THE MAIN ROMANIAN AGRICULTURAL SECTORS EVOLUTION FOLLOWING EU INTEGRATION

C. Alboiu, C.Alexandri, M. Grodea, I. Ionel, F. Toderoiu, M. Moldovan, L. Luca Institute of Agricultural Economics, Romania

Structure

- Dairy sector
- Poultry sector
- Vegetable sector
- Oilseeds sector
- Price volatility analysis along the agri-food chains
- Analysis of the economic flows between the "agriculture" aggregate and the "food industry" aggregate from the perspective of intermediary deliveries (destinations) and of intermediary acquisitions (origins).
- Final conclusions

Dairy sector

| | 2007 | 2008 | 2009 |
|---------------|---------|---------|---------|
| Total farms | 1052028 | 945860 | 849851 |
| (number) | | | |
| Livestock | 1710432 | 1593535 | 1499434 |
| herds (heads) | | | |
| Average farm | 1.63 | 1.68 | 1.76 |
| size | | | |
| (heads/farm) | | | |

Dairy farm structure by size clases

| | 2007 | 2008 | 2009 |
|-------------------|--------|--------|--------|
| 1 - 2 heads | 969896 | 863830 | 757799 |
| 3 - 5 heads | 66653 | 65817 | 73436 |
| 6 - 10 heads | 9614 | 9852 | 11227 |
| 11 - 15 heads | 2433 | 2468 | 3105 |
| 16 - 20 heads | 1391 | 1586 | 1620 |
| 21 - 30 heads | 942 | 1028 | 1202 |
| 31 - 50 heads | 587 | 634 | 795 |
| 51 - 100 heads | 321 | 409 | 432 |
| over 100 heads | 191 | 236 | 235 |

Number of milk quota beneficiaries

| | 2007-2008 | 2008-2009 | 2009-2010 |
|---|-----------|-----------|-----------|
| Producers with delivery | 228257 | 179079 | 136735 |
| quota Producers with direct sales quota | 1425284 | 1273518 | 991210 |
| Buyers for processing | 429 | 478 | 477 |

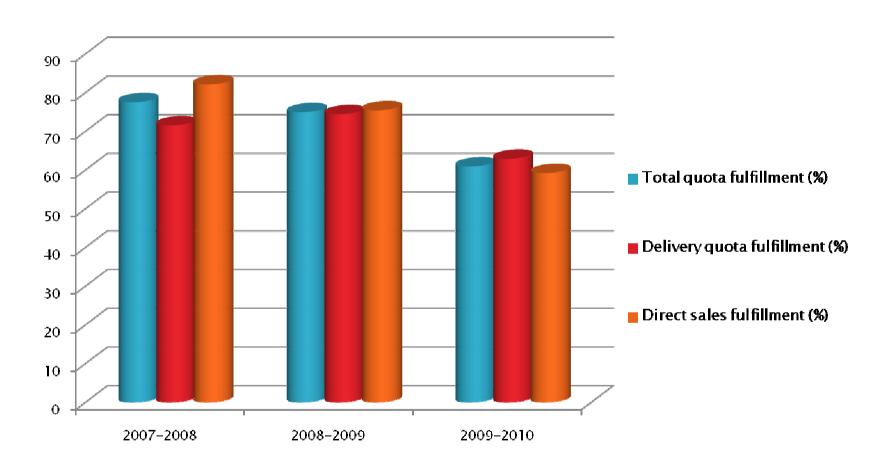
Structural characteristics of the outputs on the specialized dairy farms (FADN, 2007)

| | Average milk yield (kg/cow) | production | Milk price (euro/ton) |
|--------------|-----------------------------|------------|-----------------------|
| EU-15 | 7019 | 355 | 349 |
| EU-10 | 5567 | 102 | 283 |
| Romania | 3883 | 17 | 330 |

Evolution of the milk deliveries – direct sales ratio in Romania

| Quota years | 2007- 2008 | 2008-2009 | 2009-2010 |
|--------------------------------|---------------|-----------|-----------|
| Total national quota (thou. t) | 3057 | 3118 | 3149 |
| Milk deliveries share (%) | 43.2 | 45.8 | 46.8 |
| Direct sales share (%) | 56.8 | 54.2 | 53.2 |

Milk quota fulfillment per total and by components



Row milk supply

| | 2007 | 2008 | 2009 | 2009/20 08(%) |
|----------------------------------|---------|---------|---------|------------------|
| Row milk collected in country(t) | 1157919 | 1072679 | 1011464 | -5,8 |
| Imported row milk(t) | 43856 | 51707 | 80636 | +55,9 |
| Total (t) | 1201775 | 1124386 | 1092100 | -2,9 |

