

GLOBALIZATION ON THE PORK MARKET*

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Шиманська Е. Глобалізація на ринку свинини

Ця стаття присвячена проблемі глобалізації, зокрема на ринку свинини, який деякою мірою є специфічним. Особливу увагу було приділено виробництву свинини в окремих країнах, виробничим витратам на виробництво свинини та діяльності найбільших лідерів на ринку свинини. Метою глобалізації є надання організаціям вираженої конкурентної переваги за рахунок зниження експлуатаційних витрат, збільшення кількості продуктів, послуг та споживачів. Одним із найпомітніших проявів глобалізації є зростання конкуренції між різними країнами та компаніями, тобто конкуренція, пов'язана з цінами, витратами та якістю вироблених товарів. Більші можливості для зростання виробництва свинини будуть створені в тих країнах, де знижуються витрати виробничих ресурсів.

Ключові слова: глобалізація, ринок свинини, конкуренція, переваги, вибрані країни.

Shymans'ka E. Globalization on the pork market

This article is devoted to the problem of phenomenon of globalization development, especially – on the pork market, which is to some extent very specific. Special attention was drawn to the production of pork in selected countries, the production costs of pork and the activities of the biggest leaders in the pork market. The objective goal of globalization is to provide organizations with an excellent competitive advantage with lower operating costs, more products, services and consumers. One of the most visible manifestations of globalization is the growth of competition between different countries and companies, i.e. the competition relating to prices, costs and quality of manufactured goods. Greater opportunities of increasing pork production will be created in those countries which have lower costs of production factors.

Key words: globalization, pork market, competition, advantages, selected countries.

Szymańska E. Globalizacja na rynku wieprzowiny

Niniejszy artykuł poświęcony jest problemowi rozwoju zjawiska globalizacji, zwłaszcza – na rynku wieprzowiny, który jest do pewnego stopnia bardzo specyficzny. Szczególną uwagę zwrócono na produkcję wieprzowiny w wybranych krajach, koszty produkcji mięsa wieprzowego i działania największych liderów na rynku wieprzowym. Celem globalizacji jest zapewnienie organizacji doskonałej przewagi konkurencyjnej przy niższych kosztach operacyjnych, większej liczbie produktów, usług i konsumentów. Jedną z najbardziej widocznych manifestacji globalizacji jest wzrost konkurencji pomiędzy różnymi krajami i firmami, tj. konkurencja dotycząca cen, kosztów i jakości wytwarzanych towarów. W tych krajach, które mają niższe koszty produkcji, powstaną większe możliwości zwiększania produkcji mięsa wieprzowego.

Słowa kluczowe: globalizacja, rynek wieprzowiny, konkurencja, zalety, wybrane kraje.

Introduction. The processes of globalization occurs in the economy for many years and they are the subject of scientific research. Currently, there can be found numerous definitions of globalization in the literature. According to official documents of the United Nations Conference on Trade and Development, developed in 1995, globalization involves the growing interrelations of countries in terms of world trade, foreign direct investment and capital markets. The process of globalization has accelerated due to technology advances in transportation and communication, and as a result of

the rapid liberalization and deregulation of trade and capital flows, both at national and international level [9]. Blackmore J. [2] describes globalization as «increased economic, cultural, environmental, and social interdependencies and new transnational financial and political formations arising out of the mobility of capital, labour, and information, with both homogenizing and differentiating tendencies». Carnoy M. [3] argues that globalization is not merely a matter of trade, investment, or national economy, but a «new way of thinking about social space and time» and that this has

occurred primarily because the NICTs have redefined distance and time.

The goal of globalization is to provide organizations with an excellent competitive advantage with lower operating costs, more products, services and consumers. This approach to competition is achieved through the diversification of resources, the creation and development of new investment opportunities to open up additional markets, and access to new resources and resources.

