

## AGRICULTURAL MARKET PRICES AND INCOME DEVELOPMENTS – STATUS QUO AND OUTLOOK

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*In the last years the prices of many agricultural commodities registered significant rises. These price developments mainly result from the combination of supply side factors at EU and world levels and demand-side drivers. Some of the factors are of a structural nature and they have set conditions for tighter, demand driven markets and thus firmer price levels. Most commodity markets have recently shown similar developments but the impact on agricultural prices is amplified by the seasonality that characterizes agricultural production and which limits its capacity for short-term adjustment as compared to other industrial sectors.*

*In this paper we intend to analyze the structural factors and effects caused by them such as: the steady rise in global commodity demand driven by record economic growth rates, urbanization and changes in dietary patterns (notably for meat) in many parts of the world; the emergence of new market outlets; the successive reforms of the CAP have certainly contributed to making agriculture more competitive but they have also produced shifts in production responses between sectors; the growth in cereal yields in the EU has considerably lowed down since 1995 and this could increasingly constrain the capacity of the agricultural sector to meet a rising domestic and global demand. Whilst caution is necessary in asserting that we have entered a new period of strong market prices after two decades of price decreases, it is becoming increasingly clear that structural factors like the growth in global food demand and the development of new market outlets can be reasonably expected to maintain prices at sustained levels over the medium-term. The high agricultural prices can be expected to be reflected in consumer prices to a much lower extent given the low and declining share of agricultural raw materials in food production costs and the competitive structure of the food supply-chain.*

**Key words:** agriculture prices, structural factors, income developments, EU

After two decades of price decline in real terms, agricultural commodity prices started to rise at the end of 2006. In 2007 compared with 2006, the agricultural commodity prices in the EU have developed rather consistently both at agricultural producer and wholesale respectively first-stage-processing level [3].

These price developments mainly result from the combination of supply side factors at EU and world levels and demand-side drivers. Some of the factors are of

a structural nature and have already transformed market conditions away from supply to a demand driven markets.

The surge in prices is mainly attributed both to structural and short-term factors. While the former type of driving forces is generally made up by the gradual rise in global food demand, the emergence of new market outlets, a slow down in EU yield productivity and an overall incapacity of major exporting countries to keep pace with demand growth, the restructuring of the EU farm sector towards greater competitiveness and the slow adjustment capacity inherent to agricultural markets, the latter factors mainly emanate from adverse climatic conditions, the growth in activity of investment funds and trade restricting behavior of exporting countries.

These factors cause a gradual change over time:

- the steady rise in global commodity demand driven by record economic growth rates, urbanization and changes in dietary patterns (notably for meat) in many parts of the world;
- the emergence of new market outlets such as the biofuels market (mainly in US where this market is estimated to absorb 25% of US maize production in 2007/08 [1], while EU biofuels production use 1-2% of domestic cereals production [2]);
- the successive reforms of the CAP have certainly contributed to making agriculture more competitive but they have also produced shifts in production responses between sectors. This has notably affected the dairy sector, where support price reductions have led to some producers leaving the sector, whilst quotas have restricted other producers' capacity to increase production. Moreover, large public (and private) stocks seen in the last decade have been largely reduced for a number of commodities resulting in a higher volatility of agricultural markets;
- the significant slow down in cereal yield growth in the EU since 1995. This could increasingly constrain the capacity of the agricultural sector to meet a rising domestic and global demand.

Besides these structural factors, which were largely anticipated in the medium-term prospects, the agricultural sector has been hit over the most recent months by a series of adverse climatic conditions in many producing and exporting regions.

The combination of these structural and short-term factors has generated very tight market conditions with a further fall in global stocks to their lowest in more than 10 years. The impact of these factors on prices has been exacerbated by the restrictive policy of some exporting countries (such as Ukraine and Russia).

