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BENCHMARKINGPOLISH BASIC METAL MANUFACTURING COMPANIES

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Basic metal manufacturing companies are undergoing substantial strategic changes resulting from global changes in demand. During such periods managers should closely monitor and benchmark the financial results of companies operating in their section. Proper and timely identification of the consequences of changes in these areas may be crucial as managers seek to exploit opportunities and avoid threats. The paper examines changes in financial ratios of basic metal manufacturing companies operating in Poland in the period 2006-2011.

Key words: metal enterprises, finance, manufacturing, Poland

INTRODUCTION

The U.S. sub-prime crisis followed by a global financial crisis and consequently by the Euro zone crisis, increased the awareness of uncertainty and risk in managerial decisions. Shifting demand and changing prices of raw materials and energy pose challenges for all producers. Companies operating in mature, commoditized markets are particularly affected during crisis as low profit margins force decisions related to survival rather than growth. Volatile financial markets are placing a high premium on risk, so factors such as strong balance sheet and profitability gain in importance. All of these factors are relative and should be compared to branch and sector data. This economic downturn has been a painful lesson for many businesses and industries. Forecasted growth in demand and stable access to financing was the key to many business decisions. Based on these assumptions many companies have made over-optimistic investment decisions that will hamper their growth for years. The long awaited recovery is slow and seems to indicate that future economic environment will be different to the one before the crisis.

Managers should establish information flows enabling benchmarking and conduct continuous analysis of branch, sector and competition with regards to balance sheet structure and profitability. KPMG survey results indicate that the industry is undergoing substantial strategic changes. According to Lakshmi N Mittal (chairman and CEO of ArcelorMittal) volatile economic environment, requires that businesses have a clear strategy, underpinned by a set of core strengths. For ArcelorMittal these strengths are: quality core assets, ability to make cost reductions, market leading automotive steel, world class mining business and a stronger balance sheet [1]. It is interesting to note that two of these strengths are financial and refer to profitability and financial standing rather than creating value for the shareholder.

The contribution of this paper is to document a new set of facts that during the recent economic crisis vast changes in profitability and sales volume of basic metal manufacturing companies encouraged decisions to change their financing structure. This creates growing evidence of link between investment and financing decisions during economic downturn and enhances the importance financial analysis in crafting of business strategies.

DATA DESCRIPTION

Dataset is based on survey data published by the Polish Central Statistical Office (GUS). The survey covers economic entities with 10 and more people employed. Manufacturing refers to NACE section D. Manufacture of basic metals refers to NACE section D code 27 (Table 1). Dataset has been limited to include the period 2006-2011 in order to emphasize (rather than dilute) the effects of the current economic crisis.

Table 1 **Number of entities covered by the dataset**

	Number of entities		
Year	Total	Group D	Code 27
2011	54 189	14 802	272
2010	53 220	14 637	256
2009	53 847	15 030	263
2008	53 148	15 785	276
2007	48 165	15 354	267
2006	47 048	15 103	259

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RESULTS AND DISCUSSION

The impact of the crisis on basic metal manufacturers in Poland was substantial (Figure 1). Decrease in revenues caused a substantial drop in asset turnover and profitability (measured in relation to revenues - ROS). The number of entities has dropped from 276 in 2008 to 256 in 2010 and recovered to 272 in 2011. Changes exceeded those observed in manufacturing companies and total companies. Assessment of changes in the industry follows the methodology based upon the standard du Pont Model [2].

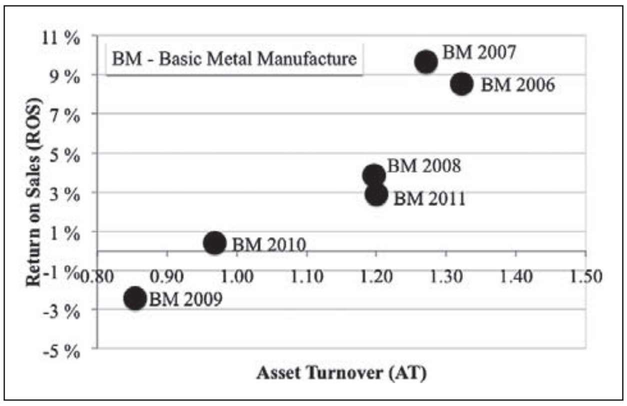

Figure 1 Return on Sales (ROS) and Asset Turnover (AT) in Polish companies 2006-2011

Comparably weak profitability and asset turnover confirm the need for continuous analysis of financial standing. Losses incurred in 2009 and feeble performance in 2010 weakened the branch position on financial markets. Basic metal manufacturers decreased the share of debt financing, measured by capital multiplier (Figure 2). Changes of financing structure are even more visible than in profitability and asset turnover. What's more, these changes result from management decisions and cannot be attributed to falling revenues during the economic crisis. By decreasing the capital multiplier, while return on sales and asset turnover were falling, managers enhanced the drop in return on equity. The scope of changes in the structure of financing in basic metal manufacturers provokes questions related to financing structure decisions during economic downturns.

