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# Efficiency ratios in furniture industry in the face of the global economic crisis

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**Abstract:** Negative consequences of global economic crisis have been severe for most sectors of Polish economy. Tendencies on the world markets influence noticeably economic situation in export branches and furniture market is one of them. One of the more important elements of managing company's finances in times of crisis is upholding the efficiency of handling assets and liabilities. The article presents the analysis of average values of turnover indexes of: inventory, receivables and short-term liabilities of furniture companies compared to processing industry in the years 2007-2012.

Keywords: economic crisis, industrial processing, furniture industry, efficiency ratios

#### INTRODUCTION

Crisis is inextricably linked with market economy. Developing globalising processes, particularly of financial markets, change the character of crisis events. The growing interdependence of different markets leads to the spread of economic problems, from country to country [Kaszuba-Perz, Perz 2010].

In Poland for many years payment reliability has been deteriorating and the delay in settling invoices becomes the primary cause of loss of liquidity. Today, according to the report by BIG, 75% of invoices are not paid at the time of expiration. Poland is one of three EU countries (followed by Spain and Portugal), where the greatest number of companies are in arrears with their invoice payment (over 120 days). One of the more important indexes informing about financial condition of a company is receivables turnover ratio, as well as other ratios that illustrate the efficiency of management in times of crisis in Poland. According to the opinions presented in literature on the subject of company finances, turnover "designates movement of assets, which is the pace with which they change their character" [Ostaszewski 2008].

#### OBJECTIVE AND RESEARCH METHODOLOGY

The primary research objective was to designate changes tendencies in the field of management of current assets and short-term liabilities in result of crisis events that have taken place in world economy over the last few years. Average values of chosen indexes for furniture enterprises have been analysed. The primary source of research material were reports obtained from data base by PONT INFO for the years 2007-2012. The reports cover annual data on average values of financial ratios that were drawn up for a group of companies singled out according to Polish Classification of Economic Activities (*Polska Klasyfikacja Działalności, PKD*).

In the analysed subjects three groups of companies have been singled out. The division criterion was the level of employment:

- group I- enterprises employing from 10 to 49 people,
- group II enterprises employing from 50 to 249 people,
- group III- enterprises employing more than 249 people.

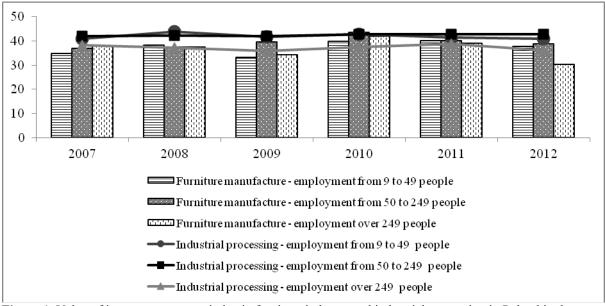
In the paper results of comparative research have been presented covering average profitability indexes obtained for furniture companies (section 31.0 of Polish Classification of Economic Activities – "Furniture manufacture") compared with the results for C section companies – "Industrial processing", which comprises among others furniture industry.

## RESEARCH FINDINGS

The analysis of economic activity index allows for the determination of the pace of turnover of particular assets and short-term liabilities and makes it possible to identify symptoms of financial threat. In this respect in ratio analysis attention should be paid to the relation between the inventory, receivables and short-term liabilities turnover.

Considerable extension of the period of dead assets kept in stock and the consequent fall in consecutive years in turnover in this category of current assets is a negative phenomenon (if it does not result from planned increase in the sales) since it may designate the accumulation of inventory that is difficult to sell or that is even redundant.

In furniture industry the average period of inventory turnover in 2007 was usually shorter than the index for small and medium enterprises operating in processing industry (figure 1). It referred to furniture companies regardless of their level of employment. It follows that dead assets were in stock for a shorter time than in processing industry companies altogether. The greatest fluctuations of the inventory turnover index were noted in large furniture plants employing over 249 people. In the years 2007-2012 the period of turnover for the least liquid component of current assets decreased from 38 to 31 days. In the remaining groups of companies furniture industry presented different tendencies. The value of the inventory turnover index increased from 35 to 38 days in plants employing from 10 to 249 people and from 38 to 39 days in medium facilities as regards employment.



**Figure 1**. Value of inventory turnover index in furniture industry and industrial processing in Poland in the years 2007-2012 [days].

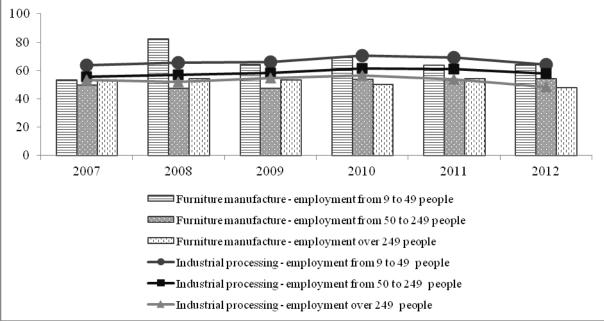
Source: compiled on the basis of data obtained from reports by PONT INFO covering the years 2007-2012.

Another important element in assessment of management efficiency is short-term receivables turnover index. The prolonging period of debt collection in consecutive periods may mean, on the one hand, that a company with a view to winning new customers provides them with the most convenient terms of payment, granting commercial credit, on the other hand, however, it may signal problems with debt collection and creation of bad debt [Black, Wright, Bachman 2000]. Both an unjustified and considerable increase in the level of short-c

term liabilities is a particularly worrying phenomenon especially when an average period of receivables inflow is longer than the day of payment of the incurred short-term liabilities. It means then that a company credits its customers but it is not credited by its suppliers. Considerable delays in receivables inflow may lead to financial difficulties and consequently cause a risk of insolvency. In order to make the evaluation of the turnover indexes reliable and objective knowledge about external factors influencing the competitive position and bargaining power both in suppliers and customers is essential as companies are often forced to accept terms imposed by their trading partners [Nowak 1998].

