

## CHANGES OF ACTION STRATEGIES IN METALLURGICAL ENTERPRISES IN TIME OF ECONOMIC CRISIS

Received – Prispjelo: 2012-10-10  
Accepted – Prihvaćeno: 2013-02-20  
Review Paper – Pregledni rad

The topic of the article is the change in action strategy of metallurgical enterprises in time of economic slowdown. The first part of article presents results of literature analyses, opinions of scientists concerning changes in behaviours of enterprises in time of bad conjuncture. In next part of the article the author concentrates on verification of argument concerning the changes in action strategies of enterprises in Polish metallurgical sector. Shown examples of changes are confronted with literature studies presented in the first part of the article.

*Key words:* metallurgical enterprise, economic crisis, strategies, changes

### INTRODUCTION

In market economy, over a long period of time, periodical changes in level of business activity occur and are called phases of conjuncture cycle. In handbooks concerning economy there are four stages mentioned: crisis, depression, growth and boom. During observation of changes occurring in economy of various countries it was assumed that after year 2008 most of them entered the phase of crisis. Generally speaking, crisis should be understood as maladjustment of company development to appearing market conditions. It has strategic dimension and is a result of disturbance in relations of enterprise with the market. The reasons of world crisis may be found on the American financial market. Decrease of prices of real estates in the USA dated from July 2007 caused a slump in mortgage credit market in that country. As a result of this, a global collapse on world stock exchanges occurred. Visible decrease of stock market indices was noted down in September 2008. It implied the decrease on economic dimensions characteristic for the phase of crisis. On many markets a drastic decrease of demand on the manufactured products occurred. Difficult situation did not exclude the metallurgical market. Economic slowdown resulted in decrease of the demand on steel and metallurgical products. Particular sectors limited the use of steel. In the light of scientific research it is assumed that enterprises in conditions of market economy, which cannot exist without elements such as phases of slump and boom, should secure their businesses in case of significant economic crisis. The conduction of direct research was aimed at finding out if metallurgical enterprises succeeded in verifying the action strategy and how they manage in new reality. It should be underlined that for

metallurgical enterprises in Poland, as well as in other countries of market transformation, crisis was a new experience with which they were to face in conditions of market economy.

### BEHAVIOURS OF ENTERPRISES IN TIME OF ECONOMIC CRISIS

Strategy as flexible approach of enterprises to possibilities and challenges of market economy allows for adjustment of aims of enterprises to new conditions of functioning (dynamics of the surrounding) [1]. A universal strategic aim of enterprises in phase of crisis is to regain and/or maintain the competitive advantage. Improvement of economic and financial situation of enterprises takes place through implication of various saving programs [2]. Enterprises in conditions of economic crisis adopt a strategy of survival on the market based on cutting the costs. They also limit the market activity offering products on the level of minimum operational value (basic products), the stop investments, reduce employment, get rid of supplies, often turn off unnecessary production lines, verify programs of paying dividends and withdrawal of shares and undertake a number of other saving activities [3]. Range of actions taking place is very broad. In general, it is assumed that such actions are those which are based on rational cuts in costs and raising the efficiency [4]. A lot was written about reduction of costs and increase in efficiency, i.e. by B. Mascarenhas and D.A. Aaker [5], and H. Simon [6]. The author of this publication would like to draw attention to the word “rational”, meaning thought over, calculated, analysed from the point of view of various possibilities (multitude of options). Spontaneous actions can bring losses to the company when economy starts to go out from crisis. Additionally, the author wishes to underline that the notion of efficiency should be under-

Bożena Gajdik, The Silesian University of Technology, Faculty of Materials Science and Metallurgy, Katowice, Poland

stood very broadly, not only as relation between achieved effects and expenditures, but also as effectiveness of actions (reaching the set goals), performance of actions (without unnecessary waste of resources), productivity, reliability of functioning (TPM), provision of product quality (accordance with norms and customer specification) and many other conditions which prove the efficiency of functioning in a company. Time horizon of verified strategic actions is conditioned by the depth of crisis effects. The rate of drop of economical indicators is different in each enterprise. New strategic plans may last even for a few years. Enterprises must monitor the results of crisis and on the basis of achieved information (dynamics of phenomena) work out counter-measures in form of correction activities which build strategy of cost reduction and increase of efficiency. It should be underlined, however, that when in times of market boom the companies have a sufficient amount of time to implement the accepted action strategy than in situation of severe crisis the time is often limited (some decisions must be made quickly, not to allow for insolvency of the enterprise). In strategic planning the following aspects should be included: decrease of demand for products coming from customers, increase in prices of raw materials, high credit interest rate, decrease of profits in an enterprise. In decision making process, a centralisation of authorisation is implemented and new decision standards are defined (assumptions of saving programs are decided upon on the highest level of managerial staff). The whole process of strategy implementation is monitored in order to check the achieved effects and born costs. In crisis an increased control is necessary of all the conducted activities in reference to savings made. Enterprises are trying to save all possible cash. Programs implemented in enterprises are based on rationalisation of functioning in possibly low-cost or no-cost way. Managerial staff, in times of crisis, must take up various actions, sometimes even those which raise objections from workers such as group termination of employment which may enable the company to get out of crisis. Group dismissals are consulted with trade unions and the workers get severance pay. It is quite expensive repair action. Dismissals which were not thought over may cause that the best workers would find employment in competitive companies. Hasty dismissals may cause a rapid drop in intellectual capital of the company. Management of an enterprise in conditions of crisis should always be treated individually. Each company has specific set of elements and resources which are versatile in certain ways. Symptoms of threats transformation into crisis in microeconomic scale are specifics of each enterprise treated separately [7].

