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## The speciality of bankruptcy of Hungarian companies in food industry

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### Abstract

The number of bankruptcy of the enterprises has been increased extraordinary in the past few years in Hungary. Very important for all the members of the economics to monitor the forecast of the companies' bankruptcy, especially in the current financial crisis. We could find analysis in the literature which monitor mostly only the large companies, which operate on Stock Exchange. Those databases are relatively homogene and therefore could be more exact than the sector of the heterogen companies. In these Hungarian economic structure the number of the small enterprises are dominated, which means, they take the 90% of the companies of the market, with extensive activities. Considering the differences of the companies, - as we mentioned above - it could be very useful to make the analyses only for the selected sector. In this study we analyse the structure of Hungarian food companies and the development of the industrial structure of the enterprises. The main part of this study is to analyze the reasons of bankruptcy of the small food enterprises in Hungary.

The effectiveness and liquidity of the companies can be determined by the Annual Report. By analyze the data of the Annual Report we can conclude the financial, income and profit status. These analyses are not able to ensure the future data – because we analyze from the information of the previous year – anyhow if there was no any other information, than the company's future status can be estimated by the appropriately selected financial ratios. It has to be mentioned that the use of the financial ratios contains contradiction, because different sector of industries are not comparable. Therefore the financial ratios has to be construe globally with additional information of the company (Rate of return, competition, velocity, economic cycles). The main goal of this study is to analyse the financial index of the food companies which are taken from their Annual Reports, and by using particular indexes, to be able to find the significant indexes to separate the enterprises into solvent and insolvent companies.

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*Keywords:* bankruptcy; food industry; small enterprises analysis

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## 1. Introduction

Beyond its contribution to the GDP the national-economic significance of food processing includes the role that the sector plays in food security. Food processing is a very significant branch in Hungary because it is the main sales market of the agricultural production.

The majority of the food processing enterprises are small and medium-sized enterprises including micro and small enterprises with extremely low productivity as well as large companies determining supply. The latter have more significant equity ratio so their operation is less exposed to economic fluctuations. (Kotormán, 2002)

## 2. The result of food processing activity

Food processing enterprises operate with considerable debts combined with high interests and exchange rate losses; consequently the bottom line is typically in the red. The figure below shows that in 2008 the sector produced a negative result after tax. This can be attributed partly to the significant financial losses which exceeded 50 billion forints in that year. In 2009 and 2010 the sector had a profit that was similar to the previous years thanks to the decrease of the agricultural raw material prices on the one hand, and on the other hand to the decrease of the financial loss. Between 2010 and 2012 the price of agricultural raw material was growing considerably, which in turn had a negative effect on the taxed results of the enterprises. (Ministry of Rural Development 2012)



Fig. 1. Course of Taxed profit and Income from operations of industrie (2004-2012; data in Hungarian Forint)

Source: Own adjustment based on Ministry of Rural Development 2012

In the food industry the proportion of invested assets is below 50 percent, which is due to the large debt portfolio. The sector operates with high levels of indebtedness and with a barely appropriate ratio of own capital; this situation is similar in other sectors of the national economy too.

