# Foreign Direct Investment (FDI) and the Reconfiguration of Dairy Supply

# Chains in Hungary

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During transition, the Hungarian dairy processing sector has undergone dramatic restructuring. Foreign investors have led this restructuring. These foreign investors have acquired larger processing plants, rationalised production and cut employment. They have instituted more formal contracting agreements, promoting the growth of a select number of medium-sized dairy farms and excluded micro-producers. The latter cannot meet quality control requirements and produce largely for informal marketing channels.

# KEY WORDS: FDI, Hungary, dairy processing

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### **1. Introduction**

Hungary has attracted the largest amount of Foreign Direct Investment (FDI) per capita and has the second largest total stock of FDI out of all the Central and East European Countries (CEECs) (EBRD, 2000). While the bulk of this FDI has gone to the service sector, significant levels have been attracted to the food processing sector, so that some branches are now in majority foreign ownership. Where this has occurred international capital has profoundly changed the structure of production and the relationship between processors and farmers. This paper considers the evolution of Hungarian dairy supply chains during transition and the strategies employed by foreign owners.

The paper is structured as follows. The next section presents an overview of previous studies on the impact of FDI, which provides a framework for the study. The nature of Hungarian dairy supply chains under communism is considered in Section 3. The degree of reconfiguration during transition and the part played by FDI is discussed in Section 4. The tensions between the strategies of international corporations and domestic agrarian policy are also drawn out. Section 5 concludes.

# 1. Foreign Direct Investment (FDI) and the Impact of International Capital

FDI can be defined as 'any investment that results in a controlling stake of foreign capital in a domestic production unit (in contrast to foreign portfolio investment or joint venture capital' (van Aarle and Skuratowicz, 2000: p.4). FDI may take the form of the establishment of entirely new facilities or control of existing enterprises via mergers and acquisitions.

Four main motives for FDI have been identified: *resource seeking, market seeking, efficiency* gains and *access to strategic assets* (Traill, 1999). Resource seeking refers to attempts to secure access to key raw materials, such as specialist crops like tea or sugar cane. FDI may also open up new markets (market seeking), yield economies of scale and scope (efficiency gains) or access to strategic assets such as specialsied labour or research facilities (Traill, 1999). Research by Anassatasopoulos *et al.* (1997) indicates the importance of access to specific markets and inputs as driving forces for FDI in the European food industries.

Previous research on the impact of FDI in developing and transitional economies has focused on: (a) explaining variations in the size and nature of FDI (Lankes and Venables, 1996), (b) considering the effects of FDI on innovation and economic growth (Meyer, 1998), (c) assessing the impact of FDI on domestic management practices and labour relations (Estrin *et al.* 2000) and (d) assessing the impact of FDI on up- or downstream actors (Gow and Swinnen, 1998).

Research on understanding variations in gross flows of FDI points to the importance of the initial level of economic development and institutional variables (law enforcement, lack of corruption etc.) (Gastanaga *et al.* 1998). The pattern for transitional countries highlights similar factors but the pace of foreign acquistion has also dependend on the rate and form of privatisation (Traill, 1999). For example whereas Hungary sold companies to foreign owners in their entirity, the Czech Republic has relied mainly on voucher privatisation (Ryan and Jones, 1997). The evidence on the impact of FDI on indigenous firms is less clear cut. It has been argued that foreign investors can boost the competitiveness and efficiency in the whole sector because they can contribute crucially needed managerial know-how (Meyer, 1998) and act as a stimulus for efficiency gains (Gow and Swinnen, 1998). While evidence on spill over effects is limited, Aitken and Harrison (1999), using firm level data for Venezuela, found that foreign owned companies were more competitive than domestic firms with FDI having a net negative impact on productivity in large domestic firms. This appears to be due to increased competition, forcing domestic firms to operate at less efficient output levels in the short run. Most of the previous work on FDI in the CEECs has been at the national level (understanding variations in gross flows of FDI) or the impact at a firm level. This paper focuses on the sectoral level to try to capture the nature of restructuring within a particular industry and the degree to which FDI has been a driving force in those changes.

#### 2. Hungarian Dairy Supply Chains under Communism

Under communism, the state was the dominant actor in agri-food production, pricing and policy. Both the agricultural and food processing sectors received substantial subsidies (Szabó, 1996). Centrally administered, fixed prices and margins were applied for most agricultural and food products at producer, processor, wholesaler and retailer levels. High export subsidies were also applied.

