

AFTER THE TRANSITION – BEFORE THE EU JOINING: COMPETITIVE STRATEGIES OF HUNGARIAN FOOD INDUSTRIAL ENTERPRISES

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After the transformation process and privatisation a rather specific dual structure has been formed in the Hungarian food industry: large food industrial enterprises, dominantly in foreign ownership, fulfilling locally the global strategy of the international firm, and micro – and small – scale firms in domestic ownership. The strategic behaviour of Hungarian food industrial firms have been examined by direct-question surveys and interviews. Based on enterprise- and business-level strategy theories, the objective was to create a taxonomy of strategic patterns of Hungarian food industrial firms. On basis of investigations four characteristic groups of small and medium scale enterprises could be separated from each other. The high cost of technology development, the uneven quality and quantity of agricultural raw material, the concentration of food trade organisations are important hindrance factors of development of food industrial enterprises. The small and medium scale enterprises consider the activity of chambers of producers as an important tool in improving their economic position. In opinion of food industrial entrepreneurs the most important factor of success in privatisation was the knowledge of legal loops and good social network. Under these conditions, the promotion of preparation of newly formed small and medium scale enterprises to meet the demands of EU joining is a necessary precondition of success. The multinational food industrial enterprises forming four groups follow diversified strategies. This variability of multinational firms increases the flexibility and competitiveness of the Hungarian food industry.

Keywords: competitiveness, strategic planning, primary data collection, comparative statistical analysis

The Hungarian food industry has been at the centre of attention of politicians, policy makers and public opinion in Hungary since the beginning of transition (NOVKOVIC & SOMOGYI, 1999). This is attributable to the relatively high importance of the sector as measured both by its share in GDP (3.1%), in export (4.5%) and in employment (3.2%). Because of food industry's large share in economy, its role in rural development and market-creation for agricultural products, improvement of food industrial competitiveness through market-oriented reforms were originally expected to act as an engine of change and growth factor for the agricultural sector in Hungary. The transition of food industry form “neither plan – nor market” stage (KORNAI, 1980) to market economy is a complex, multidimensional process. Privatisation is perhaps the

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most visible and widely discussed component of this process, yet the food industrial transition includes other essential dimensions such as development of a functioning marketing infrastructure, reduction of government intervention, and the emergence of market-oriented credit institutions.

Transition and ownership change was a rapid process from historical point of view. As a result, the Hungarian food industry has been divided into two parts. In sectors, which can be characterised by comparatively simple technology, mono- or oligopolistic market structure and stable domestic market, the multinational companies have achieved a dominant position (SZABÓ, 1998). In sectors, formerly oriented towards markets of COMECON member states, or with polipol market position characteristics the domestic investors dominated (Table 1).

The present study focuses on the strategic behaviour of firms in the context of the Hungarian food industry. At the beginning of privatisation there were numerous speculative theories on possible activities and competitive strategies of food industrial enterprises (ALVINCZ, 1994). Ten years after the privatisation process has begun there is a good possibility to analyse the actual behaviour of food industrial firms.

The accomplishment of privatisation and the creation of the structure of a market economy are necessary preconditions for the European integration. The accession to the European Union is a step, determining the fate of Hungarian economy and society for generations to come. The degree, to which the Hungarian food industrial enterprises are prepared to handle new conditions and meet demands of EU market, will greatly influence the competitiveness of the Hungarian agribusiness on the single European market. Mapping up of strategies of food industrial enterprises is a necessary precondition for formation of an adequate economic and governmental policy for upgrading Hungarian food industry.

Table 1. Ownership structure of Hungarian food industry, based on registered capital 1997

Sector	State property agency	Municipalities	MBO + EBO	Other domestic investor	Foreign owner
Meat processing industry	33.9	1.7	10.6	30.5	23.3
Poultry processing industry	42.4	0.2	2.1	24.4	30.9
Deep freezing industry	22.8	1.1	6.1	32	38
Canning industry	15.2	4.7	8.9	54.9	16.3
Vegetable oil industry	0	0	0	0	100
Dairy industry	49.2	0.3	7.8	22.8	19.9
Milling industry	11.3	0.5	10.8	57.3	20.1
Bakery industry	27.7	3.2	3.0	46.1	20
Sugar refining industry	39.4	3.6	2.9	17.7	36.4
Confectionery industry	0.9	2.8	0	0	96.3
Distilling industry	15.2	0.1	1	4.7	79
Wine making industry	41.7	0	0	9.3	49
Brewery and malting industry	0	4.7	4.6	2.3	88.4
Tobacco industry		2	0	0	98

