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# IMPACT OF THE LIBERALIZATION OF ROMANIAN PORK EXPORTS TO EUROPEAN UNION, CHALLENGES AND PROSPECTS

#### ABSTRACT

Pork is the most popular meat in Romania, representing more than half of the total yearly consumption per capita. With 19.0 kg per capita, pork consumption is much under the European average of 46.4 kg per capita, which means that there is still room for pork consumption increase. In the year 2012, about 33% of pork consumption was based on imports. The paper attempts to investigate the impact of the liberalization of pork exports to the EU at national market level, as well as the impact upon the soybean oilcake imports, on which Romania remained dependent. Lifting the Romanian pork export ban on the EU market could be a momentum for industry, which could develop in order to satisfy the domestic and export demand. This might also lead to the increase of pork prices on the domestic market due to the competition with foreign markets.

**Key words**: domestic production, pork imports, soybean oilcakes imports, imports of piglets for fattening, pork price.

JEL Classification: Q11.

# 1. INTRODUCTION

Food industry in Romania is the second in size in EU in volume terms, after Poland, accounting for about 13% of total Romanian industrial production.

The market of food products continues to be extremely fragmented, the first 10 producers representing slightly more than 30% of the packed food market, while the remaining sales come from a great number of small producers.

Most domestic producers distribute their products locally, selling their products through their own selling points or through the local shops. The few large producers distribute their products at national level, practicing an economy of scale with modern production techniques that allow them to use the retail networks. The remaining sales are the direct sales of the small producers, which still represent a considerable part of consumption (Alexandri *et al.*, 2006).

The pork sector is the largest and the most important sector of livestock production in EU, in Romania inclusively. The new CAP does not bring any significant modifications compared to the last years.

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Pig herds in Romania significantly decreased in the last two decades, and our country had to import large volumes of pork meat to meet its domestic demand (Moldovan, 2010). We speak here about an undersized sector compared to consumption, under the background of low investments on the reproduction farms.

Romania's pig herds totalled 5.413 thousand pig heads on December 1, 2013. A significant share of pig farming takes place on the family farms, under extensive household system, the fattening period taking 8-9 months; on the other side, there are large-scale producers, often vertically integrated, which are involved in pig raising, fattening, slaughtering and processing activities. On January 1, 2014, there were 218 authorized professional holdings that raised 1.8 million pig heads.

An analysis of pig slaughtering in the period 2007-2013 reveals that the number of slaughtered pigs steadily increased on the specialized units. On the individual household farms, the largest numbers of pigs are slaughtered on the occasion of winter holidays and they mainly go to self-consumption (Nistor, 2010).

In 2013 the production totalled 546 thousand tons, slightly down compared to 2012; even though the number of slaughtered pigs was greater, the average slaughtering weight was 105 kg/head.

*Table 1* Pig slaughtering and meat productions in the period 2007-2013

	2007	2008	2009	2010	2011	2012	2013
Number of slaughtered pigs, total, thousand heads	6,565	6,174	5,893	5,387	4,876	4,779	5,419
- out of which on specialized units	5,662	5,316	5,175	5,255	3,257	3,481	3,746
Live weight pork production, thousand tons	642	605	585	553	595	555	582
- out of which on specialized units	225	238	295	309	310	370	403
Carcass pork production, thousand tons	471	455	443	429	425	426	449
- out of which on specialized units	164	179	222	234	236	282	308

Source: National Institute of Statistics.

Pork production is concentrated into two distinct components of the sector: the small private farmers, focusing on self-consumption or local sales and the integrated industrial units.

Since January 2007, having in view the principles of biosecurity, identification and registration of animals, the pigs coming from non-professional holdings can be sold only on the local market

According to the National Sanitary-Veterinary and Food Safety Agency, by December 2013 about 1.1 million non-professional holdings (for self-consumption) were identified, as well as 218 authorized industrial holdings, under permanent sanitary-veterinary control, and the meat coming from these is sold on the national market directly from the slaughtering units or goes to processing.

The pork and pork meat preparations is sold through distribution firms or in the stores of the integrated units that also have processing sectors, or by other distribution niches (hypermarkets). On the cold cuts market, the main distribution channel is represented by the food stores, which, according to the Romanian Meat Association, have a market share of 46.9% of the quantity of cold cuts; the super/hypermarkets have a market share of 33.22% and the department stores 19.90%. The pork semi-carcasses are refrigerated in specially-equipped storage rooms and they go to consumption or processing. The meat and meat products are delivered with specialized vehicles. Meat is sold under the form of meat cuts, both in bulk and packed (in vacuum under controlled atmosphere, in bags or casseroles). It is worth mentioning that the sales of pre-packed products increased in recent years, which implies increased hygiene.

As regards the foreign trade, after 1997 Romania became a net pork importer (Oncanu and all 2007).