### ACTION STRATEGIES IN METALLURGICAL ENTERPRISES IN TIMES OF CRISIS

Economic recession has influenced most sectors of economy in many countries, and metallurgical sectors

as well. Bad conjuncture forced the metallurgical enterprises to introduce changes in their previous development strategies. As statistic data shows, in year 2008 world production of steel dropped by about 1 % and in European Union dropped on average, in comparison to previous year, by about 4 %. World and European use of steel in 2008 was lower by about 3 – 4 %. Production of steel in Poland was 8 % smaller in 2008 in comparison to 2007. In 2008, 9,8 million tonnes of steel was produced, and in 2007 it was 10,7 million tonnes. In 2009, in the world, 1 239,5 million tonnes of steel was produced and in comparison to previous year it was less by 87 million tonnes. In Poland, 7,1 million tonnes of steel was produced and that was the lowest production size recorded after system transformation. Decrease in production was the reaction of steelworks to drop in demand from industries such as: automotive, machine, construction and producers of home appliances industries (drop in orders by 40-60 % in reference to a year average). The situation of demand stoppage on steel products was followed by drop in prices of final products. In 2010 the demand on steel in Europe was about 75 % of the conditions before crisis. In the world, 1 413 million tonnes of steel was produced. In Poland it was 8 million tonnes and it was 0,9 million tonnes more than in the previous year. In 2011 Polish metallurgical industry used 68 % of production capacity. Production of steel in Poland was 8,8 million tonnes. It increased in comparison to a year before by 0,8 million tonnes. In the world an increase was also observed by 77 million tonnes (Figure 1) [8]. On the basis of statistic data analysis it can be assumed that the worst year for metallurgical industry was year 2009. At present, experts predict a “second wave of crisis” which is supposed to be stronger in 2013. In 2009 apparent consumption (production + import - export) dropped in Europe by 30 %. In Poland the apparent consumption in 2008 was 11,4 million tonnes and was lower by 5,4 % in reference to 2007. In 2009 the apparent consumption of finished steel products was 8 million tonnes and was lower by 30 % in reference to 2008 [8].

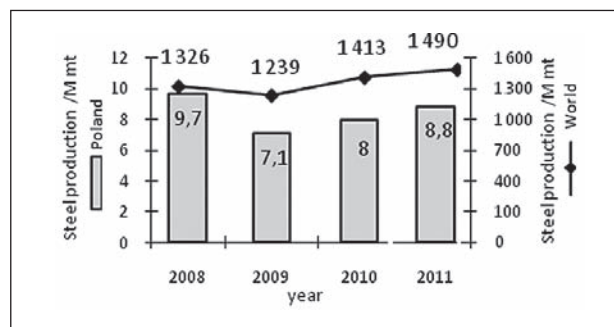
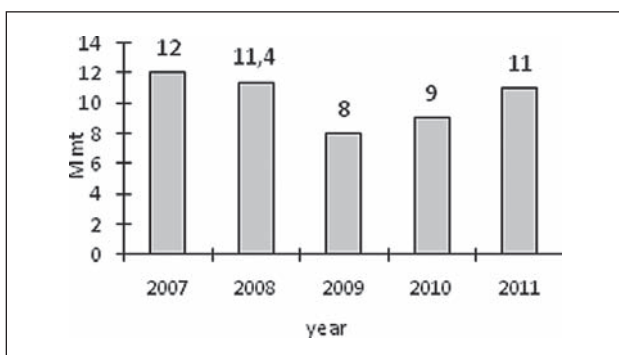


Figure 1 Steel production in times of crisis [8]

In 2009 metallurgical industry in Poland was one of the industries most badly affected by crisis. Economic and financial performance of steel industry was affected by the above-mentioned factors. Total revenues were

