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Changes in the Hungarian dairy industry after EU accession[1]

Gábor Kőnig[2]
Anita Major[3]

Abstract

Since EU accession the Hungarian dairy industry's domestic market has generally expanded as turnover and consumption have both grown, but this has been increasingly due to cheap imports, while the purchase and sale of domestic products has been decreasing or stagnating (both in the domestic and foreign markets). The growth in imports has cut Hungarian corporations domestic market share to 80%. In Hungary corporate concentration has become even more pronounced with large corporations further strengthening their position and smaller ones further shrinking. Moreover, foreign ownership prevails and has the primary aim of meeting domestic demand. Changes in ownership contribute to the strengthening of vertical integration. Still, in the EU corporate concentration trends also exist. However, in the current fierce competitive market, it is not yet apparent whether non-producer ownership or co-operative ownership is more viable. Therefore the increase in Hungarian owners and ownership of processing plants by (Hungarian) producers does not necessarily signal the end of the crisis, but may in fact still signal decline. Positive aspects are increasing concentration and, from the consumers' standpoint, cheaper dairy products. Cheaper milk products have put great pressure on milk producers (lower milk prices), and have had a positive effect on consumption trends. Milk drinks and some new milk products have been replaced by products with lower milk content and milk-imitations.

Key words

Dairy industry, milk, Hungary, EU, agriculture, trade

Introduction

The 2004 CAP reform restructured the EU dairy industry. In Hungary adapting to the EU internal market has produced insecurity due to the painful process of price adjustments and forced rationalisation imposed by tough competition. This insecurity is compounded by the fact that, at the WTO's Hong Kong negociations, the EU agreed to decrease union duties and export subsidies. Also problematic is accessing markets as there is general overproduction and a more than 100% self-sufficiency rate both in Hungary and the EU. In the future even sharper competition is expected. This is *guaranteed* by a more liberal EU policy, WTO reforms, and the emergence of new competitors. Inevitably the vital transformation of production, processing and sales will continue. Domestic and international consumption trends and those in trade and production presage hard times for the dairy industry.

[1] The analysis is based on the chapter prepared by the author, of a study published by AKI in 2006, in Studies in Agricultural Economics, edited by Orbánné.

[2] Agricultural Economics Research Institute, H-1093, Budapest, Zsil u. 3-5., konig@akii.hu

[3] PhD student of Corvinus University, Budapest.

1. Corporate structure, concentration and ownership structures of the Hungarian dairy industry

In the post-assession period, the dairy industry is also affected by increasing competition, which is reflected by corporate transformation. **Within the dairy industry** the major **corporations** (based on revenue) are Friesland, Sole, MiZo, Danone, Tolna, Pannon and Veszprémtej (in 2003 Parmalat was still 6th, but by 2004 it was no longer in the top 10). On the basis of milk quantity purchased from producers, the order is the following: Friesland, Sole, MiZo, Tolnatej, Pannontej, Danone, Északtej, Veszprémtej, Óvártej, Parmalat. In 2004 these companies represented 76% of industry revenue (or 70% of the milk quantity purchased from producers). In the dairy industry between 1997 and 2004 the number of corporations decreased from 104 to 93. The extent of concentration is reflected by the fact that between 1997 to 2004 the major corporations' market participation shot up in terms of revenue, and by 2004 **Friesland reached a market participation of 24%**, followed by Sole's 15%. Based on 2004 net revenue, the joint market participation of **Sole and Új-MiZo,** (considered one company according to 2005 ownership structures) was **26%**. Therefore **Sole-MiZo and Friesland accounted for half of the sector's 2004[4] turnover** (an 8% increase over 2003). Lagging behind was Danone (10%). **One can thus conclude that large corporations further strengthened their position, while the small ones continued to decline.**

Table 1

Increase in corporate concentration between 1997 and 2004, %

	Net revenue in total sales			Net revenue in export sales			Registered capital		
Leading corporations	**first 3**	**first 5**	**first 10**	**first 3**	**first 5**	**first 10**	**first 3**	**first 5**	**first 10**
1997	23.9	35.9	56.4	26.8	34.2	52.5	29.5	38.5	72.9
2000	43.8	56.7	74.9	40.4	46.4	83.8	27.1	51.8	84.1
2003	41.7	57.4	79.9	44.5	55.5	84.9	80.8	86.8	95.2
2004	49.5	66.2	81.9	49.9	62.1	82.6	83.7	87.4	94.8