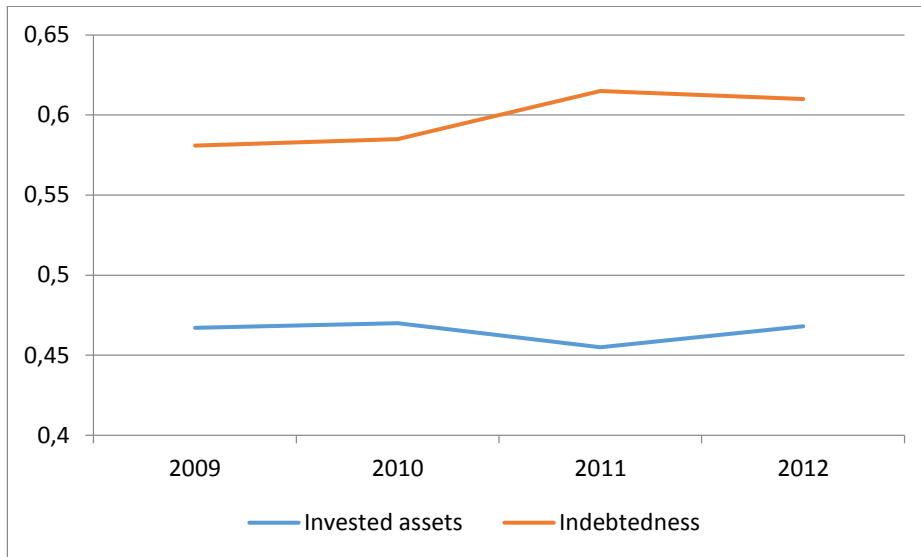


Fig. 2. Course of Invested assets and Indebtedness of industrie (2004-2012; data in Hungarian Forint)

Source: Own adjustment based on Ministry of Rural Development 2012

Overall, the level of indebtedness characteristic of partnership enterprises in the food industry is similar to the general national-economic average; however, there are significant variations across the branches. The indebtedness is very high in fish processing, oil manufacturing and malt manufacturing. These branches are characterised by a low number of enterprises, so the figures describing the sector might result from the unfavourable circumstances of particular enterprises. The lowest figures can be seen in sugar- tea- and coffee processing. Liquidity problems were characteristic mainly of meat processing, and bread and fresh bakery manufacturing, so the enterprises in administrative receivership include mainly enterprises of these branches. (Ministry of Rural Development 2012)

### 3. Comparison of the branches

The largest employers are meat processing, poultry processing, and bread and fresh bakery manufacturing; these three branches together account for nearly half of the food industry employment. In terms of the number of enterprises, one in three food industry enterprises is involved in bread and fresh bakery manufacturing whereas there are only a few enterprises dealing with margarine, malt or sugar manufacturing. It is to be noted though, that in terms of size, the latter enterprises are large enterprises, whereas those dealing with bread and fresh bakery manufacturing are typically micro-enterprises. The most typical forms of share capital origin are payments from abroad or from domestic private individuals, or partnership companies – all these account for 90-100 percent of all the share capital of all the branches. State capital played an important role until the end of the 1990s, but its proportion has been decreasing and at present the operation of food industry and its branches are greatly influenced by foreign capital. However, there is no share capital of foreign origin present in fruit wine production. (Ministry of Rural Development 2012)

### 4. Material and method

In our analysis, in addition to the SWOT analysis of the food industry enterprises we drew conclusions from the annual report data of 23 food industry enterprises regarding the question: which financial data tend to follow trends during bankruptcy. The enterprises included in the examination were selected from the Hungarian enterprise database.

We examined only those small enterprises\* of food industry under administrative receivership that have published annual reports of at least 6† complete financial years.

## 5. The SWOT analysis of the food industry enterprises

In order to understand the reasons leading to the bankruptcy of the food industry enterprises it is necessary to make a SWOT analysis of the enterprises of the branch.

Table 1. SWOT analysis

Strengths	Weaknesses
Central role of the domestic enterprises in food supply (food security)	Weak income generating ability of the sector
Central role of the enterprises as the market for agricultural raw materials (the largest market for agriculture)	Extremely low labour efficiency
High culture of food production	The domestic enterprises are often capital deficient, thus their risk taking ability is poor
Expanding exports	High level of indebtedness (especially in foreign currency), large financial loss
Ability to produce food products matching traditional, national tastes	Poor creditability
Well-known popular brands in Hungary and internationally in some particular branches (meat, milk)	Lack of provision creation resulting in unstable management, more exposure to bankruptcy
Higher educational background	Low level of vertical and horizontal cooperation and organisation among the players of the food chain
	Poor ability to enforce interests towards both raw material production and sales
	Management problems, lack of managerial skills
	Quantitative and qualitative lack of experts
	High proportion of black economy in the major branches
Opportunities	Threats
Favourable natural conditions for high quality and quantity of raw materials for the food industry	Insecurities of the global economy (e.g. unexpected fluctuations of fuel, raw material and food prices and exchange rates)
Favourable geographical location, proximity of solvent markets	Growing import pressure from the EU and global markets
Growing sales opportunities in neighbouring countries in terms of animal products	The exodus of some of the foreign capital producing high added value
Increasing consumer confidence towards traditional Hungarian food products	Decreasing, stagnating or just very slowly increasing domestic solvent demand
Supportive political environment in Europe and in Hungary for the development and innovation of small and medium-sized enterprises	The negative effects of the sales chains' (ab)use of consumer power
	Growing price pressure through the headway of discount retail chains and hypermarket applying discount retail elements

