W. SROKA

ISSN 0543-5846
METABK 52(1) 127-130 (2013)
UDC – UDK 65.01:669.013.003:658.5:658.8=111

COOPETITION IN THE STEEL INDUSTRY – ANALYSIS OF COOPETITION RELATIONS IN THE VALUE NET

Received – Prispjelo: 2012-03-01
Accepted – Prihvaćeno: 2012-07-20
Review Paper – Pregledni rad

The paper presents some of the problems relating to the coopetition relations in the steel industry. Coopetition is one of the key issues relating to the inter-organizational cooperation in recent years. On one hand, companies are working together and sharing the effects of uncertainty arising from the environment, and on the other hand they compete with each other in other areas, remaining competitors. In other words, they must reconcile each aspect of competition and cooperation, which is particularly important in case of cooperation involving more than two partners. Coopetition is a relatively new phenomenon, however it is growing very rapidly, and companies which are able to utilize this concept effectively can gain a coopetitive advantage over their competitors.

Key words: coopetition, steel enterprise, inter-firm cooperation, competition.

INTRODUCTION

Coopetition is a phenomenon of inter-organizational cooperation, both bilateral and multilateral, and has developed very intensively in recent years. On one hand, enterprises cooperate together, e.g. in the form of strategic alliances, and network organization (alliance networks), which is especially evident in inter-organizational cooperation, and share the effects of uncertainty arising from the environment. On the other hand, they compete with each other in other areas, remaining competitors. In other words, companies need to accept the aspect of simultaneous competition and cooperation. It is by no means easy, especially when inter-firm cooperation includes more than two partners. Coopetition is increasingly gaining importance throughout the global economy. There is no industry that would no utilize this phenomenon in some shape or form. This applies mainly to the sectors with a high degree of globalization, however it also relates to traditional sectors such as the steel industry.

THE IDEA OF COOPETITION

Coopetition is regarded as a complex phenomenon, occurring both within an organization (in this case it usually relates to the large, diversified entities operating in different sectors and at least in some markets) and between companies [1]. The concept was introduced in the 90s. as a combination of two concepts: cooperation and competition; etymologically, the word coopetition is a combination of these two terms. The complexity of the phenomenon relates to the simultaneous implementation of two contradictory logics of relations between companies: trust, which is a manifestation of a community of interests, and conflict of interest. Therefore a paradox appears: companies that are working together need to trust each other, sharing information and experience, while at the same time remembering that they are dealing with competitors. A.J. Brandenburger and B.J. Nalebuff [2] are regarded as the precursors of the implementation of the coopetition concept in Management Science. They pointed out the necessity of developing coopetition dependencies in the economy. In turn, M. Bengtsson and S. Kock treat coopetition as a situation where competitors simultaneously compete and cooperate with each other [3]. K. Walley makes a similar claim [4]. W. Czakon [5] is of the opinion that coopetition is a system of actors in interaction which is based on partial compatibility of goals and businesses. He also claims that coopetition concentrates on the processes of value creation and reaping the benefits therein, and not only on relations between partners. Companies are at once clients, suppliers, service providers, competitors and partners to each other. They are the subject of mutual evolution both in terms of competition and cooperation. A common evolution is associated with sharing the same vision, alliance formation, negotiating contracts and establishing comprehensive relationships at management level. Generally coopetition is gaining importance and is increasingly visible in various industries. There is coopetition between two competing companies and also coopetition of a network nature. The basic benefits of coopetition include obtaining a cost advantage, which is the result of savings by coordinating activities with suppliers or distribution channels, access to innovation, and economies of scale.

