

THE MAIN CHARACTERISTICS OF THE DEVELOPMENT OF THE FOOD INDUSTRY AND THE CHANGE OF ITS REGIONAL DISTRIBUTION

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The Hungarian food industry has gone through big changes since the Second World War. The number of food industrial workers has increased from 120,000 to almost 200,000. Between 1960 and 1985 the gross value of the food industrial fixed assets increased fivefold. Now the fixed asset stock of meat industry alone is almost the same as was that of the whole food industry 25 years ago, and the gross production value of the socialist food industry approximates to 230 billion forints.

Certain food processing activities (such as production of alimentary pastes, baking, preservation, poultry processing, and manufacture of dairy products), which were previously done mainly in households, have developed into the branches of socialist food industry or become the subsidiary activities of agricultural cooperatives. The scale of food industrial products has dynamically been extended and a variety of foods meeting modern nutritional requirements have come into prominence. The stages of processing have become more compound. The domestic food consumption and the volume of exports have increased simultaneously, and the territorial distribution of food industrial productive forces has been rationalized.

After World War II the regional distribution of food industry, similarly to industry itself, was greatly disproportional. However, it should have expectedly been more proportional because of the favourable settling conditions, in comparison with light and heavy industry, especially in the raw material intensive branches. Practically almost half of the food industrial production was due to Budapest, while in the Great Plain and the Northwestern Plain, which were predominant in agricultural production, food production constituted only a small proportion of the processing industry. Food industries working out of Budapest were concentrated in the largest country towns. The regional distribution of food industry was fairly different from the regional structure of both the agricultural products to be processed and the population, the basis of the consumer market.

Substantial changes in the regional structure of food industry took place quite slowly, since the industrialization after World War II was achieved in the branches of industry to a different degree so that the annual growth rate of food industry remained below the industrial average.

The differences of growth rate in the branches of industry and the change in the distribution of the gross production value are well indicated in Table 1.

Table 1.

**THE ANNUAL GROWTH RATE OF GROSS PRODUCTION VALUE
BETWEEN 1950 AND 1972**

| Branch of industry | Percent annual growth between 1950 and 1972 | Distribution of annual growth | |
|------------------------------|---------------------------------------------|-------------------------------|-------|
| | | 1950 | 1972 |
| Mining altogether | 5.3 | 8.1 | 4.4 |
| Electric energy industry | 9.4 | 2.7 | 3.5 |
| Metallurgy | 7.6 | 11.6 | 10.4 |
| Chemical industry | 14.3 | 3.4 | 11.4 |
| Construction industry | 10.5 | 16.3 | 26.4 |
| Building material industry | 8.2 | 3.3 | 3.3 |
| Light industry | 7.4 | 19.5 | 16.9 |
| Food industry | 7.0 | 25.9 | 20.5 |
| Other industries | 22.4 | 0.0 | 2.3 |
| Private small-scale industry | — | 9.2 | 0.9 |
| | 8.4 | 100.0 | 100.0 |

From the data of Table 1, on the basis of the above division, it can be seen that between 1950 and 1972 food industry was next to the last in order by its 7 per cent growth. It is obvious that the considerably low growth rate of food industry, in comparison with other branches, led to a significant (about 5.4 per cent) decrease in its share of industrial production.

After World War II the development of industry was uniquely intensive in the history of the Hungarian economy. As a result of this rapid industrialization the role of industry became more decisive in national economy. Correspondingly, there were big changes also in the sectorial distribution of employees. While in 1950 the ratio of industrial workers was 19 per cent and that of agricultural workers was 52 per cent, by 1973 the former increased to 35.5 per cent and the latter decreased to 28 per cent.

This dynamic development of industry was followed by substantial structural changes, too. In the course of socialist industrialization heavy industry was principally developed and the previously traditional and dominating food industry lost its predominance. (Between 1950 and 1965 the share of food industry in the total gross industrial production decreased on average by 1% each year.)