Globalization processes occur in agriculture including the pork market. Pork meat has long established its position on the market as staple food. According to the USDA data (2016) [10] global pork production in 2014 amounted to 110,5 million tonnes and was 1,5% higher than in 2013. It is forecast by the Food and Agricultural Policy Research Institute (FAPRI 2008) [4] that in the coming years the production of this kind of meat will continue to increase, reaching in 2020 the level of 120,3 million tonnes. However, greater opportunities of increasing pork production will be created in those countries which have lower costs of production factors.

Processes of globalization in agriculture.

The global «opening» of agriculture and food industry results in removing the barriers hindering the allocation of production factors, the production itself and distribution of agricultural products as well as in the accelerated process of standardization of production methods, and partly of consumption patterns too. The following processes have been recognized as caused by these dynamic changes:

- intensification of price competition with regards to the standardized product (often leading to the collapse of some companies/farms that are not able to quickly adapt to the standards of the global market) and «revaluation» of the quality characteristics of agricultural production (it becomes a priority to comply with global standard requirement whereas the «national/regional» attributes are treated as potential added value);

- the launch of various consolidation activities aimed at boosting the efficiency, which frequently causes that smaller entities producing agricultural raw materials have to subordinate their activity to transnational corporations producing and distributing consumer goods;

- increased role of global network systems which arrange not only for the purchasing, but also the processing of agricultural raw materials that now set the standards of production and distribution and the pace of their implementation. All this leads to the creation of global business networks which cover all production levels leading towards the final product (starting from the acquisition of agricultural raw material through its processing, supplying semi-finished and finished goods, and even to the packaging, promotion and distribution). With help of various brand strategies the networks try to produce the effect of full coverage of the market, distorting the perception of the customer (Rosińska-Bukowska, 2014) [6].

One of the most visible manifestations of globalization is the growth of competition between different countries and companies, i.e. the competition relating to prices, costs and quality of manufactured goods.

Research aim and sources of data. The aim of the research was to identify the globalization processes in world pork market. The analysis included the production of pork in selected countries, the production costs of pork and the activities of the biggest leaders in the pork market. The study is based on the professional literature, including the developments produced by the Central Statistical Office of Poland (CSO) and the United States Department of Agriculture (USDA) reports.

As far as production costs are concerned, the analysis was built on a report prepared by the Agriculture and Horticulture Development Board. It takes into account the efficiency of production and its costs in 15 countries around the world.

Pork production in selected countries. The biggest producers of this kind of meat are: China, the EU-28, USA and Brazil (Fig. 1). In 2015, these countries produced 92,9 million tonnes of pork, which accounted for 84,2% of the world production. China is the largest producer and consumer of pork in the world, supplying the market with 49,7% of world production. In 2005–2015 the pork production in this country increased from 50,1 million tonnes to 54,9 million tonnes. This rise was associated with a gradual transition from free range production to industrial one, and with increased foreign investment (Szymańska 2015) [8].