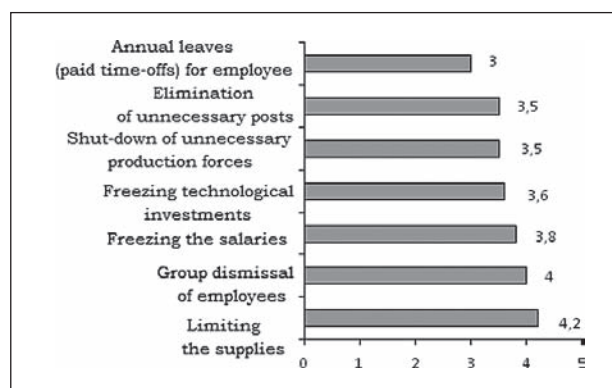
lower by 43 % against 2008 and amounted to PLN 18,8 bn. Net income was negative and amounted to PLN -0,82 bn., net profitability ratio was also negative (-4,4 %). In 2010 the apparent consumption was 9,8 million tonnes and was higher by 20 % in reference to 2009. Good situation was also in 2011, the apparent consumption in Poland was above 11 million tonnes [8] (Figure 2).



**Figure 2** Apparent consumption of finished steel products in Poland [8]

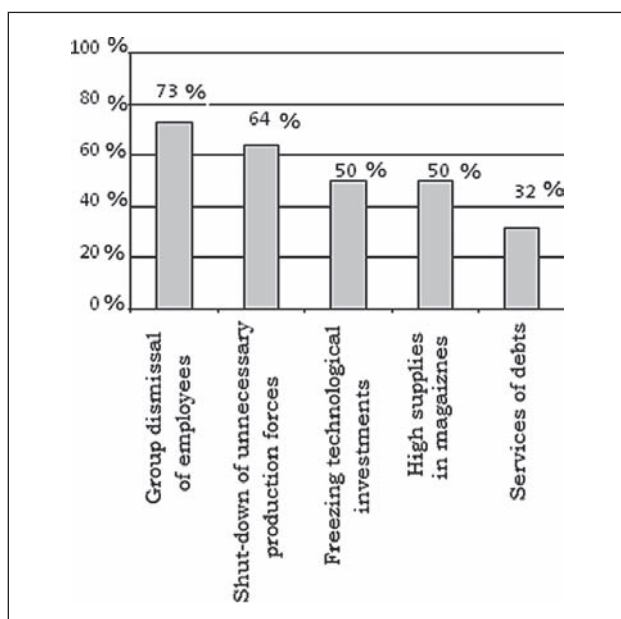
The biggest steelworks in Poland in the end of 2008 started to verify their action strategies. In ArcelorMittal Poland enterprise production of steel was reduced (drop by about 14 %). Since October 2008 two blast-furnaces were shut down (temporary switch-off), and the remaining two worked in turns. Period of breaks in production were introduced and the minimum level of production was estimated in each production section. The enterprise used only 50 % of their production capacity at that time. ArcelorMittal Poland corrected its investment plans. Some of planned undertakings were frozen, other were continued. The investments which were carried out were mainly those which aimed at limiting the energy consumption, meeting the stricter regulations of environmental protection and those connected with introduction of new types of steel on the market (agreements with contractors). During the crisis in ArcelorMittal Poland 1 000 workers were dismissed. In period of crisis more than 4 700 workers were dismissed from metallurgical sector in Poland. In 2008 there were 29 443 employees in metallurgical enterprises in Poland, in time of crisis increase (2009) only 24 657 workers kept their jobs. Dismissed workers got severance pays (the amount of severance pays was between 60 thousand and 90 thousand Polish zloty) [8]. In their analysis of activities the enterprises concentrated on risk management, exposing internal control of efficiency and being successful in actions. In ArcelorMittal Poland specialised teams were established which were supposed to coordinate saving activities (control of costs). Strategy of costs management implemented in ArcelorMittal Poland enterprise was aimed at cost reduction. According to latest data the savings achieved per one ton of steel equalled 19,7 Euro. Therefore, it can be assumed that in case of this enterprise completion of new strategy brought significant results. It can be also

proved on the basis of financial result of the company which from minus result in 2009 became a plus result next years. In monitoring the directions of changes introduced in remaining metallurgical enterprises as well as enterprises connected with steelworks (cooking plants) a similar range of repair actions was observed [9]. Conducted actions were more or less radical within the strategy of cost reduction. In order to confirm the achieved information surveys were sent to metallurgical enterprises in which strategies of actions conducted in time of crisis were identified. Tests included all metallurgical enterprises in Poland. On the basis of those tests it was concluded that so far dominant strategies of product development and market specification were replaced with strategy of cutting costs, divestment and debt management. Actions giving quick results of financial situation improvement in steelworks are: limiting the supplies, group dismissal of employees, freezing the salaries, freezing technological investments and temporary shut-down of unnecessary production forces, elimination of unnecessary posts and annual leaves (paid time-offs) for employee. Respondents assessed the list of activities typical for repair restructuring using the scale from 1 to 5, where 1- small importance of action for the enterprise and 5 - big importance. Results in form of the highest and the lowest average values of marks are presented in Figure 3.

