

# COMPETITIVENESS ANALYSIS OF LEADING COMPANIES IN HUNGARIAN DAIRY INDUSTRY BY LIQUIDITY INDICATORS

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*In this study, on the basis of the accounting data for the last few years, we analyse the change of competitiveness the Hungarian dairy companies which have the largest revenues. In 2010, 5 enterprises of the 50 food industrial ones having the largest revenues were working in the dairy sector. This concentrated competitive environment offers reasons for the comparative review of the short term liquidity factors as the most important indicators of remaining in the competition or market survival.*

*For the research we use the balance sheets, income statements and cash flow statements from the financial reports concerning 2008-2009-2010 economical periods. The research methods of our analysis are based on the internationally accepted and applied system of financial indicators. This study includes the analysis of the liquidity ratios coming from the balance sheet and the cash flow statement as well as the analysis of the cash cycle which indicates the effectiveness of the current assets management.*

*We examine the change of the liquidity position of competitors belonging to the selected group during the economic crisis. We form company orders on the basis of the revenues, the liquidity indicators, the capital structure indicators, the financial strength and the cash conversion cycle. Basically, we search the answers for the following questions:*

- Which company's market position is the strongest on the grounds of liquidity factors?*
- Which company can be considered as market leader by its competitiveness?*
- Is there any connection between the value or tendency of the change of the revenues and the liquidity situation of the analysed companies calculated on the basis of the above mentioned financial indicators?*

*Finally, we summarise our conclusions concerning the most important liquidity features of the leading Hungarian dairy industrial companies. Comparative sector analyses on national or European level may fill a gap, because only a few professional papers have appeared in this subject. In our opinion, this kind of studies has outstanding importance in the field of applied economics, business economics and practical economic life as well; consequently, our results can be used by companies immediately.*

*Our analysis can be widened, and similar researches can be accomplished for different regions or different sectors. This study is also convenient for the international popularization of competitiveness analysis from financial point of view.*

*Keywords: competitiveness, financial analysis, liquidity, dairy industry, Hungary*

*JEL Classification Codes: M21, L66*

## **Introduction**

In our study we set the aim to analyse the competitiveness of leading companies in Hungarian dairy industry by liquidity. Choosing the dairy sector can be justified by its national economical importance, very strong market competition, and potential analytical curiosities.

Dairy sector is a part of food industry, and food industry belongs to processing industry, and processing industry is an important part of agricultural sector in a wider sense. Agricultural sector is also important in respect of the output, the gross domestic product and the employment. In the last two terms the processing–distributing–catering sectors represent more than 50%. Beyond its national economic proportion, food industry is an important sector on the basis of public expenses as well. In the last few years 20-25% of the total public expenses was spent on food and non-alcoholic beverages; moreover, the export proportion of agricultural and food industrial products is also significant, 6,0-6,5% (Kovács 2010: 466-478). Within the food industry the importance of milk processing and the economical characteristics of milk processing companies can be analysed as well. The concentration of dairy industrial companies is relatively high in comparison to the fact that there are many of them on the market. The bargaining power of processing companies is strong opposite to the manufacturers, and most of the companies aim to enlarge its revenues. The companies think that it is possible to enlarge their revenues merely through effective utilization of capacities, without mergers and acquisitions. Moreover, the companies make an effort to reduce their costs, and to enlarge the production of the products with higher processing stage. These Hungarian enterprises are backward in the field of innovation and investment willingness in comparison with their foreign competitors. One reason for this is, that the bigger companies entrust the product development not to the national subsidiary companies, and the smaller companies are not enough capital-intensive for the developments. The other reason is that there is no demand for new products of higher price, because the consumers are price-sensitive (Popp, Potori and Papp 2010: 81-91).

The degree of the concentration of the Hungarian dairy industry and the size of the competition on the market can be well demonstrated on the basis of our sample used in this study. According to the “Opten” company information database there are 147 companies in Hungary now, whose main activity is „producing dairy products”. Within the companies only 23 have more than 100 million HUF capital stock value, and only 15 companies (10% of the whole sample) have more than 250 million HUF capital stock. On the basis of the capital stock and the revenues in 2010 it can be stated that the total revenues of the previous 15 companies is 170 billion HUF, and the summarized revenues of the 5 leading companies according to the revenues exceed the 75% of the 170 million HUF. Consequently, the high market concentration can be considered as verified, and the analysis of the strong competition situation involved by the concentration is justified. The sample of our research is this group of 5 leading companies.

