

DEVELOPMENT OF AGRICULTURAL PRODUCERS' GROUPS IN THE CZECH REPUBLIC WITH FOCUS ON COMMODITY AREA FRUIT AND VEGETABLES

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Received: September 1, 2011

Abstract

VAVŘINA, J., MARTINOVIČOVÁ, D.: *Development of agricultural producers' groups in the Czech Republic with focus on commodity area fruit and vegetables*. Acta univ. agric. et silvic. Mendel. Brun., 2011, LIX, No. 7, pp. 497–506

Groups of agricultural producers had been established in the former Czechoslovakia already in 1930s and with the transition to a market economy it is again relevant to think about the renewal of some type of economic partnership among agricultural producers. The need to establish a group of agricultural producers may occur in the broader context of increasing dynamics within current competitive forces' models with regard to even relatively less dynamic sector of agriculture. Further development of this kind of economic partnership among agricultural producers in the Czech Republic is eligible for support via public subsidies, namely by Common Agricultural Policy. Nevertheless many agricultural producers are still facing tougher foreign direct competitors after EU accession as single economic units instead of establishing new or joining existing producer groups, namely in production of fruit and vegetables.

Authors identify and describe subsidies currently available for further establishment of economic cooperation within structures of agri-food complex and agricultural producers. This is followed by a framework economic analysis of the whole fruit and vegetables production sector within year period 2004–2009 using Farm Accountancy Data Network with the focus on established producer groups using financial statements issued in Business Register of the Czech Republic.

groups of agricultural producers, agricultural commodity, horizontal cooperation, public subsidy, Common Agricultural Policy

Position of food processors and sellers within food verticals strengthen to the exclusion of agricultural producers in last 10 years period. It can be stated, that from a price formation point of view the all segments of commodity verticals without agricultural producers represent imperfect competition and namely they have substantial influence on determination of selling prices of commodities. On the other hand agricultural producers can be pointed out as representatives of perfect competition and that is why they usually become only passive recipient of price. The mentioned fact has to inevitably lead to a competitive disadvantage of agricultural producers. One of the possible reactions to this situation from agricultural

producers' side could be their concentration into economically larger units called groups of producers to improve their negotiating position.

Groups of agricultural producers have been established in the former Czechoslovakia already in 1930s. After the World War II thanks to social and economic changes and by set up of central directive planning however agricultural producer groups disappeared, because there was no need to utilise their activities. In 1990s in connection with transition to market economy it is again relevant to think about renew of mentioned groups of agricultural producers. Although activities of agricultural producers' groups were renewed, their performance was disputable. An adequate reaction

to improve their economic performance could be their broader involvement into horizontal or vertical cooperation. Importance and substance of activities within horizontal cooperation of agricultural producers is directly reflected by certain financial support from public resources within the framework of EU Common Agricultural Policy.

Main objective of this contribution is to identify development, up-to-date situation and perspectives of agricultural producers groups with focus area fruit and vegetable after the Czech Republic's EU accession. Partial goals are evaluation of economic performance of the whole fruit and vegetable production sector within year period 2004–2009 and particularly of related established producers' groups within mentioned time period.

METHODS AND RESOURCES

This contribution is based on the secondary research. The main information resources employed are the reports of the Czech Ministry of Agriculture, databases of the State Agriculture Intervention Fund and datasets of Czech Farm Accountancy Data Network (FADN CZ) that collects structural and accountancy data of farms, based on system of sample surveys conducted every year and the financial statements issued in the Business Register of the Czech Republic. The accountancy data of identified groups of producers are subsequently the subject of financial and statistical analysis based on decomposition of economic performance indicator Return on Equity and analysis of datasets variations of other indicators, namely Return on Assets and Profit Margin. There is proceeded the framework financial analysis of the whole production sector fruit and vegetables as well, using profitability indicators and Coefficient of Intermediate Consumption's Reaction for purposes of horizontal analysis.

RESULTS AND DISCUSSION

The Rural development programme of the Czech Republic for the year period 2007–2013 identifies weaknesses of further agricultural enterprises' development. One of them is an insufficient integration with other agricultural producers and the related processing industry. The mentioned programme document is in accordance with rural development policy in the Czech Republic as the part of EU Common Agricultural Policy and with National Strategic Rural Development Plan of the Czech Republic for the year period 2007–2013. The strategy to gain specified aims in the rural development of the Czech Republic is using defined

dominant strengths, i.e. especially rich agricultural production tradition and competitive production of agriculture commodities, to eliminate weaknesses, for instance namely problems with sales and pressure from supermarket chains¹.

The main reasons to create specialized sales organizations of agricultural producers in the Czech Republic can be defined as follows:

- "On the sale side of agricultural production – to negotiate the prices with the processing companies and to purchase and sell the products, which is the wholesale specialized in, on their own risk and thus to be recognized and even more appreciated by the agricultural producers;
- On the side of input, purchasing for the agricultural production – to centralize purchasing in order to negotiate lower prices and price discounts;
- In the mutual relations in the food processing verticals – to follow trends occurring in the food processing verticals via cooperative fulfilment of levied nutrition and other quality requirements by food processing companies;
- In the economic field – to create sufficient economic background concerning situations of their financial troubles and to provide management of receivables and payables for member enterprises based on contractual relations;
- In the field of organization – cooperative proceeding of systematic and strategic analysis of marketing trends and industry environment²."