Source: Ministry of Rural Development, 2012

In this study we will focus more on the weaknesses and the threats as they are more likely to contribute to the bankruptcies characteristic in the sector. The weaknesses mainly include financial characteristics, so it is worth paying

\* net revenue or total assets under 10 million euros every year; employment numbers were unavailable thus they were ignored

† The operation lasted for at least 8 calendar years as the years of establishment and of insolvency proceedings resulted in broken years.

attention to the structure of capital and results in the operation of an enterprise with the help of analysing figures. In addition, management problems, inappropriate decisions and bad business politics might occur resulting in a sudden deterioration of the financial figures of the enterprise. It is very difficult to reveal the proportion of black economy and it is usually interpreted only at the level of national economy, nevertheless an enterprise cannot compete with a rival operating in a black economy with much lower costs.

It is the raw material prices and the operation costs that pose the most serious threats to the food industry enterprises as they are usually unpredictable and cannot be transferred to consumers. The slow growth of macroeconomic demand also has a negative effect on the sector; recessions make consumption shrink and the population becomes extremely price sensitive considerably limiting the success of enterprises.

Retail chains are a significant threat to Hungarian food industry enterprises on the one hand because they are able to put a strong pressure on their food producer suppliers and on the other hand by manufacturing their own bakery products in their sales units for price- and convenience sensitive consumers.

## 6. Hungarian insolvent food industry enterprises

In the analysis we examined the annual reports of 23 enterprises. All the enterprises dealt with the food industry and were operating for a minimum of 6 fiscal years between 2002 and 2012. By analysing the reports we aimed to find out which result, asset and resource categories tended to show a trend before bankruptcy. We used the reports from all 6 fiscal years preceding the bankruptcy.

As we have mentioned earlier, there were insolvency problems in the case of the bread, and fresh bakery, manufacturing branch so the enterprises under administrative receivership were typically from this branch - 10 from the examined 23 enterprises operate in the bakery branch. Currently there are 1300 enterprises in Hungary operating in the bakery branch and two thirds of them are in Hungarian ownership. There has been a significant increase recently in the number of Albanian bakeries whose cheaper products constitute a serious competition for the Hungarian firms (Hungarian Bakers Association, 2012).

Among the examined enterprises there are data from all Hungarian regions; the following figure shows the proportions of the examined enterprises by regions.