Source: Ministry of Agriculture, 1997

MBO: Manager buy-out; EBO: employee buy-out

1. Methods

According to HYVÖNEN (1995), in identifying the types of competitive strategies it is possible to choose between two classification schemes. The first is called a conceptual classification or a typology in which the patterns of strategy are deductively derived. A well-known typology is that of PORTER's (1990). The second is called an empirical classification or taxonomy. It derives strategy from field data. In this study the latter approach was applied. Consequently, four basic research questions were addressed:

- Are there consistent patterns of strategy by food manufacturing firms, i.e. what are the most important dimensions of firm-level strategy patterns described in terms of distinctive competencies?
- What are the most important problems of development according to opinions of various food industrial enterprises?
- In which fields is the help of municipalities, chambers or other organisation needed for the small and medium size enterprises?
- How can the international food processing firms be grouped according to their strategies?

The empirical study is cross-sectional and was conducted in a field setting in the Hungarian food industry. The initial list of companies was selected from those listed in published data on the basis of the Association of Hungarian Food Processors (ÉFOSZ). In total, 256 operating firms were selected for empirical exploration. The selection of firms permits the examination of relevant questions applicable to diverse firms while controlling circumstances that might otherwise vary greatly across industries. In the samples there were firms of different sizes that operate in different market segments. This should ensure enough variability to study strategic behaviour.

The survey instrument was developed according to the general approach recommended by CSEH-SZOMBATHY and FERGE (1975). Because competitive strategy issues are proposed to be unique to a particular setting, industry-specific conditions as well as theoretical aspects should be carefully taken into account in designing measures (LEHOTA, 2002). Consequently, several modifications to the research were made: (i) input for the development of questionnaire came from literature and documentary data sources concerning the food industry. (ii) The relevance of the items was ascertained through the use of extensive semi-structured interviews with managers of the firms, which totalled 12 interviews. As a result of preliminary studies, it became obvious that there are two totally different segments of Hungarian food industry, and therefore it is impossible to map up the strategic behaviour of these firms by only one questionnaire. The enterprises in foreign ownership fulfil the global strategy of the multinational enterprise. The real motives of these firms are often hidden, not really known even to high-level managers of the firm. Based on this fact, for multinational enterprises a specific questionnaire had to be compiled. (iii) A panel of academic experts provided recommendations for developing measures. The interviews provided both the wording and the composition of lists of variables with several improvements. Distinctive competencies were defined broadly, reflecting various tangible and intangible resources

for the purpose of providing a general profile of the concept. As such, production, purchasing, marketing, distribution and finance variables are represented in the competence scale that consists of 50 items. Respondents were chief executives of the firms, or other competent specialists from the firm, who were asked to indicate the degree to which they evaluate each of the listed success factors or methods of competing. Five-point scales with values ranging from one (not at all important) to five (extremely important) were used. In case of numerous items the respondent may answer and evaluate in an automatic way, therefore a random number generator was used in the process for formation of item sequence.

To develop a taxonomy, in the first phase the distinctive competence variables were refined through factor analysis in order to identify the most important firm level strategy patterns.

The basic idea of factor analysis is that underlying dimensions, or factors, can be used to explain complex phenomena (NORUSIS, 1996). In the present study this complex phenomenon has been the strategic behaviour of the firm. Observed correlation between variables result from their sharing these factors. The basic hypothesis of the research was, that behind the various evaluation of the 50 directions of development and distinctive competencies, there are some well definable, but not-directly-observable factors, based on strategy of respondents. First of all, we had to determine, whether the hypothesis is true or not, are there any common, but hidden factors (patterns) behind the evaluation of various items or not.

The Kaiser-Meyer-Olkin measure of sampling adequacy is an index for comparing the magnitudes of the observed correlation coefficients to the magnitude of the partial correlation coefficients. Small values for the measure indicate that a factor analysis of the variables may not be a good idea, since correlation between pairs of variables cannot be explained by the other variables. KAISER (1974) characterises measures in the 0.90's as marvellous, in the 0.80's as meritorious, in the 0.70's as middling, in the 0.60's as mediocre, in the 0.50's miserable, and below 0.50 as unacceptable. Since the value of the statistic was close to 0.80 we could comfortably proceed with the factor analysis.

