Development Evaluation of Enterprises in Czech Agriculture

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Abstract

The paper deals with evaluation of economy of selected trade companies operating agricultural basic production in the period from 2008 to 2011. The evaluation stems from results of economic analyses of enterprises which are further monitor in context with development of external influences affecting the whole branch of agriculture and development of economic decisions of the evaluated companies. Further, the evaluation is based on real possibilities of companies stemming from resources of which they dispose, and on facts that happen in the monitored period in both companies. In the first part the paper introduced development of important factors influencing the whole branch of agriculture and their real state, further methods used in financial analysis of enterprises are introduced. In the second part of the work, two companies are evaluated of which the first operates plant and animal production and the second one is focused purely on plant production. In both companies machinery was modernized with contribution of supports from European Union funds and both the companies were competitive in the monitored period. The first company had problems with liquidity, while an unused capital cumulated in the second one.

Keywords: trade company, common agricultural policy, subsidies, yields, costs, operating result, financial stability, profit of enterprise, liabilities

Introduction

In the Czech Republic, there is a Law in force No. 252/1997 Col., on agriculture subsequently amended (further only "Law on agriculture"). According to §1, the purpose of the Law on agriculture is to create conditions ensuring ability of Czech agriculture to provide basic nutrition, food safety and needed non-food raw materials, to create background supporting non-production function of agriculture which contribute to protection of components of the environment like land, water and the atmosphere, and to maintenance of populated and cultural landscape, to create conditions for carrying out of the common agricultural policy and the policy of rural development of the European Union,

to create conditions for development of various economic activities and improvement of quality of life in rural areas and for village development.

For maintenance of production agricultural potential and for development of rural space, the law on agriculture in §2 defines state measures, dealing with structural support, support of activities financed from national resources and implementation of collection of measures resulting from regulations of the European Community (Further only "EC"). Further measures which concern provision of dax releases in consumption of fuels by persons operating agricultural production, creation of unified rules for trade with agricultural products, further creation of measures within common organization on the market with agricultural and food products. According to §2b of the Law on agriculture, the State Agricultural Intervention Fund (further only "SAIF") is set as an authority of common market organization and direct supports. SAIF deals with structural support and support of rural development according to EC regulations. The Law on agriculture defines principles of financing of subsidiary programmes guaranteed exclusively from national resources. For some provided supports the Ministry of Agriculture constituted as an entrusted person the Support and Guarantee Rural and Forestry Fund, Inc. (further only "SGRFF"). SGRFF provides supports to entrepreneurs in the area of agriculture, forestry, water management and processing industry, further to municipalities and voluntary municipality associations in rural areas.

Enterprise in agriculture, characteristics of agricultural entrepreneur and a definition of agricultural production are contained also in the Law on agriculture. A person operating the given activity has to be entered n an agricultural entrepreneur register according to law.

Table 1: Prices of agricultural producers in selected commodities in CZK

Average purchase price of agricultural commodities [CZK/t]						
Commodity/year	2008	2009	2010	2011		
Food wheat	3284	2663	4649	4155		
Feed wheat	2713	2419	3702	3797		
Winter oilseed rape			6668	8768		
Malt barley	4975	3336	4147	5056		
Slaughter cows q.c. A+B in live	26462	25243	25554	29048		
Slaughter pigs q-c- I. + V. in live	30432	26930	26146	31655		
Slaughter pigs q.c. I.+III. in JUT	38995	34533	34353	40224		
Cow milk Q q.c. 2	7207	6443	7975	8462		
Weaned piglets	57224	52611	51570	47869		

Source: CzSO 2013; MoA 2011

The reached economic results in agricultural enterprises are influenced by many factors acting inside enterprises and in outside environment of the businesses. Some of them can influence enterprises, for example a level of reached production intensity, a level of reached labour productivity, and others. Most external effects can not be influenced by the enterprise, for example height of agricultural producer prices, an amount of financial support, an amount of levies

and so on. It can just use them in a suitable way. As an example the table 1 shows fluctuating realization prices of selected commodities in the evaluated period and a view of financial support for agrarian sector.

Structure of supports flowing in the agricultural sector after accession in the European Union:

- direct and subsidiary payments
- market measures
- national payments
- Rural Development Programme

From a viewpoint of extent of financial suports within the EU CAP, the biggest significant is a system of direct payments in the form of unified payment per area. A rate per 1 ha of managed agricultural land amounted already to 4686 CZK in 2011. Other specific support is a separated payment for sugar, and a support of cows with market milk production.

