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Profitability in Czech Agricultural Enterprises

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6.1 Main Factors Influencing Profitability

The Common Agricultural Policy (CAP) is important for strong and competitive EU agriculture and in general for the agro-food industry, which employs 19 million people (Chovancová 2013). The policy assures that agriculture and environmental protection do not exclude one another. It helps the development of the economic and social rural networks and it plays an important role in tackling new problems such as climate change, water management, bioenergy and biological diversity. A decisive reason to create integrated agriculture in Europe was to secure a satisfactory volume of food for inhabitants of Western Europe and currently the CAP contributes to the integration of European agriculture. Hrabánková and Boháčková (2009) regard agriculture as an irreplaceable factor of social and economic development in rural areas.

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The agricultural policy of the European Union focuses on the ability of producers of all kinds of food, from cereals to fruit, vegetables or wine, to make a living in both European and world markets. Reforms of the agricultural policy are also in the interest of a fairer world trade. They have reduced the risk of world markets disruption by EU subventions for excess exports. During international negotiations on the liberalisation of trade in Doha, Qatar, the European Union proposed to cancel all export subsidies until 2013 even if the negotiations failed. As part of the negotiations in Doha, the European Union also offered a significant reduction of import duties on agricultural products. However, even without these measures, the European Union is now the largest importer of food in the world and the largest outlet for food from developing countries.

Financial safety nets are still functioning, however, their use is targeted, for example through financial aid to farmers who were affected by a natural disaster or outbreak of an animal disease. If necessary, the CAP supplements farmers' incomes to provide them with an adequate standard of living. However, the payment of subsidies is conditioned by fulfilling broader goals in the area of hygiene and food security, animal health and living conditions, traditional rural landscape preservation and the protection of wild birds and animals.

Agricultural policy reforms released financial means for the support of quality and international competition of food, innovation in agriculture and food industry and rural development and the diversification of the rural economy. The agricultural policy reforms are now also in the interest of more fair conditions of international trade. They reduced the risk of EU subventions on excess export disrupting world markets. EU financial means are intended for research supporting innovation in agriculture with the emphasis on productivity increase and environmental friendliness.

The most important body for the implementation of the CAP in the Czech Republic is the State Agricultural Intervention Fund, which administers financial support from the European Agricultural Guarantee Fund (EAGF), the European Agricultural Fund for Rural Development (EAFRD) and national top-up payments provided by the Czech government. According to Baun et al. (2009), the Czech Republic was relatively successful in adopting the EU requirements and creating appropriate

administrative structures, however, there were obstacles in the continuity of CAP implementation. An example might be a delayed opening of the application process for the agro-environmental part of the Operational Programme for Rural Development 2007–2013. There were also two major errors in administrative processes while allocating agricultural funds. First, the absence of deadlines for applications processing was criticised as well as the payments of financial support after the projects ended. Second, the rules for the allocation of financial support were criticised, in particular their unceasing changes, ambiguity and lack of accurate interpretation.

Economic results of agricultural businesses in the Czech Republic are usually represented in median values for all businesses, or in simple classification of the businesses. In practice, agricultural businesses in the Czech Republic do not form a homogeneous group with balanced results; therefore, median values of the economic results presented by the Farm Accountancy Data Network (FADN) create a relatively distorted view of the reality. The data are derived from FADN, which was designed for performing a microeconomic analysis and comparison of results from different types of businesses and performance in individual countries of the European Union.

Furthermore, data from the Amadeus database are presented. Amadeus is a database of comparable financial and business information on Europe's largest 510,000 public and private companies by assets. Forty-three countries are covered. Amadeus includes standardised annual accounts (consolidated and unconsolidated), financial ratios, sectoral activities and ownership data. The database is suitable for research on competitiveness, economic integration, applied microeconomics, business cycles, economic geography and corporate finance.

In the field of agriculture, 1165 businesses are registered in the Czech Republic in total. The results derived from FADN (2015) and Amadeus database are presented later in the chapter.

The economic development of agriculture in 2012 can be characterised by a mild increase in the value of agricultural production and operating subsidies, however, agricultural businesses costs continued to grow at the same pace. A key factor was a continuing growth of cereal and oilseed prices, which had a positive impact on the development of income

indicators (gross added value, net added value, income from agricultural activity).