Until 1990, producer and investment subsidies were used extensively in order to generate incentives for milk production while demand for dairy products was stimulated by consumer subsidies. The government intervened in cases of market shortages by setting new prices or, more commonly, by providing extra subsidies to maintain or increase production (Szabó and Toth, 1998).

During this period, state and collective farms dominated milk production. For example, state and collective farms accounted for 21.1 and 55.5 per cent of output in 1989 respectively compared to just 23.4 by private 'farms' (KSH, 1990). These private 'farms' were mostly the household plots of co-operative members. As such, the structure of dairy farming was extremely polarized in terms of size and specialized family farms were absent. This is illustrated by the approximate average herd sizes of the three main farm types: state farms (1,300 cows), collective farms (300 cows) and private 'farms' (1.4 cows).

In contrast to the sectoral division of agriculture where co-operative production was important, food processing was almost entirely accomplished by state enterprises (Csizmadia, 1977) (Figure 1). Food processing plants were co-ordinated by industry-wide trusts protected by legal barriers to entry. In all branches, state processors purchased all produce offered to them by primary producers.

In the Hungarian dairy industry, until 1990, the Dairy Trust over saw 15 state owned companies, almost all of which each had between four and six processing units. These plants were organised on a strict regional base with little overlap. These state owned companies accounted for between 85 to 90 per cent of all processing. As such the Trust held an almost complete monopoly on processing. The "competitive fringe" consisted around 30 small and rather weak co-operative processors which typically lacked sufficient capital to expand their processing capacities which had to be

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financed out of retained profits (Szabó and Tóth, 1998). Moreover, the Trust fought to maintain its monopolistic position by opposing the 'too-rapid expansion' of joint or co-operative enterprises (Wädekin, 1982).

Despite heavy subsidies, communist governments found it increasingly difficult to deliver high quality, cheap food to consumers with supply chains being characterised by poor quality products and erratic deliveries.

# 3. FDI and the evolution of dairy supply chains in the post-communist period

A major reform in 1990 resulted in the disappearance of the state-controlled Dairy Trust and elimination of controlled prices. The 15 state owned companies were broken down into 36 new firms. In 1997 there were 164 companies involved in dairy processing of which 103 employed less then 11 people, 47 firms employed between 11 and 300 people and 14 employed more than 300 people. All these enterprises, however, found the initial period of transformation especially tough, as state subsidies were eliminated and real incomes shrank. As a result, the quantity of milk procured and processed by dairies dropped by over 33 per cent between 1990 and 1997 from 2,262 million to 1,504 million litres (KSH, 1998). However dairies still procure almost 80 per cent of total milk production with the remainder being used as fodder, or directly marketed / consumed by farmers.

Despite financial difficulties, by mid-1997 privatisation of the industry had been completed and the share of (EU-based) foreign capital reached 60 per cent (Table 1).

Foreign ownership in the dairy industry is concentrated in larger enterprises and these enterprises have sought to increase their share of the market. Between 1995 to 1996 the joint market share of the four largest companies (the C4 ratio) grew from 26.5 to 30.6 per cent through internal growth and two mergers in 1998 pushed the C4 ratio beyond 53 per cent (Forian, 1999).

FDI was seen as an attractive strategy as Hungary is perceived as an attractive market with rising consumer incomes and a useful 'gateway' for serving other CEECs. These notions are consistent with *market seeking* theories of FDI. FDI rather than trade has been pursued due to the high transportation costs of milk, perishability and persistence of significant tariff and non-tariff barriers. These foreign owners have tended to buy dairy plants that are spatially close, often recreating regional enterprises that existed under communism (Figure 2). For example, Nutricia's acquisitions are concentrated in eastern Hungary and Bongrain in the West.

The companies operating in the market can be divided into three main groups on the basis of their position: *strategic firms, medium enterprises* and *small, specialist ventures.* There are five groups of companies that can be classified as strategic firms. Their total market share exceeds 50 per cent and this has been expanding. These five companies are: MiZo Baranyatej, Bongrain, Hajdútej (Nutricia), Danone and Parmalat (Table 2). Only MiZo Baranyatej is in Hungarian ownership, although in 2000 the company was declared bankrupt. Mizo used to purchase up to 250 million litres of milk every day from its 2000 suppliers, to whom it owes significant payments. MiZo reported a loss of HUF 1.2 billion for 1999, a 34 per cent increase compared with 1998.