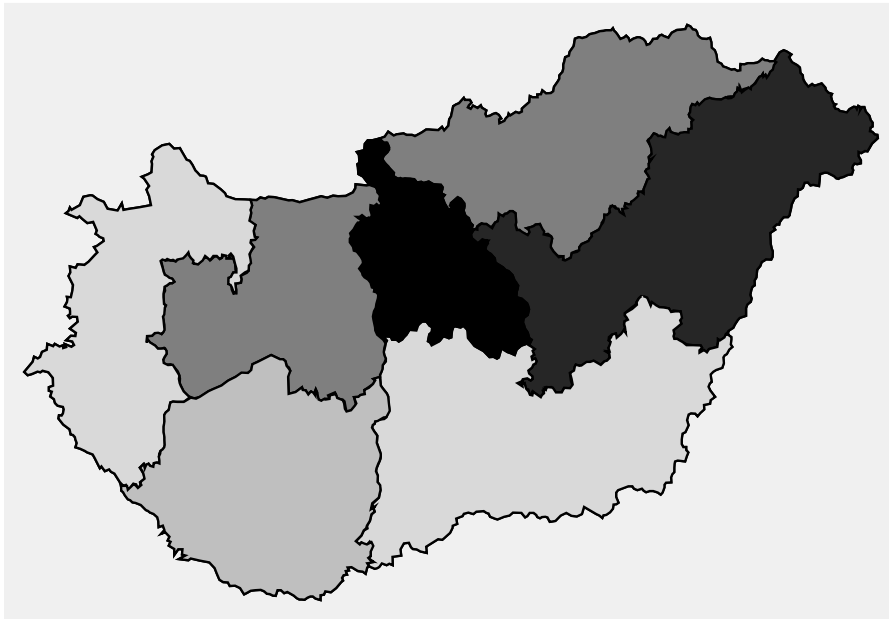


Fig. 3. The examined enterprises based on Hungarian Region (darker: more, lighter:less)

*Source: Own adjustment based on data of enterprises*

The food industry enterprises are all production plants, with the necessary fixed assets which are essential. The reports did not give a clear picture concerning the quality of the fixed assets of the enterprises; nevertheless the tendency shown in the yearly changes of the fixed assets could be examined. Looking at previous analyses the conclusion has been drawn that the decrease in an enterprise’s fixed assets bears a strong relationship with its efficiency. The figure below clearly shows that the enterprises tended to have lower and lower amounts of fixed assets as they neared bankruptcy.



Fig. 4. The quantity of fixed assets (data in Hungarian Forint)

Source: Own adjustment based on data of enterprises

A decrease in the value of the fixed assets certainly does not necessarily mean a real decrease in the assets, as due to the depreciation expressing deterioration the value of the fixed assets will decrease every year in the report even if there is no real asset decrease. In order to eliminate this it is worth examining the tendencies of ‘net investment’ (the asset changes calculated with the accounted depreciation of the given year)

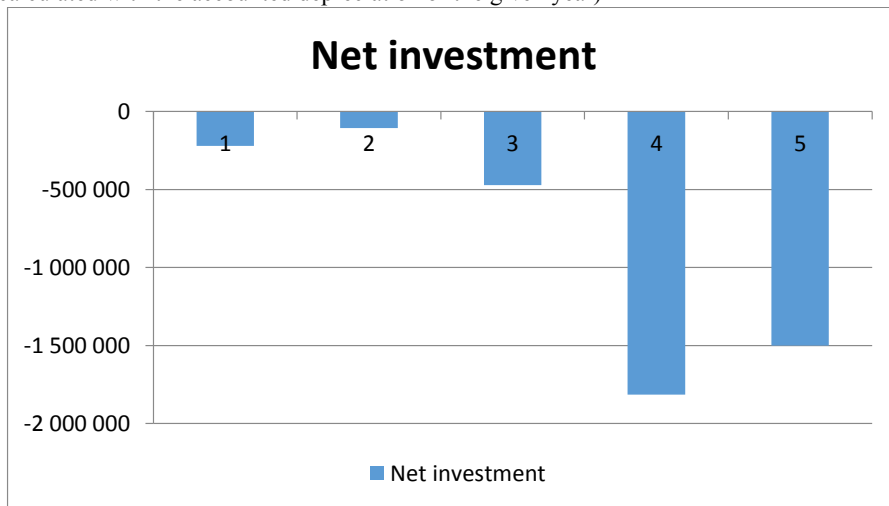


Fig. 5. The quantity of net investment (data in Hungarian Forint)

Source: Own adjustment based on data of enterprises

On the basis of the net investments of the examined 23 enterprises we can say that they were not expanding their assets during the 6 years prior to bankruptcy, and that the asset decrease became bigger the closer to the actual bankruptcy - this could be attributed to the fact that the assets were sold<sup>‡</sup>.

Current assets are significant in connection with production enterprises; this is why it is worth examining the tendencies of current assets too. The figure below shows how the accumulated current assets of the examined 23 enterprises, and within them the stock assets, changed during the last 6 years of their operation. It is clearly shown that there is a decreasing tendency approaching zero while the remaining part of the current assets is made up mainly of debt portfolio. As a result of the gradual decrease, the accumulated stock assets of 4000 billion forints in the first examined year decreased to only 170 million forints.