In the framework of subsidiary national payments it is dealt with a support of hop growing, a support of breeding of ruminants, and a support to growers of potatoes for starch production.

The above mentioned factors project themselves in the economic situation of agricultural branch and thereby also in the economy of particular entrepreneurial subjects. Therefore, development of some indicators characteristic for creation of the entrepreneurial environment in this branch will be introduced.

A share of agriculture in the total gross added value in the CR has a decreasing trend. From 2004 to 2010 it felled from 2.63 % to 1.63 %. A share of employees decreased from 2004 (3.46 % from the total number of employees in the national economy) to 2010 by 0.76 % to the total number c. 114 thousand of employees. In 2010, 46 477 subject carried business in agriculture, of it 92 % were businesses of individuals managing c. one third of all agricultural land fund and 8 % businesses of legal entities managing the remaining two thirds of agricultural land fund (Rosochatecká 2006).

Since 2008, the area of main grown crops has changed in favour of wheat; the area has increased by 7 % to 863 thousand hectares; of oilseed rape, its acreage has increased by 4 % to 373 thousand hectares; the area of sugar beet has raised by 1.6 % to 58 thousand hectares, the area of maize by 10 % to 197 thousand hectares. Vice versa the area of barley has decreased by 23 % to 373 thousand hectares and also the area of potatoes has decreased by 13 % to 26 thousand hectares; the area of rye by 41 % to 25 thousand hectares. In the period 2008 to 2011, any more significant variations were not recorded in yields per hectare in main crops, that moved in wheat at the level 5 t/ha, in barley a decrease in yields was recorded in 2008 when it was below the margin 4 t/ha; usual values are at the level of 4.5 t/ha; the average yields of sugar beet moves from 55–60 t/ha, potatoes yields about 25 t/ha, and a yield of oilseed

rape was about 3 t/ha. According to the table 1, which compares prices of agricultural production, the year 2009 was the worst and prices of plant production moved at the level of 67 % of the year 2008. Since 2010, the prices of main crops have shown growing trend; already in 2011 there was a growth in prices by c. 30 % against the year 2010.

Development in animal production is characteristic by decrease in numbers of cows raised on the purpose of market milk production, and decrease in numbers of pigs, vice versa breeding of meat cattle has slightly increased. The number of dairy cows decreased from the year 2008 by 24 thousand animals, e.i. a decrease by 6 %. However, milk yields increased by about 2 % to 6 903 litres/piece, in spite ofthat the milk production decreased by 4 %. The number of meat cattle increased from 2008 to 2010 by 4 thous. animals and it amounted 167 thousand pieces. In the same period, the number of pigs decreased by 21 % to 1909 thousand pieces. A change in prices of products in animal production recorded smaller fluctuations throughout the years than a change in plant production. A decrease in prices of animal production was in 2009 against 2008 by 14 % and in 2010 the price index grew again; the prices reached the level of 2008 in 2012.

Interest rates of provided credits decreased in the long term; in the period 2008 to 2010 the decrease amounted to 1 % from 5.4 % to 4.04 %. The level of prices of material imputs shows a long-term trend (CzSO 2013; MoA 2011).

For evaluation of economic situation, the base is created by an economic analysis a part of which is a financial analysis. The economic analysis creates a picture of a state of entrepreneurial subjects and a development of its economic results between accounting periods. Financial analysis and work of financial analysts were in detail studied e.g. by Bildstein-Hagberg (2003). By a choice of suitable methods it is possible to reach also an output which can be compared among the enterprises mutually. Methods of financial analysis are frequently used by all users, both by the external and the internal. For the external users, the most frequent reasons are possibilities of investments or also a general evaluation of economic activity for informative purposes of the wide public. For the internal users, the output of financial analysis serves in planning, a check and evaluation of particular kinds of busines activities. In creation of economic analysis it is a suitable to use all available resources, both published openly and the internal, however it is necessary to monitor arising phenomenons in the context with other important facts which only the management of entrepreneurial subject can provide. On economic and financial analysis as the main topic of work was focused also research carried out by Liang and van Dijk (2011).

The aim of carried out analysis is naturally the most important point of view influencing the choice of suitable method of financial analysis for a concrete case. However, any method itself does not give absolutely the best or absolutely the worst results, therefore it is useful to combine the methods.

