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CHALLENGES FOR THE PORK SECTOR IN ROMANIA

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Abstract

This paper aimed to analyse the evolution of the pork sector in Romania which was and is still affected by the African Swine Fever. The research method is based on a quantitative approach, based on national and international time data series for livestock, production and trade and the authors analysed the Romanian pork market evolution in the EU context. The results indicated significant loose of sector power which needs several years to recover from this crisis. Since pork is by far the preferred meat for the Romanian consumer, this will increase the imbalance of the pork trade in the next years, with consequence on the internal market prices and position of the Romanian pork producers within the market.

Key words: *African Swine Fever, market, pork, Romania, trade*

INTRODUCTION

Between 2007-2014 the pork production declined in Romania due to significant livestock decline [7]. The decrease of pigs' livestock in Romania from 5.6 million heads in 2009 to 4.9 million heads in 2017 was correlated with a switch in the top of the regions with the highest livestock, the West Region replacing the South Region of Development in the top with almost 1 million of heads [4]. The new and main important cause of decrease of pig livestock in Romania in 2018, the African swine fever (ASF), came in Europa in 2007 through a Georgia Black Sea harbour and entered EU in 2014. [6]. In Romania the African Swine Fever was first detected at the end of July 2017 in a household located at the periphery of the city Satu Mare [1] but the Romanian authorities have been alerted by the European Commission since month March of the same year when a meeting Task Force was held by DG SANTE in Suceava city, when have been presented methods for preventing of entry of this disease virus in Romania. [2]. The disease spread rapidly in the main production areas starting with the South East Region at the end of June 2018 when was recorded in a slaughterhouse belonging to a company which held a pig farm in Tulcea County. From a report of The National Sanitary Veterinary and Food Safety Authority of Romania [8] presented in Bruxelles in September 2018, it can be understanding the huge impact of disease on the pig livestock, which led to sacrifice of over 300 thousand pigs and lock the activity in more than 15 commercial farms. Since Romania was a net importer of meat and edible meat products [3], and the most significant deficit before this disease was at the group of pork [5], this crisis imbalanced more the trade with pork products. This paper aimed to evaluate the recent situation of pork sector in Romania and to underline the main challenges of this sector in relation to the main pork producers and exporters from the EU to Romania.

MATERIALS AND METHODS

For this paper were first analysed the evolution of EU livestock, pork production and the exports, in quantitative and value terms. Then were determined the main EU pork exporters and we calculated how much of their exports are delivered on Romanian markets and what was the variation of their exports share on the Romanian market. The data were provided by ITC, the joint agency of the WTO and United Nations and Food and

Agriculture Organization of the United Nations.

RESULTS AND DISCUSSIONS

Germany has by far the largest pig livestock in the EU, accounting over 58 million heads, followed by Spain which increased its livestock from 40 to 50 million heads in the last decade, while Denmark, the third EU pig producer recorded a decline from 20.1 million heads in 2010 to less than 17.5 million heads in 2017. A significant decline of pig livestock was recorded in France from 25.4 million heads in 2009 to 23.8 million heads in 2017, while in Romania the pig livestock declined under 5 million heads (Table 1), and the impact of African Swine fever from 2018 will be marked soon by the national statistic.

Table 1. Pig livestock (heads)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Germany	56,315,240	58,625,628	59,735,680	58,365,864	58,622,058	58,934,837	59,435,349	59,480,468	58,408,370
Spain	40,887,908	40,847,016	41,743,364	41,594,556	41,418,464	43,484,000	45,890,524	49,083,785	50,072,755
Denmark	19,331,500	20,137,800	20,898,500	19,485,000	19,102,000	18,857,500	18,716,700	18,356,533	17,465,533
Netherlands	13,815,660	13,943,600	14,593,700	14,317,700	14,013,580	14,595,890	15,485,070	15,373,890	15,169,000
Belgium	11,161,285	11,900,000	11,764,596	11,695,145	11,915,000	11,855,070	11,886,693	11,181,334	10,919,769
Poland	20,062,224	21,256,676	22,055,910	20,604,816	20,278,472	21,665,978	21,748,332	22,098,424	22,188,959
France	25,497,210	25,348,236	25,005,000	24,388,000	24,387,873	23,332,517	23,312,352	24,138,654	23,858,700
Ireland	2,420,800	2,657,300	2,905,000	2,972,300	2,903,700	3,042,800	3,226,000	3,316,600	3,355,100
Austria	5,598,387	5,632,463	5,601,002	5,432,959	5,431,798	5,409,578	5,414,234	5,227,573	5,152,595
Hungary	4,868,637	4,918,241	4,687,213	4,239,317	4,017,421	4,446,798	4,842,570	4,905,868	5,050,984
Romania	**5,697,726**	**5,255,000**	**5,545,000**	**5,362,000**	**4,793,000**	**5,668,000**	**5,759,000**	**5,985,000**	**4,924,340**

Source: FAO.