Gross value added (GVA) is a primary indicator of an economic result that expresses the value of total agricultural production after the deduction of production input consumption and taxes. In 2012, the gross added value grew to 17,993 CZK per hectare (ha), i.e., by 5.7%. A higher level of GVA was reached by businesses belonging to legal entities (18,283 CZK per ha). However, the growth pace of GVA of legal entities was slower than that of businesses belonging to physical entities. Gross value added of physical entities grew by 11.2% to 17,181 CZK per ha.

Economic value added (gross value added after write-offs, EVA) presents sources for covering production factors (work, land, capital). At the EU level, the EVA is regarded as a main indicator of production efficiency and income situation of agricultural businesses. In comparison with 2011, a median economic value added grew from 13,342 CZK per ha to 14,029 CZK per ha, i.e., the annual increase in EVA amounted to 5.1%. EVA growth was recorded for both legal entity businesses (2.7%) and physical entity businesses (12.5%). Within the monitored specialisations, the highest economic value added expressed per ha was achieved by agricultural businesses specialising in milk production (15,891 CZK per ha), followed by mixed production, with EVA of 14,613 CZK per ha, field production (13,328 CZK per ha) and cattle breeding (10,027 CZK per ha).

As opposed to the previous year, economic value added per worker (AWU) grew by 3.8% to 505 thousand CZK/AWU. The level of EVA/AWU was at both monitored business forms at the comparable level, 510 thousand CZK/AWU for legal entity businesses and 488 thousand CZK/AWU for physical entity businesses. A higher pace of EVA/AWU growth was achieved by physical entity businesses (6.6%). EVA/UWA of legal entity businesses grew by 2.9% a year. In 2011, the highest economic value added per worker was achieved by agricultural businesses focused on field production (666 thousand CZK/AWU).

Based on the EU FADN methodology, a final indicator of economic result is the income from agricultural activities (IAA), which is calculated as an economic value added reduced by the value of external factors (wage costs, rental of land and buildings and interest expenses) and increased by

the balance of investment subsidies and taxes (investment subsidies minus investment taxes). The income from agricultural activities presents income (of loss) from agricultural production; for physical entities, it also includes the remuneration of unpaid workers. In 2012, the agricultural businesses reached an income from agricultural production at the level of 5560 CZK per ha. Sectoral profit was at the same level as in the previous year. For legal entities, there was a mild decline in IAA, by 6.9% to 3827 CZK per ha, due to higher costs of external factors and a lower volume of paid investment subsidies. Physical entities showed IAA at the level of 10,414 CZK per ha, with an annual growth of 10.1%. Within the monitored production fields, the most profitable specialisation in terms of achieved income from agricultural activities is crop production (6941 CZK per ha). A high level of IAA was also achieved by other production specialisations, milk production (5757 CZK per ha), cattle breeding (5745 CZK per ha), and mixed production (4225 CZK per ha).

6.2 Planning and Forecasting Profitability

Chovancová (2013) states that agriculture in the Czech Republic is the principal beneficiary of EU subsidies, which is a paradox because the importance of agriculture in the Czech Republic was considered as a controversial issue of the Czech accession negotiations. In most of the fourteen regions of the Czech Republic, agriculture contributes to the gross value added by 0–5% only, with the Vysočina region with its more than 10% being an exception. Such small shares of agriculture contributions to regional gross value added are perceived as reflections of a relatively minor economic importance of agriculture in comparison with other production sectors. According to Tomšík (2010), in comparison with other states and priorities in other sectors which were taken into account during negotiations, the agricultural sector in the Czech Republic was never of a primary significance.

Baun et al. (2009) also point at the fact that the situation of Czech farmers is often worse due to administrative measures of the government, which are more strict and demanding than EU requirements. Tomšík (2010) mentions that one of the main distinctive features of the Czech

agriculture is its specific farm structure, which he regards as a possible pitfall of the CAP, specific for the Czech Republic. Czech farms are characterised by their large-scale production, which face different problems than family farms in the Western European agriculture. According to Bojnec and Latruffe (2013), who carried out research in Slovenia, small-sized farms are more profitable than medium-sized farms. The medium-sized farms are too small to be economically effective, but on the other hand they are too big to be profitable. Gorton and Davidova (2004) mention that their research carried out in Central and Eastern Europe did not show that large-sized (corporate) farms are less efficient than small-sized (family) farms. On the one hand, Czech agriculture is characterised by small family farms and on the other hand, by large enterprises such as cooperatives, joint-stock companies or limited liability companies. The present structure developed during the 1990s and the membership of the Czech Republic in the European Union did not bring any essential changes to the structure. Private family farms use more than one quarter of total agricultural land. Their share has slightly increased; however, another wave of their growth is not expected. Almost three-quarters of the used agricultural area is farmed by larger cooperatives or companies.