The market share of medium sized ventures is approximately 18 per cent. Firms belonging to this group are: Szegedtej, Avonmore (both have belonged to the Gala group since the end of 1998), Szabolcstej (Nutricia) and Tolnatej. The remaining economic organisations include Hungarian owned ventures, such as dairies owned by producers, e.g. the Milk Processors Association in Duna-Tisza köz which embraces 15 firms and small sized dairies located in Northern Hungary.

The new foreign owners have had a dramatic impact on supply chains in Hungary. These changes can be divided into three sections: internal restructuring of production and marketing, procurement and quality control.

# Internal restructuring of production and marketing

The foreign investors have typically bought larger processing enterprises and then acquired smaller, local satellite plants. For example, Nutricia in eastern Hungary have acquired Hajdútej, Sárréti Tej, Balmaz-Tej, Zalkatej, Wes Rt and Szabolcstej. Gala is the majority owner of a plant in Szegedi and have incorporated Szombathelyi Tejipari. and Avonmore Pásztó. After acquiring plants foreign owners have tended to merge enterprises and concentrate production. While foreign investors tend to be reluctant to make available internal production figures, Table 3 does record the strategy of Nutricia and Bongrain. Nutricia has expanded production at its main plant (Hajdútej) and ceased output at two smaller operations: Sárréti Tej, and Zalkatej. Overall acquisition has seen a net loss in the numbers of employed in the two groups (from 3,045 to 2,431 in June 1999) (Table 3). In 2000, Gala Italia announced plans to merge its three Hungarian dairy companies: Szombathely Dairy Rt, Szegedtej Rt and Pásztó based Gala Hungaria Rt.

Foreign investors have also developed stronger brand names and trade marks backed by significant advertising campaigns. Firms that market fresh dairy products (Danone, Parmalat) have also established nationwide distribution networks. The costs of setting up these networks have been high and the financial performance of sector has been mixed. The average profitability of the dairy processing sector, based on accounting records in 1997/ 98 was 1.8 per cent.<sup>1</sup> Danone has performed better than the sector overall (Table 2), in part due to its strong brand names and higher added value. Hajdútej Rt. and Parmalat underperformed due to the cost of internal reorganisation. The biggest loser, however, has been the only large Hungarian owned processing company (MiZo Baranyatej) which was declared bankrupt in February 2000, with estimated debts of 8 billion HUF. This is consistent with Aitken and Harrison's (1999) contention that often the biggest losers from FDI are the largest domestic owned companies.

While FDI has led to greater concentration, after the initial fragmentation and demise of the dairy trust, dairy firms and plants in Hungary are still small in comparison to the EU. The largest dairy company in Hungary processed a mere 185 million litres milk in 1997. In the EU more than half of all milk is processed by firms larger than the biggest Hungarian enterprise and there are fourteen European companies which are bigger than the *whole* Hungarian dairy industry (Szabó and Tóth 1998).

<sup>&</sup>lt;sup>1</sup> Estimated by the authors from accounting records of twenty dairy processors listed on the AMADEUS database.

#### Procurement

The larger processors that relied on large numbers of small producers for raw milk have rationalised the number of actors they deal with. Frequently dairies ensure their supplies via long-term skeleton contracts with the larger milk producers, agreeing annually prices and quantities to be supplied. More formal contractual arrangements have tended to emerge to ensure supply and reduce transaction costs. In a number of cases their relationships with producers have become more entwined by extending credits, assets (such as cooling equipment) and the provision of technical advice and variable inputs. Contracting allows dairies to have greater control over the agricultural production process. It is used to guarantee that: (a) production is tightly scheduled to facilitate processing (Davis, 1983); (b) production is better organised and mechanised to improve farm productivity; and (c) new production methods are rapidly incorporated to improve product quality, yields, and the productive use of equipment.

The development of intensive contracts has aided the development of medium sized private farms, which were entirely absent under communism. The biggest farms, under communism, have become considerably smaller while some 300 family farms have emerged, typically with 20 to 50 cows but their share in total production is still under 3 per cent. Due to a shortage of capital (poor access to credit etc.) there are only a few producers able to expand their dairy farms to reach the "family farm" size and these have overwhelmingly depended on credits and support from foreign owned dairies. The vast majority of private milk farmers thus only have between 1 and 4 cows (Table 4).<sup>2</sup> These small-scale operators produce largely for self-consumption and direct marketing by selling milk to their neighbours. While this form of

production is barely profitable, a great number of elderly and poor people are not willing to give up dairy farming with 1 or 2 cows, as it may be their only source of revenue.

