PERFORMANCE OF AGRICULTURAL ENTERPRISES WITH SPECIALIZATION LIVESTOCK PRODUCTION AFTER YEAR 2013 IN THE CONTEXT OF CAP DEVELOPMENT SCENARIOS

Marcela Basovníková

1 Department of Business Economics, Faculty of Business and Economics, Mendel University in Brno, Zemědělská 1, 613 00 Brno, Czech Republic

Abstract


Joining the EU, among others meant that Czech Republic has gained opportunity to draw financial funds of the EU. In the context of profitability and overall economic performance of agricultural enterprises, the most serious threat is currently reduction or even elimination of agricultural subsidies as came out from discussions about future development of the EU Common Agricultural Policy (CAP) already in 2011. In 2011, the CAP was a point of interest especially because of approaching the end of programme period of 2007–2013. During the last decade, the CAP has been reformed substantially while these reforms and changes reflect requirements of society connected to environment, to food quality and safety, and to developing needs of the EU’s economy. Based on these discussions across all the EU countries, three principal scenarios have been formulated in order to solve the main political objectives of future CAP. In each scenario, different stress is put on single objectives of the CAP. These three scenarios are the adjustment scenario, the integration scenario and the re-focus scenario. Changes of CAP, which were covered by single scenarios have been focused on market interventions, direct payment and on policy of rural areas development.

Keywords: agriculture, livestock production, economic performance, Economic Value Added, subsidies, Common Agricultural Policy

INTRODUCTION

The motivation for the processing of the present paper is the fact that the year 2014 is a leap year due to the implementation of the new framework of the CAP by 2020. The aim of this article is to evaluate and determine the possible impacts of the Common Agricultural EU policy development after 2013 on the economic performance of enterprises in animal primary production in the Czech Republic, mainly focusing on the scenario “re-focus scenario”. It is based on the application of financial analysis and calculation of modern EVA indicator. This scenario represents the most significant departure from current valid EU framework for the CAP in the form of a gradual elimination of direct payments, which could adversely affect the operation of very small farms. The contribution of this article can be seen through the fulfillment of the objectives set out in the approximation result of the proposed CAP “re-focus scenario” on sustainable agricultural holdings, which represents the most significant departure from the current EU CAP framework based currently on direct payments focusing on livestock production. The impact of aforementioned scenarios is analysed within the sample of companies via indicators of financial analysis, rather than developed models of other authors based on the standard inputs and outputs.
of agricultural production. The employed approach based on financial analysis allows revealing further consequences on economic efficiency of agricultural production as it is described in the following chapters.

Subsidies and their impact on the performance of agricultural business entities is the subject of interest for many authors. For example, Karamesini (2002) argues that although subsidies decisively influenced the development of agriculture, the technological development potential was not reached and on the contrary, the provision of subsidies is often not effective and tends to waste resources. A similar view is hold by Lansink and Zhu (2010), who conducted research in Germany, the Netherlands and Sweden, or Sipiläinen and Kumbhakar (2010), who conducted research based on the impact of direct payments on farm performance in Germany, Finland and Sweden. Střeleček and his team, performed a shift-share analysis by comparing subsidies in the Czech Republic and selected EU countries in 2009.

**METHODS**

There were defined operators that relevantly meet the parameters of agricultural production, especially primary animal in connection with the solution of selected problems by analysis and synthesis of the existing state of knowledge in the literature. The next step was the partial secondary research, which specifically involved the collection and analysis of financial data sample livestock enterprises (mainly focused on raising of cattle, pigs and poultry) using publicly available data in the Collection of the Commercial Register of the Ministry of Justice. In 2011, there were 1600 enterprises specialized in livestock production in the Czech Republic, all of which 80 were a subject to review in our sample. The selected businesses were legal entities – joint stock companies, limited liability companies and cooperatives.

