Bulletin UASVM Horticulture, 69(2)/2012
Print ISSN 1843-5254; Electronic ISSN 1843-5394

# Could Farm Consolidation Contribute to Economic Growth in Romania?

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**Abstract.** Even though at present agriculture per se can no longer be a major source of economic growth, the great challenge for Romania's agriculture (and food industry) is represented by the diminution of the deficit from the agri-food trade. The low productivity of small and medium-sized farmers, by tradition grain producers, in interaction with certain speculative actions, often make the farmers' incomes be insufficient for farm modernization, despite the support possibilities from EU funds. One key element of the analysis is the role that large farms, with more than 100 European Size Unit, could play in term of economic results.

**Keywords**: farm consolidation, economic growth, farm income, new member states

**Introduction.** The agriculture of the European Union, Romania's agriculture being part of it since 2007, features great diversity, both from the point of view of farm structure and of production methods and land use. The European agriculture diversity equally reflects the historical evolution of each state, as well as the weather conditions, topography and current socio-economic environment (Cervantes-Godoy & Brooks, 2008).

Overall, EU agriculture is characterized by a steady decreasing trend of the number of farms since the 1970s. Another long-term characteristic of EU agriculture is represented by the composition of production factors, which mainly meant the replacement of labour by technology and capital, the result being more equipment and fewer workers that largely used almost the same agricultural area (EC, 2011).

**Aims and objectives.** The present analysis attempts to identify the modality by which agriculture contribution to economic growth in Romania can be increased, the main objective being to estimate the importance of farm consolidation for the economic growth process, mainly by comparing the farm performance and structure in Romania to those in the other EU Member States, recognized as having an important contribution to the overall economic development.

**Materials and methods.** For completing the information from the farm structure surveys, a brief analysis of certain economic indicators was made, which reveals the differences between the agriculture of the EU New (EU-12) and Old (EU-15) Member States, based on the data from the Farm Accountancy Data Network (FADN) collected in each member state on the basis of a representative sample for the commercial farms (generally those over 2 ESU).

**Results and Discussion.** Romania's current situation reveals that agriculture did not essentially contribute to economic growth in the last decade; however the agricultural production fluctuations caused by the weather conditions became less important with the change of Romania's economy profile, in which agriculture contribution to GDP went down by half, from about 14% in the first half of the 2000 decade to about 7% in the second part of the decade. The agricultures of the EU-15 and of the EU-12 maintain their differences with regard to production orientation and technical and economic performance, even though they seem to follow the same trend, also facilitated by the Common Agricultural Policy.

The calculation of a labour productivity indicator, i.e. FNVA/AWU (Farm Net Value Added/ Annual Work Units), reveals that in the Old Member States (Germany, France, United Kingdom) the highest value added per worker was found on the farms over 100 ESU in size, steadily decreasing up to one-third on those of 8-16 ESU (the smaller farms are not selected in the samples of the respective countries, as they are not economically important). By contrast, in the year 2009, in the New Member States, the farms from 16 to 40 ESU had higher labour productivity values than those over 100 ESU (however Poland follows the pattern of the Old Member States, although in 2008 the farms of 40-100 ESU had 115% of the productivity on the farms over 100 ESU). In Romania, according to this indicator, in the year 2009 the most performant farms were those of 16-40 ESU, but in the years 2008 and 2007 it is the farms over 100 ESU that had the highest labour productivity.

The calculation of a profitability indicator, FNI/UAA (Farm Net Income/ Utilized Agricultural Area), in relation to the land used in order to reveal the efficiency of available natural resources use on farms of different sizes, reveals that Romania is still in an early stage on the way to performant agriculture (as defined by the situation of France, where the highest income per hectare is obtained on the farms over 100 ESU), with the most performant farms in the categories under 8 ESU, while Poland seems to be on the way to performant development, with the most performant holdings in the category 40-100 ESU (Tab. 1).

Tab. 1.

Ratio (in %) between profitability indicator (FNI/UAA) for agricultural holdings of different sizes and for total holdings (2009)

| | Under 4 ESU | 4-8 ESU | 8-16 ESU | 16-40 ESU | 40-100 ESU | Over 100 ESU | Total |
|---|---|---|---|---|---|---|---|
| Romania | 130.89 | 152.79 | 99.83 | 80.22 | 39.64 | 30.34 | 100.00 |
| Poland | 81.14 | 99.05 | 104.21 | 126.58 | 146.61 | 49.57 | 100.00 |
| France | - | - | 83.16 | 94.03 | 91.31 | 112.45 | 100.00 |

Source: authors' processed data from FADN database

**Conclusion.** The comparison between the farm structures and their economic performance in different EU Member States reveals that the farm size has the tendency to increase with the economic development. While the agricultural income per worker is obviously higher on the larger-sized farms, being an argument in favour of farm consolidation, the income per hectare increases with the farm size only on the long term, which suggests that on short and medium term it is the farming practices that are mostly important, and it is necessary to introduce modern technologies in order to obtain long-term performance.

*Acknowledgments.* This work was co-financed from the European Social Fund through Sectoral Operational Programme Human Resources Development 2007-2013, project number POSDRU/ CPP107/DMI 1.5/S/77082, "Doctoral Scholarships for eco-economy and bio-economic complex training to ensure the food and feed safety and security of anthropogenic ecosystems".

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