The economic crisis influences first of all the revenue, the profit and the liquidity through the decreasing demand. In this study we analyse the change of liquidity of selected 5 leading companies during the crisis, and determine which company has the strongest competitive position.

## **Literature review and research methodology**

The long term financial goal of all companies is the continuous increase of the firm’s value and the maximization of the shareholder’s wealth. The primary condition of it is a stable and sustainable liquidity. During the crisis, the continuous control of liquidity indicators is especially important in order to escape the bankruptcy situation (Brealey and Myers 2003: 24-27; Gitman 2002: 14-16).

The basic methodology of the individual and comparative analysis is the system of financial indicators (Damodaran 2002: 26-57; Bodie, Kane and Marcus 2002: 606-620). In this study, we

apply those names, financial contents and evaluation point of views of the financial ratios which are customary in international literature (Gitman 2002: 54-61).

Moreover, we emphasize the importance of Hungarian similar studies (Pitti 2010a: 2-23; Pitti 2010b: 29-44) and professional books which fit in with this subject (Katits 2002: 76-92; Bélyácz 2006: 60-68).

The following table demonstrates the companies involved in this analysis as well as their revenues, and the effects of the economic crisis on the change of the revenues.

**Table 1: The target group of the analysis (data in 1000 HUF)**

<b>Name of the company</b>	<b>Revenues 2008</b>	<b>Revenues 2009</b>	<b>Revenues 2010</b>	<b>Average revenues</b>
SoleMizo (SM)	43 144 733	37 849 216	37 247 841	39 413 930
Friesland (F)	36 499 660	28 930 657	29 416 093	31 615 470
Danone (D)	30 425 582	28 173 745	28 976 262	29 191 863
Tolnatej (T)	15 948 401	15 695 535	17 046 245	16 563 394
Köröstej (K)	40 487 619	12 083 687	15 527 873	22 699 726

Source: made by the author

Hereafter we enumerate the selected liquidity indicators involved into our analytical frame (Table 2). We also give reasons for choosing these ratios.

**Table 2: The analytic frame of the research**

<b>Financial indicators</b>	<b>Average values of 2008-2010</b>					<b>Values in 2010</b>				
	SM	F	D	T	K	SM	F	D	T	K
Quick ratio										
Debt-to-asset ratio										
Debt repayment strength (year)										
Cash cycle (day)										

Source: made by the author

Among the short term liquidity indicators based on balance sheet data we chose the quick ratio to eliminate the possible distortional effect of inventories. From the long term liquidity indicators based on balance sheet data we prefer the debt-to-asset ratio because the other capital structure indicators (debt-to-equity and total assets/equity) can be determined by using this rate. We define debt as the sum of short and long term liabilities.

After the static analysis concerning one date we change over to dynamic analysis based on cash flow statement concerning a period. Supposing that the current operating cash flow remains constant in the following years, the debt repayment strength expresses how many years are necessary for repayment of all liabilities (Katits 2002: 90); and its calculation is:  $1 / (\text{debt} / \text{operating cash flow})$ .

The cash conversion cycle refers to the fact that the firm needs financial sources to manage the time differences potentially occur in the logistical processes. Consequently, cash cycle indicates the period between the firm's operating cycle and turnover of accounts payable in days (Banomyong 2005: 30), and its calculation is:  $\text{inventory turnover in days} + \text{accounts receivable turnover in days} - \text{accounts payable turnover in days}$ .

On the basis of the accomplished calculations we create company orders according to the average values of 2008-2010, and to the values in 2010 as well. Based on company orders we formulate our conclusions concerning competitiveness.

### The results of the research

In this part, as a result of our research, we present the values calculated on the basis of annual report data concerning the years 2008, 2009, and 2010. On the basis of the values, we create company orders, and, according to these two viewpoints, we evaluate the competitiveness of companies within the sector.

**Table 3: The values of the selected ratios**

Financial indicators	Average values 2008-2010					Values in 2010				
	SM	F	D	T	K	SM	F	D	T	K
Quick ratio	0,97	2,65	0,55	2,87	0,98	0,67	2,44	0,62	2,7	1,1
Debt-to-asset ratio	0,78	0,69	0,68	0,20	0,57	0,87	0,89	0,73	0,22	0,56
Debt repayment strength (year)	16	31	7	2	NV	34	66	8	2	NV
Cash cycle (day)	-	-	-	-	-	26	35	17	34	49

Source: made by the author

We illustrate company orders with the help of tables. We listed the firms according to their average values for the period 2008-2010 and to the values in 2010, respectively (Tables 4 and 5). The numbers show the advance from the most favourable value (1) to the less favourable one (5) for every indicator. In the case of the quick ratio the bigger value refers to the better competitive position, i.e. bigger part of the short term liabilities (or even its multiple values) is covered by the value of the current assets reduced by the inventories. In the cases of debt-to-asset, debt repayment strength and cash conversion cycle the situation is reversed: the smaller values indicate the better competitive position, i.e. the smaller the indicator value, the better the liquidity status of the company.