According to Vochozka et al. (2012), two basic techniques of analysis are used, i.e. a percentual analysis and a ratio analysis. In both cases, the base is absolute indicator, i.e. state and flow magnitudes.

For evaluation of the management level selected ratio indicators will be used in the further practical part.

Materials and methodology

The aim of the paper is to analyze and evaluate development of economy of selected agricultural enterprises and to determine factors that influenced their economy in the period from 2008 to 2011. Selected enterprises are typical representatives of certain groups of production agricultural businesses that are a subject of monitoring in the selective collection.

The introductory part is focused on delimitation of entrepreneurial environment in which the agricultural enterprises are situated. The main external factors that creates a structure of the agrarian sector in the Czech Republic are introduced there. Further, a price development on the market of agricultural commodities is introduced there. For needs of evaluation of the enterprises, a theory of financial analysis and its methods is delimited briefly.

The matter of investigation has a character of qualitative approach in the form of case study of two typical companies for czech agriculture. Also quantitative points of view are included in the research in the form of financial analysis indicators.

The second part of paper deals with the own evaluation of economy of the selected enterprises. Always an enterprise is characterized at first according to a form and production factors that has at disposal, and further the financial analysis follows. The financial analysis is composed of an analysis of liquidity, indebtedness and profitability. The paper also explains an influence of subsidies on a financial situation of the enterprises and their operating result. Data needed for calculations and information necessary to explain found out phenomenons were obtained from publicly available resources (Justice 2013), so final accounts of the enterprises and consultations with responsible employees in the businesses. Further, a brief comparison of the reached operating result of both enterprises with average values of enterprises in the Czech Republic found out on the base of investigation of the Agricultural Accounting Data Network was carried out. For comparability, values are recounted per one hectare of agricultural land here.

Characteristics of evaluated companies

As an example for evaluation of development of business economy in agriculture in 2008–2011 two trade companies that operate its activity in the Central Bohemian region were chosen. The first company (further the company A) operates plant and animal production and manages c. 2 800 hectares of agricultural land. The second company (further the company B) focuses only on plant production and manages c. 1 100 hectares of agricultural land.

The company A was chosen as a representative of group of trade companies with acreage of agricultural land over two thousand hectares with universal field production and with breeding of farm animals. The company B was

chosen as a representative of group oftrade companies managing agricultural land in range of 1000–2000 ha and operating an universal field production. The mentioned groups of companies are delimited in the framework of network of testing agricultural businesses monitored by IAEI Prague.

In the company A, machinery is being modernized still and also crop pattern has been adjusted. Growing of cereals, oilseed rape and mustard prevails. A small part of managed area is created by grass growths. The company realizes so called minimization procedures (without tillage) regarding a low annual rainfall. For the company it is important a careful management of soil humidity, but the so called "minimization" is also saving of time, fuels, and the soil is less stiffened. Throughout the years in the company A an inhibition in cattle breeding happened as well as re-building of stables to pig feedlots. The company concentrates on pig breeding with close herd turnover. In 2008 a herd recovery started with the help of European funds. The company has a herd of 200 pieces of meat cattle without market milk production. The machinery passed the most significant change and demanded a significant volume of investment, therefore is noted for a considerable degree of progress in the area of saving of labour forces, time, cost for repairs, and fuels. The purchase of machines was financed by means of long-term bank credits with use of supports of interest from credits by means of the SGRFF.

The company B is at present focused only on plant production. Already for ten years it has used the minimization technology of land cultivation (without tillage), however, the land is aerated. The plant production is operated on the whole area. Grown crops are winter and spring wheat, spring barley, oilseed rape, opium poppy and sugar beet. The acreage of sugar beet was reduced owing to allotment of sugar quota and instead of sugar beet opium poppy growing started. The company is able to store all wheat production of c. 2500 tonnes and barley production c. 1200 tonnes in its newly modernized stores equipped with an active ventilation for keeping the production in a good quality. Further the production is sold at time of the most favourable prices. Oilseed production is sold at time of harvest and the sugar beet harvest is realized by the help of use of services at time agreed with a consumer. The company employs yearly 5 employees, two of them are managers, and at harvest time it takes some temporary employees. The main machines are changed after longer time intervals.

Results

Analysis of solvency

A basic presumption for long-term functioning enterprise is to keep good relations (payment ethics) with its suppliers and for a potential development of the business from external resources of financing (loans from banks) it is essential to secure liquidity of the enterprise. The liquidity represents a summary of all liquidity means that the enterprise has disposable for covering its payable liabilities. Solvability is a preparedness to pay its debts when its maturity came (Sedláček 2007). Usually three levels of liquidity are distinguished,

an immediate liquidity, quick liquidity and current liquidity.

