

# Globalisation and concentration in the Czech agro-food sector

## *Globalizace a koncentrace v českém agrárním sektoru*

T. DOUCHA

*Research Institute of Agricultural Economics, Prague, Czech Republic*

**Abstract:** The processes of globalisation and concentration have been also penetrating into the Czech agro-food sector and market. Utilising information from foreign sources and developed countries, the paper tries to present a complex view on the Czech situation from the structural and institutional aspects. Based on limited Czech information sources, the market structure in the individual links of the food chains is presented, together with the hypothesis about the sequence of the market power in the present Czech agro-food sector: input suppliers and retailers – farmers – processors. The paper also implies possibilities of the state to suppress negative effects of globalisation and concentration, especially as regards the adjustment of the Czech market regulations to the EU ones.

**Key words:** agro-food sector, agro-food market, globalisation, concentration, market power

**Abstrakt:** Procesy globalizace a koncentrace pronikají také do agrárního sektoru a trhu ČR. S využitím poznatků ze zahraničních zdrojů a z vyspělých zemí se příspěvek snaží o ucelenější zmapování situace v ČR ze strukturálního a institucionálního pohledu. Na základě limitovaných údajů ČR je představena struktura trhu v jednotlivých článcích potravinového řetězce a je vyslovena hypotéza o pořadí tržní síly v současném agrárním sektoru ČR: dodavatelé vstupů a maloobchod – zemědělci – zpracovatelé. Jsou naznačeny i možnosti státu k potlačování negativních stránek globalizace a koncentrace, především pokud se týká přizpůsobení regulace trhu podmínkám EU.

**Klíčová slova:** agrární sektor, agrární trh, globalizace, koncentrace, tržní síla

## INTRODUCTION

The continuing processes of globalisation and internationalisation bring on the floor questions linked with the development of markets in the agro-food sector from their institutional and structural aspects. How the Czech agrarian market is developed and organised, what are the main consequences of the globalisation and internationalisation on the market and how the economic power is distributed among the individual links in the agro-food chains represent the most relevant questions in this field today. Unfortunately, the shortage of a methodology and data are a serious impediment for the needed analyses.

The most advanced research in this field can be found in the USA (works of the Economic Research Services at the USDA) and in the OECD documents. In the Czech Republic, the first attempts in research and analyses are connected with the documents of INCOMA (retail sector) and in the studies of the Research Institute of Agricultural Economics (analyses of the Czech food industry). The paper tries to map up the topic and gives a more complex view on the whole chain in the Czech agro-food sector. As a consequence of the shortage of data, the paper is more descriptive, based rather on the comparative approach,

utilising analogies from the known situation on the agro-food markets in developed countries.

## GLOBALISATION A CONCENTRATION IN THE AGRO-FOOD SECTOR

The globalisation can be understood as a transformation of social and economic processes from the local, regional and national levels on world, global processes. In this context, the globalisation is connected also with the internalisation of the processes. In the economic sphere, in market, the globalisation is accompanied by the concentration of the market and economic power, which is usually measured by the share of – let us say – 4 biggest firms in the given segment of the market. As a rule, the consolidation of the given sector precedes the concentration, it means the decrease in the number of firms in the sector with their enlargement by mergers, acquisitions, internal growth, etc. In general, the growth of the market power pushes itself by a vertical coordination or integration, by a horizontal coordination or integration or by a combination of all previously mentioned forms.

---

The contribution presented at the conference Agrarian Perspectives X – Sources of Sustainable Economic Growth in the Third Millennium: Globalisation Versus Regionalism (CUA Prague, September 18–19, 2001).

As it was mentioned in the introduction, analyses and assessments of the concentration in individual sectors are burdened especially by:

- the lack of credible information (by the unwillingness of private firms to give the needed data);
- problems with the identification of “behavioural formulas” of the firm on market (issuing also from the lack of information);
- a growing diversification of firms into more sectors and activities;
- the differences between the “operational” and the “ownership” concentration (which are typical just for the reform period in the Czech Republic).