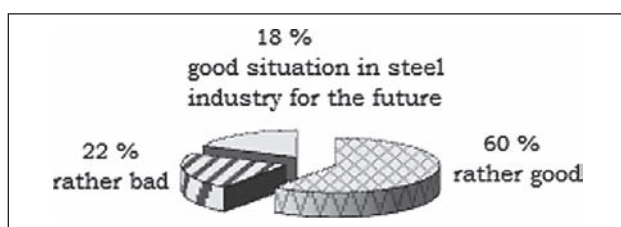


**Figure 3** Important actions in steelworks in Polish market in times of crisis [10]

In the period of economic crisis the highest costs were spent in steelworks on employment reduction (severance pays) and stoppages in production. Metallurgical enterprises also had a lot of costs connected with too high costs of supplies on stock, particularly in initial period of crisis and costs of investment freezing. The least mentioned were costs of debt management (respondents had more options to choose from)- Figure 4. Effects of strategy implementation were "curing" the financial condition of enterprise (the result of crisis was financial losses of enterprises as a result of bad conjuncture on steel market) and generating cash for paying the dues (in time of crisis the steelworks reached lower income from activity and there were some difficulties with meeting the commitments).



**Figure 4** Costs of realizing the “cut strategy” in steelworks in Poland in times of crisis (research participants choose more than one strategy, 100 % was used for each answer) [10]



**Figure 5** Situation in Polish steel industry in perspective of following years (opinions of management staff in steelworks) [10]

Crisis in Poland was a new experience for steelworks; managerial staff had to build up new competence of company management in crisis. The last question of the test was about situation in steel industry in perspective of following years - Figure 5.

## CONCLUSIONS

It should be underlined that steel market in Poland is still in the phase of bad conjuncture. Strategies of met-

allurgical enterprises still assume adjustment of the use of production forces to scale of demand. Metallurgical companies control production costs, aim at innovative solutions and first of all search for alternative markets. Analytics of the market agree that metallurgical enterprises will function in market niches offering highly-processed products of high quality. Strategy of cutting costs is the answer of the companies to signals coming from the surrounding and become a form of independent, active „fight” for own strategic position on the market, allowing for survival in difficult conditions. Verification of direct tests results with literature studies has shown accordance of behaviours of enterprises in times of crisis.

## REFERENCES

- [1] Griffin R.: Podstawy zarządzania organizacjami, PWN, Warszawa (2000), 232.
- [2] Dembowska B., Gonicka J.: Zarządzanie przedsiębiorstwem w kryzysie, Akademia Humanistyczno - Ekonomiczna, Łódź (2011), 27-37.
- [3] Guaspari J., Crom S.: Ultimately, There is just one issue: value, Rath&Strong Leadership Report, Lima (1993), 48.
- [4] Adair Ch. B., Bruce B., Murray A.: Radykalna reorganizacja firmy, PWN, Warszawa (2002), 15, 65-66.
- [5] Mascarenhas B., Aaker A.D.: Strategy over the Business Cycle „Strategic Management Journal, 10 (1989), 10-15.
- [6] Simon H.: 33 sposoby na kryzys gospodarczy, Natychmiastowe rozwiązania dla twojej firmy, Simon-Kucher&Partners, Strategy&Marketing Consultants, Difin, Warszawa (2009).
- [7] Gajdzik B.: Restrukturyzacja przedsiębiorstw w warunkach destabilizacji otoczenia na przykładzie branży hutniczej, Difin, Warszawa, (2012), 182.
- [8] Reports: Polish steel industry, Polish Steel Association, Katowice (2009, 2010, 2011, 2012), 19-20, 25-26.
- [9] Gajdzik B.: Reakcja przedsiębiorstw hutniczych na światowy kryzys gospodarczy [w:] Współczesna gospodarka światowa i jej podmioty w warunkach niestabilności, (ed.) Sporek T., AE, Katowice (2010), 74-86.
- [10] Gajdzik B.: Direct research: Restructuring process in steelworks in Poland (unprinted), Katowice (2012).

**Note:** The responsible translator for English language is D. Grachal, Katowice, Poland