# Quality Control

Foreign owned processors have also been instrumental in the drive to improve the quality of raw milk produced. The processors determine quality requirements and enforce them through the procurement system. Farmers are paid according to the quality of milk with bonus payments for 'extra quality' milk and penalties or refusal to purchase milk below certain quality thresholds. These quality thresholds have had the effect of excluding small-scale (household) producers who cannot preserve the quality of milk due to the lack of adequate cooling facilities. For example, only 0.6 per cent of the milk tested in 1997 from professional dairy farms had more than 1 million bacteria per cubic centimetre, compared to 37.1 per cent of milk from household farms (Table 5). On the measure of overall milk quality, over 82 percent of professional dairy farm milk was graded as extra (highest grade) compared to less than 10 per cent of household milk.

Under foreign ownership dairies have become much more demanding in terms of the quality of milk procured leading to the emergence of two distinct types of channel. First, *formal channels*, have increasingly become dominated by larger producers and foreign owned dairies. The linkages between larger farms and processors have become stronger with more stringent quality requirements, complex payment terms

 $<sup>^2</sup>$  In 1997 there were 25,000 individual farmers and 813 collective and corporate farmers registered with the Dairy Produce Council.

and in some cases the provision of credit, assets and inputs. These dairies in turn are dealing increasingly with centralised retail buyers.

As with processing, FDI has been significant in altering the structure of, and buyer relationships at, the retail level. Foreign owned retailers account for approximately 45 per cent of the retail food market (Gábor and Stauder, 1999). These investors have developed along west European lines by introducing and developing warehouse point distribution, own brands and systems for electronic data interchange (EDI). EDI is used for determining the size and frequency of deliveries as orders are based on actual buying patterns rather than estimates. Suppliers have been pressed to introduce systems to handle EDI. This has favoured foreign owned processors that have had the capacity for this investment and further marginalised the very smallest dairies. In these regards Hungarian supply channels increasingly mirror practices in western Europe. Excluded agents (micro-producers and small scale Hungarian owned dairies) are involved in much more *informal* channels of distribution characterised by self-consumption or sale to neighbours and small traders.

Foreign owned dairies have also introduced internal systems to aid quality control in contrast to smaller dairies which have been unable to introduce ISO systems due to lack of capital. This has limited the latter's ability to export and they will face increasing difficulties on the domestic market as Hungary adopts EU food laws as part of the process of accession.

# FDI and Agricultural Policy

The exclusion of small-scale producers has concerned Hungarian agricultural policy makers (dominated by the Smallholders' Party).<sup>3</sup> A tension has emerged between the interests of the foreign owned dairy companies, which have reduced the number of suppliers to limit transaction costs and improve milk quality, and policy makers which have attempted to protect the interests of all farmers, especially the large political constituency of micro-producers. Hungarian milk policy has sought to protect farmers, justifying it in terms of the imperative of food production, social protection and to place Hungary in a better position for EU accession. The latter refers to negotiations concerning Hungary's quota for milk production in the light of potential accession to the EU. It is likely that any quota will be based on current production, which domestic policy makers regard as artificially low. In an attempt to improve the quality of milk production and stop small-scale producers being 'blocked out' a series of subsidy schemes for improving cattle breeds, registration and identificiation and subsidised loans the improvement of capital equipment (e.g. milking machines and cooling facilities) are available.<sup>4</sup> However these subsidies have had very lmiited success in reversing the marginalisation of small producers.

Milk prices are also supported by an indicative price system, with the possibility of intervention. If dairy companies pay the indicative price to producers, they qualify for

<sup>&</sup>lt;sup>3</sup> Since July 1998 the President of the Smallholders' Party, Jozsef Torgyan, has been the Minister for Agriculture and Rural Development.

<sup>&</sup>lt;sup>4</sup> Subsidy schemes have changed from one year to the next during transition. Support measures applicable to dairy farming in 1997 were: interest rate support for agricultural activities (40%), state guaranteed loans (for 70% of the loan), subsidies for breeding bulls and female cattle (50 thousand HUF / bull), for using propagation material in cattle breeding and for joining the cattle registration and identification system. Small-scale farmers with an income up to HUF 1 million (about US\$ 4,000) are tax exempt. Agricultural producers with a turnover below HUF 2 million do not pay VAT and do not receive a refund for the VAT they have paid on their inputs. Overall, the tax burden on agriculture is relatively low compared to other countries and approximately half of the farmers do not pay taxes.

a small subsidy. If producers do not find a buyer, they may in theory sell their quality milk to the State, at a "guaranteed price" that is lower than the indicative price. This is designed to protect the small-scale producers but in recent years intervention has not been activated, as market prices were higher than the trigger price.

