POULTRYMEAT MARKET IN ROMANIA AFTER THE ACCESSION TO THE EUROPEAN UNION

PIAŢA CĂRNII DE PASĂRE ÎN ROMÂNIA DUPĂ ADERAREA LA UNIUNEA EUROPEANĂ

MINODORA MOLDOVAN[1]

[1]Institute of Agricultural Economics, Romanian Academy, Bucharest, Romania; minodora.moldovan@yahoo.com

Abstract: *The post-accession experience reveals a certain fragmentation of the Romanian meat market as regards the lack of competitiveness mainly in the pork meat market, dominated by massive imports.*

The paper investigates the deep changes that have been produced in the poultry meat sector after the accession, as regards the poultry meat production and self-sufficiency, the price convergence process on the European market in this period of agricultural production instability and price volatility.

In the year 2009, the self-sufficiency in poultry meat in Romania reached 75.6%.

In the period January 2007 - June 2010, poultry meat prices slightly fluctuated, while the low level of variation coefficients indicated a low volatility. The fast increase of chicken meat prices in Romania in the year 2008 reveals a high sensitivity of this sector to different factors, to the increase of input prices respectively (feeds, fuels).

Key words: *poultrymeat, prices, standard deviation, variation coefficient, volatility*

INTRODUCTION

Although the agricultural produce prices have decreased since 2009 from a maximum level in the year 2008 both in the European Union and in Romania, price volatility is an actual issue.

The worries in relation to price volatility increase are mentioned by experts due to farmers' exposure to changing prices. In the next years, the agricultural markets tend to increase their volatility due to the fluctuations in cereal prices, in 2010 the harvests were affected by extreme weather conditions following the climate changes. The price increases in the last

months for wheat, maize and sunflower will result in volatility and uncertainties in the poultry meat sector, having in view the necessary cereals and oilcakes. The increase in feed prices will lead to the increase of meat prices at global level. The high price of cereals and oilcakes used in poultry feeding may lead to meat consumption decrease on medium term.

Price volatility on the agricultural markets is a current problem that farmers are facing; out of this reason, new market instruments and mechanisms are needed, which, together with the current mechanisms (intervention, stocking), may function as a safety net for farmers in the situation of crisis.

RESEARCH MATERIAL AND METHOD

The paper presents a technical-economic analysis of the segment of activities on the poultry meat market, from production to trade and final consumption, as well as the price evolution analysis in Romania compared to prices in the European Union. In order to determine price volatility we used monthly price series for poultry meat between January 2007 and June 2010 and we calculated the standard deviation that represents the data deviation from the average and the variation coefficient, an indicator that expresses the volatility of the market for these products. The variation coefficient was calculated as a ratio of standard deviation to the average, making it possible to identify the dispersion points and the peaks that were above the general tendency. The higher the variation coefficient, the higher the dispersion and price volatility.

RESULTS AND DISCUSSIONS

European market

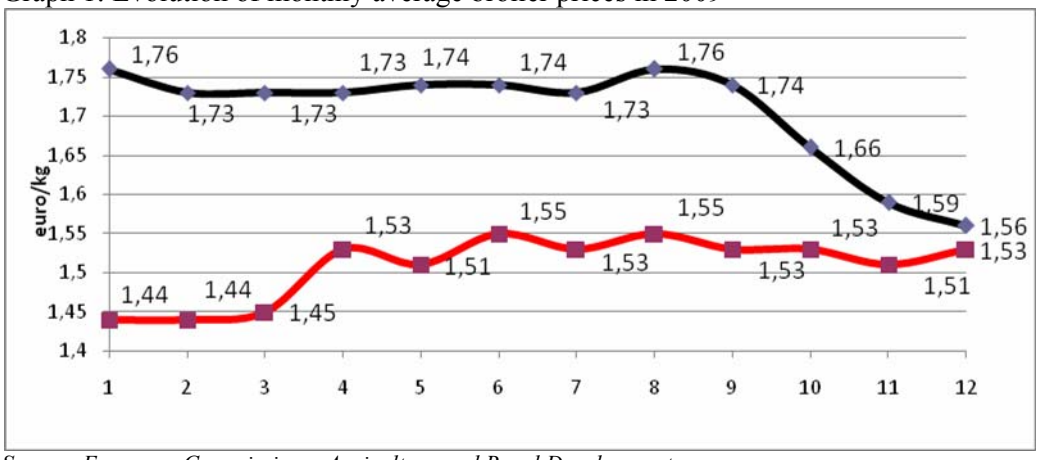
The poultry meat market in the European Union is a stable market, with a total production on the rise, which reached 11.3 million tons in 2008, and 11.5 million tons in 2009.

