SCIENTIFIC INFORMATION

Development of firm structure of the Czech food industry sector: retrospect and perspective

Vývoj podnikatelské struktury potravinářského sektoru ČR: retrospektiva a perspektiva

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MATERIAL AND METHODS

The manufacture of food products and beverages presented is one of the traditional branches of manufacturing. The production base of this branch has been changed quantitatively and qualitatively after the year 1989. This article tries to describe some of the specific development features of this base. The analysis is mainly oriented on sectoral structure and number of firms in this branch.

Monitoring of production base is very important for future trade possibilities. Czech food industry is not only traditional but also one of the key branches of industry. The accession of CR to the EU offers possibilities to export Czech food products to the EU states. Very important is the role of foreign trade with third countries.

We have observed production of food industry in roughly 15 years period, since the change the central plan economy to the EU accession the Czech Republic. We evaluate also the perspective of the Czech food manufacturing.

The authors based their conclusions on analysis of databases available in the Research Institute of Agricultural Economics (VÚZE) and another sources.

PERIOD OF ECONOMIC REFORM – TRANSITION TO MARKET ECONOMY

The food industry in the former Czechoslovakia till 1989 had been characterized by large monopolistic enterprises. Privatization of the food industry followed two main ways. The minority of enterprises was restituted to their previous owners. Other small firms were either sold directly to new owners or sold by auction. The larger companies were first transformed into joint stock companies and subsequently sold by means of voucher privatization.

Economic reform had been implemented fairly rapidly, through not only privatization, but also through de-monopolization and market liberalization. For most food manufacturing firms, the privatization in the Czech Republic was finished in 1995. The Czech food

Table 1. Sectoral structure of the Czech food industry, 1996–2000

Industry	Revenue (%)		
	1996	2000	Difference
Meat processing	20.9	18.9	–2.0
Fish processing	0.5	0.7	0.2
Fruit/vegetable	2.6	2.3	–0.3
Vegetable oil	5.2	4.8	–0.4
Dairy	15.3	15.7	0.4
Milling/starch	3.8	2.2	–1.6
Feed	6.2	7.3	1.1
Other food	26.5	28.1	1.6
Beverages	19.0	20.0	1.0
Total	100.0	100.0	x

Source: Czech Statistical Office
Calculation: Mezera (VÚZE)

industry was characterized by a low degree of concentration. The Czech Republic only counts 353 companies (food + drinks) with more than 100 employees (1995). As the three main important branches of the food industry, it is necessary to mention the meat, dairy and beer industries. These accounted for about 46 % of the total food production in 1995.

Industry structure of the Czech food manufacture had changed in the second part of the last decade. Meat processing and milling and starch industries have suffered from expressive fall in shares. Other food production (bakery, confectionery and others) rather increased their share in production. Changes of other food sectors were not so important (Table 1).

Since 1997, there were available figures of enterprises with 20 or more employees. Decentralization of the former large production mammoths and the creation of new companies increased the number of enterprises. Only the number of enterprises in fruit and vegetable production decreased (Table 2).

In spite of low concentration and a wide number of enterprises, food industry has belonged in this period among the key industrial branches.

EU ACCESSION PERIOD

After 2000, the Czech food industry, along agriculture with which it is directly linked, was preparing intensively, like other branches joining the EU.

The Czech food policy is based on the maximum valorization of farm production through the follow-up processing. The priority of the Czech national policy in connection with the EU food policy is to ensure a high degree of food safety and improvement of the legislative framework and an efficient control system in the entire food chain.

The priority of the food policy aimed at ensuring the greater safety of foodstuffs is detailed in the Government strategy, which was already expressed in the legal obligation of food producers to introduce the HCCP system. High standards and the influence of difficult economic conditions leaded to a closing of the plants and the whole enterprises (Table 2). In the assessed period, the food sector was within the manufacturing industry the most strongly touched one by liquidations and bankruptcies.

Table 3 presents changes in the concentration ratios in the food industry (2000–2003) of enterprises with 100 and more employees (required data of firms 20–99 employees were not available). The concentration ratios were calculated using the indicator of revenues. The concentration of most branches has grown. The low concentration is in the meat processing and dairy, where there is a sharp competition.

The Czech food processing sectoral composition after 2001 has also changed. Beverages expressive, dairy and meat processing industries softness have achieved stronger position (Table 4).