The Czech Republic has the highest number of small-scale farms of up to 5 ha in the European Union. However, these owners farm the smallest area of the agricultural land. In 2007, the average farm in the Czech Republic had 89.3 ha of the utilised agricultural area, which was 7.1 times bigger than the EU-27 average and 4.1 times bigger than in the old EU-15 (European Commission 2012). The Czech government is against the measures within the “status check” of the agricultural policy, which besides others propose the reduction of subsidies volume for large-sized farms (those which obtain more than 300 thousand EUR from the EU support), which may have a negative impact on Czech farms due to their large median size. The Czech government argues that by estimate, the proposed reduction would negatively affect 800 farms in the Czech Republic.

According to Tomšík (2010), another problem of the Czech agriculture after the Czech accession to the European Union, is the lack of capital. Companies and cooperatives function with a higher share of debt. Large companies make use of their size as an advantage. Not only the amount but also the structure of capital generates conditions difficult for agriculture.

Large farms often face unfavourable structure of their assets. Large agricultural businesses have only a low share of their own agricultural land, which is a consequence of the restitution process. Agricultural businesses are endangered by both long-term negative profitability and sudden fluctuations of operating profit at high indebtedness. The profit/loss of agriculture is characterised as highly variable and with a strong relation to external factors. Economic accounts for agriculture in basic current prices are presented in the Table 6.1. Annual total price indices are presented in Table 6.2.

Accountancy data from Amadeus database are further presented featuring below mentioned characteristics of agricultural enterprises in the Czech Republic in 2010–2013 ($n = 1165$, Table 6.3).

Basic indicators of agricultural businesses, which are officially available from the Amadeus database ($n = 1165$ agricultural businesses in the Czech Republic), are presented in Table 6.3. We will analyse the situation of agricultural businesses, their competitiveness and constraints that influence them.

Štreleček et al. (2012) regard as an important limiting factor of the competitiveness of agricultural businesses in the Czech Republic, uneven conditions in agricultural support in comparison with the countries of the former EU-15. The tools of the agricultural policy primarily fulfil the function of securing profit to entities operating in agriculture without an emphasis on improving competitiveness of these businesses. Many countries of the Central and Eastern Europe accepted European legislation as well as the Common Agricultural Policy while waiting for EU membership despite a lower level of agricultural support of new member states compared to that of former member states. The implementation of EU legislation was not followed by an economic success in agriculture of the new member states. It seems that the policy does not work as well as in Western Europe.

Based on the FADN results, it can be said that in 2001–2011 agricultural businesses of legal entities exhibited positive economic results with the help of subsidies. In a selected group of farms an annual decline of profitability of the total capital by 42% could be observed in 2004/2005 and by another 9% in 2005/2006. In 2007, there was a revival in the form of an annual growth of the indicator by 118%, however in 2008 and 2009 the profitability of the total capital fell (especially in 2009 by 86%) and another revival occurred no sooner than in 2009–2011. In

Table 6.1 Economic accounts for Czech agriculture in current prices (million CZK) (2004–2011)

Economic accounts for agriculture (EAA) code	Indicator	2004	2005	2006	2007	2008	2009	2010	2011
10	Crop output	63,010	49,962	49,484	66,401	62,509	51,115	56,951	70,238
13	Animal output	48,868	47,698	47,795	49,151	52,417	42,402	40,890	43,417
15	Agricultural services output	1451	2164	2346	2327	2657	2602	2709	2728
17	Non-agricultural secondary activities (inseparable)	2422	3068	2640	2304	2194	1697	2057	2483
18	Output of agricultural industry (10+13+15+17)	115,751	102,893	102,265	120,182	119,776	97,816	102,606	118,866
19	Total intermediate consumption	74,764	73,104	73,795	86,633	88,908	78,684	78,170	84,025
20	Gross value added at basic prices (18–19)	40,987	29,789	28,470	33,550	30,869	19,132	24,436	34,841
21	Fixed capital consumption	11,813	12,992	13,501	14,181	14,610	14,211	14,255	14,825
22	Net value added at basic prices (20–21)	29,174	16,797	14,969	19,369	16,259	4921	10,181	20,016
23	Compensation of employees	22,668	23,208	23,626	24,362	26,056	24,636	23,984	24,317
24	Other taxes on production	1850	1564	1464	1397	1192	1265	1364	1257
25	Other subsidies on production	7158	19,025	21,123	20,647	25,576	28,674	26,845	27,567