Germany has also the largest pork production from the EU, more than 5.5 million tons being marketed on the internal and external market. Romania with a pork production that declined at 0.45 million tons in 2017 is not able to cover the internal pork meat demand, and its market is plenty of pig meat imported from the EU.

Table 2. Pork production (tons)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Germany	5,264,505	5,488,369	5,616,074	5,474,021	5,506,772	5,527,769	5,570,490	5,589,639	5,505,572
Spain	3,290,571	3,368,921	3,469,345	3,466,323	3,431,214	3,555,606	3,854,658	4,181,091	4,298,893
Denmark	1,585,000	1,668,200	1,720,200	1,669,000	1,589,400	1,593,900	1,600,591	1,579,405	1,532,387
Netherlands	1,274,980	1,294,000	1,347,166	1,332,731	1,306,950	1,370,890	1,456,220	1,452,840	1,455,677
Belgium	1,082,036	1,123,769	1,108,255	1,109,610	1,130,572	1,118,330	1,124,310	1,060,541	1,044,561
Poland	1,735,700	1,894,800	1,936,300	1,848,600	1,775,500	1,864,500	1,976,000	2,008,800	2,047,800
France	2,261,593	2,254,688	2,217,368	2,161,653	2,130,578	2,120,315	2,148,452	2,185,430	2,136,276
Ireland	195,600	214,300	233,800	241,400	239,300	254,100	276,400	282,700	294,200
Austria	540,299	545,818	544,166	530,263	529,284	527,442	529,118	514,892	508,494
Hungary	453,484	452,073	434,707	393,712	368,153	412,292	455,088	457,808	469,829
Romania	**470,567**	**428,891**	**454,415**	**442,942**	**396,070**	**459,756**	**470,055**	**500,777**	**451,940**

Source: FAO.

In 2017 the EU accounted for two thirds of all world pork export. The main exporter was Germany, followed by Spain and Denmark both in terms of value (Table 3) or quantity (Table 4). While Denmark seems to lose a tempo in the pork trade, especially on the UK market, Spain gained large sectors on the EU and world pork markets. The scale economy is the main reason which led to decrease in the number of pig farms in some traditional EU producer countries, where pig production became more concentrated, being developed in large scale farms. Most of these countries had recorded significant improvements in productivity, so at the EU level, the pork sector remains solid, and the pork exports were not affected by particular production developments in some of the EU countries. Poland is one of the EU countries which tripled their exports in the last years, while France recorded a significant loss of its share on the international pork markets. The development of the processing industry was affected in some of the main producer countries, where the pig production was decoupled by the national processing industry. In some EU countries, the number of pigs slaughtering decreased since the pork market prices and the processing cost determined the producers to invest in slaughterhouses situated in other countries of the EU.

Table 3. Top 10 European Union exporters for meat of swine, fresh, chilled or frozen (US Dollar thousand)

Exporters	Exported value in 2009	Exported value in 2010	Exported value in 2011	Exported value in 2012	Exported value in 2013	Exported value in 2014	Exported value in 2015	Exported value in 2016	Exported value in 2017
World	23,519,969	24,931,330	30,061,040	30,509,742	31,085,714	31,497,679	25,488,107	27,550,860	30,129,460
European Union (EU 28)	16,200,094	16,585,662	19,767,118	19,911,150	21,202,993	20,437,563	16,464,482	17,929,956	19,613,359
Germany	3,990,960	4,051,758	4,921,991	5,006,181	5,303,544	5,051,956	3,986,293	4,349,885	4,762,901
Spain	2,325,803	2,322,514	2,903,042	2,999,062	3,170,556	3,382,357	2,998,204	3,550,205	4,068,663
Denmark	3,129,593	3,114,869	3,567,755	3,343,764	3,398,027	3,217,429	2,537,523	2,628,643	2,741,676
Netherlands	1,847,830	1,825,829	2,229,324	2,209,977	2,289,806	2,425,022	1,929,597	2,018,068	2,169,655
Belgium	1,611,139	1,539,602	1,712,925	1,751,237	2,036,212	1,684,892	1,310,014	1,318,556	1,442,361
Poland	364,424	573,231	805,155	966,883	1,221,172	922,314	757,948	836,970	1,062,392
France	1,092,736	1,073,887	1,230,911	1,214,747	1,246,655	1,115,887	830,036	878,573	931,178
Ireland	198,507	249,178	333,012	381,552	421,967	472,604	422,676	486,341	502,587
Austria	499,980	479,357	570,909	512,118	506,175	558,889	374,199	410,366	431,179
Hungary	319,112	434,090	461,153	409,842	400,618	419,030	342,936	355,032	399,516
%EU in World	**68.88**	**66.53**	**65.76**	**65.26**	**68.21**	**64.89**	**64.60**	**65.08**	**65.10**