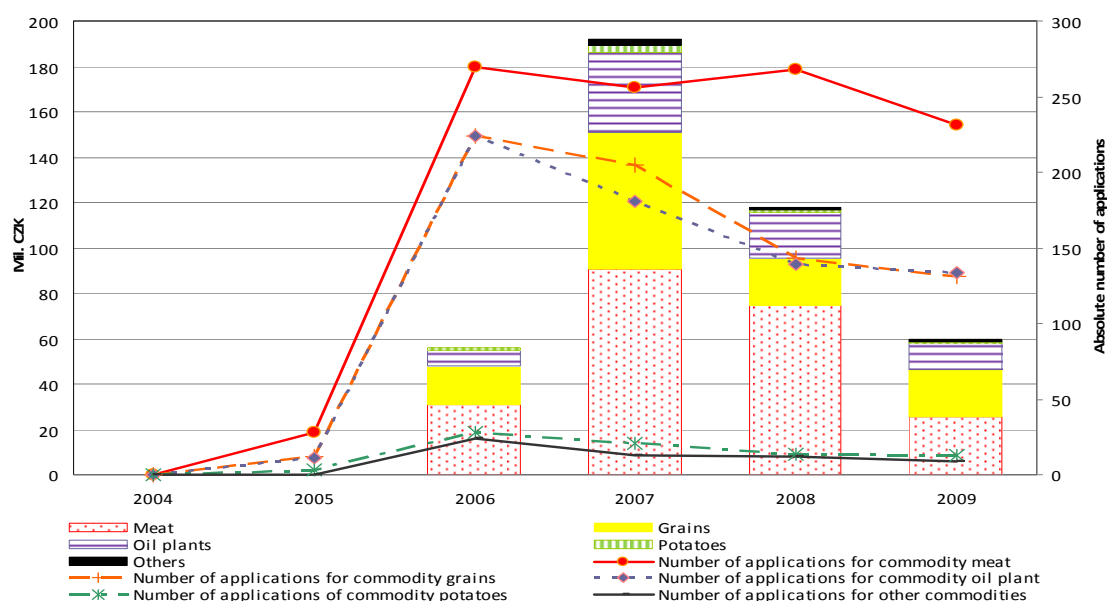
The Ministry of Agriculture of the Czech Republic (2005) describes the primal reason to set up agriculture producer groups as increasing agriculture producers' competitiveness on commodity markets. As long as there is proceeded a general comparison of the producer groups' situation in the Czech Republic and the rest of the EU, it can be stated that there are established negotiable and economically strong producers' groups in the EU-15 member states. These EU-15 producers' groups are set up in a form of both horizontal and vertical cooperation implemented into distribution chain production – processing – trade. Opposite to EU-15 situation there is not sufficient share on market among existing agricultural producer groups and traded commodities specialization in the Czech Republic³.

The existing groups of agricultural producers in the Czech Republic in the year of EU accession can be divided by two main criterions, namely traded commodities and the scope of provided services. Regarding to the criterion traded commodities can be identified narrowly specialized groups of producers for certain commodities and groups of producers with broader or rather universal oriented

1 MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, The Rural Development Programme of the Czech Republic 2007–2013.

2 TVRDOŇ, O., KRČOVÁ, K., The reasons for creation of agricultural sales organizations, p. 285–292.

3 MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, Zpráva o stavu zemědělství ČR za rok 2005.



1: Financial amount of applied subsidies and number of applications in particular years within measure Setting up Producers' Groups

Source: own work based on database of State Agricultural Intervention Fund⁷

commodity range. Regarding to the criterion range of provided services could be defined organisations of producers only mediating the trade, organisations of producers actively trading and carrying the risk regarding to management of receivables, organization of producers actively trading and establishing financial reserves for selling price reimbursement guarantee and last but not least producer groups with own storage or rather also processing capacity. The commodities fruit and vegetables are pointed out to be essential related to activity of agricultural producers groups, because after the Czech Republic's accession the EU groups of producers face the common market competition and only concentration of supply is the way to face the economic pressure of trade chains. There is no full and up-to-date database of existing economically active groups of agricultural producers. Available register is connected with provided subsidies from public budgets. There were registered 8 groups of producers with commodity specialization fruit and vegetable in the end of year 2004. Members of this mentioned producers groups participated on almost 50% of total sell of vegetables and about 35% on total sell of fruit⁴.

Financial subsidies to agricultural producer groups from public budgets

The main frontier concerning public subsidies to agricultural producer groups is the year 2004, when the Czech Republic becomes a member of the EU. There was approved the Horizontal Rural Development Plan 2004–2006 in the year 2004 and within this Programme was approved the measure Setting up Producer Groups to encourage process of the new establishment of producer groups⁵.

The measure Setting up Producer Groups was implemented by regulation of Government of the Czech Republic No. 655/2004 Coll. in current version. It was eligible to set up producer groups in commodity areas honey products, grains, oil plants, potatoes, fibre flax and hemp, flowers and woody plant, medicinal, aromatic and seasoning plants, tree nursery products, slaughter bovine, pigs, poultry, sheep and goats within this mentioned measure. The group of producers was defined by this regulation as corporate or cooperative corporate according to the Czech Business Law, with principle type of activity securing common sell of defined agricultural commodity⁶.