Calculation of liquidity:

Current liquidity = current assets/(current liabilities + short-term credits)
Immediate liquidity = (short-term financial property + short-term debts)/
(current liabilities + short-term credits)

Quick liquidity = short-term financial property/(current liabilities + short-term credits)

Table 2: Indicators of solvency of the company A

Solvency indicators					
	2008	2009	2010	2011	
Current liquidity	1.71	1.90	2.22	1.29	
Immediate liquidity	1.03	0.74	0.76	0.42	
Quick liquidity	0.32	0.10	0.08	0.00	

Source: Intraplant statements, own calculations

Results of solvency analysis in the company A indicate that there was a risk of unpayment of the liabilities in the company. From the immediate liquidity indicator, which corresponds with a recommended value only in 2008, it is obvious that the company would not be able to pay its liabilities immediately from money on a bank account. The liquidity indicator is a state magnitude counted to one date, so it is not possible to tell that the company was not able to cover its liabilities all the year. The critical period according to the management is on the turn of year and in spring when the stored production is sold and owing to long payback period, often longer than 3 months, the company wrestle with a lack of financial means to cover its monthly liabilities (for employees, cost interests, from trade relations). This fact is evidenced by values of the quick liquidity in which besides financial means also short-term receivables are shown. The values of quick liquidity moved in the recommended height again only in 2008, however, it is not a key factor of decision making because in 2010, neither the indicator of quick liquidity nor of immediate liquidity reached the recommended values, but the current liquidity indicator reached the recommended values. The values of current and quick liquidity evidence that the company lost its payment ability partially in possession of reserves and predominantly in a high amount of receivables and bank credits. In the reserve structure, the biggest items were unfinished production and animals, items that are closely connected with the character of production and the management of the enterprise can influence them just a little, with a requirement of maintenance of the current production. A positive phenomenon is decreasing reserve of material. The material for pig fattening in animal production has to stay constant, however, the material in plant production can be decreased. The company buy in advance this material only in case of advantageous offer with discounts provision. The high amount of bank credits results from a renewal of machinery and also from spending of overdrafts by which the company solves temporary deficiencies of financial means. Other

of steps to solve the liquidity was that the company asked for prolongation of the payback period of some liabilities in the main supplier which pay off some of its liabilities towards the company in a period longer than usual. Therefore, the request was accepted.

Table 3: Indicators of solvency if the company B

Solvency indicators						
	2008	2009	2010	2011		
Current liquidity	8.06	13.04	7.59	6.53		
Immediate liquidity	4.98	7.39	5.17	4.20		
Quick liquidity	4.46	6.49	3.96	3.56		

Source: Intraplant statements, own calculations

According to the results of indicator, the company B was liquid in a long-term, mainly thanks to a proportion of high short-term financial assets and short-term liabilities. Because the short-term financial assets that are noted for high liquidity created at average 34 assets and short-term liabilities amounted at average 8 %, the company was able to pay off its liabilities immediately only by the help of its financial means. Adding other components of assets with lower liquidity (short-term, receivables and reserves) in indicators of quick and current liquidity, only ability to pay its liabilities increased further. High values of liquidity found out already from financial means gave the company possibility to use a part of these means for development of entrepreneurial activity also in other business area without significant jeopardy of solvency and thereby also the activity in the main area.

Analysis of financial stability

A financial stability of enterprise is characterized by a structure of financial resources, appropriate composition of its operating results. In case of problems in this area, heavy indebtednes can happen and subsequently bankruptcy of the enterprise. The financial instability of enterprise usually means a decrease in creditors' confidence (Rosochatecká 2006).

Indicators of financial stability:

Creditor risk = foreign resources/total assets

Debt ratio = foreign resources/own resources

Coefficient of self-financing = own resources/total assts * 100

Interest coverage = (net profit + paid interests)/paid interests

Time of return on loan = total credits/(net profit + depreciations)

Indicator of rate of interest = paid interests/average state of credits * 100

Table 4. Indicators of infancial stability of the company 11						
Indicators of financial stability						
	2008	2009	2010	2011		
Indicator of creditor risk	0.69	0.66	0.61	0.60		
Indicator of debt ratio	2.52	2.00	1.68	1.62		
Coefficient of self-financing	27.17 %	32.86 %	36.31 %	37.19 %		
Interest coverage	2.93	0.62	2.95	4.24		
Time of return on loan	2.62	2.82	1.84	1.21		
Indicator of rate of interest	6.90	5.80 %	4.07 %	5.37 %		