Note: Sole-MiZo (S. Csányi) and Pannontej-Veszprémtej (Bongrain) were shown separately in this examination.
Source: author's own calculations based on data from Hungarian Tax Authorities and AKI

Total net sales values were solid indicators of domestic sales proportion for the major corporate groups surveyed. This means that the **proportion of domestic and export sales has not changed**. Given that **foreign capital had significantly grown by 2000**, it leads one to think that exports could have expanded as well. After 2000 the sector experienced no significant concentration, either on the basis of export revenue or on the basis of foreign capital share in registered capital (due to the almost 100% value of this latter figure stability can be assumed). Although it tries to gain a large share of the dairy industry (in 2004 their share was 87%), **the primary aim of foreign ownership is to meet domestic demand (and not to increase exports)**. **Foreign participation significantly exceeds the food industry average and it grew until 2004, which was contrary to the food industry trend**. In 2005, due to changes in ownership structure, the previous year's significant **foreign parcipication**

[4] The 50% domestic participation of the two dominant corporate groups is not so significant compared to the Dutch concentration, where the two largest groups, Campina and Friesland have a 90% market share.

will probably not further grow as Sándor Csányi acquired the Italian **Sole**. Csányi[5] is also an owner of **Új-Mizo** – who now controls a 25%-20% share in the milk and meat industries. At **Parmalat** there was also a change in ownership, and ownership passed to about 140-150 producers. The main owner is Alföldi Tej Kft, which is controlled by 82 Alföld area producers, but numerous Dunántúl area producers also have a stake. Alföldi Tej Kft. is Sole's largest supplier.

Table 2

Change in foreign participation in the dairy industry's registered capital between 1997 and 2004, %

Year	in the case of the first 3 corporations	in the case of the first 5 corporations	in the case of the first 10 corporations	all the corporations
1997	51.7	56.1	68.2	58.9
2000	94.6	86.5	90.9	80.5
2003	93.0	91.3	88.8	86.4
2004	93.1	91.1	98.0	87.3

Note: Sole-MiZo (S. Csányi) and Pannontej-Veszprémtej (Bongrain) were shown separately in this report. This is important in the case of the first 3, first 5 and first 10 corporations, but does not influence the total.
Source: own calculations on the basis of data from the Hungarian Tax Authorities and AKI

On the one hand, dairy industry **investors'** acquisitions prompt **optimism**, because this reflects financial investors' expectation that this sector's market position will normalise within a few years and they will receive a return on their investments. On the other hand, current investor activity in the industry might **indciate** that **the sector is in a trough** and **now is the time to acquire** the bankrupt **companies** at a good price. However, the question is how much investment is needed to make them competitive. It is also noteworthy that the **investors are Hungarian**, **not foreigners**, although foreign capital also targets promising investments. Therefore, while greater Hungarian ownership is most welcome, the exit or absence of foreign capital foretells further difficulties within the sector (Table 3).

[5] The increased competition after the EU accession contributed to Sole's withdrawal from the Central European region, and the withdrawal from Hungary was particularly due to the fact that the export subsidy of feta cheese was stopped (which had a substantial part of their revenue) and in addition, the company had to close down its Pásztó plant, which was not able to meet the EU requirements. The sharp competition resulted in the dismissal of 130 employees in this case. As a result of the rationalisation process after the joint owner of Sole and MiZo took over, the closure of the Kecskemét milk plant was followed by the closure of the central MiZo plant in Pécs as well. This meant the dismissal of 100 + 300 employees. If we add the dismissals (116 employees) after the closure of Friesland's Békéscsaba plant, the dairy industry dismissed about 650 employees. A counter-example is Tolnatej, which even increased the number of its employees in the wake of its developments. This section is based partly on the paper of Mihálovics – Marnitz (2005), Szirmai (2005 a, b), Szabó (2000) as well.