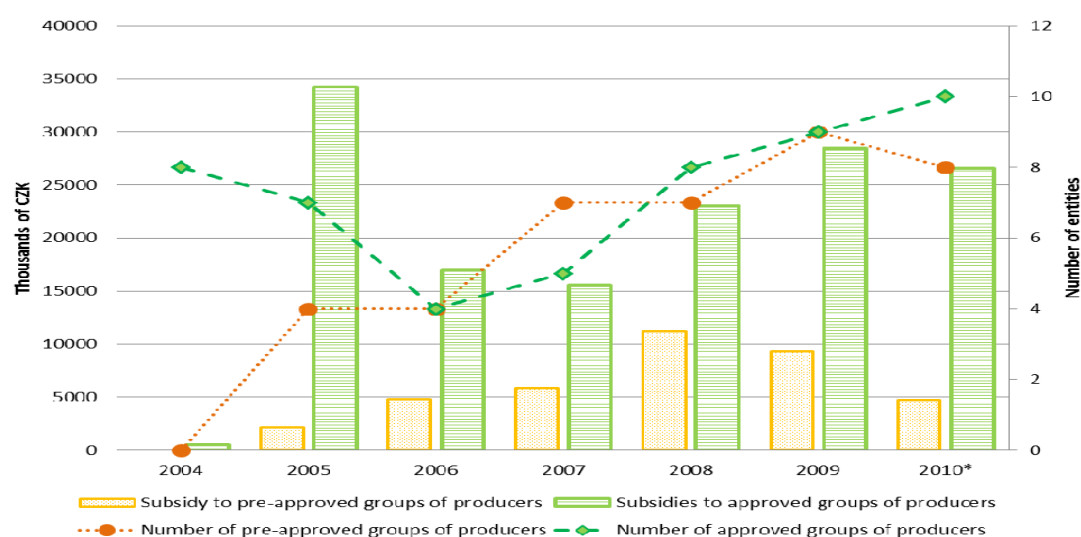
Fig. 1 provides own worked overview concerning subsidy measure Setting up of Producer Groups based on general dataset of subsidy beneficiary⁷.

4 MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, Zpráva o stavu zemědělství ČR za rok 2004.

5 MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, Zpráva o stavu zemědělství ČR za rok 2006.

6 GOVERNMENT OF THE CZECH REPUBLIC, Nařízení vlády č. 655/2004 Sb., ve znění Nařízení vlády č. 322/2007 Sb., o stanovení podmínek pro zařazení skupin výrobců, zajišťujících společný odbyt vybraných zemědělských komodit, do programu zakládání skupin výrobců a o stanovení podmínek pro poskytnutí dotace k podpoře jejich činnosti v rámci Horizontálního plánu rozvoje venkova.

7 STATE AGRICULTURAL INTERVENTION FUND, Seznam příjemců dotací.



2: Financial subsidies for pre-approved groups of producers and approved groups of producers in the Czech Republic according to Common Organization of Market with fruit and vegetables in respective years

Note: * data available only till the 31st of July 2010

Source: own work based on data of the Ministry of Agriculture of the Czech Republic¹¹

Related to this measure it is obvious that within the observed time period 2004–2009 the meat area was the most wanted commodity with totally 1,053 applications for subsidy amount over 221 mill. CZK. Grains are the second most wanted commodity area with total amount 715 applications for subsidy and financial amount over 119 mill. CZK. The Oil plants were the third most wanted commodity area with 689 applications and the subsidy amount was nearly 75 mill. CZK.

The most important subsidy title concerning commodity area fruit and vegetables are subsidies provided via the Common Organization of Market with fruit and vegetables. More precisely these are subsidies to approved organizations of producers or groups of producers organizations, which were approved by responsible state authority, or pre-approved groups of producers based on application for pre-approval according Council Regulation (EC) No. 1234/2007⁸, Commission Regulation (EC) No. 1580/2007⁹ and Czech Government directive No. 318/2008 Coll., in current version. The eligible applicants for subsidies under Common Organization of Market with fruit and vegetable are both enterprising personal and legal bodies according to Czech Government directive No. 318/2008 Coll., in current version. Financial subsidy for approved organization of producers is

provided for respective year either as one payment or as several partial payments based on costs of special operational programmes of each producer group with a maximum frontier of 4,1% of total amount trade production within the organization of producers¹⁰.

Fig. 2 shows own worked overview of subsidy programme development for producer organizations under Common Organization of Market with fruit and vegetables based on datasets of Ministry of Agriculture of the Czech Republic¹¹. Producers' groups with time limitation till the end of the year 2005 were automatically registered in the year 2004. The noticeable decrease in number of producer's groups was in the year 2006, when 3 organizations of producers had been disapproved due to not fulfilment of the programme conditions. The number of approved producer organizations increased again in following years and it was stated by State Agriculture Intervention Fund that exist 10 approved organizations of producers with the operational programme in October 2010. The financial subsidies of pre-approved groups of producers are dependent on volume of traded production¹².

Fig. 3 describes development of own enumerated ratio Return on Assets (ROA) and Return on Equity (ROE) of selected agricultural enterprises joint into