Dairy balance trade (thou. euros)

| | 2007 | 2008 | 2009 |
|--------------------------|--------|--------|--------|
| Milk and | -19698 | -30088 | -37039 |
| sour milk | | | |
| concentrated Milk and | -5805 | -4048 | -7598 |
| sour milk | -3803 | -4048 | -1398 |
| unconcentrated | | | |
| Butter | -15807 | -18861 | -21470 |
| Cheese and | -53937 | -78400 | -69175 |
| hard cheese | | | |

Romania is a net importer for dairy products

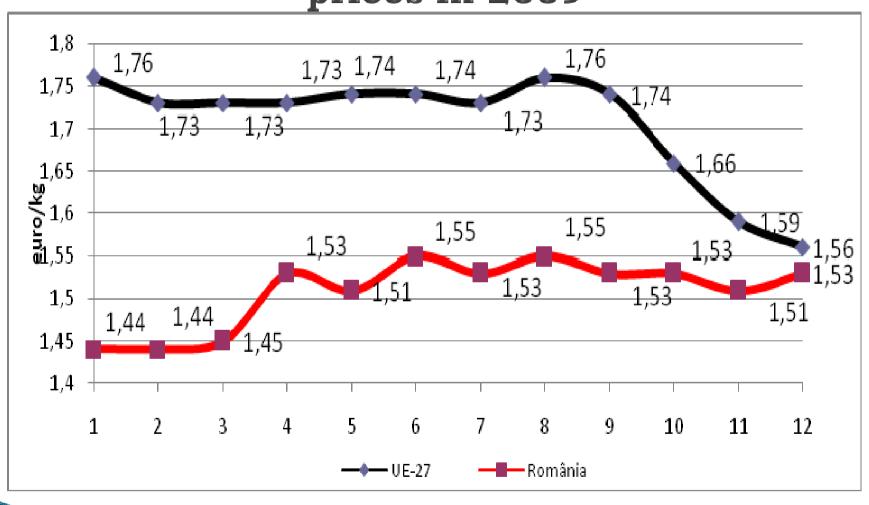
SOME CONCLUSION

- The transformation of the dairy cow farms sub-sector in Romania, following EU accession was produced under the milk quota system constraints due to both structural and conjunctural factors
- The result of the interaction between these factors is reflected in the poor economic performance of the dairy farms: these obtain the lowest net value added per annual work unit among all the EU Member States (2441 euro/AWU); this situation is the result of the small farm size, in combination with the labour surplus on these farms.

Poultry sector

- The poultry sector is characterized by the existence of two systems: an extensive raising system on the individual households 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.

Evolution of monthly average broiler prices in 2009



Poultry meat production

| | 2007 | 2008 | 2009 |
|---------------------|-------|-------|-------|
| Poultry carcass | 304.9 | 343 | 371.3 |
| total (thou. tons), | | | |
| out of which: | | | |
| - in specialized | 210.3 | 255.7 | 289.8 |
| industrial units | | | |
| (thou. tons) | | | |
| Average chicken | 1.6 | 1.6 | 1.5 |
| carcass weight | | | |
| (kg/piece) | | | |
| - in specialized | 1.6 | 1.7 | 1.6 |
| industrial units | | | |
| (kg/piece) | | | |

Foreign trade with chicken meat

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---------------------|-------|-----------|-------|-------|-------|------|
| Imports (thou tons) | 129.1 | 160. 8 | 155.4 | 138.3 | 118.3 | 112 |
| Exports (thou tons) | 3.8 | 6.2 | 3.1 | 1.7 | 8.0 | 30.2 |

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 |

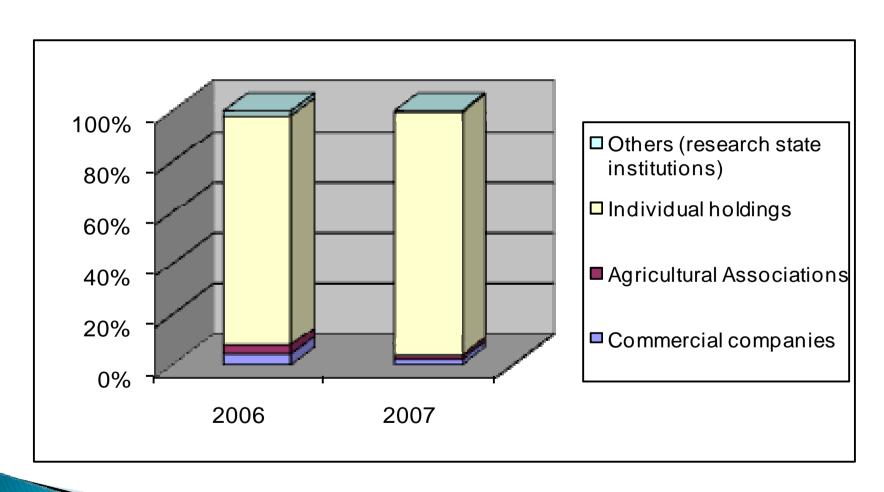
SOME CONCLUSIONS

- 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 decreasing sales, as well as the absence of subsidies and increase in feed prices.
- The broiler carcass prices were below the EU-27 average