Source: International Trade Center and own calculations.

Table 4. Top 10 European Union exporters for meat of swine, fresh, chilled or frozen (Tons)

Exporters	Exported quantity in 2009	Exported quantity in 2010	Exported quantity in 2011	Exported quantity in 2012	Exported quantity in 2013	Exported quantity in 2014	Exported quantity in 2015	Exported quantity in 2016	Exported quantity in 2017
World	9,041,843	9,587,138	10,418,450	10,556,750	10,477,525	10,596,207	10,996,882	11,719,148	11,596,632
European Union (EU 28)	6,025,205	6,574,793	7,087,599	7,028,580	7,197,602	7,249,283	7,585,436	7,969,324	7,762,800
Germany	1,440,110	1,544,780	1,700,168	1,693,699	1,732,721	1,757,952	1,778,914	1,869,922	1,818,896
Spain	882,291	879,828	995,319	1,029,067	999,463	1,076,366	1,254,383	1,487,458	1,517,410
Denmark	1,089,031	1,153,809	1,211,141	1,102,590	1,085,548	1,090,664	1,130,866	1,128,625	1,093,046
Netherlands	641,760	774,779	846,492	824,402	797,262	889,269	940,316	925,788	911,800
Belgium	655,703	666,313	667,752	684,682	777,521	696,764	722,622	687,352	672,040
Poland	147,295	257,491	309,753	358,812	441,309	374,196	394,493	415,282	471,514
France	469,419	484,211	491,909	481,344	483,336	455,488	437,113	444,308	423,110
United Kingdom	108,363	138,016	144,539	152,670	180,585	181,713	186,955	206,039	215,986
Ireland	82,476	103,386	124,673	132,311	132,461	148,519	169,465	183,823	192,062
Austria	171,254	170,413	183,273	161,865	153,982	177,595	158,579	166,931	154,566
%EU in World	**66.64**	**68.58**	**68.03**	**66.58**	**68.70**	**68.41**	**68.98**	**68.00**	**66.94**

Source: International Trade Center and own calculations.

Germany is the main pork export supplier for the Romanian market (Table 5). Spain has recorded the highest increase of pork on the Romanian market. From 2009 to 2017 Spain doubled its exports in Romanian pork market, and the Romanian preferences for these products can be associated with the large community of Romanian from Spain which has begun to bring the consumer influence of pork products with Spanish origin on their relatives from Romania, fact that was speculated by the Spanish pork exporters. Certain Spanish specific stores have also been established on the Romanian market. The high level of the pork imports from Hungary can be related to the low cost for transport and

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consumer preference of the Hungarian communities which totalize more than 1.2 million inhabitants. In 2017 the total import of pork in Romania totalized 0.23 million to (Table 6), which is half of the internal pork production. Both in quantitative and value terms, Germany, Spain and Hungary are the main suppliers for our internal market. Poland gained in the last decade large share on the Romanian pork market. Only 3% of the Germany pork exports came in Romania in 2017, but should be considered that around 20% of Hungary pork exports can be found on the Romanian pork market. In terms of quantity, Germany exported 62 thousand to of pork meat on Romanian market in 2017, representing 3.45 % of its total exports, but in 2009, Germany exported in Romania over 73 thousand to of pork products, which represented at that time 5.13 % of its total exports of pork products.