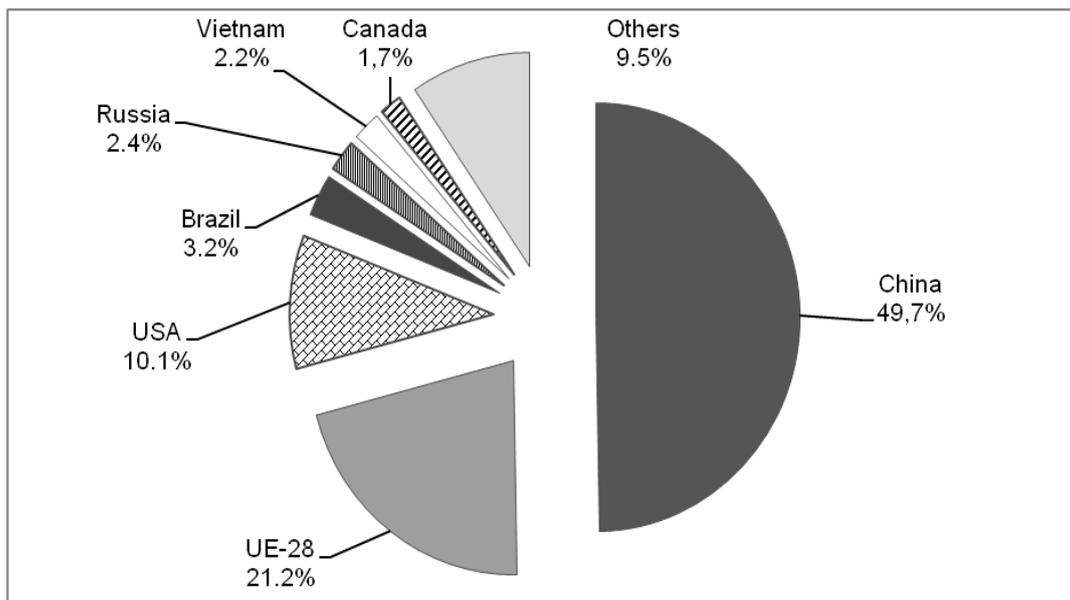


Fig. 1. The share of selected countries in the production of pork in 2015 per million tonnes of carcass weight

Source: own work based on USDA data.

The EU-28 is second in the world in this regard, supplying to the market with 21,2% of the world pork production in 2015. The largest pork producers in the European Union are Germany, Spain, France, Denmark and Poland (Fig. 2). As for other countries, a large amount of this kind of meat is also produced in: Italy, the Netherlands and Belgium. In 2013, these countries

produced a total of 18,4 million tonnes of pork, which accounted for 82,3% of the production in the entire EU-28.

The pig inventory in these countries numbered 116,4 million and accounted for 79,2% of this livestock species in the United Europe. Most pigs were kept in Germany, Spain and France (Fig. 3).

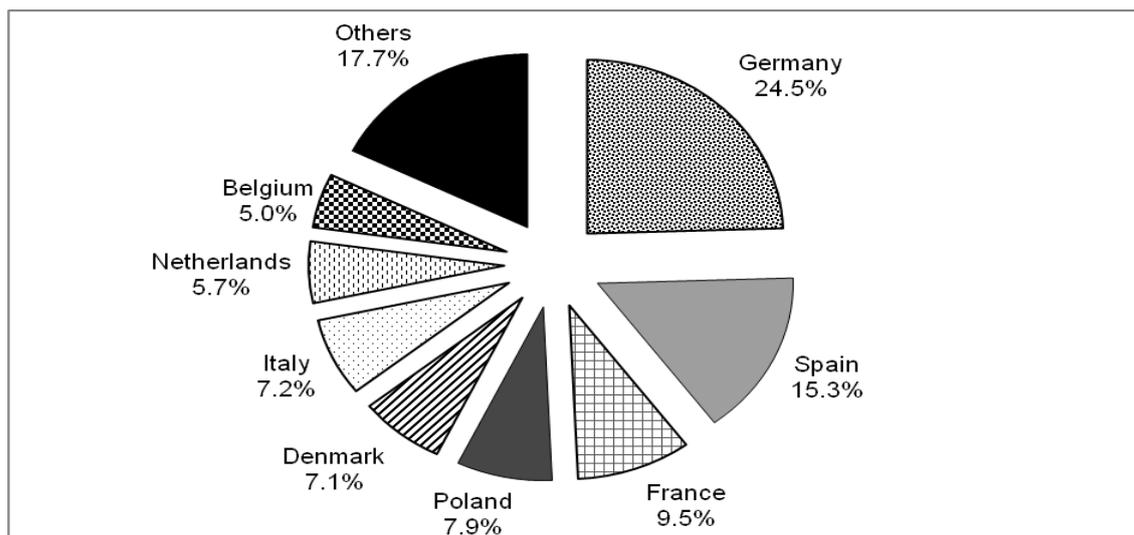


Fig. 2. The share of selected countries in the production of pork in the EU-28 in 2013.
Source: own work based on CSO (Rocznik... 2015) [5].