Table 3

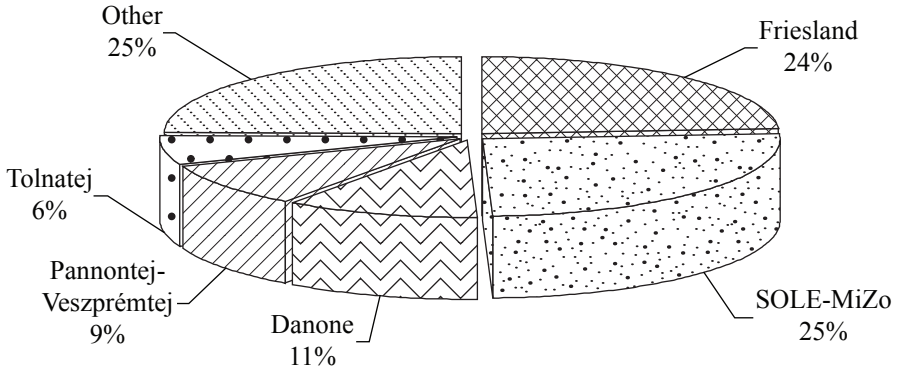
Ownership structure of leading dairy industry corporations (2004)

Influential participation	Csányi Sándor		Dutch producers	Bongrain		Institutional investors
Corporation (net revenue, percentage of sector, 2004)	Sole (HUF 35 bn, 15%)	Új-MiZo (HUF 26 bn, 11%)	Friesland (HUF 57 bn, 24%)	Pannontej (HUF 12 bn, 4.9%)	Veszprémtej (HUF 10.8 bn, 4.6%)	Danone (HUF 25 bn, 11%)

Note: On the basis of the quantity of milk purchased from producers Sole and MiZo has a 30.5% market share, while Friesland 21% and Danone 4%.
Source: Szirmai 2005, professional interviews and articles

Figure 1

Participation of leading dairy industry corporations selected according to 2004 revenue and examined according to 2005 ownership structures



Source: Database of Hungarian Tax Authorities and AKI

In the EU concentration is also taking place. Tight and growing competition, low prices, the need for more efficient production and processing (also cost-efficiency) have meant changes. Among these changes are the formation of more powerful industrial groups and **more concentration in processing**. Greater company size is offsetting the negative effects of lower EU price subsidies on revenues. At the same time this trend bolsters bargaining power against retailers, who would like to drop prices, which would lower prices paid to producers. The emergence of producing and processing corporation groups may be the result of enhanced competition. In **Hungary** this phenomenon can also be observed: for instance, **the Parmalat purchase** proved a good opportunity for Hungarian producers as a processing company became the producers' property resulting in coordination between production and processing[6]. A further step in the struggle against increasing competition may be closer cooperation or fusion.

[6] After the establishment of this organisation with government support we will see whether the ambitious plans for purchase (from producers) and sale are viable (eg. exporting 110 million litres of milk and processing 40 million litres of milk). It is particularly thought provoking how far the government loan (from the Hungarian Bank for Developments), making the establishment of this organisation possible, serves the interest of the sector, with special regard to the fact that the main activity of the organisation is delivering milk as raw material to Italy, this way losing the employment opportunities of the potential processing activity.

Integration between producing and processing companies does not only present advantages. **An international example of this is the 2004/2005 unsuccessful attempt at cooperation when the largest EU corporations operated as producer-owned cooperatives** (Fórián, 2005, Dairy Industry news, 2005 Kósa, 2005). Another example of this are the failed negotiations for closer cooperation between **the German Nordmilch and Humana.** These **broke down** at the end of 2004. The early 2005 merger attempt by the Danish **Arla** and the Dutch **Campina** was also a failure, and this despite a year and a half of preparation. One of the reasons for this was the big European companies' less flexible cooperative decision-making system as compared to non-producer ownership. Owing to the stricter market environment in the EU dairy industry, mergers and acquisitions have for several years been commonplace. A good example of this is **the successful 2005 expansion of the privately owned British company Dairy Crest** (Dairy Industry News, 2005). Although **it is clear from the above that corporations not owned by produces can better adapt to the market environment,** there is also a significant number of producer-owned dairy corporations within the EU dairy industry. **Four of the top five largest EU dairy corporations** (based on processed milk in 2004) **operated as cooperatives**. Only one was owned by non-producers while cooperatives and other types of associations were **50-50% in the top ten**. There is a clear intent on the part of the dairy industry to increase concentration. However, negotiations aiming at closer cooperation among four cooperatives from the top five corporations broke down in 2004 and in 2005.