Table 5. Top 5 supplying markets for meat of swine, fresh, chilled or frozen imported by Romania (US Dollar thousand)

Exporters	Imported value in 2009	Imported value in 2010	Imported value in 2011	Imported value in 2012	Imported value in 2013	Imported value in 2014	Imported value in 2015	Imported value in 2016	Imported value in 2017
World	**531,331**	**403,791**	**360,419**	**331,644**	**357,726**	**378,390**	**327,996**	**380,264**	**541,906**
Germany	170,376	125,206	110,171	96,479	106,005	123,480	101,246	88,037	142,828
% from World	**32.07**	**31.01**	**30.57**	**29.09**	**29.63**	**32.63**	**30.87**	**23.15**	**26.36**
Spain	62,412	36,745	26,675	25,973	38,740	52,557	56,121	97,127	131,730
% from World	**11.75**	**9.10**	**7.40**	**7.83**	**10.83**	**13.89**	**17.11**	**25.54**	**24.31**
Hungary	85,558	74,001	66,457	87,390	98,712	67,687	58,096	67,259	79,085
% from World	**16.10**	**18.33**	**18.44**	**26.35**	**27.59**	**17.89**	**17.71**	**17.69**	**14.59**
Netherlands	42,711	31,949	35,816	39,117	34,652	44,014	37,791	38,578	57,209
% from World	**8.04**	**7.91**	**9.94**	**11.79**	**9.69**	**11.63**	**11.52**	**10.15**	**10.56**
Poland	7,336	5,820	5,273	4,569	5,485	17,195	18,096	22,707	44,463
% from World	**1.38**	**1.44**	**1.46**	**1.38**	**1.53**	**4.54**	**5.52**	**5.97**	**8.20**

Source: International Trade Center and own calculations.

Table 6. Top 5 supplying markets for meat of swine, fresh, chilled or frozen imported by Romania (Tons)

Exporters	Imported quantity in 2009	Imported quantity in 2010	Imported quantity in 2011	Imported quantity in 2012	Imported quantity in 2013	Imported quantity in 2014	Imported quantity in 2015	Imported quantity in 2016	Imported quantity in 2017
World	228,458	198,914	157,696	156,454	150,118	163,559	188,689	196,966	232,387
Germany	73,902	62,332	49,949	39,993	44,555	57,022	63,257	50,701	62,733
% from World	32.35	31.34	31.67	25.56	29.68	34.86	33.52	25.74	27.00
Spain	23,414	14,822	9,927	9,869	12,248	17,861	25,490	42,406	47,901
% from World	10.25	7.45	6.30	6.31	8.16	10.92	13.51	21.53	20.61
Hungary	35,562	35,396	27,718	53,502	44,183	26,714	30,088	31,455	35,049
% from World	15.57	17.79	17.58	34.20	29.43	16.33	15.95	15.97	15.08
Netherlands	16,849	14,835	15,086	15,564	13,919	18,244	21,297	20,093	24,702
% from World	7.38	7.46	9.57	9.95	9.27	11.15	11.29	10.20	10.63
Poland	4,633	5,120	3,391	2,629	3,117	9,062	13,445	13,488	20,882
% from World	2.03	2.57	2.15	1.68	2.08	5.54	7.13	6.85	8.99

Source: International Trade Center and own calculations.

In 2017 Spain has the highest share of its pork exports on the Romanian market, representing 3.24 % of its total pork exports (Table 7). Poland pork exports to Romania increased in the last years the concern of Romanian producers who faced in this way a new and important competitor on the market. The challenges of the internal market can be seen from different points of view. In terms of quantity (Table 8), it can be seen that the Romanian imports have increased to over 1.8 million tons. The producers have been affected by the African Swine Fever both in terms of livestock and price. They lost pigs with captive bullets and it takes several months until the production can be relaunched. The farms had to fire the employees and activity can be hardly restarted. The risk of new cases of AFS makes some producers circumspect in their attempting to resume the production, since the disease has spread in 18 Romanian counties and around 300 localities. Some measures related to the restriction for animal movements and campaign for the decreasing of domestic swine in the affected areas can also be a brake in the relaunch of pork sector in the disease area.

The retail of pork product made in small enterprises has collapsed and many businesses have been closed. Also many businesses related with providing inputs to the pig farms were closed or severally affected. The pork processors are now obliged to import higher quantity of frozen pork which they use in the preparation of sausages and this can lead to an increase of the price of Romanian pork products on the market.