From the mentioned reasons, the researches are forced to help themselves also by analogies based on analytical results and information from other sources. There is a question particularly of the studies in the agro-food market from the USA provenience, methodological and analytical studies of the OECD and the recent Czech reports from the studies in developed countries (e.g. USA and Japan). However, the very important indirect source of information about the real situation in the concentration of market powers and about the behaviour of firms on the markets are presented in partial analyses following various shocks on the markets (for example, after the rapid and deep decline of prices for pig producers in 1998–1999, after the recent BSE crisis in the beef market, or after deep price shifts in the world oil market). From these reasons, the results presented in the following parts of the paper should be considered rather as signal information or as hypotheses needed to be substantiated in further analyses and research.

## **NEGATIVE AND POSITIVE ASPECTS OF THE GLOBALISATION AND CONCENTRATION**

Undoubtedly, a higher rationalisation of production processes issuing in lower production costs and thence in lower consumer prices belongs among the positive effects of the concentration of the market power. Even a flexibility of the capital can be assessed as a positive effect to a certain extent.

- On the other hand, the concentration of the market power raises up especially the following negative effects:
- increase of prices as a consequence of the functioning of monopolies/monopsonies, or oligopolies/oligopsonies, respectively;
  - imperfect price transmission in the agro-food verticals (some market segments gain a higher economic power and a rent added to the detriment of other market segments);
  - “social recklessness” of the flexible capital.

It is evident, that the concentration of the market power may not bring only negative effects under all circumstances. In any case, it is advisable to work for a balance or a trade-off between positive and negative effects. It

can be demonstrated on an example from the USA: the decrease of the production costs by o 5–10% as a positive effect of the concentration would have to be eliminated – *ceteris paribus* – by the increase of prices up to 40%, which is not evidently the reality. We can speak about a complex positive effect of the concentration in such a case.

## **THE PRESENT STATE OF GLOBALISATION AND CONCENTRATION ON THE AGRO-FOOD MARKETS IN DEVELOPED COUNTRIES**

The agro-food market generally consists of several segments corresponding with the vertical: input suppliers – farmers – processors – wholesale sector – retail sector – final consumers (of food). The concentration and the market power of firms are necessary to analyse not only inside of the individual market segments, but also particularly between the segments.

From foreign information sources it is possible to deduct the following general tendencies in the agro-food markets in developed countries:

- Farmers (and also consumers) functioning under the almost perfect competition have naturally the weakest market power in the chains.
- Farmers try to strengthen their market power and to improve their position on the market by horizontal co-operations (by marketing organisations) and by the integration with up- and downstream firms. This integration promotes the price stability for agricultural commodities, but it leads to the loss of farmers’ “independence” in the same time.
- The market power of input suppliers (particularly in agro-chemical and seeds inputs, where the globalisation fastens, or it is accompanied, respectively, on the concentration in research and breeding and on the higher intellectual property rights protection of big multinational firms) has been pushing forward.
- The economic power of the retail sector, representing to some extent consumers’ interests, has been markedly growing in the agro-food markets.
- Various types of corporations and long-term alliances, functioning against the natural market relations and generating improper market signals, have been penetrating in the agro-food markets.

## **GLOBALISATION AND CONCENTRATION ON THE CZECH AGRO-FOOD MARKET**

The present situation in the Czech agro-food market can be generally characterised by the following features:

- The retail sector together with input suppliers show the biggest market power. The both sectors are followed by farmers (from more reasons – see later), whilst processors show obviously the least market power in average.

It is true particularly in the food industry branches, which are more dependent on the domestic supply of agricultural raw materials and on their primary processing (dairies, slaughter-houses, etc.).

- There is a very blind ownership structure of input suppliers and processing firms, impeding the identification of their real market power.
- The general legal environment (the institutional infrastructure of the society) is not sufficiently developed (or it is not operative, e.g. in the contract enforcement, respectively). This reality is obviously the main driving force for the growth of the vertical integration and the diversification of some large input, trade and processing firms (even for the diversification into farming).
- In the institutional structure, informal relations are more effective than formal ones.
- The share of the farm-gate prices in the final food prices ranges from 40% to 50% in average, compared with 15–25% in developed countries. Marketing and other services in the chains and a higher value added are not still “fairly” evaluated by the market, or the services are not still provided on a decent level, respectively.