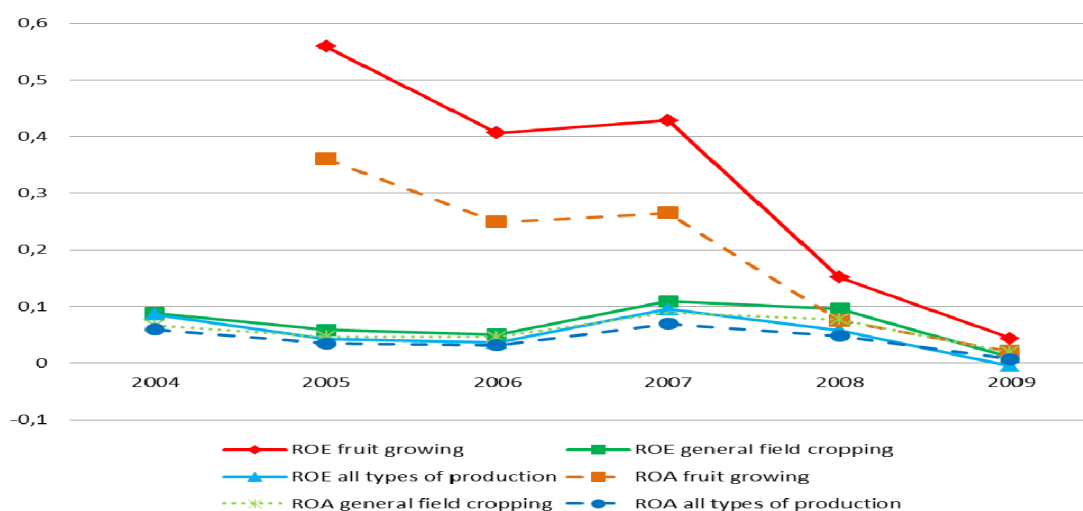
8 EUROPEAN COUNCIL, Council Regulation (EC) No. 1234/2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products (Single CMO Regulation).

9 EUROPEAN COMMISSION, Commission Regulation (EC) No. 1580/2007 laying down implementing rules of Council Regulations (EC) No. 2200/96, (EC) No. 2201/96 and (EC) No. 1182/2007 in the fruit and vegetable sector.

10 GOVERNMENT OF THE CZECH REPUBLIC, nařízení vlády č. 318/2008 Sb., o provádění opatření společné organizace trhu s ovocem a zeleninou.

11 MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, Zemědělství 2004–2009

12 STATE AGRICULTURE INTERVENTION FUND, Commodity report.



3: Values of Return on assets (ROA) and return on equity (ROE) ratios of representative sample of agricultural enterprises within FADN CZ and respective years related to hectare of growing area

Note: Data for fruit growing related to year 2004 were not available

Source: own work based on database FADN CZ¹³

Czech Farm Accountancy Data Network survey (FADN CZ)¹³ with principle type of farming fruit-growing, general field cropping and aggregated results for all principal types of farming. It is obvious related to principle type of farming fruit-growing, that both ROA and ROE achieved higher values than are the values for all principle types of farming till the end of year 2007. Substantial decrease of both ratios is marked in the year 2008.

The main reason for described situation can be pointed out as noticeable overproduction of fruit in the whole EU and subsequent decrease of agricultural producers' prices¹⁴.

It can be stated, that return on equity ratio decreased in the year 2008 against the year 2007 of 27.6% related to hectare of growing area. This mentioned decrease was further analysed by decomposition of the return on equity ratio. This decomposition revealed, that most negative influence on ROE ratio value was year-on-year decrease of total assets turnover, namely more than 24% and also negative influence of profit margin with is year-on-year decreased more than 16%. Only indicator financial leverage had a positive influence on value of ROE, namely it corrected negative development of ROE ratio by its year-on-year increase by 12.5% and also indicates increasing involvement of external capital.

The main reasons for continuous decreasing of investigated ROE and ROA indicators in 2009 within principle type of farming fruit-growing are pointed out the harm of growing areas due to hailstorm and

continuous decreasing of agriculture producers' prices.¹⁵

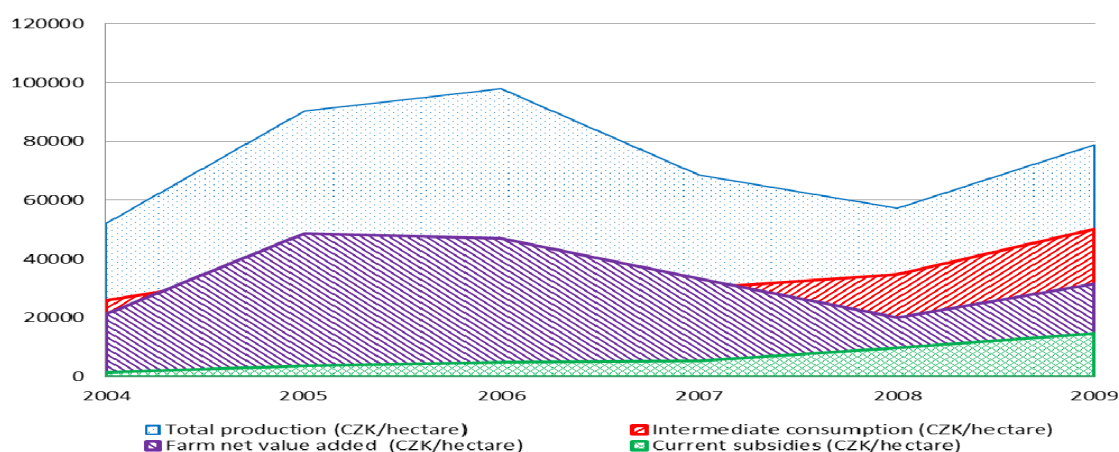
It can be stated that return on equity ratio decreased in the year 2009 against the year 2008 of 10.8%, according the proceeded analyse. This identified decrease was further analysed by decomposition of ROE ratio. This decomposition revealed, that most negative influence on ROE ratio value was the year-on-year decrease of profit margin, namely -8.4% and also decrease of total assets turnover, namely more than -3%. Only the indicator financial leverage had a positive influence on value of ROE ratio as well, namely it corrected negative development of ROE ratio by year-on-year increase by 9.7% and proved the continuing progress of increasing level of external capital against equity capital.