W. Sroka, Academy of Business in Dąbrowa Górnicza, Department of Management, Poland

COOPETITION IN THE STEEL INDUSTRY IN POLAND

Coopetition occurs in sectors with diversified potential for globalization. Although there is a significant positive correlation between the coopetition prevalence and the degree of globalization in the sector [6], the coopetition phenomenon can be observed also in the steel industry, despite the fact that the rate of globalization in the steel industry is only 33 % as opposed to a rate exceeding 100 % for sectors considered as highly globalized. Coopetition of enterprises in the Polish steel industry began in the early years of this century. The basic conditions for integration in the sector were: complete privatization of the largest Polish steel enterprises, transition from the repair restructuring to the development, greater liquidity, and favorable situation on the steel market, resulting in increased production. The domestic steel market of steel producers and steel products is formed by 22 steel enterprises, but the steel is melted in only nine of them. Eight companies (Coke Plant Zdzieszowice, Huta Warszawa, Huta Królewska, Walcownia Blach Grubych Batory, Huta Katowice, Huta Cedler, Huta Sendzimira, Huta Florian) belong to ArcelorMittal Poland SA [7]. At the time of its entrance into Polish market, ArcelorMittal also became the owner of a wide range of dependent companies, affiliated companies and those with minority interest, operating in different branches such as industry automation, service and production maintenance, transport, waste management, trade, social activities and other. A theoretical division of their activities could have taken the following form:

- entities connected with the basic activity of the concern – entities providing service assigned by the Polish Steelworks.
- entities not directly connected with metallurgy which could provide services outside metallurgy.
- entities not directly connected with the economic activities of the group [8].

The rest of the 22 steel companies belong to the owners representing foreign capital, or mixed (national-foreign). By observing the changes in the steel market in Poland, one can try to develop a framework model of coopetition activities (Figure 1).

There were some forms of internal competition between companies in the network configuration, although this sometimes led to internal tensions. Such tensions were useful because they allowed increased flexibility and network members were forced to keep a permanent finger on the pulse. Such forms of network relations were observed in the vast majority of steel enterprises. Coopetition is of particular importance in the case of cooperation involving more than two partners. This applies to the Polish steel industry, especially ArcelorMittal Poland. Internal competition within the network configuration is determined by both the number of enterprises performing similar functions in the market,

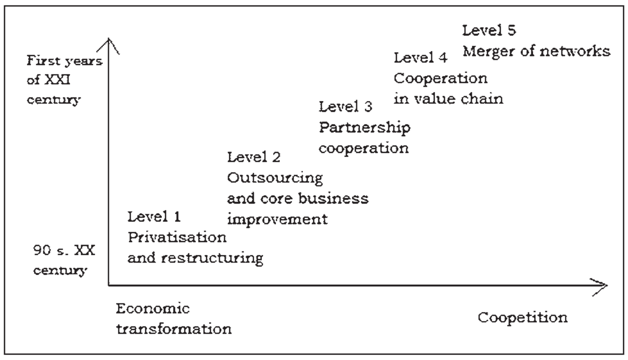

Figure 1 Model of "maturation" of steel enterprises to coopetition [9]

and the mutual relations between them. Network participants have different approaches to this issue. Some will prefer to limit the number of network members, which reduces the potential for competition between them. Others will accept overall competition between the companies, which in turn allows for complementarity and ensures that the partners are more interested in cooperation than competition. Such internal competition has two different effects:

- it increases flexibility, drives innovation and ensures security of supply,
- it marks the boundary between the optimal and excessive competition.

This therefore requires a balance between cooperation and competition amongst partners. Companies within the network configuration will have a completely different opinion as to what level of competition is appropriate. Those that are subject to internal competition will prefer more orderly processes, while others may benefit from competition among suppliers and customers. The simultaneous occurrence of competition and cooperation between companies in the network is the most complex situation, but also leads to the most advantageous relationship between competitors. Partners can be separated from each other by various degrees of closeness to the customer, and by access to competitive assets. Coopetition is inherently linked to the phenomenon of conflict of interest between partners, especially if there are more partners in the network. It is extremely rare to find companies amongst which there are no conflict of interest. It is therefore in the interest of the partner companies to find a delicate balance between cooperation and competition amongst partners. This can be achieved through the careful selection of cooperating companies, also choosing an appropriate structure and a suitable management system. However, given the specificity of coopetition, a key role is played by competent managers and human resource management, including the theme of diversity management. Perception of values and advantages of diversity management and understanding of its importance can be a key factor in improving the process of inter-organizational cooperation [10]. Ultimately, people make all decisions, including those related to HRM. As has been already said, there is