The methods of financial analysis, resp. the analysis of financial ratios, have been applied on the financial statements of selected business entities. The emphasis was mainly on the analysis of current liquidity, prompt and immediate, and the analysis of profitability, by setting the value of the return on equity and return on total assets. Furthermore, the economic added value was established for all enterprises by INFA methodology, which is used by the Ministry of Industry and Trade of the Czech Republic. The INFA methodology is a comprehensive diagnostic system, created in the 90s of the 20th century by Inka and Ivan Neumaier (Neumaierová and Neumaier, 2002). By its nature, the INFA belongs to a group of pyramidal system of indicators. Unlike the classical pyramidal decomposition, which usually works with two directions of partial decomposition of the top indicators, the INFA has a form of three interrelated sub-pyramids. These pyramids evaluate the force production of a company, the production division of power between business owners, creditors and the state, and also the relationship between assets and liabilities, expressed in terms of liquidity.

The analyses were carried out in the years 2004–2011 (with regard to data availability). These methods were re-applied on the same data set adjusted for operating subsidies from the state budget or the EU budget. The amount of these grants were detected by the data available from the State Agricultural Intervention Fund, which provides a complete list of grant recipients. The synthesis of the results of the analyzes formed the fundamental basis for the determination of the expected development of occupational environment in the context of the CAP scenarios, especially in the context of the “The re-focus scenario.”

**RESULTS AND DISCUSSION**

On the basis of the aforementioned methods were obtained average values of indicators expressing the state of the economic situation of surveyed enterprises.

**Data Analysis Including Subsidies**

From the perspective of traditional methods of financial analysis, the analysis favors the average value ratios. Firstly, this analysis revealed that farm animal production suffers from solvency problems. All types of liquidity have higher values than the recommended values in the professional literature, which proves that the use of funds in the surveyed enterprises can be highly inefficient and can have a negative impact on the profitability of the company (e. g. Synek, 2011). High values are especially common liquidity. Compared with a quick ratio, it is clear that the examined companies have excessive amounts of inventory, which is the context of animal production obvious and it was confirmed by the average values of inventory turnover period, which in some years reached 400 days. Inefficient management of current assets

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2004</th>
<th>2005</th>
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<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current ratio</td>
<td>3,75</td>
<td>5,93</td>
<td>4,86</td>
<td>4,3</td>
<td>3,8</td>
<td>7</td>
<td>7,12</td>
<td>6,01</td>
</tr>
<tr>
<td>Quick ratio</td>
<td>1,54</td>
<td>3,26</td>
<td>2,5</td>
<td>1,94</td>
<td>1,4</td>
<td>4,19</td>
<td>4,16</td>
<td>2,93</td>
</tr>
<tr>
<td>Cash ratio</td>
<td>0,52</td>
<td>1,5</td>
<td>0,75</td>
<td>0,62</td>
<td>0,42</td>
<td>1,28</td>
<td>1,87</td>
<td>0,87</td>
</tr>
</tbody>
</table>

Source: authors’ calculations
can also be inferred on the basis of profitability resulting values, which were identified at very low levels and gradually increasing the value of net working capital and its share of the current assets and on this basis it could be inferred that companies are holding cash resources.

Selected key indicator EVA reached in all years of the period negative values. It can be stated that studied statistical sample of companies with their activities do not constitute economic added value for its owners (e.g. Neumaierová, 2005; Beranová, Basovníková and Martinovičová, 2013). From 2007 to 2010, there was even a significant decrease in absolute value compared to the previous year, which indicates a negative condition of enterprises of the sector. The main reason can be identified mainly due to higher capital costs than the reported return on that capital. High capital costs may result from rather negative approach to the use of external (chargeable) capital for most farms. In many cases, within the analyzed group debts played its role, which arose only from short-term debt primarily related to trade payables. Some of the analyzed companies were also possible to record negative equity. To eliminate these extreme values was used robust average (Hendl, 2004).