The accomplished analysis of return on equity within FADN CZ principle type of farming fruit growing was followed by analysis of farm net added value creation in the same principle type of farming. The farm net value added indicator presented in Fig. 4 is created by values of total production measured in current prices CZK/hectare increased of balance of current subsidies and taxes and decreased of intermediate consumption and depreciation. It can be stated according to executed horizontal analysis of farm net value added, that the highest value was achieved in year 2006, namely 36,500 CZK/hectare of growing area, however it was connected with year-on-year decrease of farm net value added. The year-on-year development of intermediate consumption, measured by coefficient

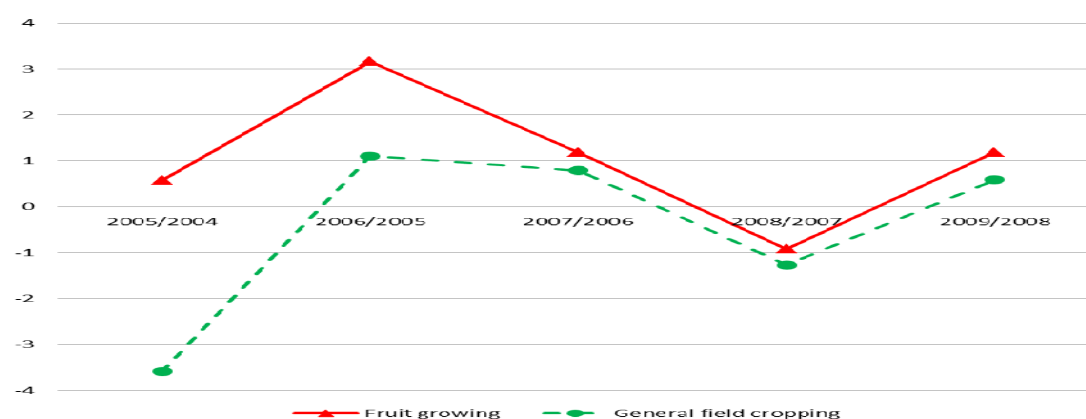
13 INSTITUTE OF AGRICULTURAL ECONOMICS AND INFORMATION, Zemědělská účetní datová síť ČR.

14 MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, Ovoce 2009.

15 MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, Ovoce 2010.



4: Development of selected indicators of observed enterprises and principle type of production fruit growing in respective years
Source: own work based on database FADN CZ¹¹

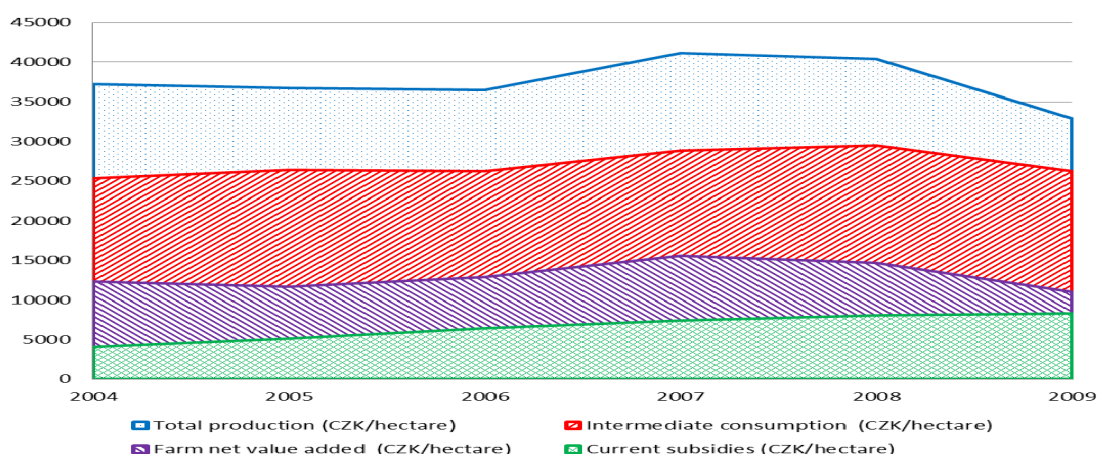


5: Development of intermediate consumption's coefficient of reaction related to changes in volume of total production within observed type of farming in respective years
Source: own work based on database FADN CZ¹³

of intermediate consumption's reaction within year-on-year period 2006/2005, indicates progressive development of respective costs within intermediate consumption. Namely it had to be spent 0.47 CZK to create 1 CZK of total production, more precisely it is for 17% higher compared to year 2005. The year-on-year 2006/2005 decrease of farm net value added was corrected by increase of current subsidies, namely about 37% compared to year 2004. On the other hand, the lowest value of the farm net value added indicator was identified in the year 2008, namely less than 20,000 CZK/hectare and it was also connected with year-on-year decrease of farm net value added, namely -40%. This described development was influenced not only by year-on-year 2008/2007 decrease of total production, namely by -16%, however also by regressive increase of intermediate consumption, namely year-on-year increase by 15%. Fig. 5 presents own worked development of intermediate consumption's coefficient of reaction related to changes in volume of total production within principle type of farming fruit growing and general field cropping within representative sample

of agricultural enterprises according to data of FADN CZ.

Development of observed indicators ROA, ROE and farm net value added within farms with principle type of farming general field cropping that involves growing of vegetable shows noticeably lower variation on mentioned indicators than principle type of farming fruit, as it is presented in Fig. 6. Reasons of described situation should be seen already in the year 2004, when significantly raised competition in area of vegetable after EU accession. Subsequently the growing areas of vegetable have been continuously diminished and also self-sufficiency has been decreased. Horizontal analysis of return on equity development revealed, that the highest value of return on equity was achieved in the year 2007, namely 0.11 CZK of earnings after taxation related to 1 CZK invested equity capital. Further decomposition of this indicator shows, that its value consists of profit margin, namely 0.10 CZK earnings after taxation per 1 CZK of sales, of turnover of total assets as high as 0.67 CZK per 1 CZK of enterprises' assets and finally from financial leverage ratio 1.50 CZK of assets per 1 CZK of equity.