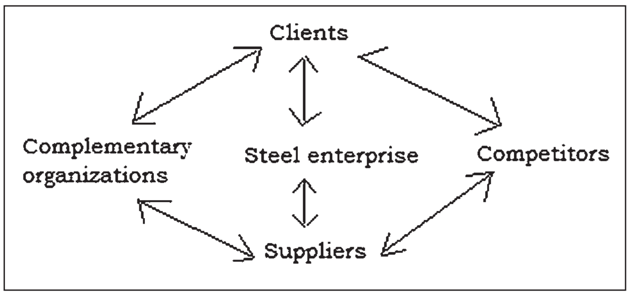

Figure 2 A classic network of steel enterprise relations network [1]

a kind of paradox in coopetition. In any event, it is worth noting that being a company with a "human face", and furthermore demonstrating social responsibility, is an important determinant of creating a positive or negative image of the company [11].

FACTORS SHAPING COOPETITION RELATIONS IN THE POLISH STEEL INDUSTRY

Coopetition is driven mainly by global corporations seeking to increase value-added sources. These corporations create links, both vertical and horizontal, by building a so- called a value net and striving to achieve maximum benefit. A classic example of a steel enterprise relations network consists of five basic elements (Figure 2).

Four of the five factors presented, namely customers, competitors, suppliers are widely known and have been recognized in literature, e.g. in Porter's five forces model. In contrast, complementary organization is another important link, which enables competition and cooperation simultaneously and ensures that the combined operations should be profitable to all the participants. Suppliers, customers and complementary organizations generate benefits to the company in the value net. The vertical links indicate the occurrence of both cooperation and competition. Cooperation occurs when both suppliers and clients build customer relationships in order to create value. If there are benefits, they must be divided among the various participants. Customers usually insist on the price of the products, while suppliers exert their bargaining power according to expectations regarding prices, delivery time, payment conditions, etc. A more complex situation occurs in the case of a network of horizontal relations. In such networks, enterprise relations with both competitors and complementary organizations are more complicated. Complementary organization increases the value of products offered by the company compared to similar products offered by its rivals. Through the contribution of both tangible and intangible assets made by these organizations, the value of products offered by the company is also higher compared to products offered by the company itself. In the steel industry, service centers would be a classic example of such a complementary organization. Complementary organization enhances partners' attractiveness for suppliers, because it is more beneficial for them to deliver their products to the complementary system than to a direct competitor. Competitors also reduce the attractiveness of suppliers to the consumers, because it is more appropriate to perceive competitors through the prism of coopetition, indeed, an open fight and competition can bring a Pyrrhic victory to the winner. The model presented uses the principles of game theory in relation to competition, cooperation, and creating coopetitive relationships. The model assumes that companies compete with each other, ensuring themselves the maximum benefit, and relationships between participants in networks of relationships are a non-zero sum game. In other words, the achievement of business satisfaction, including profit and an increased level of competitiveness does not only apply to a win-lose relationship.

RESEARCH ON COOPETITION IN THE STEEL INDUSTRY

Although no specific research on the coopetition in the Polish steel sector has yet been carried out, at least two surveys have been partly devoted to this subject. The first studies were conducted in 2008, i.e. before the economic crisis, and were mainly aimed at identifying the presence, scale and scope of network relations in the Polish steel industry. The study was conducted in three main thematic blocks: alliance networks formation, management of alliance networks, existence and growth of the networks. The research took place from April to May 2008. Questionnaires were sent to 50 managers representing 33 companies. Respondents were asked to comment on the proposed statement, answering "yes" or "no"; or to indicate the correct answer on a scale of 1 to 5 (1 - minor importance, 5 - very high importance); or finally to submit their own proposals. A total of 32 responses were finally received, representing 64 % of the research sample. A few addressees did not answer due to the fact that the scope of the survey and/or type of character of questions was too comprehensive. The surveys confirmed the existence of networks in the steel industry in Poland. They take usually the form of dominated networks: steel companies (a part of global concerns) are surrounded by a chain of steel business related companies, operating in different sectors. They are all connected by means of capital bonds, although some respondents also indicated the utilization of commercial bonds, with no capital engagement amongst the parties. In turn, in other research (conducted in 2011) aimed at the application of modern management concepts by Polish enterprises (which included a group of 125 companies operating in five traditional sectors of the Polish economy: metallurgy and steel-related sectors such as machinery, coke, mining and energy), inter-organizational cooperation strategies were among the least popular management concepts utilized by the companies