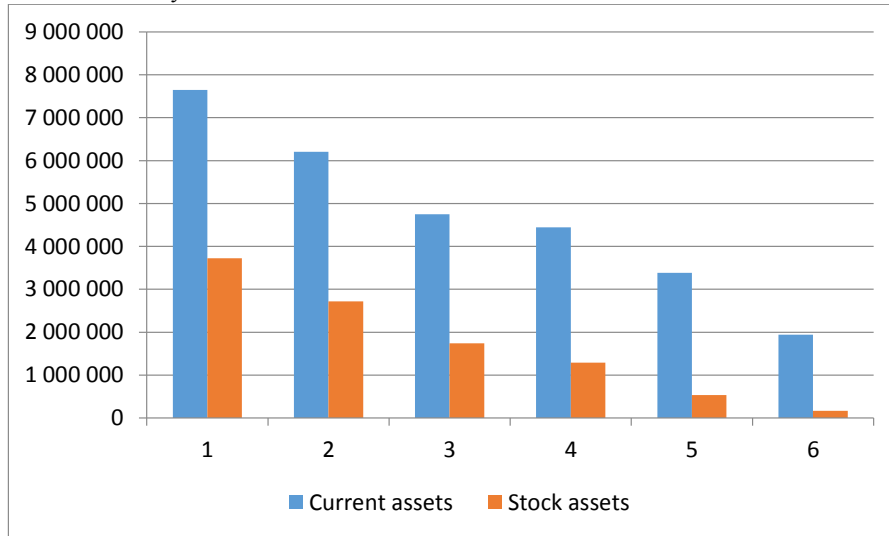


Fig. 6. The quantity of current assets and stock assets (data in Hungarian Forint)

Source: Own adjustment based on data of enterprises

The decrease of assets of the enterprise inevitably means a decrease in the total assets (balance sheet total) of the enterprise, which also results in its shrinking resources. In an economically stable situation this would mean a decrease of the outside resources (paying off loans and debts), however, in most enterprises this means an asset decrease resulting in the decrease of their share capital.

The following figure shows the composition of the resources in the examined enterprises. The gradual decrease in the balance sheet total means a decreasing tendency in the enterprise's assets. By examining the two elements of the latter one can see that it was the decreasing share capital (own resources), which influenced the process considerably as during the last 6 years of operation the outside resources were not changing significantly.

<sup>‡</sup> There were no revaluations of fixed assets in any of the enterprises.

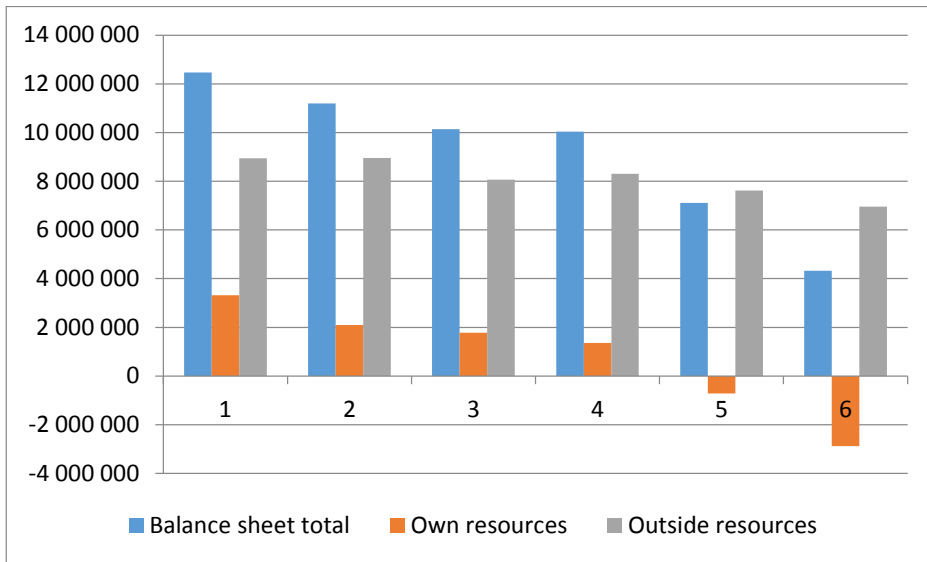


Fig. 7. The quantity of balance sheet total and own resources and outside resources (data in Hungarian Forint)