6: Development of selected indicators of observed enterprises within FADN CZ and principle type of production general field cropping in respective years

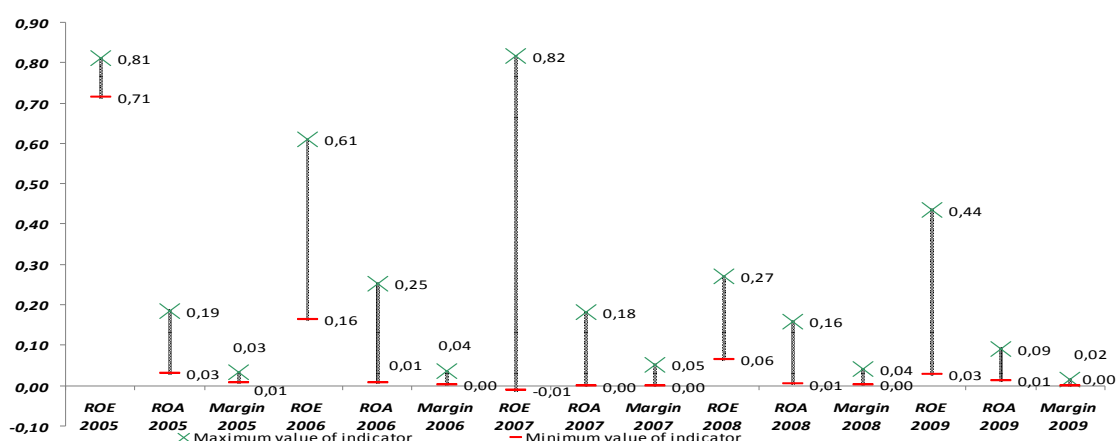
Source: own work based on database FADN CZ¹³

The positive effect of financial leverages' impact is proved by enumeration of its profit effect, namely 1.41 that is enumerated as a multiplication consisting of ratio earnings before taxes and earnings before interest and taxes and ratio of total assets and equity capital.

The overall characteristics of agriculture producer groups' economic activity supported within measure Common Organising of Market with fruit and vegetable

The pre-approved groups of producers and approved organizations of producers, which are in evidence as applicants for subsidy within Common Organising of Market with fruit and vegetable has only one type of legal form and it is cooperative. The members of cooperatives are after paying the initial contribution to each participating public or

private bodies of agriculture producers, who are compulsory primarily to sell their whole production of commodity being subject of support via the producer group. The other obligations are especially paying of member payments for reimbursement of operation cost. Payments of receivables from customers for commodity supplies are consequently based on the balance of payables and receivables redistributed to members of producer groups regarding articles of association and internal rules of the cooperative. The groups of agriculture producers declare their principle activity in section G – whole sale trade and merchandising, subsection 46 – Wholesale without whole sale of motor vehicles, unit 46.31 wholesale trade with fruit and vegetable according to Czech harmonised system of economic activity classification CZ NACE¹⁶.



7: Variation range of return on equity (ROE), return on assets (ROA) and margin of pre-approved groups of producers in respective years

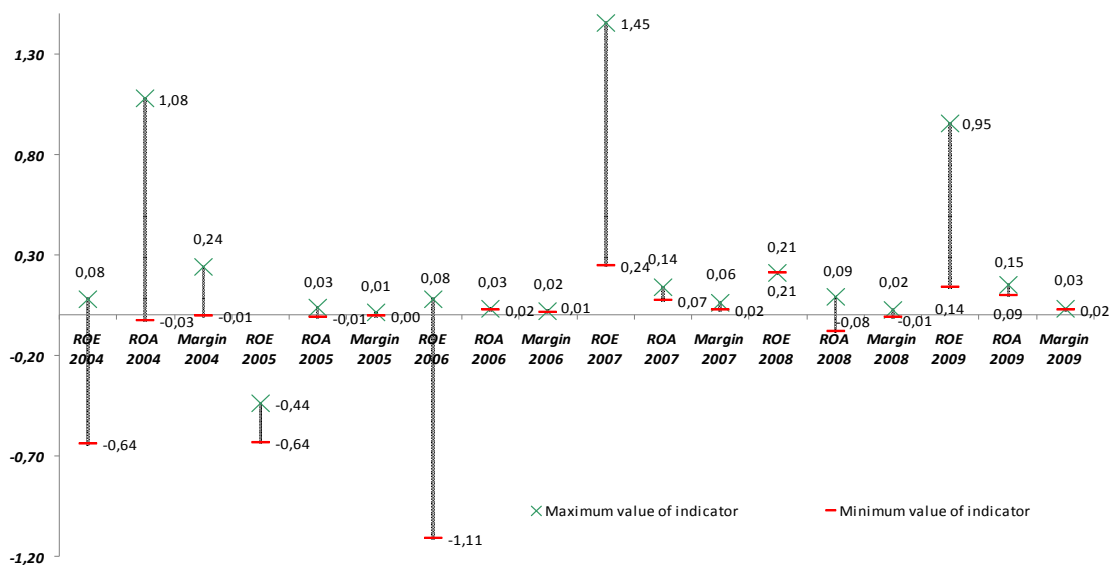
Source: own work based on financial statements issued in the Czech Business Register

