ua
- Shchetinina, I. O., & Diachenko, V. I. (2008). Значення інноваційного розвитку для птахівництва. Сучасний стан виробництва м'яса птиці в Україні та перспективи

- розвитку 2008 [Znachennia innovatsiinoho rozvytku dlia ptakhivnytstva. Suchasnyi stan vyrobnytstva miasa ptytsi v Ukraini ta perspektyvy rozvytku 2008]. Retrieved from http://avian.org.ua/data/statti/schetinina.htm 2.1
- Skrypnyk, A. V., & Rodyna, M. A. (2014). Meat production: global and Ukraine trends. *Economics of* the agro-industrial complex, 3, 93-100 [in Ukrainian].
- 17. Tereshchenko, O. V. (2011). Стан і перспективи розвитку птахівництва [Stan i perspektyvy rozvytku ptakhivnytstva]. Suchasne ptakhivnytstvo, 7-8, 4-8.
- The European Commission (n.d.). Retrieved from https://webgate. ec.europa.eu/sanco/traces/output/
- 19. The official website of Ministry of Agrarian Policy and Food of Ukraine (1997). Retrieved from http://www.minagro.gov.ua
- 20. The official website of the State Statistics Committee of Ukraine (2003). Retrieved from http://www.ukrstat.gov.ua
- 21. Topikha, V. S., & Topikha, V. I. (2006). Тенденції розвитку галузі свинарства в країнах світу та Україні [Tendentsii rozvytku haluzi svynarstva v krainakh svitu ta Ukraini]. Visnyk ahrarnoi nauky Prychornomoria, 8-14.
- 22. UNIAN (2015). Ukraine became the third largest supplier of chicken in the European Union. Retrieved from https://economics. unian.net/agro/1092353-ukraina-stala-tretim-po-velichine-postavs-chikom-kuryatinyi-v-evrosoyuz. html (accessed June 22, 2015).
- 23. Uys, P., & Bisschoff, C. (2016). Identifying consumer buying preferences of beef. *Problems and Perspectives in Management*, 14(4-1), 256-263. http://dx.doi.org/10.21511/ppm.14(4-1).2016.15
- 24. Yaroshenko, F. (2003). Птахівництво в Україні: проблеми становлення [Ptakhivnytstvo v Ukrayini: problemy stanovlennia]. *Ekonomika Ukrainy*, 1, 70-74.

- 25. Zabolotnyi, V. S. (2016).

  Конкурентоспроможність вітчизняної продукції м'ясного птахівництва з урахуванням її імпорту [Konkurentospromozhnist vitchyznianoi produktsii miasnoho ptakhivnytstva z vrakhuvanniam іі іmportu]. Retrieved from http://zsas.zhitomir.org/ru/pdf
- 26. База данных доступа к рынку EC [Baza dannykh Dostupa k rynku ES] (n.d.) Retrieved from https://webgate.ec.europa.eu/sanco/traces/output/non\_eu\_list-sPerCountry\_en.htm#
- 27. Підсумки року: експорт м'яса виріс на 23 % [Pidsumky roku: eksport miasa vyris na 23 %] (2017). Retrieved from http://ukrainianfood.org/uk/post/pidsumki-roku-eksport-masa-viris-na-23
- 28. Прогнози балансу попиту і пропозиції м'яса в Україні в 2017 [Prohnozy balansu popytu і propozytsii miasa v Ukraini v 2017]. (2017). Retrieved from http://agronews.ua/node/74752
- 29. Рейтинг Топ-30 птахофабрик за чистим доходом в 2015 [Reitynh
- Top-30 ptakhofabryk za chystym dokhodom v 2015]. (2015). In Птахівництво України і світу: менеджмент, аналітика, реформи, стандарти [Ptakhivnytstvo Ukrainy i svitu: menedzhment, analityka, reformy, standarty]. Retrieved from http://market.avianua.com/?p=4187
- 30. Центр досліджень та сертифікації Халяль [Tsentr doslidzhen ta sertyfikatsii Khalial]. Retrieved from http://halal.org.ua/ua/home\_ua.html