In spite of its low growth rate, in comparison with the whole of industry, food industry was capable of processing an increasing proportion of agricultural products. (It should be mentioned here that the development of agriculture was

much slower). Consequently, the processing of the export products of food economy became more advantageous.

The development of food industry was achieved by territorial differentiation, thus its regional structure also changed.

In different periods and regions the share of food industry in the industrial investments was different. In a decreasing order counties Hajdu-Bihar, Békés, Bács-Kiskun, Somogy, and Szabolcs-Szatmár took the lead the share of each in industry exceeded 20%, while that of counties Komárom, Nógrád and Veszprém was below 5%. In general, in counties having more developed heavy industry the ratio of food industrial investments was below 10%. Besides the above mentioned Komárom, Nógrád and Veszprém, counties Baranya and Borsod-Abauj-Zemplén also belong to this group.

While between 1955 and 1973 the share of food industry in the total industrial investments was 10.7 per cent, between 1974 and 1977 this ratio increased to 14.3 per cent. In the latter period the increase in the ratio of food industrial investments usually took place to the disadvantage of heavy industry. The distribution of the total industrial investments among the major branches of industry was as follows (per cent):

| Branch of industry | 1955—1973 | 1974—1977 | 1955—1977 |
|---------------------|-----------|-----------|-----------|
| Heavy industry | 81.0 | 75.8 | 79.7 |
| Light industry | 8.3 | 9.9 | 8.7 |
| Food industry | 10.7 | 14.3 | 11.6 |
| Industry altogether | 100.0 | 100.0 | 100.0 |

Examining the distribution of the absolute values of food industrial investments among the counties, there can be found big differences between the maximum and minimum values. The territorial comparison was made by the determination of the ratios between the counties having the greatest and the smallest share, respectively, in the current priced food industrial investments. The ratios are as follows.

From the data of Table 2 it may be established that the maximum values of investments were mostly obtained for counties Bács-Kiskun, Borsod-Abauj-Zemplén, Békés, and Hajdu-Bihar. The minimum value in the period examined was obtained, except two cases, for Nógrád. The ratios show a big deviation. While in 1977 the ratio of maximum and minimum values was 63.1, in 1959 it was only 6.1.

Considering the 1984 regional distribution of food industrial investments characteristic in today's tendency, it may be established that the capital still owns a significantly larger percentage (18.80%) of the total food industrial investments than the ratio of its employees (13.65%); in comparison, the lowland's counties with limited capacity have only by 2.2% greater share in the total investments than the

Table 2.

**THE RATIOS OF THE DISTRIBUTION OF FOOD INDUSTRIAL INVESTMENTS
AMONG THE COUNTIES**

| Year | Counties | Maximum/minimum |
|------|----------------------|-----------------|
| 1955 | Bács-Kiskun/Nógrád | 10.3 |
| 1956 | Bács-Kiskun/Csongrád | 6.8 |
| 1957 | Vas/Nógrád | 11.5 |
| 1958 | Heves/Komárom | 6.8 |
| 1959 | Pest/Komárom | 6.1 |
| 1960 | Borsod-A-Zpl/Nógrád | 25.8 |
| 1961 | Heves/Nógrád | 26.3 |
| 1962 | Békés/Nógrád | 16.9 |
| 1963 | Békés/Nógrád | 10.2 |
| 1964 | Bács-Kiskun/Nógrád | 15.6 |
| 1965 | Bács-Kiskun/Komárom | 22.0 |
| 1966 | Bács-Kiskun/Nógrád | 26.5 |
| 1967 | Pest/Nógrád | 17.0 |
| 1968 | Hajdu-Bihar/Nógrád | 16.2 |
| 1969 | Hajdu-Bihar/Nógrád | 23.8 |
| 1970 | Békés/Komárom | 10.5 |
| 1971 | Borsod-A-Zpl/Nógrád | 26.7 |
| 1972 | Borsod-A-Zpl/Nógrád | 23.7 |
| 1973 | Borsod-A-Zpl/Nógrád | 23.2 |
| 1974 | Borsod-A-Zpl/Nógrád | 13.9 |
| 1975 | Békés/Nógrád | 6.7 |
| 1976 | Hajdu-Bihar/Nógrád | 28.2 |
| 1977 | Hajdu-Bihar/Nógrád | 63.1 |
| 1984 | Hajdu-Bihar/Nógrád | 9.04 |