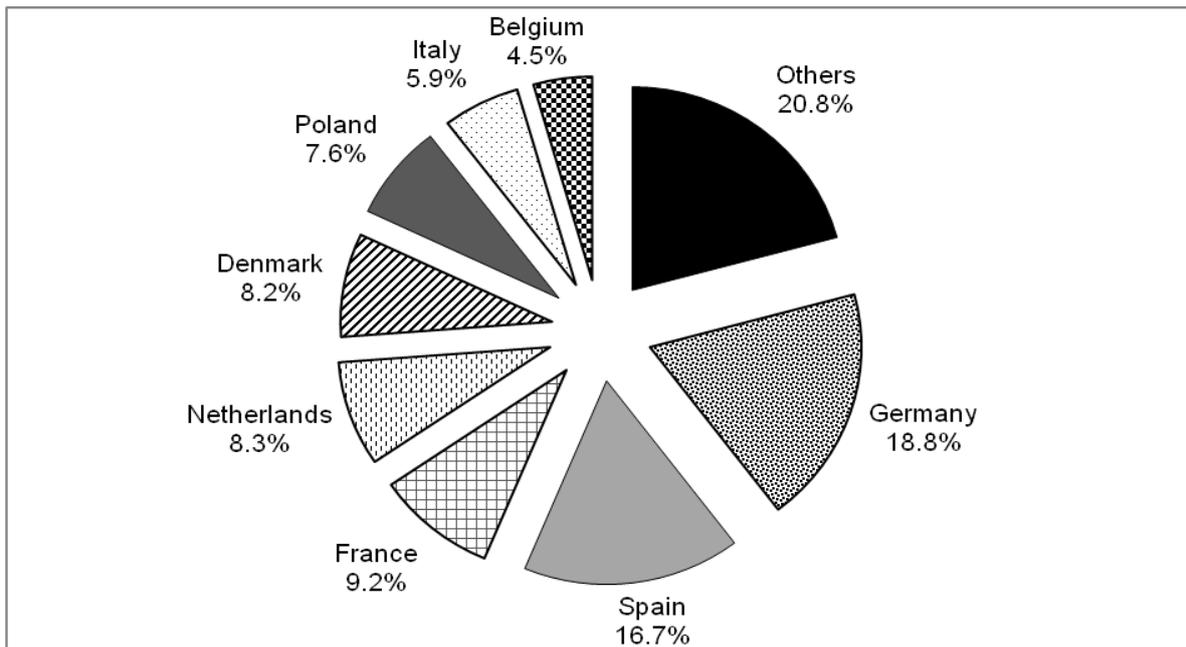


Fig. 3. The share of selected countries in the pig inventory in the EU-28 in 2013.

Source: own work based on CSO (Rocznik... 2015) [5].

Agricultural holdings keeping pigs in these countries vary considerably. The most consolidated is the production of live pigs in Denmark where herds of 1,000 or more units cover more than 92% of this species population in the country. This indicator shows similar values in the Netherlands and Spain, 83% and 79% respectively. In other EU countries, the proportion of smaller farms is also significant (Strategia... 2012) [7].

The key factors increasing the production of pork in the EU-28 are primarily feed prices, as they decide about the profitability of farming. Rising prices of grain lead to the restructuring of the industry, resulting in a decline of less efficient operators and increased concentration of livestock in larger farms. Another important factor determining the functioning of this industry is the EU requirements on animal welfare and environmental protection.

A much important pork producer in the world is the United States whose share in world production in 2015 was 10,1%. In the years 2005–2015 the production of this kind of meat has increased in this country from 9,4 million to 11,1 million tonnes.