The squared multiple correlation coefficient between a variable and all other variables is another indicator of the strength of the linear association among the variables. It is obvious that there was a statistically significant relation between individual variables and the set of variables, and neither variable could be eliminated from the set being analysed.

Based on factor analysis, numerous strategy patterns (dimensions) could be identified, but the rather large number of possible strategies made it hard to interpret these patterns in practice. In order to identify group-level patterns of strategy, and to make the interpretation of results of factor analysis more simple, cluster analysis was performed. This is a useful method in strategy studies to group firms by strategic orientation, and to form strategy taxonomy.

In the study factor analysis scores were utilised as the input variables to classify the firms into clusters based on the strategy patterns. Factor analysis automatically standardises the input data, it also reduces collinearity between independent variables. For cluster formation Ward's hierarchical (centroid method) clustering on basis of squared Euclidean distances was used to form clusters. According to the opinion of ROMENSBURG (1984) by this method better coverage of cases and better handling of outliers can be achieved. It is well known that there is no absolute criterion for selection. The number of clusters was determined on basis of possibility of practical interpretation.

2. Results

2.1. Taxonomy of small and medium scale enterprises

The factor analysis yielded 14 factors in case of small and medium scale enterprises, having an eigenvalue above 1 (Table 2). An orthogonal rotation (varimax method) of the initial principal components' factor matrix was used to separate the components of factors. On the basis of factor loadings it was possible to characterise the main features of various factors.

The 14 factors characterise different accents for determining ways of development of enterprises (Table 3).

A four-cluster formation was found to be a good, interpretable solution for classification of strategies (Table 4).

Table 2. Results of factor analysis by method of principle component analysis

Component	Extraction sums of squared loadings-principle component analysis			Rotation sums of squared loadings-varimax rotation		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	9.260	20.578	20.578	4.066	9.035	9.035
2	4.248	9.440	30.018	3.972	8.826	17.861
3	3.220	7.154	37.173	3.838	8.530	26.391
4	2.733	6.074	43.247	3.035	6.745	33.136
5	2.437	5.417	48.663	2.839	6.308	39.444
6	1.900	4.223	52.886	2.515	5.589	45.032
7	1.656	3.681	56.567	2.377	5.282	50.314
8	1.534	3.409	59.977	1.894	4.210	54.524
9	1.515	3.368	63.344	1.744	3.875	58.400
10	1.387	3.083	66.427	1.689	3.754	62.154
11	1.277	2.838	69.265	1.689	3.754	65.907
12	1.205	2.677	71.942	1.684	3.741	69.649
13	1.092	2.426	74.369	1.655	3.677	73.326
14	1.007	2.238	76.607	1.477	3.281	76.607

Table 3. Main features of factors investigated

Factor number	Characterisation of the factor
1	Strong emphasis on technology and infrastructure
2	Expansion-orientation in national and international scale
3	Product differentiation and innovation with a strong emphasis on satisfaction of local demand
4	Domestic market orientation
5	Export orientation with a strong emphasis on image building and promotion
6	Distribution orientation
7	Quality orientation by product innovation
8	Strong orientation on development of logistical system
9	Orientation of improvement of distribution and logistics
10	Cost minimisation by utilisation of economy of sale effect
11	Main emphasis on improvement of financial indicators
12	Niche market orientation
13	Diversification and increasing emphasis on output-side relations
14	Strong emphasis on agricultural input

In case of enterprises, grouped in cluster 1, the most important emphasis was laid on satisfaction of demand of local consumers, by conventional, cheap products and production methods, by better utilisation of technical resources and improvement of technology. These enterprises utilise a direct-delivery to retailers, firms in this cluster lay a specific emphasis on good relations to these entrepreneurs. It is worth to mention that even though these enterprises consider the good image of the given region and of Hungarian agriculture as a whole an important source of success, they do not accept the importance of collective marketing activity of food manufacturers. These enterprises follow a rather defensive strategy: they do not increase their scope of activity, and neither their field of activity in geographical sense. Enterprises in this cluster assign little importance to product development. These firms operate often on the level of technical minimum, satisfying only the minimal hygienic and technological standards. This is the reason these firms consider the good relations with local municipalities and government offices as a necessary precondition for further survival. These firms are mainly micro-enterprises, working mainly in baking, meat processing and in canning industry. Their main scope of activity is the village of one part of a town, they do not plan to increase either their geographical scope of activity, or the export.