## **MATERIAL AND METHOD**

For presenting the statistical data regarding the agricultural market prices and the income developments in UE, there were used the official information, several reports and analysis regarding the rural development in European Union. Among these studies are the followings: "Agriculture in the European Union. Statistical and Economic Information 2007", "Update on recent price developments in EU-27 agriculture and food

retail“, both elaborated by the Directorate-General for Agriculture and Rural Development -EU in 2008. Also in analysis there were used the conclusions of the surveys “Situation and prospects for EU agriculture and rural areas“ and “Medium-term prospects of agricultural markets and income 2007-2014“elaborated by the Directorate-General for Agriculture and Rural Development -EU in 2007, respectively in 2008. The analyzed period in our study is 1995-2007.

As statistic methods there were used investigation methods in order to determine the causality, and in particular, to draw a conclusion on the effect of changes of prices in the values of predictors regarding the agricultural income or the impact of higher agricultural prices on consumers.

## RESULTS AND DISCUSSIONS

The developments in agricultural income in 2007 compared to 2006, accordingly with the latest statistics, register a positive year-on-year change for in the EU Member States (*fig.1*). Negative or less favorable figures for some countries mainly result from a relatively low importance of the crop sector in their national agriculture and/or a high importance of the negatively affected pig/intensive cattle fattening sectors through higher feed costs.

Furthermore, losses in output volumes due to adverse climatic conditions significantly affected agricultural revenues and income in these countries (this was particularly the case for Bulgaria and Romania).

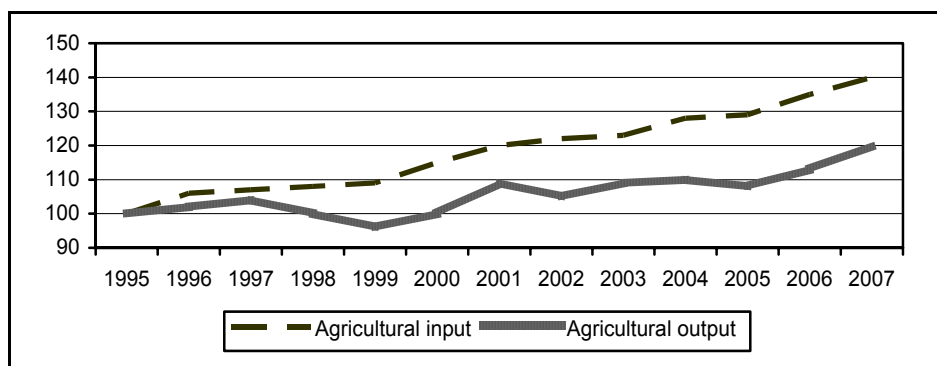


Figure 1 EU-27 agricultural input and output price indices (1995=100) [2]

As regards agricultural product price indices, animal output prices tend to lack behind crop output prices (*fig.2*). Given the "feed-interlinkage" between the animal and crop sectors, it can hence be expected that animal output prices will shift further upwards in the future.

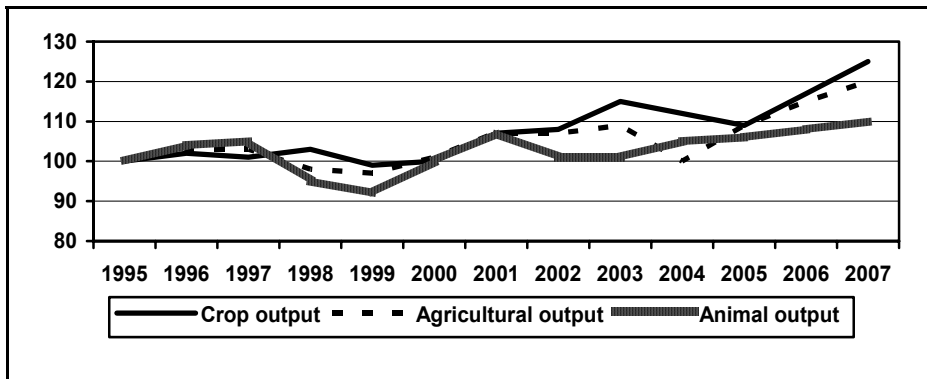


Figure 2 Agricultural output price development in the EU-27 (1995=100) [3]