ratio of their employees. Taking into consideration also the differences in the level of the technical and technological development, it should be noted that the development of the lowland's counties rich in food industrial raw materials does not promise a quick elimination of the limited sphere of capacity in their processing industry.

The territorially differentiated development of food industry led to an even more advantageous regional structure of workers. Especially the period after 1958, when rural industrialization became a major question, accelerated the decrease of the disproportional dominance of the capital, and the industrial, inclusively food industrial, development of the counties of the Great Plain, the Northwestern Plain and Southern Dunántúl.

This tendency is supported by our survey of the annual growth rate of the number of food industrial employees between 1963 and 1980.

So there can be seen an opposite tendency between the capital and the 19 counties. Table 3 shows that in the period investigated the growth rate of the number of food industrial workers was the highest in counties Szabolcs-Szatmár, Hajdu-Bihar, Békés, and Baranya and that of Nógrád, Komárom, Tolna, and Vas was the lowest.

Table 3.

THE ANNUAL GROWTH RATE OF THE NUMBER OF FOOD INDUSTRIAL EMPLOYEES
BETWEEN 1963 AND 1980.

| County, capital | Member |
|----------------------|---------|
| Baranya | 302.69 |
| Bács-Kiskun | 218.13 |
| Békés | 308.25 |
| Borsod-Abauj-Zemplén | 279.38 |
| Csongrád | 172.69 |
| Fejér | 169.88 |
| Győr-Sopron | 318.07 |
| Hajdu-Bihar | 394.44 |
| Heves | 110.32 |
| Komárom | 65.88 |
| Nógrád | 54.81 |
| Pest | 205.50 |
| Somogy | 195.94 |
| Szabolcs-Szatmár | 412.12 |
| Szolnok | 217.25 |
| Tolna | 87.63 |
| Vas | 100.00 |
| Veszprém | 122.19 |
| Zala | 270.06 |
| Budapest (capital) | 458.57 |
| Altogether | 3539.63 |

Table 4 indicates the significant change that took place in the regional structure of food industrial productive forces. First of all, in Budapest the decrease of the ratio of employees to 13.65% is quite substantial, approximating to the optimum value. But taking a thorough insight into the structure of food industry, there can still be found raw material intensive branches in the capital with outsized capacity. That is the case, for instance, with milk processing industry which is characterized by an excess of capacity in relation to the milk production of the capital district, and by a limited sphere of capacity in relation to consumption. A further examination of the product structure of milk factories in Budapest demonstrates that a large number of products with a long shelf-life are produced the manufacture of which is accompanied by considerable weight loss. Thus, it would be reasonable to adjust more the milk processing capacity to the regional structure of raw material production.

The capital takes an enormous share in meat industrial capacity too, in relation to marketing.

In general, it can be pointed out that now 35.33 per cent of food industrial employees are working in the six counties of the Great Plain dominating in food

Table 4.