Table 4. Results of cluster analysis on basis of factor loadings in case of small- and medium-scale enterprises

Distinguishing competence	Cluster number				Unweighted	Weighted
	1	2	3	4	average	average
Decreasing of production costs	4.87	4.29	3.87	4.07	4.592	4.643
High market share in neighbourhood of enterprise	4.50	4.11	4.06	4.65	4.044	4.189
High market share in the county	3.75	4.06	4.23	4.32	3.452	3.689
High market share in the region	2.50	3.74	3.85	4.30	2.957	2.966
Achievement of high market share in Hungary	2.17	3.53	3.49	3.73	2.830	2.720
Emphasis on introduction of new technologies	3.45	4.28	4.20	4.13	3.618	4.006
Improvement of product quality	3.87	4.78	4.85	3.77	3.783	4.061
Improvement of logistical infrastructure of the company	2.83	3.14	3.89	4.12	3.217	3.084
Wide product range	3.17	4.03	3.88	4.33	3.851	3.643
Achievement of lower prices than competitors	4.30	3.67	4.12	2.67	3.628	3.919
Just in time delivery	3.50	4.97	4.85	4.76	4.581	4.307
Flexible response to consumer demand	4.50	4.75	4.95	4.65	4.800	4.687
High quality services, joining to core product	3.83	4.11	4.30	4.67	4.228	4.052
Improvement of relations with local municipalities	3.83	3.47	3.76	3.86	3.599	3.668
Improvement of relations with regional municipalities	3.67	3.31	3.12	4.38	3.274	3.417
Improvement the relations with governmental organs	2.67	3.03	2.88	3.87	3.226	3.303
Continuous product development	3.33	4.21	4.43	3.72	3.752	3.645
Improvement of relations with administrative organs of the state	4.33	4.12	4.41	4.67	4.437	4.366
Improvement of relations with catering	2.83	3.78	3.85	3.58	3.782	3.427
Increasing export to Austria	2.68	3.11	3.78	3.67	2.559	2.682
Increasing export to other EU states	1.54	3.51	1.80	2.67	2.380	2.320
Maximal satisfaction of local consumer demand	4.54	4.50	4.08	4.23	4.529	4.480
Satisfaction of "shopping tourism"	2.50	3.61	4.38	3.33	3.380	3.080
Increasing export to the Slovak market	1.50	3.13	1.43	3.58	2.231	2.088
Increasing export to Central and Eastern European Market	2.33	3.00	1.55	3.67	2.388	2.455
Increasing export to the Community of Independent States	2.50	3.03	1.70	3.54	2.474	2.561

Table 4 (cont.)

Distinguishing competence	Cluster number				Unweighted	Weighted
	1	2	3	4	average	average
High ethical standards	4.60	4.64	4.83	4.67	4.683	4.653
Production of specific products	3.50	4.12	4.35	4.33	3.852	3.687
Specialisation on niche markets	3.50	4.32	4.55	3.84	4.360	4.154
Utilisation of goodwill of Hungarian food industrial products	3.45	4.29	4.34	3.33	3.853	3.870
Improvement of business relations with agricultural suppliers	3.58	3.24	4.35	4.33	4.371	4.217
Production of healthier products	3.25	3.89	4.11	4.07	3.860	3.539
Increasing production capacities	2.83	3.61	3.87	4.03	3.286	3.213
Contribution to and utilisation of the good image of the region	2.33	3.61	4.35	3.33	3.407	3.150
Good relations with industrial suppliers	4.35	4.50	4.28	3.00	4.133	4.373
Increasing capacity utilisation	4.35	4.22	3.80	4.67	4.260	4.238
Production of classical "Hungarian" products	4.50	4.36	4.54	4.67	4.516	4.469
Increasing the professional knowledge of employees	3.50	4.67	4.55	3.33	4.013	4.055
Utilisation of goodwill of food production of the county in Hungary	3.83	4.25	4.15	4.67	4.225	4.076
Increasing of collective marketing activity of food industrial enterprises in the county	2.67	3.72	3.85	4.67	3.527	3.207
Market building in Hungary, improvement of the level of knowledge of Hungarian consumers	2.33	4.47	4.21	3.33	3.478	3.351
Contribution to and utilisation of the good image of the region in export countries	2.50	3.75	3.75	3.00	3.175	3.107
Improvement of liquidity and solvency	3.25	4.44	4.30	4.00	3.999	3.869
Improvement of the goodwill of the firm	4.50	4.72	4.68	3.33	4.308	4.534
Development of information system of the enterprise	2.81	4.17	4.43	4.20	3.600	3.541
Improvement of relations with wholesale enterprises	2.83	3.92	4.15	4.28	3.975	3.542
Development of distribution network	3.83	4.42	3.98	4.21	4.306	4.124
Increasing of promotional activity	2.33	4.31	3.55	4.12	3.797	3.359