In the global pork market the position of Brazil is also steadily growing stronger. In the years 2005–2015 it increased its production

from 2,7 million tonnes to 3,5 million tonnes, and its share in world production is 3,2%.

The level and cost structure of live pig production. In 2014, the average cost of production of live pigs in the EU amounted to 1,34 pound per kg of hot carcass weight and was lower by 13% compared to the previous year, mainly due to lower feed costs (Fig. 4). The level of these costs, however, varied regionally. The lowest costs of production of live pigs were reported in Brazil, the USA and Canada. In these countries, they averaged from 0,83 to 1,02 lb/kg. In Europe, the lowest production costs of pork occurred in Spain, where they averaged 1,19 lb/kg of carcass weight. Their low level was due to a large scale of production, modern farming technology and high productivity of grains as feed ingredients. The production of live pigs in Spain has been consolidated by a large number of producers (companies) keeping more than 40,000 sows. The company that owns the livestock provides sows, feed and veterinary drugs while the farmer provides a farming facility, labour, energy, water and fertilizer management. The farmer is paid by the company for his service depending on the contract terms, either for a weaned piglet or a fattening pig. In Spain the production of live pigs is also characterized by a low consumption of feed per kilogram of

growth, which makes an average of 2,57 kg. Furthermore, owing to specific climatic conditions, Spanish producers of live pigs utilize very

simple farming facilities or even keep livestock outside the farming buildings, especially in the case of Iberian pork production.

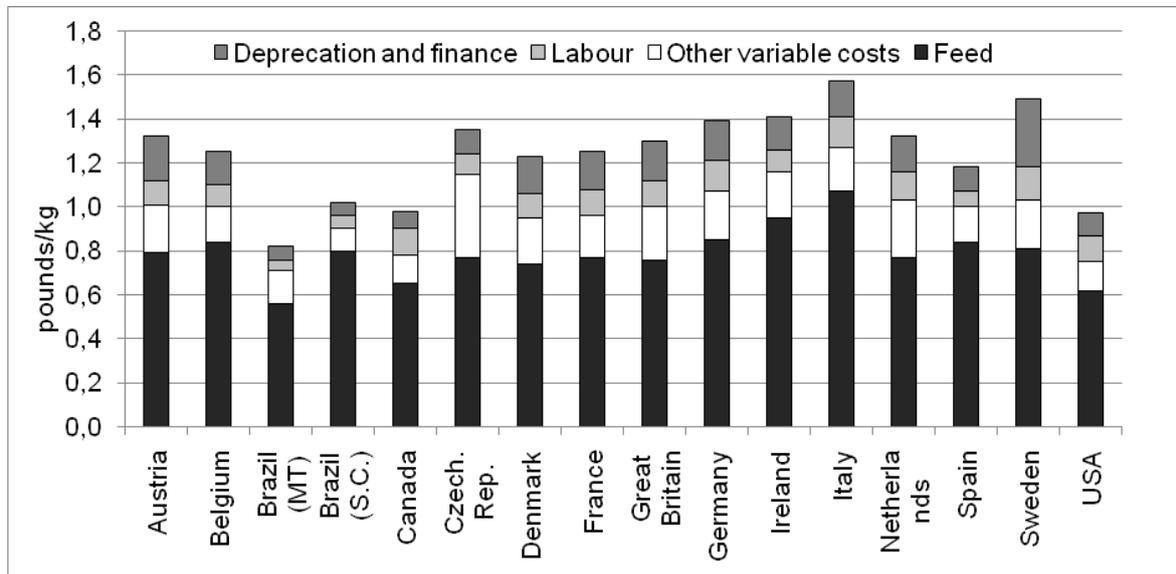


Fig. 4. The level and cost structure of the live pig production in selected countries.

Source: (Pig Cost 2014) [1].