Data Analysis Adjusted by Operating Subsidies
Separations of operating subsidies out of the relevant indicators of corporate financial statements have significantly affected the resulting values for the current period liability status and short-term investments on the asset side. On this basis, then, of course, there was also a decline in some indicators (e.g. Machálek and Pělucha, 2008). In the case of normal liquidity and efficient allocation of subsidies not of financial statements in values that would not move in that interval at the recommended literature. Worse results then but resulted in cash ratio, which were in most years identified as negative, mainly due to the fact that the allocation of subsidies had an enormous impact on the status of current financial assets.

The reduction in profit then resulted in further reduction of certain ratios of assets. In terms of the performance of businesses that have been surveyed can be considered as indicators of profitability, which in all cases (ROA, ROE, ROS) showed negative values, mainly due to a negative result for the current period. Determination of the value of equity within the EVA indicator is using ROE, and cost of equity capital. It is apparent that the resulting average value of the designated indicators will also be negative. Development of return on equity in the period 2004–2011, after deducting grants from corporate financial statements is given in Fig. 2.

In the Czech Republic, there was carried out a fundamental study using a shift-share analysis which compares subsidies in the Czech Republic and the selected EU countries. Based on this study, there are clear conclusions. The Czech Republic’s agriculture is competitive in comparison with other European countries, however it has a lower proportion of funding at a lower cost. Unlike other authors we argue, that the low proportion of grants weakens competitiveness and especially slows down the renewal and modernization of assets in agriculture.

II: Average profitability in the years 2004–2012

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2004</th>
<th>2005</th>
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<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA (%)</td>
<td>5.6</td>
<td>3.7</td>
<td>5</td>
<td>5.8</td>
<td>4.1</td>
<td>3</td>
<td>3.6</td>
<td>6.2</td>
</tr>
<tr>
<td>ROE (%)</td>
<td>12</td>
<td>6.2</td>
<td>6.9</td>
<td>11.1</td>
<td>6.2</td>
<td>4</td>
<td>3.8</td>
<td>9.8</td>
</tr>
</tbody>
</table>

Source: authors’ calculations

The average value of EVA

The average value of EVA

1: Average values of EVA in the years 2004–2011
Source: own processing
Since 2011 it was possible to record the intensifying debate on the revision of the CAP and the imminent end of the programming period 2007–2013. CAP has undergone over the last decade, major reforms that reflect the demands of society in relation to the environment, quality and safety of foods and the evolving needs of the EU economy. In the future, however, the CAP should be able to respond to possible further anticipated problems in the economy, the environment, climate change and, last but not least, changes in the policy itself. The main policy objectives of the CAP reform after 2013 were divided into three directions:

1) The orientation of the CAP measures to increase the productivity and competitiveness of the agricultural sector (e.g. improving the functioning of the advisory system and networking for knowledge creation and transfer and support innovative approaches to providing funds for projects of rural development measures, etc.);

2) Improving the environmental profile and performance of the CAP in the area of climate change;

3) Increase the efficiency and effectiveness of the CAP (balancing support for direct payments, reducing disparities in the level of support for direct payments between Member States and farmers); (The CAP towards 2020).

On the basis of extensive discussions in all Member States were formulated three basic scenarios that should address aforementioned main political objectives of the future CAP. Each scenario is placing different emphasis on individual goals. Namely scenario, customization, integration, and a new focus. Changes that are solved under each scenario are related to changes in market measures, direct payments and rural development policy.

Scenario “adjustment” assumes the CAP to be mainly in relation to the orientation. Farmers should be able to use available resources to enhance competitiveness, i.e. direct payments should be reallocated across the EU effectively and equitably. These direct payments will then serve as a protection against excessive volatility in farm incomes operators.

The scenario of “integration” is aimed at enhancing competitiveness, sustainable development and innovation in the agricultural sector. The scenario is to support the conditions under which the farmers should be able to cope with any future problems in the economic and environmental.

The last scenario “re-focus”, foresees the gradual withdrawal of direct payments, which would lead to a major restructuring in the sector. Small farms would no longer be viable and would create a much more capital-intensive businesses. In an effort to increase economic performance from the viewpoint of agricultural entrepreneurs obviously need to respect the rules of economies of scale in agricultural production, which in terms of the current focus of multifunctional agriculture apparently led to the degradation of nature and landscape (European Commission, 2011).