The main producers have the following shares: 15.8% France, 12.4% United Kingdom, 11.7% Spain, 11.0% Germany, 10.2% Italy. With a production of 371 thousand tons in 2009, Romania's share was 3.2%. The poultry meat export in EU-27 reached 920 thousand tons in 2008, while in 2009 it was up

to 1013 thousand tons, while imports reached 792 thousand tons. The main exporters were Netherlands, France, Italy and Germany.

The EU-27 monthly average prices for broilers without VAT had a variability of 1.76 euro/kg in January and August, to reach 1.56 euro/kg in December.

Graph 1: Evolution of monthly average broiler prices in 2009



Source: European Commission – Agriculture and Rural Development

In Romania prices were under the EU average and oscillated from 1.44 euro/kg in January-February to 1.55 euro/kg in June and August, with an annual average of 1.50 euro/kg. Prices were higher than the annual average in the following countries: United Kingdom 1.23 euro/kg, Poland 1.24 euro/kg, Bulgaria 1.43 euro/kg and lower than in Germany 2.53 euro/kg, Italy 1.79 euro/kg, Denmark 1.85 euro/kg. This situation of broiler prices in EU could lead to certain options for Romania, i.e. exports should be oriented to countries that have higher prices compared to us and imports from countries with lower prices. At EU level, prices are different by countries, while in the period January – June 2009 the monthly average broiler prices without VAT had a variability ranging from 1.76 euro/kg in January to 1.74 euro/kg in June. In the same period, in the year 2010, prices oscillated from 1.58 euro/kg in January to 1.65 euro/kg in June.

In Romania, in the first half of the year 2009, prices were under the EU average, oscillating from 1.44 euro/kg in January to 1.55 euro/kg in June. Compared to 2010, the prices had a decreasing trend, from 1.53 euro/kg in

January to 1.43 euro/kg in June, the prices being lower than those from the EU average.

The market in Romania – general considerations

The poultry raising sector is characterized by the existence of two systems: an extensive raising system on the individual holdings and an intensive or industrial system. The large units for raising chickens for meat are integrated units, with combined feed mills, reproduction units, chicken raising units, slaughtering and processing units, distribution units and own shops.

There are 273 thousand individual holdings, summing up 24% of the number of poultry, and 185 legal entity units, which account for 76% of poultry number. The total number of slaughtered poultry in 2009 was 241128 thousand heads, out of which 74.6% were slaughtered in specialized industrial units.

The integrated producers have their own slaughterhouses and have made great investments for getting in line with the EU standards in recent years. The slaughtered poultry meat production totaled 304.9 thousand tons carcass weight in 2007, out of which 68.8% was obtained in great complexes, up by 25.9 thousand tons compared to 2006; in 2009, carcass meat production was 371.3 thousand tons, up by 8.2% compared to 2008 (Table 1).

Table 1: Poultry meat production

	2005	2006	2007	2008	2009
Poultry carcass total (thou. tons), out of which:	308.6	273.3	304.9	343.0	371.3
- in specialized industrial units (thou. tons)	155.1	184.4	210.3	255.7	289.8
Average chicken carcass weight (kg/piece)	1.5	1.5	1.6	1.6	1.5
- in specialized industrial units (kg/piece)	1.6	1.6	1.6	1.7	1.6

Source: NIS

In the first six months of the year 2010, production reached 188.2 thousand tons, up by 8% compared to the same period of previous year.

The organized poultry meat market is almost entirely supplied by the integrated industrial producers and by imports.

Since 2007, imports have decreased compared to previous years, mainly those from third countries such as USA, Canada, and Brazil (Table 2).
After accession, the chicken meat imports have decreased by about one third compared to previous years, due to domestic production increase.