Table 4

Ownership structures of the main dairy industry corporations

Main European dairy companies in 2004, by quantity of processed milk			Main Hungarian dairy companies in 2004, by revenue		
Corporation	**Country**	**Ownership**	**Corporation**	**Country**	**Ownership**
Arla	**DK**/SE/UK	producer	Friesland Rt.	**NL**/DE	producer
Groupe Lactails	FR/BE	non-producer	Sole Rt.	HU	non-producer
Friesland Foods	**NL**/DE	producer	Új-MiZo Rt.	HU	non-producer
Campina	**NL**/DE/BE/PL	producer	Danone Kft.	**FR**/USA/UK	non-producer
Nordmilch	**DE**/UK	producer	Tolnatej Rt.	HU	non-producer
Bongrain/CLE	**FR**/BE/DE	non-producer	Pannontej Rt.	**FR**/BE/DE	*non-producer*
Nestlé	CH	non-producer	Veszprémtej Rt.	**FR**/BE/DE	*non-producer*
Sodiaal	FR	non-producer	Északtej Rt.	HU	non-producer
Dairy Crest	UK	non-producer	Óvártej Rt.	HU	non-producer
Humana Milchunion	**DE**/UK	producer	World Proteins Rt.	NL	non-producer

Note: The joint owner of Pannontej and Veszprémtej is Bongrain SA (CLE), and Sole and Új-MiZo have a joint owner as well, therefore their joint role is more significant. In 2005 Parmalat became owned by the Hungarian producers of Alföldi Tej Kft. and operates in the form of cooperative. Although Friesland operates as a cooperative in its mother country, controlled by Dutch producers, the Hungarian Friesland company is governed by its management and not by Hungarian producers, since it is not a cooperative.
Source: Dairy Industry News 2004, Database of Hungarian Tax Authorities and AKI

In Western Europe there is better cooperation between the producing and processing sector. This stems from the the necessity to counterbalance the power of chains, a phenomenom which also exists in Hungary. This coupled with increased price competition

from imported products likely means there will be **closer cooperation among stakeholders in the Hungarian sector[7]. To generate the greater flexibility** required because of increased competition, it would likely be preferable **for Hungary to retain concentrated non-producer ownership** instead of the less flexible producer-owned cooperatives, thus preventing a likely natural elimination process among cooperatives. However, **increased concentration may also entail risks.** A good example of this is **the collapse of** one of the largest international dairy processing corporations (**Parmalat)**, which has affected thousands of dairy producers (Popp, 2004). **A major challenge for the Hungarian producer-owned cooperatives is** creating and maintaining competitive sales prices, while at the same time paying high marketing costs and having high producer prices. However, an argument that counters theories questioning the contemporary viability of producer-owned processing corporations is that, in the autumn of 2005, Hungarian **Parmalat became producer-owned.** Moreover, there are about 10 other processing companies owned by producer groups. **Domestic (Hungarian) ownership's increasing role will only prove beneficial** if it means the company can better meet growing competitive challenges and become more sensitive to the problems in the Hungarian environment, which will lead to decisions which are more beneficial toward the Hungarian dairy industry.

As for competitiveness, the **low level of horizontal coordination between milk producers** (except for e.g. Alföldi Tej Kft) and the **low level of vertical coordination between producers and the processing plants** (except for the relationship between Dalmand and Sole) is undesirable. Vertical coordination among producers, processing plants and retailers, only extends to maintaing a business level which serves the interests of retailers and processing plants[8]. The low prices paid to the producers encourage greater concentration in the now **decentralised production structure** because more and more farms fail due to production losses. However, even today there are about 4,400 direct sale producers/farmers (even without having a quota), who sale less than 100 thousand litres of milk per year. Hungary's low standard of competitiveness is mainly due to technological deficiencies and low concentration in production. A trend toward **growing elmination and concentration among the producers coupled with processing side concentration** will lead to more cost-efficient products, and there is also potential for greater cooperation between the two participants. The above trend will in turn help **the sector offer more competively priced products**, enabling it to meet the needs of retailers and consumers and to compete against cheap imported products. **Although increased corporate concentration and high foreign participation increases the Hungarian dairy sector's competitiveness,** it is still not enough to successfully compete against imports and to counter retailers' dominant position. In order to improve efficiency as soon as possible issues related to ownership structures need to be resolved. This is because cheaper fodder produced on freehold land may provide a basis for making the products more competitive.

2. Supply and demand in domestic and foreign markets

The 2004 CAP reform had a serious effect on the EU dairy industry as it lowered the intervention quantity of butter plus the intervention price of butter and skimmed milk powder, which caused milk prices to decline. This ***milk crisis*** has also made it to Western Europe.

[7] A good example for the cooperation between the production and processing sectors is Danone's cost optimisation programme, which can make the production of farms cooperating with Danone more competitive.

[8] See more about this topic by Fertő et al. (2005 and 2006), and Szabó (2005).