Source: Own adjustment based on data of enterprises

From the aspect of liquidity of the enterprises it is worth examining the relationship between the current assets and the short-term liabilities. Based on the accumulated figures of the 23 enterprises one can see that there were no serious liquidity problems 6 years prior to bankruptcy, though during the following years there was a decrease in current assets, and the decrease of the short-term liabilities was not as significant as necessary to make their proportion compared to each other optimal.

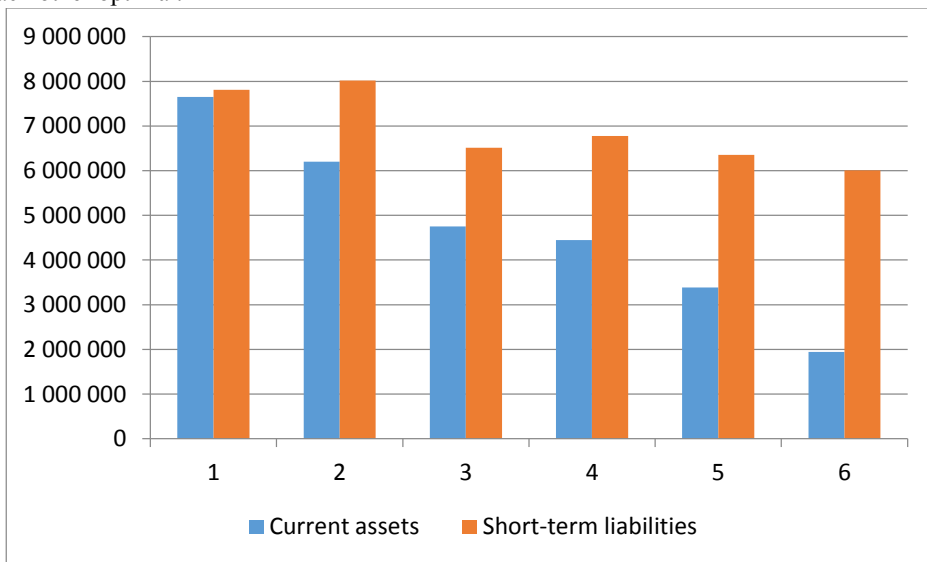


Fig. 8. The quantity of current assets and short-term liabilities (data in Hungarian Forint)

Source: Own adjustment based on data of enterprises



Examining the integrated indicators of the enterprises we can see that the revenue (net revenue) of the enterprises decreased significantly only in the last year before bankruptcy, which would refer to a basically balanced operation. However, we can see considerable decreases in income from operations.<sup>§</sup>



Fig. 9. The quantity of income from operations (data in Hungarian Forint)

Source: Own adjustment based on data of enterprises

The branch analyses also showed that the vast majority of the enterprises suffered serious financial losses in connection with large amounts of liabilities\*\* - this phenomenon was characteristic of the 23 examined enterprises. The figure below shows that 6 years before bankruptcy (in the first examined year) the taxed profit was positive in spite of the negative financial results, while, in contrast, in the 5<sup>th</sup> year before bankruptcy the operational income shows as negative as well; as a result the taxed profit was negative too. During the following examined years the majority of the examined enterprises suffered more and more serious losses in addition to the financial losses.