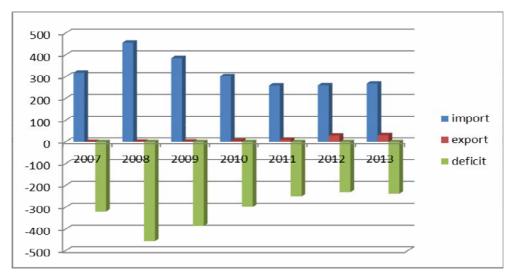


Figure 1. Trade balance for the fresh and refrigerated pork meat, thousand euro.

Pig farmers were subject to a ban on intra-community exports from 2007 until January 1, 2014, due to the swine fever hotbeds from 2006 and to the vaccination against this disease.

Since 2010, pork imports have decreased, compared to previous years, in the conditions in which an industrial pig raising complex re-opened in the western part of the country, the production of which accounts for 30% of the Romanian pork supply. The high share of imports is the result of the insufficient domestic supply.

According to experts, 1/3 of the Romanian agri-food products can be produced in the country, and among these we can mention pork, soybeans and soybean products (Steriu, Otiman 2013).

In Romania, the great industrial complexes get their piglets for fattening from internal sources, and the surplus is distributed to other farms. Unfortunately, in the

last years, even the large-sized farms had financial problems, and they had to adjust their herds or even to close down. As a result, the supply of the domestic piglet market also significantly diminished and the farmers had to import piglets.

According to the data of the Ministry of Agriculture and Rural Development, in the year 2013, 878 thousand piglet heads up to 50 kilograms were imported, worth 61.1 million euro, compared to 724 thousand heads (51.2 million euro), imported in 2012, i.e. an increase by over 20%. The main suppliers were: Hungary (315,001 heads), Netherlands (244,285 heads), Germany (206,550 heads), followed by Slovakia and Denmark.

The data on the quarterly pork prices, in live weight terms, indicate that these increased in the period 2005-2013 and constantly had the highest levels during the winter holidays, when pork demand is the highest. Throughout the year the pork demand is lower, and the meat demand for processing is covered by imports, being under frozen meat form and having lower prices than those practiced on the Romanian market.

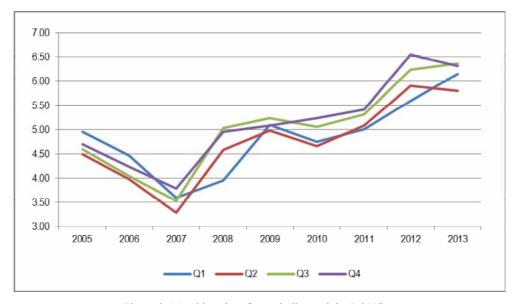


Figure 2. Monthly prices for pork, live weight, RON/kg.

In the period 2007-2012 Romania was confronted with a constant deficit of soybean oilcakes for pig and poultry feeding in the industrial raising system. There are no data that indicate that this was a less-favoured sector, but according to the experts in the field, the pig feeding recipes are most often not adapted to the real needs in the industrial pig raising sector.

Table 2
Soybean oilcake trade and production, thousand tons, 2007-2014

	2007	2008	2009	2010	2011	2012	2013
Imports of soybean oilcakes	217	318	469	435	455	482	464
Imports of soybeans – in oilcake equivalent*	55	75	17	14	28	51	94
Exports of soybeans - in oilcake equivalent *	19	22	9	30	59	72	31
Exports of soybean oilcakes	66	85	103	72	81	105	117
Soybean production – in oilcake equivalent *	109	72	67	120	114	83	120
Consumption availability, for all species *	296	358	442	467	457	439	529
Pig feeding necessary, under industrial system *	285	261	358	327	345	342	381
Poultry feeding necessary, under industrial system *	165	157	215	196	210	205	229
Oilcake surplus, for feeding other species *	-154	-59	-131	-56	-98	-108	-80

Source: Eurostat, \*own calculations.

### 2. MATERIAL AND METHOD

In order to analyze and evaluate the meat sector current evolution and prospects, we collected data from the National Institute of Statistics, the Ministry of Agriculture and Rural Development, the National Sanitary-Veterinary and Food Safety Agency, Eurostat and FAO data for the period 2007-2013.

The initial purpose was to identify the evolutions of the pork and protein feed market, which were subsequently used to evaluate the impact of pork trade liberalization on: animal herds, meat production, soybean production, soybean oilcake imports, imports of live piglets for fattening, pork exports and evaluation of the trade balance related to the pork sector (live animals, meat and protein oilcakes).