**DISTRIBUTION OF THE NUMBER OF INDUSTRIAL AND FOOD INDUSTRIAL
EMPLOYEES IN 1984 (%)**

| Region | Industry (%) | Food industry (%) |
|-------------------------------------------------|--------------|-------------------|
| Baranya | 4.37 | 4.97 |
| Bács-Kiskub | 4.24 | 7.30 |
| Békés | 3.59 | 6.34 |
| Borsod-Abauj-Zemplén | 9.37 | 6.61 |
| Csongrád | 3.96 | 5.26 |
| Fejér | 4.73 | 3.44 |
| Győr-Sopron | 4.63 | 5.61 |
| Hajdu-Bihar | 4.12 | 5.93 |
| Heves | 3.26 | 4.46 |
| Komárom | 4.09 | 2.04 |
| Nógrád | 2.59 | 1.20 |
| Pest | 5.89 | 5.80 |
| Somogy | 2.15 | 4.25 |
| Szabolcs-Szatmár | 3.83 | 6.11 |
| Szolnok | 3.92 | 4.39 |
| Tolna | 2.26 | 3.35 |
| Vas | 2.63 | 2.86 |
| Veszprém | 4.36 | 2.77 |
| Zala | 2.95 | 3.64 |
| Budapest | 22.90 | 13.65 |
| Activity outside the boundary of the country | 0.16 | 0.02 |
| Country altogether | 100.00 | 100.00 |

industrial raw material production. This ratio is the result of rapid development, however, in some cases, it seems to remain below the optimum value, that is, several smaller or bigger districts begin to develop in the Great Plain the agriculture of which produces a larger amount of raw materials than what can be processed by the local or district food industry. For instance, there is no satisfactory harmony between vegetable and fruit production and cold-storage capacity in Csongrád; between animal breeding and meat industry in Bács-Kiskun, and Szolnok, between fruit production and fruit processing almost in the whole Great Plain, between grape production and processing in Csongrád, and Bács-Kiskun, between sugarbeet growing and sugar industrial capacity in the southern part of the Great Plain, and in the beer-making of Csongrád and of its districts. The above listing demonstrates that in Bács-Kiskun several food industrial raw materials are available in a larger quantity than the county's food processing capacity. Accordingly, in relation to smaller districts the territorial disharmony is here the sharpest.

Between 1979 and 1985 within food economy the development of food industry

was more dynamic than that of agriculture. There is a different tendency in the change of productivity. It can be explained in that today's food industry undertakes too much (very often from agriculture), such as purchase liabilities, the costs and risk of storage, quality changes, and it is often touched by the constant fluctuation of the market. It can be considered as a result that in the food industrial market, where the price level was stagnant in the whole world market, the „unit value positions” of Hungarian foods did not decrease further (6). This well indicates that by quick and flexible adjustment to the constantly changing world market, positive changes can be achieved even in a fairly disadvantageous stage of the world market. This is promoted by the modernization of the interest and organizational system which also supports productivity. In no other industry can it be so important to harmonize production, processing, putting into circulation, and marketing than in food economy. This idea is reflected by those significant structural changes which helped the firms increase their independence and acquire more authority. The adequacy of these measures is proven by the results achieved by these firms. The characteristic features of food industry suggest that results can only be achieved if flexible decision are made. The authority of decisions should be due to where there is a great deal of information and interest.

The ratio between the number of workers employed in the locally and externally supervised food industrial plants in the individual counties was quite surprising in 1980*. The data showed that on a domestic scale only 34.3 per cent of the total number of food industrial workers are supervised locally. A higher ratio was obtained only for Hajdu-Bihar and the capital; it was 36.5% in the former and 98.5% in the latter as concerns local supervision. In the other counties the values were quite similar. (The deviation was only 22.0%). Because of the closeness of the capital it is evident that the minimum ratio of the number of locally supervised workers was found in Pest, which was followed by counties Zala, Borsod-Abauj-Zemplén, and Szolnok. However, it is interesting that among the counties where this ratio was close to the maximum value were the strong industrialized (Győr-Sopron, Veszprém) and the less industrialized (Szabolcs-Szatmár, Heves, etc.) counties. There could not be found any correlation between the extent of industrialization and the ratio of the number of locally supervised workers.

When investigating the distribution of the number of food industrial workers in relation to supervision by arranging the centres in the individual counties, there can be found big differences in the ratios of the number of locally supervised workers. The maximum ratio 40.0% is obtained for Hajdu-Bihar and the minimum ratio 15.9% is obtained for Veszprém. The centres in the capital supervise locally 56.6 per cent of their employees.