Over the analysed period in industrial companies little fluctuations in the value of the receivables turnover index in days were noted (figure 2). Its highest level was observed in subjects employing from 10 to 49 people, and the lowest in companies with employment over 249 people. In 2012 the period of short-term receivables inflow was at the level of: 65 days (group I), 58 days (group II) and 49 days (group III).

At the beginning of the analysed period average values of the receivables turnover index were similar for furniture companies regardless of the level of employment. A year later the period of receivables inflow was significantly prolonged in companies employing from 10 to 49 people. In consecutive years the situation stabilized, however, in the year 2012 the receivable turnover index increased from 54 to 65 days as compared to the year 2007. In the group of medium companies the period of receivables inflow was extended by 5 days. And in companies with the highest level of employment a different tendency was observed – short-term receivables were settled 5 days sooner than in the year 2007. It can be treated as a favourable situation.



**Figure 2.** Value of short-term receivables turnover index in furniture industry and industrial processing in Poland in the years 2007-2012 [days].

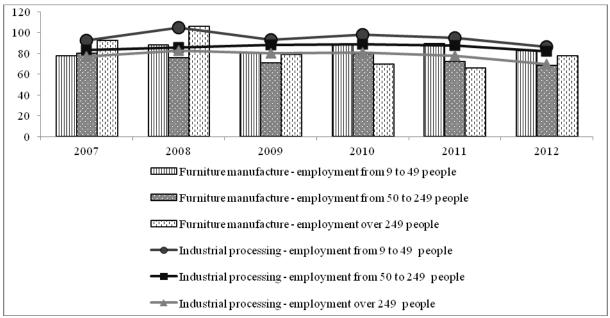
Source: compiled on the basis of data obtained from reports by POINT INFO covering the years 2007-2012.

An important element in assessment of management efficiency in times of crisis is tendencies of changes analysis of liabilities turnover index that identifies the period of active debt repayment of a company.

In 2007 in industrial processing an average short-term liabilities turnover index was the highest in companies employing from 10 to 49 people and amounted to the level of 92.31, which designates that an average period of less-than-a-year debt repayment was more than 3

months (figure 3). The lowest level of the index in question was noted in companies with the highest level of employment. Similar tendencies as regards liabilities turnover index were observed in the whole period. In 2012 in processing industry its value amounted to the levels respectively: 87 days (group I), 83 days (group II) and 70 days (group III).

At the beginning of the analysed period the highest average value of short-term liabilities turnover index was noted in furniture facilities employing more than 249 people – 93 days. Similar period of liabilities payment was observed in large companies operating in processing industry altogether. The lowest level of the index in question was noted in companies employing between 10 and 49 people (78 days). Over the analysed period an increase in the value of this index took place in furniture companies from group I, and in facilities employing from 50 to 249 people as well as in enterprises with more than 249 workers the period of short-term liabilities payment was shorter, which may be treated as a positive phenomenon.



**Figure 3.** Value of short-term liabilities turnover index in furniture industry and industrial processing in Poland in the years 2007-2012 [days].

Source: compiled on the basis of data obtained from reports by POINT INFO covering the years 2007-2012.

## **CONCLUSION**

Global economic crisis has had a negative influence on the financial condition of most companies. It particularly refers to industries that are strongly connected with exports and imports. Hence an important task of the management personnel in the face of crisis events is to ensure proper management efficiency of property and capital components.

In furniture industry in small and medium furniture facilities as regards employment the period of freezing financial means in stock was extended. In the years 2007-2012 average index of inventory turnover increased from 35 to 38 days in group I and from 38 to 39 days in group II. Its highest values were observed in the years 2010-2011. Regardless of the level of employment it amounted to about 40 days. Only in facilities employing more than 249 people a fall in an average period of inventory turnover was noted from 38 to 31 days, which can be treated as a positive phenomenon.

In the group of furniture facilities employing from 50 to 249 people the period of receivables inflow was extended by 5 days. However, in companies with the highest level of

employment short-term receivables were settled on average five days sooner than in 2007. The situation may be treated as a positive phenomenon.

It needs to be noted that from the point of view of managing property and capital components it is important to compare receivables turnover index and short-term liabilities turnover index. In all analysed groups of companies the period of liabilities payment was longer than the time of receivable inflow, which is a positive phenomenon. It means that furniture facilities were longer credited by their contractors than they credited themselves. Still, over the analysed period the discrepancy between the values of the indexes decreased in all groups of companies. In medium and large companies as regards employment the difference decreased by 16 days in group II and 10 days in group III respectively.

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**Streszczenie:** Wskaźniki sprawności działania przedsiębiorstw branży meblarskiej a globalny kryzys gospodarczy. Negatywne konsekwencje globalnego kryzysu gospodarczego odczuło dotkliwie większość sektorów polskiej gospodarki. Tendencje na rynkach światowych mają wyraźny wpływ na koniunkturę w branżach eksportowych, a do takich należy rynek meblarski. Jednym z ważniejszych elementem zarządzania finansami przedsiębiorstwa w warunkach kryzysu jest zachowanie sprawności gospodarowania składnikami aktywów i pasywów. W artykule zaprezentowano analizę średnich wartości wskaźników rotacji: zapasów, należności i zobowiązań krótkoterminowych przedsiębiorstw branży meblarskiej na tle przemysłu przetwórczego w latach 2007-2012.

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