### **Input suppliers**

It is possible to deduct from various information sources, that the consolidation processes are obviously in the most advanced progress in this segment of the agro-food market. The market power of input suppliers is supported by oligopolies and evidently even by informal cartel agreements (see for example the imperfect price transmissions on the fuel market). Above it, the market power towards farmers is strengthened by the fact, that many input suppliers give to farmers commercial credits, not accessible otherwise.

The consolidation is in the progress especially in seeds, agrochemicals, finance (banks) and insurance inputs. The machinery and feed suppliers are evidently just in the middle of the consolidation process. The behaviour of supplying firms is withal influenced by the Support and Guarantee Farm and Forestry Fund (SGFFF). The input price support issues in higher input prices, which exceed “adequate” or average levels. It is evident e.g. in the banking sector and in its interest rates on credits given to farmers through the SGFFF.

Nevertheless, the domestic market power of input suppliers and its negative effects are off-set to a large extent by the outstanding liberalisation in the input markets towards foreign markets.

### **Farmers**

The Czech farm sector finds itself still in the middle of the consolidation, which is softened by the stabilisation agricultural policy of the government (the farm structure – the relations between individual and collective farming – has not changed since 1995 in principle). The consoli-

ation is stimulated by the effort of farms (particularly by coops) to cope with their transformation debts, by the struggle on the ownership concentration and by other factors. On the other hand, the consolidation is impeded by the extreme difference between the land ownership and the land usage (92% of land on farms is leased) and by barriers in the land market. However, the emerging dual farm structure (a small number of large farms occupies the decisive part of land) is not significant for the increase of the market power of individual farms (none of farms cannot cast off the almost perfect competition).

The market power of farmers has started to grow by their horizontal integration (by their marketing organisations and co-operatives). However, the functioning of the organisations is smoothed by the interest fragmentation of farmers and by their lower willingness to a really collective and co-operative behaviour.

It is important, that the market power of farmers has been fortified even by “weaknesses” of processors (e.g. by overcapacities in the Czech food industry) and frequently also “artificially” by policy measures in the market (minimum farm-gate prices, export subsidies, etc.).

### **Processors**

The consolidation in the sector differs significantly by the individual branches. In general, it finds itself “somewhere in the half-way”. The following information can illustrate the situation.

About 11.5 thousands of processing firms functioned in the sector in 2000, a mild decline in their number compared with 1999, but with the constantly growing number of foreign firms. An undersaturated market exists e.g. in beverage production, where the number of firms has been continuously growing. The firms up to 300 employees provide about 94 % of the total food industry production. The firms with 100–300 employees are economically the most important, participating by 33% in the total food industry revenues and by 20 % in the total employment of the sector.

The foreign direct investments (FDI) in the Czech food industry are relatively very high (CZK 48 bil. till 2000 altogether). The share of the FDI in the food industry in the total FDI in the national economy significantly exceeds the share of the food industry in the GDP.

The continuing overcapacities together with the growing pressures from the side of retailers, with the “pro-farmers” agricultural policy of the government and with other factors weaken the market power of the sector.

### **Wholesale sector and intermediaries**

In spite of the large number of firms, this extraordinarily important segment of the Czech agro-food market is not sufficiently developed according to the evaluation of foreign experts (World Bank, EU). Above it, the Czech traders often compete among themselves even abroad,

to the detriment of the Czech farmers. The significance of commodity exchanges is still low, though year by year mildly increasing.

The sector plays an outstanding role in the generation of real market prices in developed countries. The policy measures prepared ahead react indirectly and ex post on the market prices. The situation in the Czech market is a bit different in many cases: direct and ex ante realized interventions of the state in the market prevail and the sector has been becoming deeply dependent on the state institutions (the former State Fund for Market Regulation, now the State Agricultural Intervention Fund), functioning as a state trade enterprise, which influences directly the supply and demand and generates prices. Fortunately, the situation has been improving with the gradual adjustment of the Czech agricultural policy to the EU regulations.

It is symptomatic as well, that several large firms have been gaining a decisive market power and they have been trying to cast off the given market conditions, diversifying also into more other sectors including farming.

As in other countries, the wholesale activities for processed products are more integrated into the retail sector (to the detriment still relatively large sale activities of processors).