A different situation in terms of costs occurred in Italy where they amounted to an average of 1,57 pounds per 1kg of hot carcass weight. This was associated with a large slaughter weight and high feed prices. The pig sector in this country is very sensitive to the rise in feed prices due to unfavourable feed conversion ratios. Fattening pigs are slaughtered there at the age of 10–12 months, weighing from 150–170 kg and providing carcasses weighing 125–140 kg. Such is the demand of the meat industry, whose flagship product is the Parmenian ham. In Denmark, Belgium, France, Germany and the Netherlands the cost of live pig production in 2014 ranged from 1,23–1,31 pounds per kg of carcass weight.

The unit costs of production of live pigs were dominated by the costs of feed. In European countries these costs accounted for 47,6 to 65,6%. In the United States, in Brazil and Canada, their share ranged from 58,9 to 68,4%. A particularly large increase in feed prices was recorded in the second half of 2010. Labour costs accounted for approximately 1/3 of the direct costs. Their share in the European countries ranged from 7,5% in Spain to 13,0% in France. A similar percentage of these costs was found in the analysed countries of North and

South America, from 8,7% in the USA to 14,8% in Canada.

Business leaders in the pork market. In 2013 the WH Group company recorded sales of over 20 billion dollars. This company slaughtered annually 43,2 million pigs (Fig. 5).

They are also involved in projects that are ancillary to the main business segments. In China, this involves mainly the production and sale of packaging materials, logistics services, operating a network of retail grocery stores, production of flavour ingredients, natural casings and biological pharmaceuticals. In 2013 the company took over the world's largest producer of pork – Smithfield Foods.

The second in the pork market comes the US plant Tyson with the slaughter of approximately 27 million pigs. Tyson Foods has been operating in the food industry since 1935. It is one of the largest producers and distributors of poultry, beef and pork and the second largest company engaged in food production in the world. The company provides its products and services to customers in the United States and in more than 90 other countries. It employs 115,000 workers and has more than 400 facilities and offices around the world.