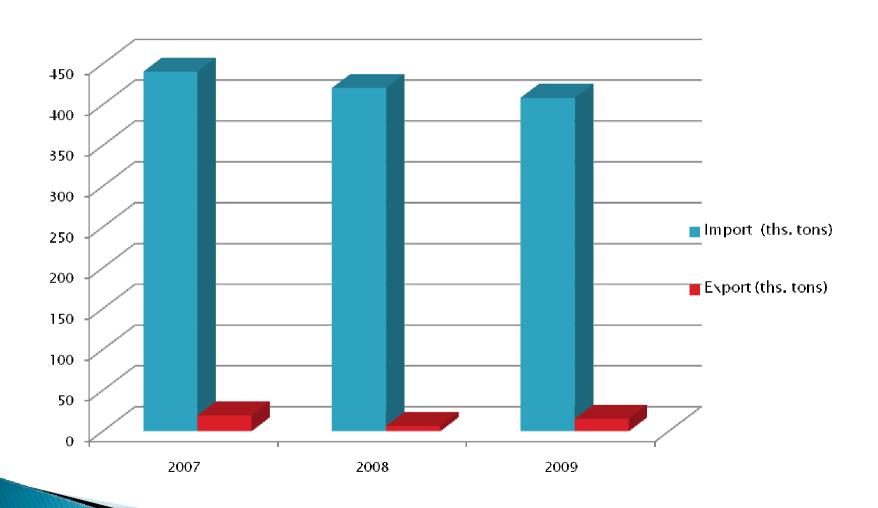
Vegetable sector

- The land area under vegetables accounted for 3.3% of total cultivated arable
- At the EU level, the share of area under vegetables is quite similar; the difference is that currently in Romania the consumption needs are not fully covered by domestic supply
- Main cultivated vegetables: tomatoes 18%, cabbage 17.7%, and dry onion 14%.

Share of cultivated areas by types of holdings



Vegetable balance trade



Coefficient of variation %

| | Field tomatoes | Winter white cabbages | Onions | Green peppers |
|------|----------------|-----------------------|--------|------------------|
| 2005 | 19 | 27 | 7 | 19 |
| 2006 | 42 | 56 | 11 | 36 |
| 2007 | 19 | 24 | 7 | 19 |
| 2008 | 19 | 39 | 5 | 13 |
| 2009 | 28 | 27 | 4 | 27 |
| 2010 | 9 | 6 | 11 | 11 |

Variation Coefficient for F&V in relative prices in few EU Countries

| | CV | CV | CV |
|----------|-----------|-----------|-----------|
| | 1999/2002 | 2003/2006 | 2007/2009 |
| Austria | 2,6 | 3,0 | 6,8 |
| | | | |
| Bulgaria | 6,9 | 2,8 | 12,9 |
| Greece | 7,7 | 3,7 | 3,9 |
| Spain | 2,2 | 3,3 | 2,4 |
| Hungary | 8,1 | 5,0 | 6,8 |
| Poland | 4,9 | 7,9 | 6,9 |
| | | | |
| Romania | 9,7 | 12,3 | 12,6 |
| Slovacia | 1,7 | 2,7 | 3,3 |

Some conclusion

- The vegetable production and yields fluctuate a lot and this is reflected in the price variation.
- The CV for F&V is highest among the other Romanian agricultural products and among the EU countries.
- Although some support was provided to this sector within CAP it is still confronted with large fragmentation among farmers and wholesalers.
- Weather conditions contribute also to a high variability of the production which makes it even more difficult to balance the demand and supply.