Table 4: Indicators of financial stability of the company A

Source: Intraplant statements, own calculations

According to the analysis, the financial stability in the company A has improved in the long-term. The coefficient of self-financing (a share of own resources in the total assets) has increased by 10 % throughout years what is a positive phenomenon, however, values represent higher dependence of the company on foreign resources without which the company would not be able to acquire assets. Other indicators of financial stability have also improved in the long-term, only in indicators of interest coverage and time of return on loans deterioration was recorded in 2009 because the indicator influences an operating result from the current period and the company reached a loss in this year which was revised by height of depreciations mainly from newly purchased machines and also building. However, the indicator of interest coverage documents that the company was able to cover payments of credits. It is necessary so that the management takes into account possible fluctuations in gaining a profit in the following years. The indicator of creditor risk has decreased to a value 0.6. A possible liquidation of the enterprise would represent a loss for creditors because the indicator of debt ratio exceeds the margin 100 % and receivables of creditors would not be satisfied to full extent.

Table 5: Indicators of financial stability of the company B

Indicators of financial stability						
	2008	2009	2010	2011		
Indicator of creditor risk	0.17	0.12	0.14	0.14		
Indicator of debt ratio	0.22	0.15	0.16	0.16		
Coefficient of self-financing	78.06 %	84.66 %	84.86 %	86.47 %		
Interest coverage	23.59	7.24	13.77	33.09		
Time of return on loan	0.43	0.92	0.56	0.23		
Indicator of rate of interest	8.20 %	8.20 %	8.54 %	9.20 %		

Source: Intraplant statements, own calculations

The coeficient of self-financing in the company B has grown in the long-term what was positive and the company's assets became less dependent on foreign resources. The indicator of debt ratio has a similar trend like the indicator of creditor risk which predicates about financing of the company mainly from own resources. Payment of annual interests was fully covered from the reached net profit, only in 2009 a fall happened owing to a decrease in net profit, however, it did not affected the payment of interests. Generally it can

be said that development of the company is secured predominantly from good economic results.

Analysis of profitability and costs

Profitability prepresents achievement of profit. The most often it is expressed as a profitability rate, i.e. a ratio of profit to a base by help of which the profit was achieved (e.g. to assets, costs, revenues, outputs). The assets are a state magnitude while outputs, revenues and costs are flow magnitudes (Sůvová 2008).

Indicators of profitability and costs:

Profitability of Assets = profit before interests and taxation/total assets * 100 Profitability of own capital = profit after taxation/own property

Profitability of revenues = net profit/revenues

Costs of revenues = costs/revenues

Table 6: Indicators of profitability and costs of the company A

Indicators of profitability and costs						
	2008	2009	2010	2011		
Profitability of Assets (ROA)	4.59 %	-0.85 %	2.61 %	5.47 %		
Profitability of own capital (ROE)	16.88 %	-2.57 %	7.18 %	14.72 %		
Profitability of revenues	9.00 %	-1.63 %	4.05~%	8.53 %		
Costs of revenues	1.30 %	1.51 %	1.35~%	1.23 %		

Source: Intraplant statements, own calculations

From the indicators of profitability and knowledge of price development of agricultural commodities it is possible to estimate that an ability of the company A to reach a profit unwinds just from the price development of agricultural commodities if the production stays steady. Because in 2009 and 2010 the commodity prices were significantly lower than in the margin years, also the capital profitability decreased. For the company it would be beneficial to diversify structure of its incomes and secure incomes independent on development of the market of agricultural commodities. The development of costs of revenues is to some extent documented by the fact that the main activity of the company was, without endowment supports flowing from the state budget and the European Union, unprofitable because in each period more than one cost unit was expended per a unit of revenues. In the weakest year 2009, subsidies (other operational revenues) shares with 28 % on the total revenues; in the following year they created already only 20.5 %. A comparison of ROA indicator and interest rate in 2009-10 is documented by a negative fact that the total capital of the company was less profitable than the borrowed capital, so for the company the bank loans were a burden. However, the necessity of use of bank loans resulted from an intensive investment policy of the company. It must be added that in 2011 in spite of new investment covered by the help of bank loans, the profitability of the total capital exceeded the average interest rate and the borrowed capital started to pay off to the company.