As far as agricultural input prices are concerned, historically, the increase in feedingstuff prices used to be rather limited as compared to the observed price rises for energy/lubricants and fertilisers. In 2007 compared to 2006, feedingstuffs showed the biggest price increases among all agricultural inputs, driven by the price rises recorded in the grain and oilseed sectors (*fig.3*). But feedingstuff prices still developed below overall input price inflation over a long-term perspective.

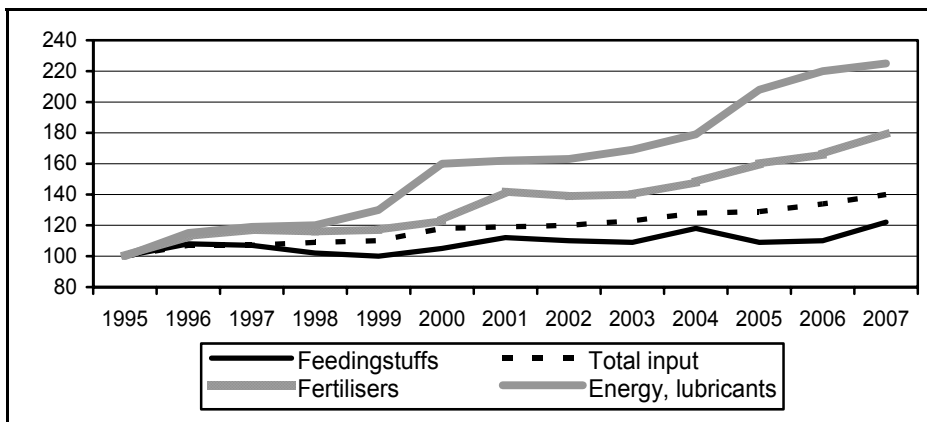


Figure 3 Agricultural input price development in the EU-27 (1995=100) [3]

Regarding future perspectives for agricultural commodity prices, many structural factors are expected to sustain market prices over the medium term. However, it is forecast that prices would not remain at the exceptional levels recently observed, mainly due to predictable producer responses to high prices (additional supply potential can be mobilized globally and particularly in the developed world) and policy adjustments such as the removal of mandatory set-aside for the 2008/09 marketing campaign, the suspension of the import duties for most cereals until the end of June 2008 and the additional 2% dairy quota increase in the EU in 2008 [4]. Pork prices are expected to cyclically rise and, finally, to explicitly reflect higher feed costs in the coming months, a development which is

already observed in the poultry and egg sectors. EU and Oceania dairy prices have been continuously converging over recent years, with interregional prices nowadays reaching rather comparable levels.

The impact of higher agricultural prices on consumers should be more limited, given the low share of agricultural raw product value in final product value (approximately 25% on average) and the low share of household food expenditure in total household expenditure (14% in 2007, new methodology).

The share of food expenditure in total household expenditure varies considerably among Member States (reflecting differing income/welfare levels). Within Member States, the respective share varies between different household types (household types differentiated by household income, household composition and household location).

It should be noted that the share of food expenditure in total household expenditure has recently started to (slightly) increase again (breaking the falling trend recorded in past decades) (*fig.4*).