Since the CAP reform, **farmers have been going bankrupt.** In Hungary the cap reform coupled with post-assession **forced price adjustment** (decrease), has increased pressure on domestic market participants. The change in industry regulations may result in **greater cheese production and stronger cheese exports,** but this will be at the expense of butter. The EU's commitment (at the WTO Hong Kong negotiations) to decrease union duties and export subsidies by 2013 is also worrying for the dairy industry. General **overproduction** in Hungary and the EU makes access to the market difficult as the self-sufficiency rate being over 100%.

Cheese, cottage cheese and milk constitute 82% of sales in **domestic milk products** and sour milk products account for 10%. Milk powder and flavoured milk constitute about 2-2%. In 2004 the amount of milk purchased was 1.6 billion litres. **Milk purchased from producers decreased by about 4%** in the first 10 months of 2005 as compared to 2004 to date figures. **Although the purchased amount decreased, the quality improved** because, in 2005 and 2004, 98% of milk purchased was of extra quality, a 7% quality improvement over 2003. In Hungary **the initial year** 2000 **decrease in milk and milk products consumption** continued into 2003. In 2003 **consumption decreased by 1.6 litres per capita, as compared to the year-to-date figure,** descending to 156.5 litres. This was 11.6 litres less than the average between 1995 and 2000. The 2003 decrease was caused by a decline in milk consumption, but there was a slight growth in consumption of other milk products. This was due to changes in consumer habits and milk prices, which, compared to the previous year, grew by 3.2%, while the average cheese consumer price only grew by 1%. Szabó (1999) had already referred to the close relationship between consumption and the level of revenues. In relation to other countries, **Hungary consumes less milk and fewer milk products**. For example, per capita cheese consumption is 8.9 kg while in the EU 15 it sits at 18-19 kg. The previous figures include cottage cheese, which according to EU standards is fresh cheese. In Hungary the year 2003 per capita butter consumption was 1.3 kg, whereas the EU-15 consumed 4.5 kg. In France per capita cheese consumption was 24 kg, and the French surprisingly consumed 8 kg of butter per year! Not only in the old member states is cheese consumption higher than in Hungary (Table 5); Czech, Polish, and Slovenian cheese consumption is about 10 kg. Morevoer, the Polish and Czechs consume per capita about 4 kg. of butter. Within Hungary and internationally the 2005 **consumption and production trends provide few grounds for optimism**. In Hungary the 2005 rise in consumption was triggered by growth in imports, while the milk purchased from Hungarian producers decreased slightly. This food consumption analysis was backed up by data from the Hungarian Central Statistical Agency (2005) and the Élelmiszer (2005).

Table 5

Consumption of milk and milk products in the enlarged EU in 2002

	EU-15	EU-10	Hungary
Consumption of milk and milk products kg/capita	244.5	186.3	143.1
Butter consumption kg/capita	4.4	3.7	1.0
Cheese consumption kg/capita	18.9	10.8	8.9

Source: Agrár Európa 2004, Central Statistical Agency, FAO Agrostat 2002 and own calculations

The fact that imports' share in domestic consumption grew from 12% in 2003 to about 15% in 2004 illustrates a foreign market surplus and import pressures. **Since 2004 the dairy industry's trade balance (expressed in value) has been negative.** The **increase in imports** has primarily been caused by **cheese supplies**, amounting to almost half of 2004 and 2005 imports. When examining the 2000-2005 **trends in the sale of milk and milk products**, one concludes that from 2003 to 2004 the value of exports expressed in USD slightly decreased, while in 2005 the value grew by 30% due to the increase in liquid milk exports. It is **noteworthy** that in **2004 imports shot up by 115% and that in 2005 they grew by 36%.** As for **cheese exports,** in 2005 Hungary's **main markets remained Saudi-Arabia, Lebanon** and the other traditional Middle-Eastern target markets, as well as **Macedonia and Japan** (with a total share of approximately 70%); In 2005 Italy constituted the the main foreign market for Hungarian milk. Hungarian exports to the Middle East may get a temporary boost because of Arab countries' anger at the Mohamed cartoons published in Denmark. Because of the cartoons, the Arab countries might slap a limit on Hungary's main rival (Arla). An indication of suppliers' optimism in maintaining their unexpected Arab market is that Köröstej purchased Friesland's Hajdúböszörmény cheese factory in order to satisfy increased Arab consumer demand. Arab hostility toward Denmark peaked in 2005, but in the spring of 2006 some Arab consumers still continued their boycott of Danish cheese, which helped Hungarian exports to the region. Shifting trade in milk and milk products is revealed by an increase in imports from our northern neighbours and an increase in exports towards the south (e.g. to Italy).