Table 7. The pork value imported by Romania from the supplying markets (US Dollar thousand)

Exporters	2009	2010	2011	2012	2013	2014	2015	2016	2017
Germany	3,990,960	4,051,758	4,921,991	5,006,181	5,303,544	5,051,956	3,986,293	4,349,885	4,762,901
Value imported by Romania from Germany	170,376	125,206	110,171	96,479	106,005	123,480	101,246	88,037	142,828
%	4.27%	3.09%	2.24%	1.93%	2.00%	2.44%	2.54%	2.02%	3.00%
Spain	2,325,803	2,322,514	2,903,042	2,999,062	3,170,556	3,382,357	2,998,204	3,550,205	4,068,663
Value imported by Romania from Spain	62,412	36,745	26,675	25,973	38,740	52,557	56,121	97,127	131,730
%	2.68%	1.58%	0.92%	0.87%	1.22%	1.55%	1.87%	2.74%	3.24%
Hungary	319,112	434,090	461,153	409,842	400,618	419,030	342,936	355,032	399,516
Value imported by Romania from Hungary	85,558	74,001	66,457	87,390	98,712	67,687	58,096	67,259	79,085
%	26.81%	17.05%	14.41%	21.32%	24.64%	16.15%	16.94%	18.94%	19.80%
Netherlands	1,847,830	1,825,829	2,229,324	2,209,977	2,289,806	2,425,022	1,929,597	2,018,068	2,169,655
Value imported by Romania from Netherlands	42,711	31,949	35,816	39,117	34,652	44,014	37,791	38,578	57,209
%	2.31%	1.75%	1.61%	1.77%	1.51%	1.81%	1.96%	1.91%	2.64%
Poland	364,424	573,231	805,155	966,883	1,221,172	922,314	757,948	836,970	1,062,392
Value imported by Romania from Poland	7,336	5,820	5,273	4,569	5,485	17,195	18,096	22,707	44,463
%	2.01%	1.02%	0.65%	0.47%	0.45%	1.86%	2.39%	2.71%	4.19%

Source: International Trade Center and own calculations

Table 8. The pork quantities imported by Romania from the supplying markets (Tons)

Exporters	2009	2010	2011	2012	2013	2014	2015	2016	2017
Germany	1,440,110	1,544,780	1,700,168	1,693,699	1,732,721	1,757,952	1,778,914	1,869,922	1,818,896
Imports of Romania from Germany	73,902	62,332	49,949	39,993	44,555	57,022	63,257	50,701	62,733
%	5.13%	4.04%	2.94%	2.36%	2.57%	3.24%	3.56%	2.71%	3.45%
Spain	882,291	879,828	995,319	1,029,067	999,463	1,076,366	1,254,383	1,487,458	1,517,410
Imports of Romania from Spain	23,414	14,822	9,927	9,869	12,248	17,861	25,490	42,406	47,901
%	2.65%	1.68%	1.00%	0.96%	1.23%	1.66%	2.03%	2.85%	3.16%
Hungary	107,100	158,639	151,845	136,244	132,939	132,377	139,530	134,533	**No quantity**
Imports of Romania from Hungary	35,562	35,396	27,718	53,502	44,183	26,714	30,088	31,455	35,049
%	33.20%	22.31%	18.25%	39.27%	33.24%	20.18%	21.56%	23.38%	-
Netherlands	641,760	774,779	846,492	824,402	797,262	889,269	940,316	925,788	911,800
Imports of Romania from Netherlands	16,849	14,835	15,086	15,564	13,919	18,244	21,297	20,093	24,702
%	2.63%	1.91%	1.78%	1.89%	1.75%	2.05%	2.26%	2.17%	2.71%
Poland	147,295	257,491	309,753	358,812	441,309	374,196	394,493	415,282	471,514
Imports of Romania from Poland	4,633	5,120	3,391	2,629	3,117	9,062	13,445	13,488	20,882
%	3.15%	1.99%	1.09%	0.73%	0.71%	2.42%	3.41%	3.25%	4.43%

Source: International Trade Center and own calculations.

CONCLUSIONS

Romania was the main affected country by the African Swine Fever. The low security of the Romanian farms and the late reaction of the factors involved it generated a real and major crisis on the internal pork market. All the pork supply chain has been affected and the market is now under pressure of the import pork products from the EU countries. The Romanian trade balance with pork products will become even deficient and prices on the pork market can have surprising developments since the internal production cover about one third from the consumption needs.

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