	Table 7: 1	Indicators of	of	profitability	and	costs	of	the	company	ιF	3
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Indicators of profitability and costs						
	2008	2009	2010	2011		
Profitability of Assets (ROA)	17.21~%	3.56 %	5.73 %	8.50 %		
Profitability of own capital (ROE)	22.05 %	4.56~%	6.76 %	9.83 %		
Profitability of revenues	29.62 %	8.39 %	9.73 %	16.13 %		
Costs of revenues	1.07~%	1.35~%	0.97 %	1.15 %		

Source: Intraplant statements, own calculations

From the results it is obvious that the profitability of total capital in the company B showed similar values as the profitability of own capital owing to a high share of self-financing. The profitability was the highest in 2008 when the company showed the highest profit. In the following year the profitability decreased c. by 75 % mainly owing to a decrease in revenues from sale by 25 %. The decrease in revenues was caused more by the decrease in prices of sold commodities than by the decrease in crop yields, and also by the fact that a part of harvest was sold in the next year. The profitability of revenues from sale predicated about an ability of the company to reach even a net profit from the total revenues under the average conditions. From a comparison of ROA with the indicator of interest rate it is obvious that for the company it is not advantageous to use foreign resources for financing of investments. From the indicator of profitability of revenues it results that also for this successfully managing company the financial supports are necessary to secure the financial stability.

Activity analysis

"Activity indicators measure ability to use invested financial means and linking of particular capital component in particular kinds of assets and passives; the most often they express a number of turns of particular components of resources or assets. Their analysis serve above all for looking for answers to a question how we manage assets and their particular components" (Sůvová 2008).

Activity indicators:

Asset turnover = revenues/assets

Fixed asset turnover = revenues/fixed assets

Current asset turnover = revenues/ current assets

Reserve turnover = revenues/reserves

Debt turnover = revenues/ debts

Liability turnover = revenues/liabilities

Turnover can be converted into a time of turnover in days.

Activity analysis of the company A

Table 8: Activity indicators

Activity indicators					
	2008	2009	2010	2011	
Asset turnover	0.51	0.52	0.64	0.64	
Fixed asset turnover	0.87	0.78	1.09	1.09	
Current asset turnover	1.24	1.59	1.59	1.57	
Time of fixed asst turnover (in days)	418	470	336	335	
Time of current asset turnover (in days)	294	229	230	233	
Time of reserves turnover (in days)	116	140	151	156	
Time of debt turnover (in days)	123	78	70	76	
Time of liability turnover (in days)	196	122	105	133	

Source: Intraplant statements, own calculations

A change of the total asset value in the revenue value fastened in the company A, so the company used its assets more efficiently in creation of revenues. The value of fixed and current assets increased, so a time when particular assets projected in the revenue value decreased. The decrease of time of current asset turnover caused decrease of time of debt turnover; customers paid off their liabilities faster and the company had its financial means bind in the form of debts for a shorted time. Vice versa, the time of reserve turnover increased, generally by 34 % which slowed down the time of turnover of disposable financial means. The company had possibility to buy reserves with a more significant reduction in price before the year end, and thereby also a base of income tax from ordinary activities decreased. From the time of debt turnover it is possible to read that the company paid its liabilities in a period longer than 3.5 months and in 2008 the period was longer than 6 months.

Activity analysis of the company B

Table 9: Activity indicators

Activity indicators					
	2008	2009	2010	2011	
Asset turnover	0.58	0.46	0.59	0.53	
Fixed asset turnover	0.61	1.36	1.89	1.88	
Current asset turnover	0.94	0.72	0.90	0.76	
Time of fixed asst turnover (in days)	227	268	193	194	
Time of current asset turnover (in days)	389	506	405	482	
Time of reserves turnover (in days)	149	219	129	172	
Time of debt turnover (in days)	25	35	65	47	
Time of liability turnover (in days)	13	3	32	42	

Source: Intraplant statements, own calculations

The company B used more efficiently fixed assets in achievement of revenues; their time of turnover decreased to 194 days. The current asset turnover indicates that a part of current assets were not used; it was dealt mainly with fi-

nancial means on bank account. It confirms a presumption from liquidity evaluation that it would be economically beneficial for the company to use a part of these resources for investment activity. The time of debt turnover increased c. by 25 days and the company had bound its financial means for a longer time in the form with lower liquidity. The time of reserve turnover develops from when and in what intervals reserves are bought and consumed.