So, if you will be incorporated into the analyses, also assumptions for the CAP after 2013, based on the above proposed scenario, we can state the following findings. The refocus scenario would significantly deepen the negative value of EVA, as would the abolition of operational subsidies be caused by decrease in short-term investments and thus a reduction in income. This statement is based on the results of the analyses carried out in this field, within the sample of enterprises of agricultural primary production, when in animal production was identified further decline in economic value added, and more precisely due to the implementation of fundamental aspects of re-focus scenario.
CONCLUSIONS

Individual partial results of solved problems highlight the significant impact of operating subsidies for the creation of economic value added within Czech agricultural primary producers of livestock. Since the end of 2013 it was confirmed by the agriculture ministers of the EU reform of the Common Agricultural Policy, it can be stated that the final solution has the form of a “compromise” with aforementioned scenarios. Compared to the draft correlated with the script “New Focus”, which allowed the gradual withdrawal of the direct payments, while the final version of the CAP for the next programming period agreed equitable distribution of EU funds. Namely, direct payments will be acquired only by active farmers and will be disqualified from receiving EU subsidies to those entities which cannot prove that agricultural activities represent a significant part of their income. Public support will continue for young farmers, which should be guaranteed by the increase in direct payments up to 25%; to be subject to specified conditions, regardless of their production focus. On the basis of the approved new reform of the CAP for the period 2014–2020 and in the context of the analyzes, it can be inferred that new forms of direct payments, respectively operating subsidies significantly negatively affect economic value added of livestock enterprises. Nevertheless, one weakness is pointed out to be present in the next programming period, i.e. lower domestic economic efficiency of agricultural production especially in comparison with the EU 15. However, this assumption is based on the conditions set for the Czech agricultural sector after year 2004 when the current suboptimal negotiated positions negatively impacted the potential to increase agricultural production, especially in the livestock sector.

This article above all presents author’s initial phase within exploring the future development of the Common Agricultural Policy area till and behind the year 2020. The given results will be continuously verified and the following studies will be aimed at further empirical analyses of data and the given results will be continuously verified including involvement of other substantial literature and information resources.

SUMMARY

Objective of this paper is to determine and to evaluate possible effects of the CAP’s scenarios after 2013 on economic performance of agricultural enterprises with specialization livestock production in the Czech Republic, based on the methods of financial analysis, the economic value added included. The research was conducted on a sample representing 80 farms within the country engaged in livestock production using secondary data of financial statements. The selected businesses were legal entities – joint stock companies, limited liability companies and cooperatives. The observed business entities suffer from high capital costs, which may result from rather negative approach to the use of external (chargeable) capital for most farms. In many cases, within the analyzed group debts played its role, which arose only from short-term debt primarily related to trade payables. The realized simulation on separation of operating subsidies out of the relevant indicators of corporate financial statements have significantly affected the resulting values for the current period liability status and short-term investments on the asset side. The reduction in profit then resulted in further reduction of certain ratios of areas. In terms of the performance of businesses that have been surveyed that can be considered as indicators of profitability, which in all cases (ROA, ROE, ROS) showed negative values, mainly due to a negative result for the current period. Assumptions for the CAP after 2013, based on the proposed scenario can be stated as follows. The refocus scenario would significantly deepen the problem of inability to create the economic profit, as the abolition of operational subsidies would be caused by decrease in short-term investments and thus a reduction in income. The two residual scenarios namely integration and adjustment can be cosidered as the compromise in the field of impact on economic performance of agricultural businesses. So, these scenarios are intended to economically support the conditions under which the farmers should be able to cope with any future problems in the economic and environmental areas. Farmers should be able to use available resources to enhance competitiveness, i.e. direct payments should be reallocated across the EU effectively and equitably and in this manner support economic performance of farmers.

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Contact information

Marcela Basovníková: xbasovn1@mendelu.cz