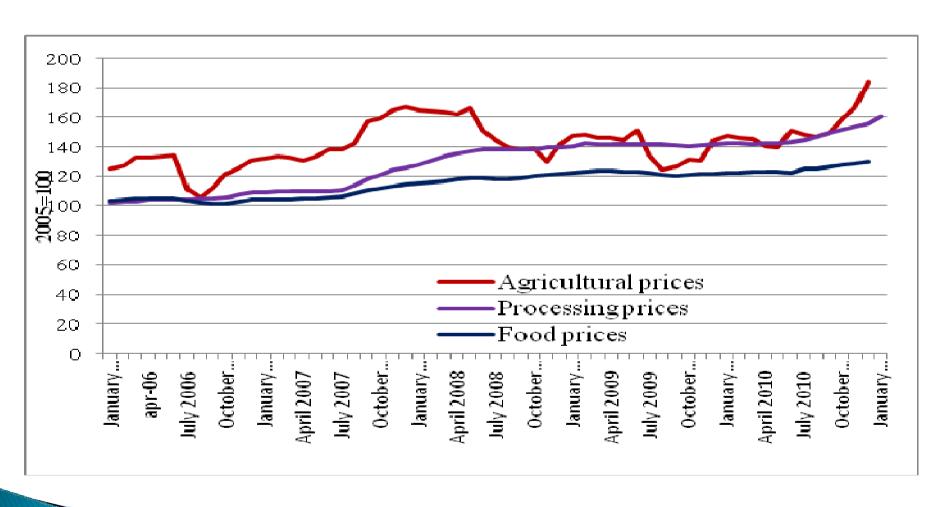
OILSEEDS SECTOR

- Romania is one of the most important producers of oil crops in Europe.
- The main cultivated oil crops are: sunflower (66%), rapeseed (30%), soybean (3%) and others 1%.
- The oilseeds industry had an increasing trend, mainly due to a steady increase of sunflower production and to a constant demand of raw (brut) oil and oilcakes on the foreign markets.
- By types of holdings, there is a balanced situation between the individual holdings and the agricultural companies. On the individual holdings, sunflower is cultivated on the largest areas (55-61%)

OILSEEDS SECTOR

- The Romanian oil industry is booming, being very competitive, with great investments from the large foreign companies in this field (Cargill, Bunge) absorbing almost 950 thousand tons of sunflower seeds and about 235 thousand tons soybeans.
- Sunflower remains a top product in the Romanian exports, while the exported surplus continues to decrease as the needs for raw materials for processing on the domestic market increase.
- Romania has a positive trade balance from the trade with oil seeds, oils and oil cakes in the last three years

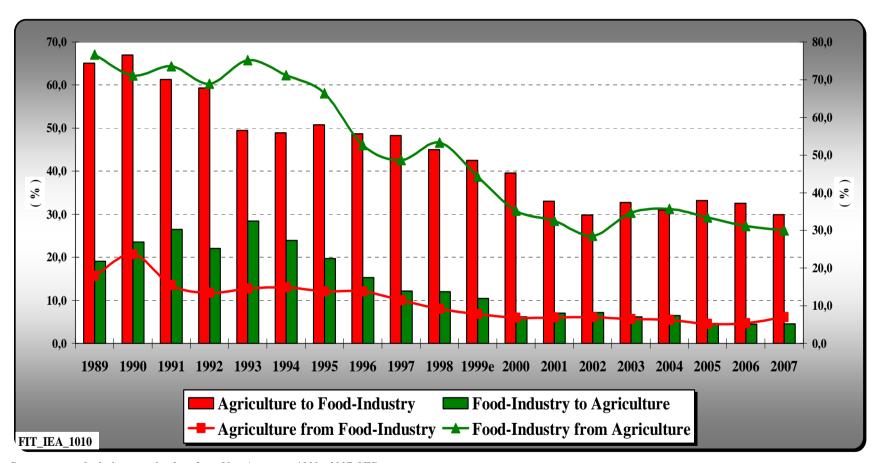
Evolution of agricultural products prices, of the processor products prices and of consumer food prices in Romania



Price variability in the main stages of agri-food chains

| | Jan.2006- Dec.2010 | Jan.2006- Mar.2007 | Apr.2007- May 2008 | Jun. 2008- Oct.2008 | Nov. 2008- Sep.2009 | | Aug.2010- Dec.2010 |
|-------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|-------|-----------------------|
| Crop products | 16.50% | 11.20% | 10.80% | 16.20% | 9.40% | 8.90% | 13.10% |
| Animal products | 14.30% | 5.80% | 8.40% | 5.10% | 3.40% | 4.50% | 4.60% |
| Total processin g | 13.10% | 2.40% | 8.80% | 0.50% | 0.70% | 0.70% | 2.30% |
| Total foodstuffs | 7.50% | 1.20% | 4.60% | 0.60% | 1.00% | 1.00% | 1.40% |

Evolution of inter-relations between agriculture and food industry, as intermediary deliveries and intermediary acquisitions, in Romania's economy, 1989 – 2007



Source: own calculations, on the data from Nat. Accounts, 1990 - 2007, NIS;

FINAL CONCLUSION

- From the analysis of the sectors presented one can notice that although there were steps made in improving competitiveness following the EU accession, the main structural problems are still an issue.
- Fragmentation still remains a problem, the negotiation power is still low, there is an oligopoly situation regarding the agricultural inputs, there is also an oligopoly situation in the distribution and marketing channels especially in the vegetable sector.
- Price volatility is extremely high, which is a consequence of a very high production variability and lack of balanced situation between demand and supply of agricultural products.
- This may suggest that the adoption of Common Agricultural Policy has not yet solved the main sectoral problems and the future CAP may further be reformulated in such a way that problems at stake could be better tackled.

Thank you for your attention!