As Table 5 illustrates, during the transition and the EU accession period, there occurred some changes. Two groups of enterprises with 20–49 and 50–99 employees increased their number. The group of enterprises with 100–499 employees and 500–999 employees marked significant decrease. Economic position of the latter categories of companies is very unsure and part of them moved to group of small enterprises. There is the possibility to achieve labor productivity growth

Table 2. Number of enterprises in the Czech food industry, 1997–2000 and 2001–2003

Number of companies	1997	2000	Index 2000/1997	2001	2003	Index 2003/2001
Meat processing	185	215	116.2	217	182	83.9
Fish processing	6	10	166.7	10	8	80.0
Fruit/vegetable	41	33	80.5	37	36	97.3
Vegetable oil	5	9	180.0	8	8	100.0
Dairy	77	84	109.1	78	73	93.6
Milling/starch	45	49	108.9	46	46	100.0
Feed	56	81	144.6	79	76	96.2
Other food	448	537	119.9	515	491	95.3
Beverages	154	165	107.1	159	120	75.5
Total	1 017	1 183	116.3	1 149	1 040	90.5

Source: Czech Statistical Office
Calculation: Mezera (VÚZE)

Table 3. Concentration ratios in the Czech food industry 2000–2003 (choice branches)

Concentration ratio (CR_3[1)])	2000	2001	2002	2003
Meat processing	23.6	25.3	22.0	22.3
Poultry processing	62.6	58.5	72.5	85.5
Dairy	31.4	34.6	33.4	35.8
Baking and confectioner's production	35.8	38.3	50.6	49.2
Sugar production	66.3	65.0	88.0	94.6
Brewery and malt production	58.5	62.3	74.0	78.6
Soft drinks and mineral water	56.7	54.9	57.3	55.5

Source: Czech Statistical Office
Calculation: Mezera (VÚZE)
[1)] CR_3 Concentration ratios measure the share of the 3 largest companies in the total revenues of relevant branches

Table 4. Sectoral structure in the Czech food processing industries, 2001–2003

Industry	Revenue (%)		
	2001	2003	Difference
Meat processing	19.5	20.0	0.5
Fish processing	0.7	0.7	0.0
Fruit/vegetable	2.3	2.3	0.0
Vegetable oil	5.1	5.1	0.0
Dairy	16.0	16.8	0.8
Milling/starch	2.2	2.3	0.1
Feed	6.9	6.6	–0.3
Other food	27.9	23.7	–4.2
Beverages	19.4	22.5	3.1
Total	100.0	100.0	x

Source: Czech Statistical Office
Calculation: Mezera (VÚZE)

Table 5. Size structure of food enterprises with 20 and more employees

Number of employees	Average number of enterprises		Index
	1997	2003	
20–49	469	543	115.8
50–99	197	225	114.2
100–499	261	238	91.2
500–999	57	20	35.1
1 000 and more	13	14	107.7
Total	1 017	1 040	102.3

Source: Czech Statistical Office
Calculation: Mezera (VÚZE)

and decreased the number of employees and second part finished market activities.

Comparatively small is the group of the biggest companies. In this group, there are mostly companies with inflow of foreign direct investment. These companies dispose of market power in relation to distributive chains. The position and market power of distributive chains, as the component of multinational companies, is very strong, especially in the Czech Republic in last years.

AFTER EU ACCESSION PERIOD – PERSPECTIVE

The knowledge and experiences show that the Czech food industry similarly as in the EU food industries, could and will be characterized by a small group of big companies, around which there would operate numerous smaller companies and companies of medium-size.

The importance of medium-side and smaller companies is based first of all on the ability of orientation on local markets (countryside) where they meet the consumer‘s habits, differing with regions, or they supply perishable and fresh foodstuff. The strong competitiveness in the framework EU leads to reduction of firm's base and especially of small and medium-side firms.

The government approved of the document to the conception of food industry keeping the market share in foodstuff segment to 2013. This branch has opportunity in the future to improve its competitiveness. The competitiveness will lead to the placement of the production in the market.

The decisive factors from the point of view of development of the branch are level of food safety and quality and better position of firms in the market.

The government document presupposes, according to the agrarian conception, three periods: incoming (2004–2006), assimilating (2007–2011) and leveling (2001–2013).

DISCUSSION

The market share is more important than firms to keeping the efficiency of the industry. This theoretical instruction will be needed to support marketing activities of state and companies. The Czech Minister of Agriculture has introduced the KLASA – a national quality mark to be awarded to high-quality food and agricultural products in 2003.

The state support will be needed particularly for small and medium-size firms. These firms are typical for the Czech food industry. It is also necessary to use financial resources from the EU funds. Improving the competitiveness of the food industries is a strategy issue for the Central and Eastern European countries (Jansik 2002).

It will be also necessary to improve the position of food companies to distributive chains. Now the retailer chain has a very powerful position on the market. Vertical links between food processors and farms should be strengthened, based on long-term commercial and capital relations. It will be needed to improve the concentration in the agro-food sector (there are possible mergers or other ways).

Very important is also the role of the common food market.

CONCLUSIONS

Monitoring of firms structure shows that firm's structure of the food industry has changed. Privatization, de-monopolization and market liberalization primarily had been one of the main features in the period of economic reform.

In the EU accession period, the priority of the Czech national food policy was aimed at a high degree of food safety and quality, improvement of the legislative framework in firm's base and control system.

Food strategy after the EU accession period should be based on concentration of food production and competitiveness of the Czech food products.

Achieving these aims will enable keeping the efficiency of the Czech food industry in future conditions.

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