# 5. Conclusion

Foreign owners have significantly restructured the Hungarian dairy industry. Processing has become more concentrated with a greater use of formal contracts and quality control mechanisms. They have supported the growth of new, medium-sized private sector dairy herds and largely excluded micro-producers, which can no longer reach quality control thresholds. The marginalisation of small-scale producers has created tensions with political actors, which have sought to protect the interests of all milk producers. Despite political support for micro-producers the differentiation between formal and informal marketing channels has grown.

Returning to the literature on FDI, a number of lessons from the Hungarian case can be drawn out. FDI has not been in the form of a one-off investment but rather a series of linked acquisitions and mergers. To fully capture the impact of these investments it is necessary to study sectors over a number of years. League tables of FDI in particular years do not capture the degree to which investments in 1999 or 2000 were linked to strategies that commenced in 1995 or 1996. Some commentaries on FDI have tended toward rather simplistic statements of 'is it good or bad for local suppliers?' The Hungarian case points toward a more nuanced view. In deliberately aiding the growth of a certain type of supplier (medium-sized family farms) other potential suppliers have been deliberately excluded. Moreover, FDI at the retail level by introducing new logistical systems has aided the foreign owned processors, which were much more able to comply with these systems. Rather than looking at 'service sector FDI' or 'manufacturing FDI' in isolation, a more appropriate unit of analysis for understanding the impact of FDI is the whole supply chain.

Finally, a series of trajectories can be envisaged. The micro-scale producers, with 1 or 2 cows, are likely to persist as long as rural incomes remain low, pensions meagre and unemployment relatively high. While barely profitable, such activities provide basic food and cash but not enough to significantly expand their operations from retained profits. For the small-scale, domestically owned processors a number of problems persist. They are largely unable to meet EU food standards, achieve economies of scale or secure contracts with the largest milk producers. A significant proportion are likely to cease trading or be bought by foreign owned dairies with a view to reducing capacity in the industry and tightening concentration in procurement. The foreign owned dairy processors, also face substantial challenges. The average profitability of the sector is low and significant overcapacity exists. Firms are largely oriented to a domestic market that has been protected by trade barriers and other forms of government intervention. On accession to the EU, one of the key reasons for FDI, market access, will be open to non-FDI processors. The degree to which the sector can respond to this challenge will be critical to its long-run fortunes.

# **Bibliography**

- Agra Europe, (1999), 'Stakes in Hungarian dairy bought by Friesland', *East European Agriculture and Food*, June, p.34
- Aitken, B. and Harrison, A., (1999), 'Do domestic forms benefit from direct foreign investment? Evidence from Venezuela', *American Economic Review*, Vol.89, No.3, pp.605-618
- Anastassopoulos, G., Papanastassiou, M., Pearce, R.D. and Traill, W.B., (1997), Firm and location specific determinants in investment and trade strategies of major multinationals in the food industry in Europe. In S. R. Hennebury (ed.), *Foreign Direct Investment and Processed Food Trade*, Stillwater OK: Oklahoma State University
- Csizmadia, E., (1977), Socialist Agriculture in Hungary, Budapest: Akademiai Kiado
- Davis, J.M., (1983), 'Capitalist agricultural development and the exploitation of the propertied labourer.' In: F.H. Buttel and H. Newby, (eds.), *The Rural Sociology of the Advanced Societies: Initial perspectives*, London: Croom Helm, pp.133-153
- EBRD, (2000), *Transition Report 1999*, London: European Bank for Reconstruction and Development
- Estrin, S., Richet, X. and Brada J.C. (2000), (eds.), *Foreign Direct Investment in Central Eastern Europe: case studies of firms in transition*, Armonk: M.E. Sharpe
- Fennesz-Berka, A., (1998), *Annual Marketing Plan for Hungary*, Washington DC: USDA, mimeo
- Fenyvessy, J. and Kiss, J., (1996), A Tiszantulon termelt tej minosege. [Quality of the Milk in East Hungary] *Elelmezesi Ipar*, Vol.50, No.3, pp.86-89
- Forian Z., (1999), A tej termékpálya hazánkban I.-II. [The Dairy Supply Chain in Hungary] *Elelmezsei Ipar*, Vol.53, No.10-11, 291-293, 327-331
- Gabor J. and Stauder M., (1999), A kereskedelmi láncok es az elelmiszertermelok kapcsolatának valtozasai [Change of relation between the retail chains and food producers] AKII, Budapest
- Gow, H. R. and Swinnen, J.F.M., (1998), 'Up- and Downstream Restructuring, Foreign Direct Investment, and Hold-up Problems in Agricultural Transition', *European Review of Agricultural Economics*, Vol. 25, No. 3, pp. 331-350.
- Jansik, C., (2000), 'Foreign Direct Investment in the Hungarian Food Sector', Hungarian Statistical Review, Vol. 78. Special Number, Budapest, 2000 March, 78-104