16 CZECH STATISTICAL OFFICE, Classification of Economic Activities CZ NACE rev. 2.

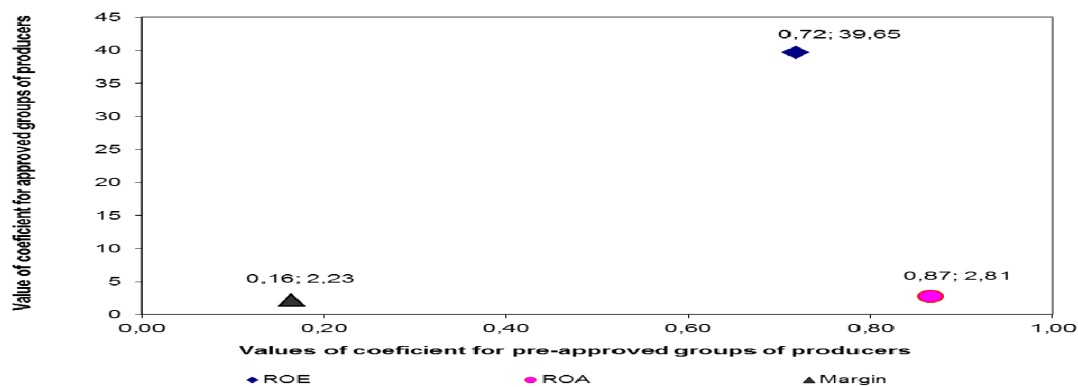
Economic activities of pre-approved groups of producers were analysed by return on assets, return on equity and profit margin within time period of their engagement into subsidy programme. The basic characteristic of variability of the observed sample of pre-approved agriculture producers was executed via variation range as presented in Fig. 7.

The largest difference of basic variability of characterized return on equity, measured by variation range was identified in the year 2007, i.e. the value of variation spread was 83%, namely the highest value of return on assets represents 0.82 CZK earnings after taxes per 1 CZK of equity capital and the lowest value of ROE that represents loss of 0.01 CZK per 1 CZK of equity capital. On the other hand indicator margin as the ratio of profit or loss before taxation increased by paid interests and sales increased by outputs performed the lowest basic variability of observed pre-approved groups of producers, namely range 0–5%. The highest basic

variability of indicator profit margin was achieved again in the year 2007, when the group of producers with lowest value of margin did not gain the profit before taxes. On the other hand, the most successful pre-approved group of producers created per 1 CZK of sales 0.05 CZK of earnings before taxation and interest. Higher variability was identified within the observed period by approved producers' groups as it is presented in Fig. 8. The highest variability spread among analysed indicators was in the year 2006, more precisely by return on equity and its value 119%. The group of producers with highest return on assets declared 0.08 CZK earnings before taxation and interest per 1 CZK equity capital and on the other hand the group of producers with lowest value of ROE declared loss at value 1.11 CZK per 1 CZK of equity. Profit margin was again pointed out as indicator with the lowest basic variability, namely the highest value of variability in the year 2004 represented 25%, while organization with



8: Variation range of return on equity (ROE), return on assets (ROA) and margin of approved groups of producers in respective years
Source: own work based on financial statements issued in the Czech Business Register



9: Comparison of variation among observed financial analysis' indicators measured by coefficient of variation within approved and pre-approved groups of producers in year period 2004–2009
Source: own work based on financial statements issued in the Czech Business Register

highest margin declared earnings before taxation and paying interest at value 0.24 CZK per 1 CZK of equity capital. On the other hand organization with the lowest margin declared loss of 0.01 CZK per 1 CZK of equity capital.

There was executed also analysis of variability among observed pre-approved groups and organizations of producers via coefficient of variation. The results are presented in Fig. 9 and it is obvious that pre-approved groups of producers have lower variability and single analysed indicators, namely margin differs to its arithmetical average only till 16%. On the other hand these groups of producers achieve higher variability was declared among indicators related to approved groups of producers, namely margins differ from arithmetical values as much as 40 times. Regarding to the mentioned result of variability of financial analysis indicators it can be pre-assumed, that economic performance of approved producer groups would be more differentiated than economic performance of pre-approved groups of producers.

CONCLUSIONS

The objective of this paper was to identify the ultimate framework within economic activities of groups of agriculture producers in the Czech Republic with focus on commodity area fruit and vegetables. There were also identified other important commodity specializations of agricultural producer groups from EU accession onward beside commodity fruit and vegetables, which should be taken into account and investigated by another studies, namely:

- regarding animal production commodities pork, poultry, beef meet and milk,
- regarding plant production commodities grains and oil plants.

The article presents authors' approach to activity and performance of agricultural producer groups based on primary study of this problem area. The given results will be continuously verified and the following studies will be broadening to identify and analyse particular factors, which could influence activity and performance of groups of agricultural producers.