In 2003, 2004 and 2005 imports of milk and milk products as raw material grew less than imports of processed milk products. This was because demand for products requiring larger quantities of liquid milk (cheese, butter) was less than that for products requiring relatively less liquid milk. From 2003 to 2005 milk imports expressed in tonnes grew thirteenfold, by 50 thousand tonnes (expressed in value this is a twelvefold growth). Cheese imports grew by 51 thousand tonnes, which is a 57% increase. The same phenomenon, albeit more moderate, is also present for **exports.** Between **2003 to 2005 in both exports and imports** there was **an increase in less processed products. Unfortunately, growth in imports considerably exceeded growth in exports.**

Table 6

Export and import of main milk products, 2000-2005

Name			2000	2002	2003	2004	2005	2005/2000, %	2005/2003, %
Export	thousand USD	Milk	17,304	17,080	15,657	20,478	46,621	269	298
		Milk powder, condensed milk	4,902	12,567	16,645	2,533	2,541	52	15
		Cheese	40,221	41,347	49,484	50,539	50,875	126	103
	thousand tons	Milk	66.4	60.4	45.6	49.4	105.9	159	232
		Cheese	1.2	20.2	23.4	19.7	17.1	1,425	73
Import	thousand USD	Milk	1,016	753	3,384	21,801	41,409	4,076	1,224
		Sour cream, yoghurt	5,743	5,976	10,680	25,564	26,881	468	252
		Butter	1,372	1,294	4,304	14,092	13,615	992	316
		Cheese	22,040	27,885	34,644	63,798	92,051	418	266
	thousand tons	Milk	1.7	1.1	4.0	29.4	54.6	3,212	1,365
		Sour cream, yoghurt	8.4	7.4	12.1	18.5	22.0	262	182
		Butter	0.9	0.8	1.6	4.3	3.4	378	213
		Cheese	11.1	11.3	12.7	18.3	20.0	180	157

Source: author's own calculations on the basis of Central Statistical Agency and AKI database.

For the past few years a major increase in domestic **cheese consumption** has been expected. However, despite an increase in imports, it hasn't occurred yet. The anticipated rise in consumption is mainly associated with cheap milk.

Cheese remains one of the most promising products. Based on consumption structures in the more developed countries, international trends forecast growth in special milk products consumption. **These include products with higher value added** such as flavoured milk, special fruit yoghurts, and cream cheese, and low-fat products. Also included are products enriched by special additives, dessert products, special types of cheese, vitamin enriched highly processed products, and probiotic cultures. **The slight increase in our consumption may be explained by the post-accession emergence of cheap import products. Another factor could be that Hungary currently lags well behind the international and former domestic level. However, this is certainly not indicated by international and long-term domestic consumption trends[9]. To boost demand continual innovation and the launch of new modern milk products are very important.** The dairy industry is not geared to the export market and for this reason foreign markets do not offer solid growth potential.

By terminating the **quota-free direct sale of 250 million litres of milk** (including milk for personal use) and directing it to official sales channels, corporations' excess capacities could be reduced. This would bolster milk processing and the quantity of milk products in

[9] According to GfK, consumption of milk products grew by 5% in the first nine months of 2005 as compared to year-to-date data. This also includes the fact that milk consumption was the highest in Hungary among Central European countries, amounting to 78 litres per capita.

shops (Kőnig et al., 2004). However, there is some doubt as to whether this will work due to difficulties in estimating consumer capacities. Obviously, from a social and economic standpoint, there is still a need for small producers selling directly from their own homes, of whose milk mostly lies in the grey milk category. For the small producer such direct sales are often the only way to make money. Moreover, large processing plants and retailers may not be able to meet this market need as such direct sales offer accessibility and can accommodate specific consumer requirements. The Austrian example confirms the likely survival of such direct sales, but in Austria producers have a permanent direct sales quota, which does not exist in Hungary.

Based on the above, one may conclude that although the post-accesion dairy industry structure has already been substantially altered, the process is not yet complete. On the contrary, this is only the start of a process which, if accompanied by thorough structural transformation, will hopefully create a competitive dairy industry. Such a transformation must be adapted to the quickly changing market environment. Transforming the dairy industry may be facilitated with loans designed to alleviate problems caused by lack of capital. Also the government could increase marketing support to boost sales.

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