Table 2: Foreign trade with chicken meat

-thousand tons-

	2004	2005	2006	2007	2008	2009
Imports	129.1	160.8	155.4	138.3	118.3	112
Exports	3.8	6.2	3.1	1.7	8.0	30.2

Source: NIS

Exports are modest and decreased in volume after 2005 due to avian influenza, and the large producers are satisfied to supply the domestic market, where demand exists.
Poultry meat consumption in Romania had an increasing trend after the year 2000, from 12.1 kg/capita to 21.4 kg/capita in 2007 and 21.6 kg/capita in 2009, which is a level comparable to the EU average of 22.0 kg/capita.
Consumption increased due to imports, which accounted for 31% in 2007 and 26.1% in 2008, self-sufficiency reaching 59.3% in 2006 and 75.6% in 2009 (Table 3).

Table 3: Self-sufficiency in meeting poultry meat consumption needs from domestic production

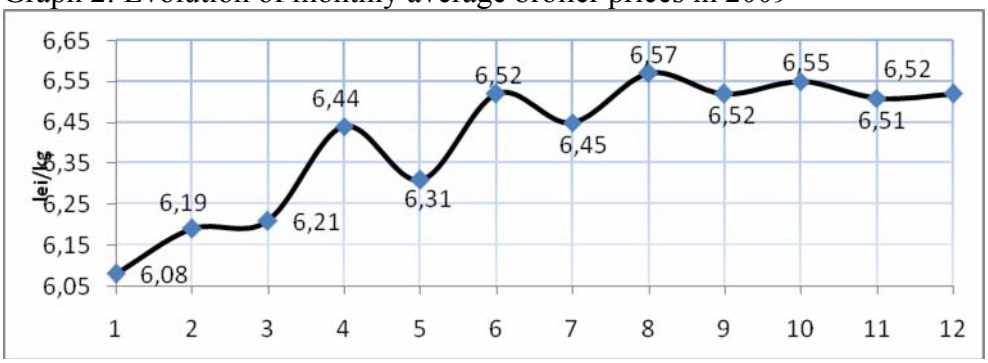
	2006	2007	2008	2009
Domestic production – thousand tons carcass	273.3	304.9	343.0	371.3
Consumption – thousand tons	460.8	433.8	453.8	462.2
Total production per total consumption - %	59.3	70.2	75.5	75.6

Source: NIS, own calculations

Prices, volatility

The broiler prices are reported to Brussels, as expressed in both national currency and in euro, as in the other EU Member States and represent average weighted prices at country level. The average monthly prices for broilers in 2009 ranged from 6.08 RON/kg in January to 6.55 RON/kg in October (Graph 2).

Graph 2: Evolution of monthly average broiler prices in 2009

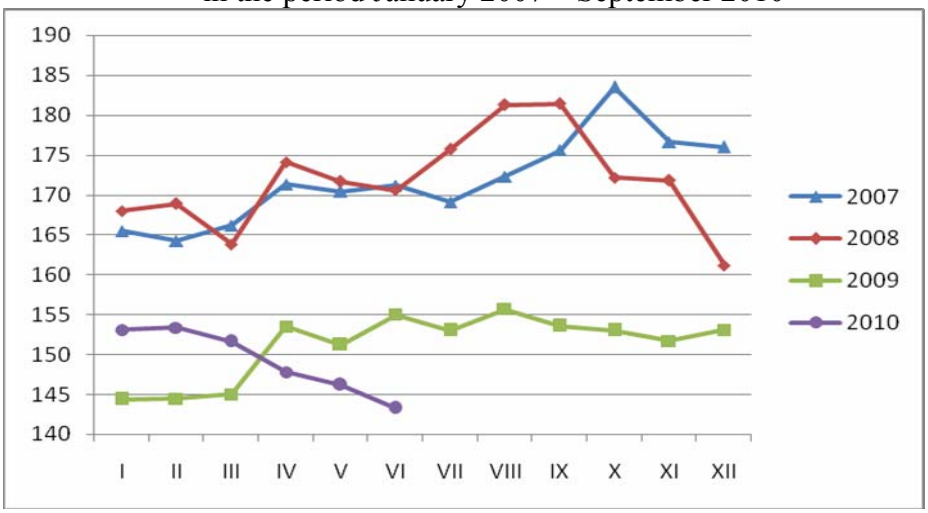


Source: MARD

In 2010, the monthly average prices followed a decreasing trend, from 6.38 RON/kg in January to 6.08 RON/kg in June.