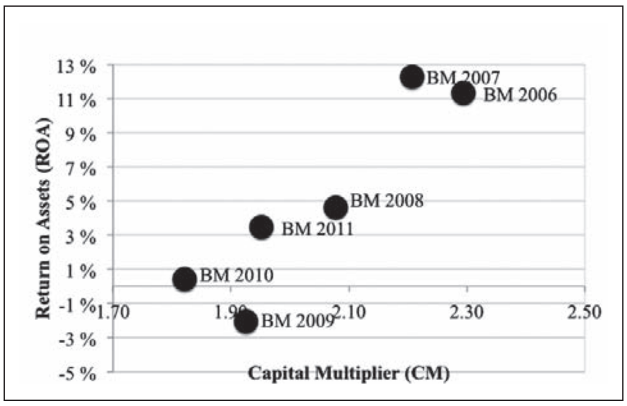

Figure 2 Return on Assets (ROA) and Capital Multiplier (CM) in Polish companies 2006-2011

Investment and financing decisions, in theory, can be viewed independently. Referring to fundamental theory, Modigliani and Miller (1985) stated in their theorem, that the choice between debt and equity does not affect the value of a firm or its cost of capital [3]. Taking into consideration, that the financial crisis violated theorem's assumptions related to asymmetric information, efficient markets and cost of borrowing, financing decisions became important in assessing firm's value. Cost of financing and access to capital may be influenced by the structure of financing. Myers and Majluf (1984) model, presented in their seminal paper, implies that, due to information asymmetry, firms will prefer internal financing and debt to equity if they need external funds [4]. Myers and Majluf refer to investment opportunities. During an economic downturn, decisions may focus on securing the continuity of operations rather then identifying and exploiting new investment opportunities. Essentially retaining profits, decreasing receivables and inventories and reducing (or delaying) investments, aim at improving internally generated cash flow. These activities increase the share of equity in financing (either by increasing equity or by decreasing liabilities).

It is essential to understand that financial theory doesn't become inapplicable during financial crises. We should rather accept that the assumptions to some models are temporarily violated and conclusions should be restated. Assuming that financing structure matters and should be compared to investments, managers should revert to traditional financial ratios and benchmark their financing structure.

The share of current assets in total assets in basic metal manufacturers has decreased in 2009 (Figure 3). Companies decreased inventories and receivables following the drop in revenues, net loss decreased cash positions and equity, increasing the share of fixed assets in total assets. In the period 2006-2008 the share of fixed assets in total assets was comparable to the share of equity in financing. Losses incurred in 2009 have changed this relation. In 2010 companies continued to increase the share of equity in their financing while deferring capital investments (purchases of new fixed assets).

Since continuity of business operations is growing in importance changes in asset structure should also be addressed. Internally generated cash flow has to be allocated. In theory, corporations (separate business entities) should not accumulate cash. Interest rates on deposits and returns on short-term financial investments are lower than expected by investors. In other words rational investors will expect the management to invest available resources in their operating activity. Some cash is necessary to maintain liquidity (ability to pay amounts due in time) but any remaining amounts should be paid out to investors.

The structure of current assets indicates that since 2008 companies are accumulating cash (the share of cash in total assets has increased from 3,3 % in 2006 to

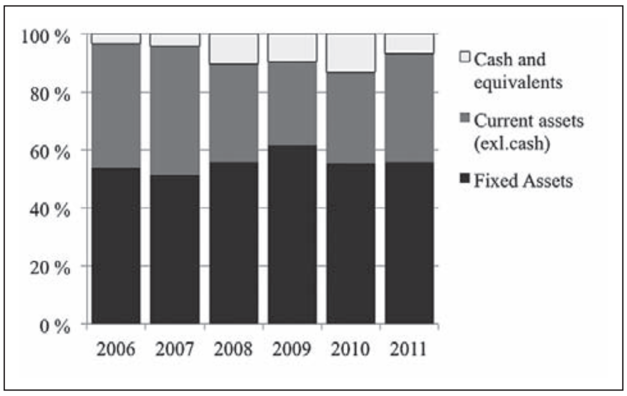

Figure 3 Asset structure of basic metal manufacturers in Poland 2006-2011

13 % in 2010). In nominal terms the total amount of cash held by basic metal manufacturers has grown five-fold during that period. This can be explained by lack of trust in financial institutions. Companies accumulated cash to secure against events that would force them to repay bank loans. In 2011 the share of cash in total assets dropped to 6,5 %.

Basic metals producers in Poland (and many other countries) are to a large extent consolidated. Financial results of individual large business entities may have a significant impact on branch data and results. Further analysis including data and ratios of individual companies can provide additional information that can be used in assessment and forecasting of competitive changes within the branch (based on strengths and weaknesses of individual competitors). [5, 6]

The paper focuses on the analysis of asset and financing structure it is however essential to remember that this is a part of broader financial analysis. Current economic downturn and decreasing sales stipulated changes in costs. Most manufacturers scaled down production and even closed facilities. Capacity planning [7] and detailed analysis of cost structure and its benchmarking remains vital and should accompany broader benchmarking initiatives. Due to accounting principles some initiatives may not be recorded as assets. Improvements in production processes and changes in distribution channels can create a significant competitive advantage. Their effect may however be initially overlooked by competitors as increasing revenues are attributed to market revival.

CONCLUSIONS

Vast changes in financial standing of basic metal manufacturers indicate that managers should gather and carefully analyze financial data of competitors to benchmark their performance and position. The effects of the crisis upon companies in this branch have been far bigger than in the case of all manufacturing companies or all businesses in Poland. Falling profitability and asset turnover in 2009 and 2010 has forced the companies to change the structure of financing and increase cash holding. These results are also interesting for researchers as factors inducing management decisions in prolonged economic downturn conditions are to a large degree unknown. It is difficult to talk about rationality and forming theories, as equilibrium and timing are difficult to forecast during the crisis.

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Note: The responsible translator for English language is M. Flis, Lodz University of Technology, Poland