We started from the premise offered by the OECD-FAO estimates for the period 2011-2020 that show that the meat sector will continue to get adjusted to the disequilibria between supply and demand produced in recent years with regard to feeds, with direct consequences upon meat prices. The meat market prospects for the next decade take into consideration the high feed costs in the context of demand maintenance, mainly from the developing countries. The high prices in the first half of the period should lead to the increase of animal herds, which will be followed by trade development in the second half of the decade. Productivity increase on the basis of price cuts and technological efficiency improvement represent the main growth engine, mainly for pork production in the developing countries. Compared to the previous decade, pork consumption increase will be slower, due to the high production costs and to slowing down the population's growth process. The increase of demand is mainly due to the economies from Asia and Latin America, as well as from the oil exporting countries.

On the other hand, Poland and Romania are seen as the countries with the best positions so as to become main pork producers and possible exporting countries on the long term. The population of both countries prefers pork, their cereal production is sufficient and they present interest for foreign investments that will accelerate the pork meat sector modernization (Vernooij, 2011).

At the same time, according to the Romanian industry, there is an increased interest for investments in the pork meat sector. The foreign investments made in the western part of Romania proved that the vertically integrated business is successful, and the pork prices can be competitive both on the domestic and foreign markets.

#### 3. RESULTS AND DISCUSSIONS

The data resulting from the calculations for the period 2015-2019, on the basis of the algorithms used, are presented in Tables 2-4.

We started from the hypothesis that pigs will continue to be raised under the household system, but their number will continuously decrease.

The slaughtering of pigs coming from the commercial farms will increase by 10% each year on the average, to reach 6.6 million heads at the end of the period, i.e. an increase by 2.5 million heads. This trend will be followed by the production of live weight and carcass pork meat.

Table 3
Pig slaughtering and pigmeat production estimates in the period 2014-2019

	2014	2015	2016	2017	2018	2019
Number of slaughtered pigs, total, thousand heads	5,121	5,333	5,586	5,885	6,233	6,736
- out of which on specialized units	4.121	4.533	4.986	5.485	6.033	6.636
Pork production, live weight, thousand tons	640	704	775	852	937	1031
-out of which on specialized units	444	488	537	591	650	715
Pork production, carcass weight, thousand tons	493	542	596	656	722	794
-out of which on specialized units	375	428	501	584	657	754

Source: own calculations.

In order to feed the increasing pig herds on the commercial farms we followed two variants: the areas cultivated with soybeans will increase together with the increase of imported soybean oilcakes.

Due to the coupled support for soybean production, announced by the Ministry of Agriculture and Rural Development, the farmers' income, at national level, will increase by 42-56 million euro in the period 2015-2019, which will also lead to investments in crop production.

 $Table \ 4$  Estimates of the necessary soybean oilcakes for pig feeding, in the period 2014-2019

	2014	2015	2016	2017	2018	2019
Area under soybean (thousand ha)	85	90	95	100	104	108
Soybean production (thousand tons)	170	190	210	230	250	270
Coupled support for soybean crop (euro/ha)*	n.a.	465	488	500	511	521
Additional income for farmers from the coupled support						
for soybean crop (thousand euro)	n.a.	42,071	46,582	50,000	53,229	56,268
Soybean oilcake, consumption needs for pigs, thousand tons	372	409	450	495	544	599
- out of which from imports - thousand tons	216	237	262	291	324	363
-t housand euro	96.120	105.465	116.590	129.495	144.180	161.535

Source: own calculations, \*coupled payments proposal, Ministry of Agriculture and Rural Development.

As a result of pig raising and pork processing sector revigoration, the trade balance will be positive by the year 2019, reaching 186 million euro, so that we can say that the pork exports will exceed the imports of live animals, meat for processing and soybean oilcakes.

 $Table\ 5$  Estimates of the trade balance in the pork sector, thousand euro, in the period 2014-2019

	2014	2015	2016	2017	2018	2019
Imports of live animals	63,000	63,000	63,000	63,000	63,000	63,000
Pork imports	250,460	250,460	241,515	232,570	223,625	178,900
Imports of soybean oilcakes, used in pig feeding	96,120	105,465	116,590	129,495	144,180	161,535
Pork exports	134,400	252,000	336,000	420,000	504,000	588,000
Pork sector trade balance	-275,180	-166,925	-85,105	-5,065	73,195	184,565

Source: own calculations.

## 4. CONCLUSIONS

It indubitably results that by the primary production sector restructuring, with the use of high quality superior biological material, an adequate feeding of pigs, correlated with massive investments in technologies complying with the biosecurity and environmental requirements, the Romanian pork sector can bring significant incomes on the short term, in spite of the fact the imports of live pigs, pork and soybean oilcakes will continue. By the year 2018, the pork exports will determine a surplus trade balance generated by the sector.

At the same time, the farmers who will opt for soybean cultivation will receive coupled support, which will facilitate subsequent investments in technology.

A possible threat of lifting the embargo on pork exports could determine an increase in prices on the domestic market due to the limitation of domestic supply.

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