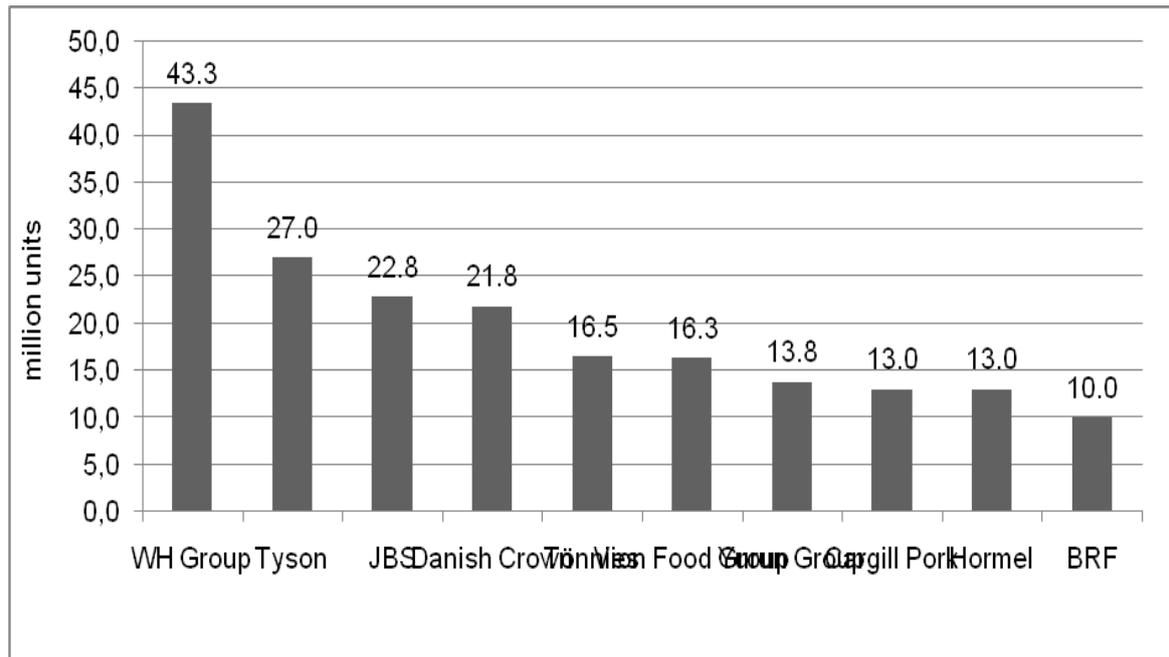


Fig. 5. The largest multinational corporations in the pork market in terms of the number of slaughtered pigs.

Source: WATTAgNet.com.

Another large enterprise in the pork market is the company JBS originating in Brazil. Over the past few years, JBS Company bought such operators as Swift, Pilgrim Pride and now Cargill Pork. Through these take over's the company aims to become a global leader in the market of beef, poultry and pork. Having bought the Cargill Pork pig production system, JBS Swith Company has become one of the biggest players in the US pork production market.

The European market is dominated by the Danish food processing company «Danish Crown», which was formed by a multiple merger of Danish export-oriented cooperatives. Danish Crown is mainly engaged in the processing of pork and beef. In 2013, its slaughter capacity reached 21,8 million pigs. It is the largest producer of pork in Europe. Through its subsidiaries, it is also engaged in the development of other food products. It is the largest company in the sector of pork processing in Europe and of beef processing in Denmark and is also one of the largest exporters in the agricultural sector. The company is also developing its activity in other countries such as Poland or the United Kingdom.

The list of leaders in the pork market includes as well the German company Tännies with the slaughter capacity of 16,5 million pigs. It is a German group of slaughter companies and

the EU leader in the slaughter of sows. Its success was due to a merger of large, modern, automated and efficient processing plants and low costs of employment of contract workers. The company is a key supplier of Aldi and Lidl discount chains. Tännies took over the German group Zur Muhlen, operating in the field of further processing. Outside Germany, the company has developed slaughtering activities in Denmark. This enables Tännies to access certain markets in third countries, where the products from Germany could not be delivered. The company also invests in Russia.

An important place in the processing of pork belongs also to the Vion company. It is an international meat producer with production facilities in the Netherlands and Germany and sales offices in more than ten countries around the world. Its take-overs take place not only in the Netherlands but also in the UK and Germany. Transnational companies with a global system of production and distribution create a new organizational paradigm of the world food trade.

Conclusions

1. Globalisation is a process where the world economies are becoming more integrated. Globalisation refers to the increased openness of economies to international trade, financial flow and direct foreign investment. The goal of globalization is to provide organizations with an ex-

cellent competitive advantage with lower operating costs, more products, services and consumers. It brings about benefits and opportunities as well as cost and risks. Globalization of the world economy have consequences for the development of the agricultural sector, including the pork market.

2. Pork meat has long established its position on the market as staple food. In the years 2005–2015 pork production in the world increased by 14,6%. This is interrelated with population growth in the world and economic development, particularly in countries with high demographic growth. The biggest producers of this kind of meat are: China, the EU-28, USA and Brazil. Over the next years there is expected an increase in supply in developing countries, mainly in China, Brazil and Russia.

3. The processes of globalization lead to the development of international trade of pork, be-

cause the cost of production are varies in different countries. In 2014, the average cost of production of live pigs in the EU amounted to 1,34 pounds per 1kg of hot carcass weight. The lowest costs of production of live pigs were reported in Brazil, the USA and Canada. A different situation in terms of costs occurred in Italy. This was associated with a large slaughter weight and high feed prices in this country.

4. With the development of globalization international corporations are emerging on the market. These are formed through mergers and take over's of smaller companies in order to achieve economies of scale, expand the product range and gain new markets. Having at their disposal considerable capital, production and technology resources, these corporations highly influence the development of business relations in the world economy and significantly alter the conditions of competition.

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