KSH, (1997, 1998, 1999), Unpublished agricultural statistics, Budapest

- Lankes, H. and Venables A., (1996), 'Foreign direct investment in economic transition: the changing pattern of investments', *Economics of Transition*, Vol.4, No.2, pp.331-347
- Meyer, K., (1998), *Direct investment in Economies in Transition*, Cheltenham: Edward Elgar
- Ministry of Agriculture, (1997) Az élelmiszertermelés piaci feltételeinek várható alakulása 2000 után. [Food Markets Conditions Outlook after 2000] Discussion Paper, Hungarian Ministry of Agriculture
- Ryan, M. and Jones, W., (1997), 'Globalisation of the food Industry in Central and Eastern Europe.' Paper presented to *the EAAE Seminar on Globalisation of the Food Industry*, University of Reading
- Szabó M. (1996) A magyar tejipar versenykepesseget befolyasolo tenyezok [Facts that determine the competitivness of the Hungarian Dairy Industry] Working paper, Budapest University of Economic Sciences
- Szabó, M. (1999) Vertikalis koordinacio és integracio az Europai Unio es Magyarorszag tejgazdasagaban. [Vertical coordination and integration in the milk sector in Hungary and the EU] AKII, Budapest
- Szabó, M. and Tóth, J. (1998) Agricultural Market Development and Government Policy in Hungary: the case of the dairy sector, AKII, Budapest
- Traill, W. B., (1999), 'Foreign trade versus foreign direct investment in the food sectors of transition economies.' In: M. Hartmann and J. Wandel (eds.), *Food Processing and Distribution in Transition Countries: Problems and Perspectives*, Kiel: Wissenschaftsverlag Vauk Kiel, pp.225-267
- van Aarle, B. and Skuratowicz, A., (2000), 'Trade and FDI effects of EU enlargement', Paper presented to the ZEI / CEPR Labour Markets, Work and Welfare During the Transition and Integration Processes Workshop, Vilnius Lithunaia, 10-14<sup>th</sup> April
- Wädekin, K-E. (1982), Agrarian Policies in Communist Europe: a critical introduction, The Hague: Marinus Nijhoff

Company	Home country	Main subsidiaries	% share of Hungarian market
Nutricia	Netherlands	Hajdutej, Szabolcstej,	18.3
Gala Italia	Italy	Szegedtej, Gala Paszto	17.3
Danone	France	Danone Bp.	11.5
Bongrain	France	Veszpremtej, Pannontej	12.5
Parmalat	Italy	Fejertej	5.5
Total			65.1

Table 1: Share of	f the Hungarian	dairy market	controlled by no	on-Hungarian	based firms (1999)