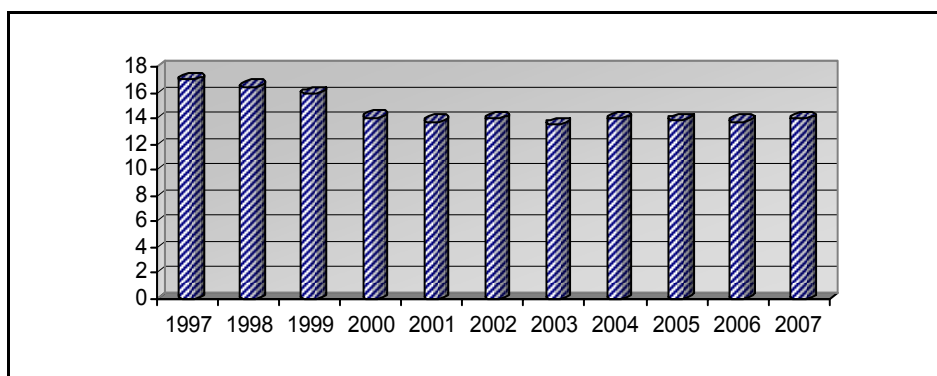


Figure 4 **Year-on-year change in the share of food expenditure in total household expenditure in the EU-27 (%) [2]**

Furthermore regarding the impact of higher agricultural prices on consumers, it should be mentioned that low-income households would be more affected. This can be explained by the higher share of food expenditure in total household expenditure recorded for low income households and by the fact that low-income households simply have less flexibility to adjust their expenditure in reaction to higher food prices.

## CONCLUSIONS

Whilst caution is necessary in asserting that we have entered a new period of strong market prices after two decades of price decreases, it is becoming increasingly clear that structural factors like the growth in global food demand and the development of new market outlets can be reasonably expected to maintain prices at sustained levels over the medium-term. This factor should increase export opportunities of EU cereals, as displayed in the medium term prospects.

However, the existing production structure and potential in the major producing countries seems largely sufficient to supply global demand so that the risk of food shortages appears low. For instance in the EU, additional production will be stimulated by both policy measures (with the proposed removal of the set-aside obligation for 2008) and economic incentives (as the very high cereal prices should constitute an appropriate incentive for farmers to increase production).

While most commodity markets (like those for metals or oil) have recently shown similar developments, the impact on agricultural prices is amplified by the seasonality that characterizes agricultural production and which limits its capacity for short-term adjustment as compared to other industrial sectors. However, the impact of these short term factors on prices should slowly decline in the next future.

The combination of structural and short-term factors has generated very tight market conditions with a further fall in world cereal stocks. The impact of these factors on prices has been exacerbated by the restrictive policy of some exporting countries, which led to what can be considered as extremely nervous markets with prices at exceptional levels.

The high agricultural prices can be expected to be reflected in consumer prices to a much lower extent given the low and declining share of agricultural raw materials in food production costs and the competitive structure of the food supply-chain (over the medium- to long-term there is no significant evidence of partial transmission of price changes between the farm and consumer levels, although this may happen in the short run in some sector/country specific situation).

## BIBLIOGRAPHY

1. Cahill, S.A. 2007 - *Net Farm Income, Market Prices and Agricultural Productivity Growth in the United States*, Research and Analysis Directorate Strategic Policy Branch Agriculture and Agri-Food Canada.
2. Popa, A., Giurcă Vasilescu, Laura, 2007 - *Romanian Rural Development between the European Union Financing Supply and the Possibilities of the Local Economy*, Lucr. șt., seria Agronomie, vol. 50, U.S.A.M.V. Iași, p. 177-182.
3. \* \* \*, 2007 – European Comission, Directorate-General for Agriculture and Rural Development 2008 -*Agriculture in the European Union. Statistical and Economic Information*.
- 4.\* \* \* – European Comission, Directorate-General for Agriculture and Rural Development, 2008 - *Update on recent price developments in EU-27 agriculture and food retail*.
5. \* \* \* – European Comission, Directorate-General for Agriculture and Rural Development, 2008 -*Medium-term prospects of agricultural markets and income 2007-2014*.
6. \* \* \* – United States Department of Agriculture ERS, 2002 - *Agricultural Income and Finance Outlook*, AIS-79, Economic Research Service, Sept.