Table 4 (cont.)

Distinguishing competence	Cluster number				Unweighted	Weighted
	1	2	3	4	average	average
Improvement of relations with retailers	4.17	4.28	3.78	3.83	3.888	4.092
Improvement of relations with specific retail forms (e.g. job rackers, vending machine users)	3.23	4.42	3.85	3.43	3.983	4.224
Share of the cluster in the set of investigated enterprises (%)	44	34	16	6	100	

Strategy of members of cluster 2 is similar to strategy of members of cluster 1, but these firms lay more emphasis on product quality and marketing. They want to achieve a market-leader position in the region, laying greater weight on product and technology development and better utilisation of resources. These enterprises sell their products not only to retailers, but also to wholesalers, so they attribute greater importance to building up better relations with wholesalers. This is a strategy of development-oriented small and medium scale enterprises, oriented toward satisfaction of local and/or specific demand. For these firms the regional and country-wide dimension in marketing strategy is more important, than for firms in cluster 1. The main competitive edge of these enterprises is the upgrading of logistical system on purchasing and distribution side. Enterprises in this cluster are operating mainly in meat processing, bakery, wine-making, distillery and brewery industries.

Members of cluster 3 follow a quality and technology oriented strategy. This strategy includes better product quality and improvement of various inputs of production. These firms are processing agricultural or horticultural raw materials. These enterprises utilise the favourable image of the firm and the region. This is the strategy pattern of small and medium scale enterprises, which are increasing their efficiency by technical and technological improvements and continuous technological and technical development as well as product innovation. These firms are often confronted with problems of unsatisfactory information and logistical system, so they consider the improvement in these areas as key factor of further development. These firms are working mainly in canning, wine making and milling industry.

Members of cluster 4 are medium- or large scale enterprises, following an expansion-oriented strategy. For them the market share in immediate surrounding is of secondary importance, they are interested in achieving a high market share in Hungary or in Central and Eastern Europe. They consider the low price strategy as unacceptable, because they are afraid of the concurrence and at the same time of consumers to consider the products as a low quality one. These firms try to increase their market share by improvement of distribution network and promotional activity. For these firms the market and marketing orientation are a key factor of success. The relative

importance of export markets is more important for members of this cluster, than for other enterprises.

For firms grouped in cluster 1 the most important hindrance of development is the high price of machines (Table 5). The scope of activity of these firms is rather narrow in geographical and technological sense, therefore, they often do not face problems, which are much more important for firms operating on a wider field of activity. The satisfaction of technological and hygienic regulations is a rather difficult task for firms in this cluster. Interestingly, they often do not have enough know-how and market intelligence, but they do not consider it as a problem yet.

Firms in cluster 2 are facing with the same problems as firms of cluster 1, but at the same time for them the business practice of multinational firms and the purchasing strategy of commercial enterprises mean a practical problem. These companies often face a difficult regulation system. The low willingness of consumers to pay for products of higher quality is a current problem, but even these firms did not recognise the importance of market formation yet.