Source: Agra Europe (1999), p.34; interviews by authors

Company	Ownership	Subscribed	Share of	Corporate Strategy	Financial Position
		capital (1998)	milk processed (1999)		
MiZo Baranyatej Rt	Hungarian Comprised of 4 companies.	3325 MHUF	10.2%	Győrtej develop trade marks with its milk and fruit yoghurt (Yonett). Specialise production only from end of 1997.	Large portfolio of debt amounting to 8 billion HUF in 2000. Lack of capital and liquidity problems. Operating deficit of 775 MHUF in 1998.
Hajdútej Rt.	Nutricia (Netherlands). Comprised of Hajdútej, Sárréti Tej, Balmaz-Tej, Zalkatej, Wes Rt and Szabolcstej.	1800 MHUF approx.	18.3%	Full range of dairy products. Promote trade marks (Milli, Kölyök, Hajdútej). Market segmentation (products aimed at children). Fresh milk to regional markets.	After tax profits of Hajdútej were 141 and 118 MHUF in 1994 and 1995 but 5 MHUF deficit in 1996. Lag behind the average of sector: export subsidy decreased and the reorganisation of the enterprise has been expensive. Modest profit again in 1997.
Bongrain	Bongrain Group (France). Two main parts: Veszprémtej, and Pannontej.	2800 MHUF approx	8.5%	Concentrate on cheese manufacturing. There is no marked trade-mark. Veszprémtej has started to introduce some products new to Hungary, Pannontej intends to modernise technology.	Above average returns (1994- 1996) but Veszprémtej high debts. Pannontej perform better.
Fejértej- Parmalat	Parmalat (Italy)	1612 MHUF (!997)	5.5%	Every product in dairy range except cheese and powdered products. Emphasise quality in manufacturing and distribution. Aggressive commercial policy.	The firm's after tax profit was minimal between 1994-96, due to expensive distribution investment. Short-term liabilities high (2.5 billion HUF in 1996). Financial indexes below the average of sector.
Danone	Groupe Danone (France)	2564 MHUF (1997).	8.5%	Fruit yoghurts. Intensive advertising activity, very strong trade mark	Sales revenue per 1 litre milk is 200 HUF while it is 120 HUF in the case of the next firm and 88 HUF is the sector average. Strong profit after 1996.
Gala Group	Gala Italia (Italy). Major ownership: Szegedi and Szombathelyi 100% owner of Avonmore Pásztó and Trade Kft	2700 MHUF, approx. (1998)	15-18%	Avonmore focuses on milk. Gala plans further purchases and expansion of products.	Up to 1997 all three firms in the group produced considerable deficits and indebted. Balance sheet result of Avonmore in 1998 was, after tax, profit of 92 MHUF. Estimate of sales revenue of 28 billion HUF and modest profit in 1999.

 Table 2: Main Players in the Hungarian dairy market (1999)

Source: data compiled by authors from company accounts

#### Table 3: Foreign Direct Investment and Changes in Business Strategy

Foreign Investor	Plant / Company	Change in Employment		Change in no. of		Change in product range (Number of products)	
mvestor	oougin	At	1999/06	At	1999/06	At	1999/06
		acquisition		acquisition		acquisition	
Nutricia	Hajdutej	1085	1085	97	100	112	148
	Sarreti Tej (1999/09)	227	0	13	0	20	0
	Zalka Tej (1997/11)	258	1	25	0	42	0
	Szabolcstej (1999/03)	680	685	78	63	63	75
	WES (1998/06)	295	176	32	14	37	21
Bongrain	Vezsprémtej (1993/12)	500	484	222	231	60	91
Totals		3045	2431	467	408	334	335
C	1 / 11 / 11	.1					

Source: company data collated by authors

#### Table 4: The number of cows by farm type (June 1997)

	Thousand Cows	Per cent
Corporations	116	27.6
Collective Farms	166	39.4
Individual Farms	139	33.0
Total	421	100.0
Source: KSH (1998)		

#### Table 5: Quality of the raw milk in Hungary (1997) **Hygienic characteristics Quality Class** Household farms **Professional Dairy** Farms 80% 20% Share in production approx. Distribution % Life spore class <=100.000\* 89.9 12.6 (Bakt. / cm3) 100.001-300.000 8.2 19.2 300.001-800.000 1.1 20.3 800.001-1.000.000 0.2 10.8 > 1.000.000 0.6 37.1 90.9 Somatic cell numbers class <=400.000\* 67.1 (cells/cm3) 400.001-500.000 5.7 14.0 500.001-700.000 2.8 12.7 700.001-1.000.000 0.5 4.5 > 1.000.000 0.1 1.7 **Total Quality Ranking** Extra 82.4 9.7 1. 11.9 17.7 2. 3.7 20.7 3. 0.8 12.7 Out of classes 1.2 39.2

\* EU standard for consumer milk, cheese, butter, etc

Source: Dairy Research Institute Hungary, unpublished data

Figure 1: Hungarian Food Chains Under Communism



Source: own depiction



Figure 2: Mergers and acquiitions in the Hungarian Dairy sector 1995 - 1999.

The size of circles refers the sales revenue of the companies in 1998 Source: Jansik (2000)