SUMMARY

The position of food processors and sellers within food verticals has strengthened to the exclusion of agricultural producers in the last 10 years. This fact has to inevitably lead to a competitive disadvantage of agricultural producers. One of the possible reactions to this situation from agricultural producers' side could be their concentration into economically larger units. The Main objective of this paper is to identify development, up-to-date situation and framework perspectives of agricultural producers groups with a focus on area fruit and vegetables after the Czech Republic's EU accession. The most important subsidy programme concerning commodity area fruit and vegetable are subsidies provided within Common Organization of Market of fruit and vegetables, more precisely subsidies to approved organizations of producers and also pre-approved groups of producers. The executed framework financial analysis based on representative sample datasets of FADN CZ revealed that the substantial decrease in return on assets concerning fruit growing sector in year-on-year period 2008/2007 was primarily influenced by decrease of total assets turnover and also by negative development of profit margin. This negative development could be connected with a continuous decrease in producer prices. The analysis of economic performance of fruit growing sector was accomplished by analysing farm net-value-added involving coefficient of intermediate consumption's reaction. It revealed regressive increase of intermediate consumption in year-on-year period 2008/2007, and together with a decrease in total production caused the lowest farm net value added in observed year on year period 2004–2009. General field cropping sector involving production of vegetables showed noticeably lower variation of given economic performance indicators. The reasons for described state of matter should be seen already in the year 2004, when increased dramatically competition in area of vegetables in the Czech Republic after EU accession. Subsequently the growing areas of vegetables have continuously diminished and also self-sufficiency has been decreased. These generally cheerless results were not corrected by neither subsidies for establishing groups of producers nor particular existing groups of producers. That is why an analysis of variability among observed financial indicators and between pre-approved groups of producers and organizations of producers was carried out. The results state, that there is a great deal of variation among economic performance of individual entities. Measured via coefficient of variation the differences to mean value of indicators differ from 16% in the case of the profit margin indicator of pre-approved groups of producers to 4000% related to return on equity of approved groups of producers. The basic ranges of variance identified are motive for authors to carry on further research of particular producer groups' economic performance and also the economic performance of agricultural producer groups within other commodity sectors.

Acknowledgement

This paper was worked out thanks to Internal Grant Agency of Faculty of Business and Economics, Mendel University in Brno project No. 35/2011.

REFERENCES

- CZECH STATISTICAL OFFICE, 2008: Classification of Economic Activities CZ NACE rev. 2. [online]. [Cited 2011-08-12]. Cited from: <http://www.czso.cz/csu/2008edicniplan.nsf/p/0216-08>.
- EUROPEAN COUNCIL, 2007: Council Regulation (EC) No. 1234/2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products (Single CMO Regulation).
- EUROPEAN COMMISSION, 2007: Commission Regulation (EC) No. 1580/2007 laying down implementing rules of Council Regulations (EC) No. 2200/96, (EC) No. 2201/96 and (EC) No. 1182/2007 in the fruit and vegetable sector.
- GOVERNMENT OF THE CZECH REPUBLIC, 2007: Nařízení vlády č. 655/2004 Sb., ve znění Nařízení vlády č. 322/2007 Coll., o stanovení podmínek pro zařazení skupin výrobců, zajišťujících společný odbyt vybraných zemědělských komodit, do programu zakládání skupin výrobců a o stanovení podmínek pro poskytnutí dotace k podpoře jejich činnosti v rámci Horizontálního plánu rozvoje venkova.
- GOVERNMENT OF THE CZECH REPUBLIC, 2008: Government regulation No. 318/2008 Coll., o provádění opatření společné organizace trhu s ovocem a zeleninou.
- INSTITUTE OF AGRICULTURAL ECONOMICS AND INFORMATION, 2011: Zemědělská účetní datová síť ČR [online]. [Cited 2011-08-14]. Cited from: <http://www.vsbox.cz/fadn>.
- MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, 2004: Zpráva o stavu zemědělství ČR za rok 2004 [online]. [Cited 2011-08-03]. Cited from: http://eagri.cz/public/web/file/6357/zelena_zprava_2004_cast_1.pdf.
- MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, 2005: Zpráva o stavu zemědělství ČR za rok 2005 [online]. [Cited 2011-08-03]. Cited from: http://eagri.cz/public/web/file/6537/zelena_zprava_2005.
- MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, 2006: Zpráva o stavu zemědělství ČR za rok 2006 [online]. [Cited 2011-08-03]. Cited from: http://eagri.cz/public/web/file/123009/ZZ_2006.pdf.
- MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, 2008: The Rural Development Programme of the Czech Republic 2007–2013 [online]. [Cited 2011-06-08]. Cited from: <http://eagri.cz/public/web/en/mze/subsidies/rural-development-programme-2007-2013/programme-documents/the-rural-development-programme-2007.html>.
- MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, 2009: Ovoce 2009 [online]. [Cited 2011-08-01]. Cited from: http://eagri.cz/public/web/file/2810/OVOCE_10_2009.pdf.
- MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, 2010: Ovoce 2010 [online]. [Cited 2011-08-29]. Cited from: http://eagri.cz/public/web/file/91448/SVZ_Ovoce_2010.pdf.
- MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC, 2005; 2006; 2007; 2008; 2009; 2010: Zemědělství 2004–2009 [online]. [Cited 2011-06-30]. Cited from: <http://eagri.cz/public/web/mze/ministerstvo-zemedelstvi/vyrocní-a-hodnoticí-zpravy/publikace-zemedelstvi>.
- STATE AGRICULTURE INTERVENTION FUND, 2011: Commodity report [online]. [Cited 2011-06-29]. Cited from: <http://www.szif.cz/irj/portal/anonymous/komodity/rv/04/03>.
- STATE AGRICULTURE INTERVENTION FUND, 2011: Seznam příjemců dotací. [online]. [Cited 2011-08-06]. Cited from <http://www.szif.cz/irj/portal/anonymous/spd>.
- TVRDOŇ, O., KRČOVÁ, K., 2002: The reasons for creation of agricultural sales organizations. *Agricultural Economics*, Vol. 48, No. 7/02. pp. 285–292. ISSN 0139-570X.

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