Table 5. The evaluation of importance of some hindrance factors on a 1–5 interval scale according to various clusters

Hindrance	Cluster number			
	1	2	3	4
It is hard to get credit	3.33	4.03	4.23	4.00
The price margin of trade is too high	3.00	4.24	4.38	4.21
Uneven supply of agricultural producers	3.23	3.86	3.48	4.12
Quality demand of commercial enterprises is too high	2.67	3.87	3.69	3.45
Too intense competition between food processors	3.00	3.50	3.19	3.00
Unsatisfactory market information	2.67	2.94	2.88	2.67
No good region or origin image	2.83	2.14	2.22	2.33
Low consumer acceptance of quality products	3.33	3.47	4.12	3.13
Predatory pricing practice of multinational enterprises	3.50	3.63	3.45	4.12
High production costs	4.00	4.06	4.10	4.22
High price of machines and technology	4.67	4.58	4.56	4.33
Unfavourable image of Hungarian products	2.50	2.06	2.54	4.33
Saturated market	3.00	3.31	3.05	3.54
Low product price	3.17	4.23	4.05	3.67
Erratic market fluctuations	2.66	3.25	3.04	4.01
Too much imported product from EU	2.91	2.66	2.48	2.64
Complicated customs clearance system	1.21	2.14	2.54	2.66
Too much imported product from CEFTA states	2.31	2.69	2.64	2.36
Low bargaining power of food producers	2.38	3.89	3.78	3.98
Low quality of agricultural products	3.28	3.85	4.25	4.05
High additional cost of living labour	3.51	3.85	4.25	4.31
Bad image of products from the region	1.95	2.11	2.12	2.22
Bureaucratic procedures on municipal level	3.86	3.54	3.45	3.68
Lack of high-quality advisory system	2.15	3.24	2.31	2.14
Too strict administrative regulations	4.26	3.87	3.28	3.45
High tax level	3.97	4.25	4.35	4.35

For technology-oriented firms the most important problems are the lack of capital for modernisation and the high price of machines. For these, mainly considerably innovative firms the low level of paying willingness is a serious hindrance factor of development. These firms often process agricultural raw material, so the uneven quality of agricultural products means a lingering problem. They follow a differentiated strategy by production of specific products. The market of these products is rather stable, so the market fluctuation is a question of secondary importance for these firms.

For medium scale enterprises aiming to increase their activity in the involvement of additional financial resources is an important problem.

One of the most important aims of privatisation was the formation of a social class of owners, the domestic owners. Not only from point of view of social justice, but also for competitiveness of industry it is an important factor, whether the new owners are real, talented managers, or they are only some short-run minded speculators, profiteers. That's why we have asked the respondents to evaluate the main sources of success from point of view of managerial skills and knowledge on a 1–5 interval scale according to their contribution to the success of the enterprise (Table 6).

From analysing the factors of success it is obvious that the respondents contributed especially high importance to the knowledge of legal and economic “back doors” and good social network. These features seem to be much more important, than any other aspect of manager's personality or work. This is a natural consequence of speed of Hungarian privatisation. Under these conditions the upgrading of the professional knowledge of new owners is a question of basic importance.

There were characteristic differences between the utilisation of various up-to-date decision support methods. The micro enterprises hardly ever utilise the systematic methods, but in larger companies the utilisation of these methods will become a general practice soon.

Table 6. Evaluation of importance of sources of success in the opinion of Hungarian food industrial entrepreneurs on an 1–5 interval scale

Sources of success	Mean	Standard deviation
Much hard work	3.917	1.143
Social network	4.619	0.710
Good tactical skills during privatisation	4.381	1.017
Favourable geographical position	3.940	1.057
Professional competence	4.119	1.102
Knowledge of legal and economic back doors	4.429	0.935
Managerial skills	4.083	0.947
Knowledge of foreign languages	3.381	1.298
Specific know-how, technology or products	3.821	1.153

There is a considerable discrepancy between the evaluation of actual and potential role of economic chambers (Table 7). The small- or medium scale enterprises evaluate the potential of chambers rather high, but they are unsatisfied with the activity of chambers. The larger enterprises do not consider the chambers as important tools in the defence of their interests and in promotion of economic activity. This is because they try to defend their interests through other channels, e.g. through various organs of employers, political parties, lobbying groups, etc.

In the opinion of managers of small- and medium scale enterprises the EU-accession has some favourable and at the same time unfavourable affects on activity of firms (Table 8). The most important favourable effects are the infrastructural development and the increased purchasing power. Of course, the import competition will increase. The effect of EU membership on raw material quality largely depends on the field of economic activity of the given firm, for example, the firms in canning industry wait for a better and cheaper raw material supply, and at the same time the slaughterhouses prognosticate an increase in hog-price.