[12]. Respondents mainly favoured the formation of bilateral alliances, among which "loose agreements ..." were strongly dominant. Other forms of bilateral alliances were seemingly utilized only two or three times. It is worth noting that two respondents identified the creation of virtual and network organizations, which means that the respondents mainly use the simplest forms of inter-organizational cooperation. On the other hand, it should be noted that virtual organizations, due to their nature, are rather the domain of other sectors of the economy. The outcome of said research confirms the theory that modern management concepts, including inter-firm cooperation strategies where coopetition exists, are not only the domain of high-tech sectors. Research has confirmed that companies from traditional sectors of the economy utilize modern management concepts in their operations, although the respective popularity of those concepts is highly differentiated.

CONCLUSION

Coopetition plays an increasingly important role in the global economy. Leading global corporations operating on a global scale, especially those that rely mainly on inter-organizational cooperation strategies, such as ArcelorMittal Group, make extensive use of this concept. Although there is no doubt that coopetition exists to a greater extent in sectors with a high degree of globalization, such as advanced technology, we can also observe coopetition in traditional branches such as the steel industry. On the other hand, it should be also stressed that while research into coopetition is growing very rapidly, and is an important issue particularly in the context of strategic management, many fundamental issues linked with the concept remain unexplained. This indicates, therefore, the need for further in-depth research on this phenomenon. Surveys on practical utilization of the concept in industries characterized by a high degree of globalization, such as consumer electronics, would be particularly desirable. It is also important to analyze the coopetition in evolutionary terms, because the character of coopetition is constantly changing with the passage of time.

REFERENCES

[1] Cygler J.: Kooperencja przedsiębiorstw. Czynniki sektorowe i korporacyjne, Wyd. Szkoły Głównej Handlowej w Warszawie, Warszawa (2009), 30-48.

[2] Brandenberg A.J., Nalebuff B.J.: Co-opetition, Doubleday, New York (1997)

[3] Bengtsson M., Kock S.: Tension in coopetition. Academy of Marketing Science Annual Conference, Washington, DC, May 28-31, (2003)

[4] Walley K.: Coopetition, International Studies of Management and Organization, 37 (2007), 2, 11-31

[5] Czakon W.: Koopetycja - splot tworzenia izawłaszczania wartości, Przegląd Organizacji, 2009, 12, 11-14

[6] Farrell D.: Odkryj globalny potencjał swojej firmy, Harvard Business Review Polska, November (2006), 88-99

[7] Gajdzik B.: Przedsiębiorstwo hutnicze po restrukturyzacji, Politechnika Śląska, Gliwice (2009), 19-30

[8] Gajdzik B., Sroka W.: Analytic study of the capital restructuring process in metallurgical enterprises around the World and in Poland, Metalurgija, 51 (2012) 2, 265-268

[9] Gajdzik B.: Struktura łańcucha wartości dodanej w sektorze hutniczym, Gospodarka Materiałowa i Logistyka, 64 (2012) 3,13-19

[10] Wziątek-Staśko A.: Diversity management - narzędzie skutecznego motywowania pracowników, Difin, Warszawa (2012), 61-65

[11] Wziątek-Staśko A.: Ethics in the HRM process as a way to the sustainable development of the organization, Journal of Management and Sustainable Development, 29 (2011) 2,71-75.

[12] Lisiński M., Sroka W., Brzeziński P., Jabłoński A., Stuglik J.: Application of modern management concepts by Polish companies - analysis of research results, Organizacija, 45 (2012) 2, 41-49.

Note: The responsible translator for English language is Andrew Gillin, Poland