### **Retail sector**

The retail sector shows the outstanding dynamics, linked with the penetration of multinational networks in the sector and with the growth of its market power in the chains. The internationalisation of the sector is extremely high even under the European conditions (only one Czech firm belongs to the TOP 10). The highest turnover was reached by the Makro (CZK 27,5 bil.) and Ahold (CZK 23,5 bil.) in 2000. The share of the TOP 4 in the market is estimated about 35–40% at present, with a growing tendency.

However, the share of the networks in the total retail turnover does not still reach the level in developed countries (up to 80%). From this point of view, it is possible to speak about a low market saturation, particularly in cities and big towns. The sector has been still going through the consolidation and a sharp internal competition, with positive impacts on the consumer prices. The sources needed for the sector development are then sucked from suppliers and they are frequently realized in the form of various rents stemming from the payment delays, listing and shelf payments exceeding the adequate level, etc.

### **THE ROLE OF THE GOVERNMENT IN THE PROCESS OF GLOBALISATION AND CONCENTRATION AND IN THE CONTROL OF THEIR NEGATIVE IMPACTS**

The possibilities of the state to intervene into the market under the globalised market economy are rather limit-

ed. It does not mean, however, that the state should resign. It can utilise particularly the following instruments and measures:

- the consistent application of the Competition Law;
- territorial (regional) plans for the protection of regional and local interests;
- the support of the horizontal integration of farmers (the establishment and functioning of their marketing organisations);
- the support of marketing funds of producers;
- the offer of (free) general services in the field of research, informatics, extension services, education, land consolidation, etc. (the provision of these services is considered in developed countries as one of the most effective forms of the state support to “weaker social groups”);
- the support of small and medium enterprising through the SGFFF and the Czech-Moravian Guarantee and Development Bank (under the competition of the Ministry of Industry and Trade);
- the support for regional products;
- the formulation of ethic codices for behaviour of firms on the market (especially of multinational firms, according to the OECD model), with their regular evaluations followed by the publication of the results of the evaluations (for shaping attitudes of consumers).

The state can significantly contribute also by including externalities in the transport prices, but it should be realised on a multinational or even on the global (world) level.

### **CONCLUSIONS**

The state can fight with the negative effects of globalisation and concentration on the Czech agro-food market, but only on a limited level and exclusively only by indirect measures. The regionalisation of the agricultural policy and the adaptation of market measures on the EU rules (the shift from the direct impacts on prices, supply and demand to indirect instruments for the market regulation) can contribute to smooth the effects. Consequently, it can support the development of sale firms, intermediaries and other market institutions and services as an infrastructure, whose proper functioning represents one of the necessary attribute of a “healthy” agro-food market.

### **REFERENCES**

- Doucha T., Vaníček F. (2000): Report on the Study of the Czech Experts in Japan on Marketing in the Japanese Agro-Food Sector. Document AICA, Japan, Tokyo.
- Doucha T., Vaníček F. (2000): Marketingová infrastruktura japonského agrárního trhu. Bulletin VÚZE, č. 19.
- Doucha T., Vaníček F. (2001): Změny v marketingu a distribuci zemědělských výrobků v USA. Výběr ze studií ERS-USDA. Bulletin VÚZE č. 5.

Market Concentration in the Agro-Food Sector (2001): Selected Economic Issues. Document AGR/CAAPM(2001). OECD, Paris.

Martilla J. (1996): The Effect of Oligopolistic Competition on Economic Welfare in the Finnish Food Manufacturing. Research publications 80. Agricultural Economics Research Institute. Finland.

Maze A., Polin S., Raynard E. (2001): Quality Signals and Governance Structures within European Agro-Food Chains: A New Institutional Economic Approach. Paper for the 78. EAAE Seminar. Copenhagen.

Panorama potravinářského průmyslu 2000 (2001). MZe Praha.

Zprávy o stavu zemědělství ČR (1999–2000). MZe Praha.

Arrived on 14<sup>th</sup> December 2001

---

*Contact address:*

Doc. Ing. Tomáš Doucha, CSc., Výzkumný ústav zemědělské ekonomiky, Mánesova 75, 120 28 Praha 2, Česká republika  
tel: +420 2 22 72 55 43, fax: +420 2 22 72 54 50, e-mail: doucha@vuze.cz

---