**Table 4: The company orders for the period 2008-2010**

Financial indicators	company orders based on average values				
	1	2	3	4	5
Quick ratio	T	F	K	SM	D
Debt-to-asset ratio	T	K	D	F	SM
Debt repayment strength (year)	T	D	SM	F	K
Cash cycle (day)	↓	↓	↓	↓	↓

Source: made by the author

**Table 5: The company orders for the year 2010**

Financial indicators	company orders based on values in 2010				
	1	2	3	4	5
Quick ratio	T	F	K	SM	D
Debt-to-asset ratio	T	K	D	SM	F
Debt repayment strength (year)	T	D	SM	F	K
Cash cycle (day)	D	SM	T	F	K

Source: made by the author

By evaluating the change of company orders, an interesting characteristic can be noticed, namely, the company orders based on the average values for 2008-2010 as well as on the values in 2010 are almost the same. Evaluating the indicators separately, it can be stated that we can divide the companies into two groups according to their quick ratios: firms with acceptable and with less favourable (below 1,00) values. In the first group the values decrease (SM, F, T), while in the second group they increase (D, K), which can also be pointed out by the relation of the average values and the data in 2010. Quick ratio data of SoleMizo and Danone become to be critical in 2010.

The characteristic change for the 3 years time series of debt/total assets is the increase; the only exception is Kőröstej, which was able to decrease a bit this indicator. In the case of the three companies of the largest revenues the value is over 70%, which definitely indicates financing problems. In the case of SoleMizo and Friesland, beside the unfavourable capital structure, the increasing amount of loss also weakens their competitiveness.

Changes of debt repayment strength indicator show no tendency: there are big changes even within the companies in the period of 2008-2010. Tolnatej has favourable and stable values. Danone normalized the value of this indicator, and, in this way, compensated the unfavourable values based on balance sheet. In the case of SoleMizo and Friesland the values of this category, similarly to the former ones, are worse and worse, and the values in 2010 are critical. Concerning Kőröstej we applied 'NV' to sign that indicator has no financial content because the value would be -46 for 2010 due to the negative value of operating cash flow. Therefore, we did not calculate average value, because the negative operating cash flow itself indicates a very unfavourable liquidity position.

Because of the calculation method, we have cash conversion cycle data only for 2009 and 2010, therefore we did not estimate average values in this case, but we marked only the increase (↑) or the decrease (↓). Every enterprise decreased its cash cycle, which was a necessary requirement because of the general increase of debt-to-asset ratio. Regarding the cash cycle values in 2010 the firms show no large differences, although Danone and Kőröstej differ a bit from the mean of the sample, which is 32 days. In the case of Danone this value suggests that the firm makes the necessary efforts to improve its short term liquidity position.

## **Conclusions**

In our study we set the aim to analyse the competitiveness of the leading Hungarian dairy industrial companies based on liquidity indicators. We justified the industrial concentration and the strong competition, and accomplished the comparative analysis of the selected 5 companies based on internationally applied liquidity indicators, creating our analytical frame. On the basis of the orders created from the calculated values the following conclusion can be formulated:

- The liquidity position of Tolnatej (T) is the strongest among the 5 companies. Concerning the first three points of view it is market leader, and regarding the fourth one it has an average position.
- Danone (D) can be considered as the second company. This firm is able to compensate the unfavourable values of static indicators (quick ratio and high debt-to-asset ratio) with the better values of dynamic, consequently more important, parameters (debt repayment strength and cash cycle).
- The complex competitive position of SoleMizo (SM), Friesland (F) and Kőröstej (K) is weaker, which is even declined by continuous loss in the case of SM and F. In spite of its favourable values based on balance sheet, Kőröstej (K) is the last, because its cash cycle and its liquidity based on cash flow (because of the negative operating cash flow) is the most unfavourable among the examined firms.

- Based on the results of the competitiveness analysis by liquidity, it can be stated that neither the size of the revenues nor their changing tendency can be directly connected to the liquidity positions of the firms. According to their complex liquidity, the two companies of the biggest revenues have more unfavourable competitive positions than their competitors with smaller revenues.

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