Table 7. Evaluation of potential and actual role of the chamber of commerce

Field of activity	Potential role		Actual role	
	Average	Standard deviation	Average	Standard deviation
Image building of the region	4.44	0.85	2.92	1.17
Lobbying activity at governmental decision-making bodies	4.40	0.96	2.91	1.16
Lobbying activity at municipal decision-making bodies	4.37	0.94	2.65	1.17
Promotion of information exchange	4.32	0.97	2.58	1.17
Education and improvement of professional knowledge	4.11	1.18	2.51	1.21
Promotion of introducing total quality management systems	4.10	1.03	2.47	1.08
Upgrading actual business-to-business relations	3.91	1.15	2.21	1.11
Joint procurement and utilisation of expensive machines	3.80	1.33	1.95	1.05

Table 8. Evaluation of possible effects of EU accession on a 1–5 interval scale

Effect	Average	Standard deviation
More rigorous quality regulation	4.38	1.00
Increased wage cost	4.14	0.94
Infrastructural development	4.12	0.96
Better possibilities to get additional capital	4.05	1.08
Increased paying demand	4.02	1.24
Import competition on domestic market	3.98	1.20
Increasing prices of agricultural products	3.95	1.10
Decreasing prices of agricultural products	3.92	1.08
More complicated legal regulation system	3.82	1.09
Better possibilities for product realisation on EU markets	3.25	1.32
Better possibilities for product realisation on market of non-EU member states	3.52	1.36

2.2. Strategy patterns of multinational enterprises

In case of analysis and grouping of multinational enterprises, the same procedure has been utilised, as in case of small and medium scale food producers. In this case the number of items was 26. These items (statements) could be separated by four factors (Table 9).

The first factor is suitable to differentiate the followers of low-price strategy from other producers. Enterprises following this strategy, i.e. the competitive price-seekers, consider the achievement of low prices with continuous concern on lowest pricing, and the control of distribution channels and financial management as key factors of success, but at the same time they emphasise the importance of total quality management, too. They do not want to differentiate their products by strong promotional campaigns, thus this consideration got a rather low, negative loading.

Marketing differentiators (factor 2) compete with product range typically involving speciality products with a strong emphasis on product development and new products, strong marketing and sales organisation, building brand identification, good corporate image, emphasis on trade marketing.

In the third factor are considerations such as mirroring the strategy of companies, following a competitive strategy based on a broad range of products, satisfying demands of various market segments.

The fourth factor comprises the elements of production and product-oriented strategy. In this strategy the considerations of availability of raw material is of primary importance. The utilisation of economy of scale has a high value, too. The low-price strategy requires a safe access to low-price agricultural raw materials.

Cluster 1 has its highest mean on a differentiation-oriented strategy, emphasising importance of introduction of new technologies, broad range of products, meeting the demand of specific market segments, deepening of the product-structure and financial efficiency. This cluster consists of medium-size firms. A typical field of activity of these firms is the confectionery and baking industry and food ingredient productions.

Table 9. Extraction sums of squared loadings

Components	Extraction sums of squared loadings – principle component analysis			Rotation sums of squared loadings – varimax rotation		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	7.336	40.756	40.756	5.352	29.735	29.735
2	2.768	15.379	56.135	3.275	18.192	47.927
3	1.723	9.574	65.709	2.499	13.885	61.812
4	1.283	7.127	72.836	1.984	11.024	72.836

Table 10. Rotated component matrix

Components of strategy	Factors			
	1	2	3	4
Emphasis on introduction of new technologies	-0.167	0.161	0.005	0.821
Continuous control of distribution channels	0.801	0.392	-0.001	0.006
Continuous product development	0.185	0.786	-0.007	0.175
Building brand identification	0.256	0.820	0.002	-0.004
Broad range of products	0.269	0.186	0.758	-0.007
Competitive pricing	0.783	0.137	0.006	-0.008
Total quality control	0.558	0.569	0.114	-0.107
Strong marketing and sales organisation	0.600	0.629	-0.002	0.102
Continuous concern for lowest pricing	0.841	0.179	0.009	0.106
Focus on specific market segments	-0.155	-0.754	-0.828	0.126
Advertising expenditures above the industry average	-0.798	-0.265	0.252	0.010
Depth of product range, large number of items	-0.324	-0.008	0.849	0.001
Economies of scale based on mass production	-0.198	0.425	0.253	0.495
Good corporate image	0.511	0.643	-0.005	0.302
Emphasis on trade marketing	0.147	0.443	0.401	0.422
Major effort to ensure the availability of raw materials	0.229	0.111	0.008	0.810
Finance and operating efficiency	0.828	0.334	0.002	0.190
Manufacturing of speciality food products	-0.711	0.002	0.430	0.081