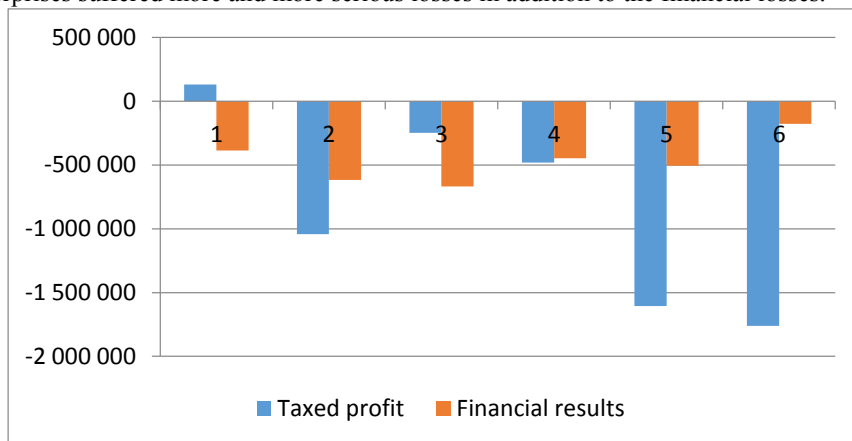


Fig. 10. The quantity of taxed profit and financial results (data in Hungarian Forint)

Source: Own adjustment based on data of enterprises

<sup>§</sup> Beyond the differences of the revenues and costs related to the activity of the enterprise it includes the difference between the sales of the fixed assets and investments.

\*\* interest liabilities and foreign currency liabilities

## 7. Conclusions

The article examines the situation of the food industry enterprises in Hungary and the features of their bankruptcy. The majority of the enterprises operating in this sector are small and medium-sized enterprises, among which micro- and small enterprises operate with extremely low performance. The success of the enterprises in the food industry sector is largely influenced by financial expenditures and material-type expenditures. The proportion of the invested assets is below 50 percent, which is due to the high level of debt portfolio. The capitalization of the industries is low, so their operation is greatly exposed to economic fluctuations. Liquidity problems are mostly a characteristic of the meat-processing branch, and the bread- and fresh bakery-manufacturing branch. There are extreme variations among the branches in terms of ownership structure; certain branches have 100 percent foreign capital (sugar manufacturing) while fruit wine production does not have any foreign capital.

Based on the SWOT analysis it was concluded that the unpredictability of the raw material prices and of the production costs are a serious threat, as these cannot be transferred to the consumers. In addition, the slow growth of the macroeconomic demand as well as the black economy, have a negative effect on the sector too. The retail chains are in the position to put strong pressure on their food industry suppliers, and possess their own bakery manufacturing set up in their sales units.

We examined the data of 23 bankrupt food industry enterprises regarding the period before the bankruptcy. We concluded that the 23 selected enterprises showed an asset and capital structure that is typical of the sector and that there were considerable financial expenditures. As for the value of the net investments we concluded that the enterprises were not expanding their assets in the 6<sup>th</sup> year before bankruptcy and that there were larger and larger decreases as they neared bankruptcy, which could be attributed to the sale of the assets. As the equities of the enterprises decreased, the assets decreased too, whereas the outside resources (liabilities) stagnated during the last 6 years of operation. There were no serious liquidity problems 6 years prior to bankruptcy but current assets decreased during the ensuing fiscal years, and the short-term liabilities did not decrease to the extent that their relationship could be optimal. Taxed results were positive in the first examined year (in spite of negative fiscal results), while in the 5<sup>th</sup> year before bankruptcy even the income from operations was negative, consequently, taxed results were negative too. During the following examined years the enterprises had more and more serious losses in addition to fiscal losses.

Based on the examined data we can conclude that the selected 23 food industry enterprises showed typical characteristics of the sector allowing for the process of bankruptcy to be observed. It is evident that several outside and inside factors affect the success of a particular enterprise, however due to these factors being unknown to the average economic actors judgement of a particular business partner's operation takes place on the basis of the published annual report. It is impossible to draw general conclusions based on annual reports that include insufficient information, however some conclusions can be drawn as to the possible threats. In the case of the examined food industry sector we can conclude that in addition to liquidity it is essential to expand assets. So, if our buyer cuts back on assets, it is worth paying more attention to our partner's operation.

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