(continued)

Table 6.1 (continued)

Economic accounts for agriculture (EAA) code		Indicator	2004	2005	2006	2007	2008	2009	2010	2011
26		Factor income (22-24+25)	34,482	34,258	34,628	38,618	40,642	32,330	35,662	46,326
27		Operating surplus/mixed income (22-23-24+25)	11,813	11,050	11,003	14,256	14,586	7695	11,678	22,009
28		Rents and other real estate rental charges to be paid	2586	3056	3245	3472	3611	3900	3802	4216
29		Interest paid	1388	1522	1568	1434	1444	1349	727	1192
30		Interest received	691	597	645	660	611	394	497	527
31		Entrepreneurial income (27-28-29+30)	8548	7051	6835	10,009	10,143	2840	7645	17,128

Source: Own elaboration based on FADN data

Table 6.2 Annual price indices in the Czech agriculture (2004–2011)

Year	2004	2005	2006	2007	2008	2009	2010	2011
Agricultural producer price	108.1	90.8	102.2	116.8	108.8	75.2	105.4	119.1
Input agricultural price	106.8	103.0	100.4	105.9	110.8	92.3	98.2	108.3

Source: Own elaboration based on FADN data

Table 6.3 Basic data on agricultural enterprises in the Czech Republic (2010–2013)

1165 companies	Operating revenue (turnover) in CZK	Number of employees	ROE using P/L before tax %	ROCE using P/L before tax %	ROA using P/L before tax %	Profit margin %
2010						
Median	42,735	38	4.24	4.20	2.06	2.69
Standard deviation	187,539	113	33.50	26.18	11.38	15.55
Average	78,249	56	8.96	5.91	3.94	3.77
2011						
Median	45,000	23	8.29	6.90	4.06	5.09
Standard deviation	249,065	105	44.76	39.26	11.36	15.06
Average	88,925	48	10.55	7.55	5.17	5.26
2012						
Median	45,000	23	7.22	6.05	3.38	4.41
Standard deviation	167,616	99	48.84	27.02	10.80	13.66
Average	85,101	46	10.78	8.39	4.47	5.03
2013						
Median	45,000	23	7.92	6.17	3.99	4.41
Standard deviation	185,324	97	58.50	27.27	10.88	13.66
Average	92,336	44	8.67	8.82	4.53	5.03

Source: Own elaboration based on Amadeus data

2011, it was already at the same level as in 2007 (6.94%). The same trend was also recorded for operating return on sales.

A new reform of the Common Agricultural Policy has been approved for the period 2014–2020. The new CAP stems from the modification of the former policy with regard to an increase in the competitiveness of

agricultural enterprises. It concerns the following priorities which need to be monitored in the future:

1. Transfer of CAP measures towards a growing productivity and competitiveness of the agricultural sector through:
 - Verification of an advisory system function and creating a network of farmers, advisors, researchers, food producers, customers for creating knowledge and favourable approaches to secure the financing of rural development – human resource issues.
 - Encouragement of joint events for economic competition among farmers to support an efficient use of resources, product development and marketing – competitiveness.
 - Providing stimuli for the use of risk management tools and active prevention strategies – risk management.
2. Improvement of CAP impact on climate change and environment through:
 - increase in the agricultural areas where farming brings benefits for the environment and climate and encouragement of an interest in advanced environmental measures – partnerships and cooperation.
3. Improvement of the efficiency and effectiveness of the policy through:
 - Compensation in the form of direct payments in order to reflect income support and performance in relation to the environment – increasing sales potential/sales strategy.
 - Decrease in disparity in direct payments between member-states and farmers – increasing sales potential/sales strategy.

Particular managerial challenges on the basis of the results of own qualitative research are presented in the following chapter. The research was conducted by means of interviews with owners and managers of agricultural businesses in the Czech Republic.

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