In order to determine price volatility, we used monthly average price series for the chicken carcass in the period January 2007 – June 2010. Volatility measures the amplitude of price variation and the standard deviation and the variation coefficient are calculated, meaning the percentage ratio of standard deviation to the average of the period; this indicator reveals the volatility level of this product market.

Graph 3: Evolution of broiler carcass prices
in the period January 2007 – September 2010



Source: MARD

In the year 2007, prices began to increase since the month of March and reached a maximum level in October, i.e. 183.5 euro/100 kg carcass, while in 2009 prices began to decrease since the month of October. The evolution of prices in 2010 also followed a decreasing tend, from 153.1 euro/100 kg carcass in January to 143.3 euro/100 kg carcass in June. When the price almost does not change, volatility is low. We calculated the standard deviation and the variation coefficient for the period January 2007 – June 2010 (Table 4). The result of the price increase in 2008 was a standard deviation of 6.06 and a variation coefficient of 3.53%.

Table 4: Variation coefficients for broiler carcass

	Average - euro/100 kg carcass	Standard deviation	Variation coefficient %
2007	171.82	5.25	3.06
2008	171.72	6.06	3.53
2009	151.14	4.11	2.72
2010	149.23	4.11	2.75

Source: own calculations on the basis of prices provided by MARD

Comparing the variation coefficients in the period January 2007 – June 2010, we can notice that price dispersion was higher in 2007 and 2008. The low level of the variation coefficients reveals a certain stability of the poultry meat market in the investigated period. The price fluctuations above the trend line are considered peaks, with a higher dispersion in the years 2007 and 2008.

At EU level, in the period January 2004 – May 2010, the variation coefficient for the broiler carcass was 9.23%, indicating low price volatility, according to a study from June 24, 2010 of the Economic Analysis, Perspectives and Evaluations Directorate of the European Commission.

The analysis of poultry meat prices in the first half of the year 2010 paradoxically reveals a price decrease tendency compared to the same period of the year 2009. This situation is most likely generated by a production surplus following the depopulation practiced by some producers who limit their activity in the conditions created by the absence of state aids and decrease of sales as a result of the population's purchasing power diminution.

According to the information provided by the Union of Poultry Farmers from Romania and by certain producers from the sector, the subsidies granted in the year 2009 covered about 15% of the production cost. In order to stay on the market, producers needed to lower prices, often under the production cost, or to get a minimum profit.

CONCLUSIONS

The national poultry meat production increased after Romania joined EU, while self-sufficiency in poultry meat also increased from 59.3% in 2006 to 75.6% in 2009.

In 2010, producers were confronted with pressures related to the low prices compared to the 2009 prices, due to the diminution of sales, as well as the absence of subsidies and increase in feed prices.

The broiler carcass prices were below the EU-27 average, i.e. 1.61 euro/kg, compared to 1.75 euro/kg in 2008 and 1.50 euro/kg compared to 1.71 euro/kg in 2009.

The variation coefficients calculated in the investigated period were low, indicating a stability of the poultry meat market in Romania.

BIBLIOGRAPHY

1. **ALEXANDRI, CECILIA** (2006), Integrarea Europeană a pieţelor agricole româneşti, Ed. Terra Nostra, Iaşi
2. **ZAHIU, LETIŢIA, TOMA, ELENA, DACHIN, ANCA, ALEXANDRI, CECILIA** (2010), Agricultura în economia României – între aşteptări şi realităţi, Ed. Ceres, Bucureşti
3. *** Romania's Statistical Yearbook. NIS
4. *** Statistical Foreign Trade Bulletin, INS
5. *** Disponibilităţile de consum ale populaţiei, INS
6. *** Commodity price volatility: International and EU perspective, European Commission, Brussels 24 June 2010
7. http://ec.europa.eu/agriculture/markets/index_en.htm