National economic interests made it necessary to change this situation. A significant change was achieved by the elimination of a great part of food industrial

* The sources of the data are the plant tables from the 1980 reports of the Central Statistical Office on industrial statistics, which include 1667 food industrial plants.

trusts. Consequently, poultry, wine, sugar, tobacco, confectionery, canning, and brewing industrial firms gained total independence. By the elimination of trusts these firms were taken under the supervision of the Ministry, and therefore, they acquired much more independence. Since that time the correctness of this decision has definitely been proven.

Nevertheless, in other branches the supervision is still the right of the trusts and large enterprises, respectively, the modernization of which has become a question of interest recently.

It is doubtless that food economy, included food industry, plays an important role in the solution of economic problems. However, it should not be forgotten that due to the shortage of investment sources there are no limitless possibilities here either. The requirements can only be fulfilled by a resolute investment policy, by changing the microstructure according to the demands of the market, by economical considerations, by modernizations, and by the dynamic development of packaging. Taking into consideration the fairly disadvantageous economic conditions, it can be achieved by an intense exploration and exploitation of the internal resources and by a flexible adaptability to the ever changing circumstances.

Summary

The Hungarian food industry has developed dynamically since World War II. The food processing industry has been extended and is now capable of processing an increasing proportion of the domestic agricultural products. The manufacture of a variety of new products has recently been begun. The domestic food consumption and the volume of exports has increased simultaneously. The regional distribution of food industrial productive forces has been rationalized. The role of regions outstanding in raw material production has grown in food processing, too and the predominance of the capital in food industrial production has considerably decreased. Despite the favourable changes in food economy the individual spheres are still not in proper territorial harmony. There have been positive changes also in the supervision of firms. However, in this respect and as for further rationalization of regional structure, product groups and product structure, there are still resources the exploitation of which is one of the future tasks.

References

- Abonyi-Palotás, J.*: Élelmiszeripari beruházásaink területi alakulása. (Regional Distribution of Food Industrial Investments in Hungary). *Gazdálkodás*, 2, 21 (1979)
- Abonyi-Palotás, J.*: Élelmiszeriparunk regionális fejlődésének és fejlesztésének néhány kérdése. (Some Questions of the Regional Development of Hungarian Food Industry). *Földrajzi Értesítő*, 3—4, 371 (1979)
- Abonyi-Palotás, J.*: Az élelmiszeripari telepek irányításának területi rendszere. (Regional System of the Supervision of Food Industrial Plants). *Statisztikai Szemle*, 2, 173 (1984)

- Csendes, B.*: A magyar élelmiszergazdaság a 80-as években. (Hungarian Food Economy in the Eighties). „Tervgazdasági Fórum”, 1, 24 (1985)
- Dénes, K.*: Az élelmiszeripar települési helyzetének fejlődése napjainkig és a fejlesztés irányai. (Development of Food Industrial Settling Conditions Until Now and Trends of Development). Élelmészeti Ipar, 1, 27 (1986)
- Illés, I.*: Szerkezeti változások a magyar népgazdaságban (1979—1985). (Structural Changes in National Economy in Hungary Between 1979 and 1985). „Tervgazdasági Fórum”, 1, 3 (1985)
- Kiss, F.*: Az élelmiszeripar múltját, jelenét és jövőjét szolgálja a 40 éves MÉTE szaklap. (The 40 Years Old MÉTE Journal Serving the Past, Present and Future of Food Industry). Élelmészeti Ipar, 1, 5 (1986)
- Kovács, I.*: Élelmiszeripari vállalatok önállóan. (Independent Food Industrial Firms). Figyelő. Szept 9, 1982, p. 13.
- Timár, M.*: Gazdaságunk szerkezete, fejlesztési politikánk. (The Structure of Hungarian Economy and Development Policy). Közgazdasági Szemle, Oct, 1973, p. 1129.