Table 11. Analysis to determine the differences between the evaluation of importance of various strategy elements in four clusters

Distinctive competence	Clusters			
	1	2	3	4
Emphasis on introduction of new technologies	4.23	3.48	3.65	4.10
Continuous control of distribution channels	4.12	4.38	3.87	4.18
Continuous product development	4.45	3.65	3.45	4.12
Building brand identification	4.23	4.45	3.66	4.78
Broad range of products	4.62	4.26	3.84	3.89
Total quality control	4.50	4.72	4.25	4.25
Strong marketing and sales organisation	3.65	4.55	4.26	4.68
Continuous concern for lowest quality pricing	3.12	4.12	4.54	4.01
Focus on specific market segments	4.28	3.97	3.54	3.76
Advertising expenditures above the industry average	4.32	4.87	3.61	4.65
Depth of product range, large number of items	3.98	4.31	3.21	4.02
Economies of scale based on mass production	3.65	4.23	4.36	4.25
Good corporate image	4.12	4.10	4.20	4.23
Emphasis on trade marketing	4.25	4.55	3.69	4.28
Major effort to ensure the availability of raw materials	3.28	4.02	4.28	4.12
Finance and operating efficiency	4.26	3.59	4.44	4.23
Manufacturing of speciality food products	4.68	3.77	3.25	3.66

Members of cluster 2 are emphasising the importance of control of distribution channels, brand identification as well as product development. For them the push strategy is of great importance. Formerly, these firms often operated as state-monopolies, and after privatisation they were turned into ownership of multinational enterprises. This cluster consists of very large firms that have been operating for a long time in the business. Typical firms in this cluster are for example the main producers in soft-drink industry, margarine production or brewing and malting industry.

Enterprises in the third cluster compete by competitive pricing. For them serving specific market segments is of minor importance. This cluster consists mainly of firms oriented toward the domestic market. For them the cheap raw material and the utilisation of economy of scale are questions of primary importance. Typical firms in this cluster are operating in sugar refining industry and poultry processing industry.

Members of cluster 4 are marketing oriented firms with a well-defined aggressive marketing strategy. This group involves medium-sized and larger firms. A large proportion of these firms is working in the field of production of convenience foods, drinks and tobacco.

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References

- ALVINCZ, J. (1994): *A magyar élelmiszeripar privatizációja*. (The privatisation of Hungarian food industry.) CSc. (Ph.D.) Thesis, Budapest, pp. 1-120.
- ANON. (1997): *The situation of food industry in Hungary*. Report to the EU Commission, Manuscript, Budapest.
- CSEH-SZOMBATHY, L. & FERGE, ZS. (1975): *A szociológia felvételi módszerei*. (The research methods of empirical sociology.) Közgazdasági és Jogi Könyvkiadó, Budapest, pp. 1-383.
- HYVÖNEN, S. (1995): Competitive advantages, bargaining power and organisation performance: the case of food manufacturing firms. *Agribusiness*, 11 (4), 333-348.
- KAISER, H.F. (1974): An index of factor simplicity. *Psychometrika*, 39 (4), 31-36.
- KORNAI, J. (1980): *The shortage*. Kluwer, The Hague, pp. 154-162.
- LEHOTA, J. (2002): *Élelmiszermarketing*. (Food marketing.) Műszaki Könyvkiadó, Budapest, pp. 1-152.
- NORUSIS, M. (1996): *SPSS for Windows, Professional Statistics*. SPSS Inc., Chicago, pp. 1-324.
- NOVKOVIC, N. & SOMOGYI, S. (1999): *Agromenedzment*. (Agrimanagement) Novi Sad University, Novi Sad, pp. 1-250.
- PORTER, M. (1990): *Versenysstratégiák*. (Competitive strategies.) Akadémiai Kiadó, Budapest, pp. 1-420.
- ROMENSBURG, H.C. (1984): *Cluster analysis for researchers*. Belmont Publ., California. pp. 1-325.
- SZABÓ, G. (1998): *Élelmiszer-gazdaság*. (Food economy.) Manuscript, PETE University, Kaposvár, p. 86.