Influence of subsidies on operational result of a company

The table 10 introduces what would be the operational result of economy, if no endowment payments were paid to the enterprises. The main endowment payments are payments for area of managed lans SAPS which purpose is to secure a sufficiently big income of agricultural enterprises so that their activity would not be unprofitable for a long time, so that they would enable modernization and increase of production efficiency, contribute to diversification of the production according to demand, and secure a sufficient income of employees in agriculture.

From the table it results that except 2008 when the company B reached a positive operating economic result without subsidies, both enterprises would manage with a loss in all other years. It would mean that if there were no endowment payments, they could not under the current market conditions produce in the long term. A general development of both companies in the given period was characterized by considerable investment in the machinery (in both companies almost all used machines were bought as new). The companies during the monitored period dealt also with purchase of new production capacities. The operating economic result after deduction of subsidies would express with what results the companies would be managed, if they passed the current development.

Introduction of subsidies unambiguously contributed in both enterprises to modernizing of production and improvement of work conditions of employees. It can be stated that the paid subsidies encourage development of Czech agriculture.

Table 10: Operating economic result

Operating economic result of the company A					
	current operating ER	OER after deduction of subsidies			
2008	8 089	-14 317			
2009	1 267	-16 772			
2010	4 321	-11 908			
2011	7 655	-8 041			
Op	erating economic result o	f the company A			
	current operating ER	OER after deduction of subsidies			
2008	13 593	6 806			
2009	2 913	-4 443			
2010	4 528	-2 348			
2011	6 664	-254			

Source: Intraplant statements, own calculations

Conclusion and discussion

The aim of this paper was on base of a case study to analyze and evaluate economy of selected agricultural subjects and to determine factors, which influenced their level of economy in 2008–2011. For this purpose, two trade companies were selected as representatives of typical groups of agricultural enterprises in the Czech Republic.

The assession of the Czech Republic in the European Union was significant for both the companies; it brought availability of financial supports from the Union funds. The supply of new capital in the company A enabled modernizing of machine equipment and renewal of capacities for pig breeding. A negative side of this development was a high indebtedness of the company caused by a considerable height of bank credits. The company paid off the credits, however, it had problems with liquidity which it solved by the help of a bank overdraft. Binding of financial means in long-term debts for partners and daugter company was unfavourable, too. For more fluent obtaining of financial means, also a more steady sale of plant products with use of storage in the enterprise can contribute, as well as a reduction of time of debt turnover and a mutual credit of debts and liabilities from the business contact.

The company B also invested in modernizing of machine equipment and storage spaces in the monitored period. The company maintained a low level of indebtedness for a long time. A high liquidity was secured thank to savings in bank accounts.

From the viewpoint of rate of profit in both the companies, the year 2000 was risky; prices of agricultural commodities decreased on the market while prices of purchased material grew. In the company A, the low realization prices were the main cause of loss in the given year. In the company, it is necessary to continue in economical spending of operational costs and to try to reach a reduction in cost share in revenues. It would be advantageous for the company to reach also a certain diversification on the side of incomes also outside the agricultural production.

The company B, despite the decrease in realization prices, managed successfully to reach a significant profit in 2009. The structure of grown crops in the company showed a high profitability.

The companies differ in use of their capital because the company A uses more efficiently all input capital. In the company B, the unused financial means cummulate. This capital could be used, with willingness of management of both the companies, to diversification of activities, eventually for purchase of land in order to become independent on lessors of managed pieces of land.

Both the companies manage with a smaller ratio of assets per one hectare against the comparable average in the Czech Republic in spite of that they are able to reach a comparable profit. In comparison of the reached level of operational profit in re-count per hectare of managed land with average values found out in a network of testing authorities for Czech agriculture (IAEI, FADN 2013), their level was following. The company A for the category of enterprises with acreage above 2000 ha reached slightly under-average

values in the monitored year except 2009 when it was only 26 %. An opposite situation was shown by the company B which in year 2008–10 was in this indicator high above the average values. Only the year 2011 was slightly under the average, 92 %. Also in creation of added value, except the year 2009, better than average results were achieved.

Střeleček et al. (2011) introduced in a collection of monitored agricultural enterprises negative values of profit before taxation for 2009. It is in accordance with found out results in both companies when the height of this profit was negative in the company A and in the company B in 2009 it showed the lowest values over the whole monitored period.

Matošková (2011) points out a considerable volatility of prices of agri-food products on the world markets which shows also in fluctuation of prices of these products on the domestic market. This price fluctuation significantly affected also the achieved economic results in the evaluated companies in the monitored period.

Both the companies have passed a wide modernizing in recent years and achieved very good economic results. They trade with a steady base of suppliers and customers. On base of the carried out analysis it is possible to state that both the companies have a background for further development and applying on the market.

Reference

- BILDSTEIN-HAGBERG, S., 2003. Staging information-financial analysis and the (up)setting of market scenes. *International Review of Financial Analysis*. **12**(4), 435–451. ISSN 1057-5219.
- CZECH REPUBLIC, 1997. Act No. 252 from 24th September 1997 on agriculture. In: *Collection of papers*. Part 85, 4826–4830. ISSN 1211-1244. Available at: aplikace.mvcr.cz/sbirka-zakonu/ViewFile.aspx?type=c&id = 3076
- CZECH STATISTICAL OFFICE, 2013. Indexy cen výrobců časové řady [online]. [cit. 2013-03-19]. Available at: http://www.czso.cz/csu/redakce.nsf/i/ipc_cr
- INSTITUTE OF AGRICULTURAL ECONOMICS AND INFORMATION, 2013. Agricultural accounting and data network: FADN [online]. 2013 [cit. 2013-03-19]. Available at: http://www.vsbox.cz/fadn/
- JUSTICE, 2013. Official server of Czech justice [online]. 2013 [cit. 2013-03-20]. Available at: http://portal.justice.cz/Justice2/Uvod/uvod.aspx
- LIANG, X. a M. P.van DIJK, 2011. Economic and financial analysis on rainwater harvesting for agricultural irrigation in the rural areas of Beijing. Resources, Conservation and Recycling. 55(11), 1100–1108. ISSN 0921-3449.

- MATOŠKOVÁ, D., 2011. Volatility of agrarian markets aimed at the price development. *Agricultural Economics-Czech.* **57**, 34–40. ISSN 0139-570X.
- MINISTRY OF AGRICULTURE, 2011. Report on state of agriculture of CR in 2008 to 2010: Green Report. Prague: Ministry of Agriculture. ISBN 978-80-7434-005-5.
- ROSOCHATECKÁ, E., 2006. *Ekonomika podniků*. Prague: Czech University of Live Sciences in Prague. ISBN 80-213-1482-6.
- SEDLÁČEK, J., 2007. Finanční analýza podniku. Brno: Computer Press. ISBN 978-80-251-1830-6.
- STŘELEČEK, F., J. LOSOSOVÁ a R. ZDENĚK, 2011. Economic results of agricultural enterprises in 2009. Agricultural Economics Czech. 57, 103–117. ISSN 0139-570X.
- SŮVOVÁ, H., 2008. Finanční analýza I. Prague: Bank Institute. ISBN 978-80-7265-133-7.
- VOCHOZKA, M., P. MULAČ et al., 2012. *Podniková ekonomika*. Prague: GRADA. ISBN 978-80-247-4372-1.

Hodnocení vývoje českých zemědělských podniků

Příspěvek se zabývá hodnocením hospodaření vybraných obchodních společností provozujících zemědělskou prvovýrobu za období trvající od roku 2008 do roku 2011. Hodnocení vychází z výsledků ekonomických analýz podniků, které jsou dále sledovány v kontextu s vývojem externích vlivů působících na celé odvětví zemědělství a vývojem hospodářských rozhodnutí hodnocených společností. Dále se hodnocení opírá o reálné možnosti společností vycházející ze zdrojů, jimiž disponují a o skutečnosti, které za sledované období v obou společnostech nastaly. V první části práce je uveden vývoj důležitých faktorů ovlivňujících celé odvětví zemědělství a jejich současný stav a dále jsou zde uvedeny metody používané při finanční analýze podniků. Ve druhé části práce jsou hodnoceny dvě společnosti, z nichž první provozuje rostlinnou a živočišnou výrobu a druhá společnost je zaměřena výhradně na rostlinnou výrobu. V obou společnostech probíhala, za přispění podpor z fondů Evropské Unie, modernizace strojového vybavení a ve sledovaném období byly obě společnosti konkurenceschopné. První společnost měla problémy s likviditou, zatímco ve druhé společnosti se hromadil nevyužitý kapitál.

Klíčová slova: obchodní společnost, společná zemědělská politika, dotace, výnosy, náklady, výsledek hospodaření, finanční stabilita, ziskovost podniku, závazky

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