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## ASPECTS OF STRATEGIC MANAGEMENT UNITS OF THE INDUSTRIAL HOLDING COMPANY

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**Abstract.** Mining and metals production sector (MMPS) of Ukraine is one of the basic for the state's economy. During 1999 - 2004 the MMPS enterprises integration into the structure of major private transnational financial industrial groups took place. Large-scale consolidation of major enterprises contributed to the emergence of business combination referred to as holding company. In the future, Ukrainian iron and steel companies' competitiveness in the world market will be largely determined by the scope of their participation in the global consolidation processes. Their future directly depends on the rate of large corporations' formation and restructuring, including changes in the mechanisms of corporate governance.

Keywords: strategic management, metallurgical holding, KPI, model group, competitiveness.

Jel classification: C12, C15, M21, L61

### 1. Introduction

The issues of iron and steel companies corporate structures creation, development and effective functioning is analyzed in the works of Ansoff (1999), Buriak and Tatarin (2006), Collins and Motgomery (2007), Demb and Noubaer (1997), Dess *et al.* (2009), Dobson *et al.* (2004), Hill and Jones (2006), Hitt *et al.* (2006) Koch (2004), Miles and Snow (2003).

It is well-known that, business growing, its management structure becomes increasingly complex and for the whole group, not separate business units, to successfully develop and stay competitive managerial performance is crucial (Hill and Jones 2008; Hitt *et al.* 2010; Koch 2004). Therefore, management system performance is a key competitiveness factor for corporate groups (World Bank 2004; World Steel in Figures 2010).

The described changes in the Ukrainian MMPS ownership organization structure determine the methods and tools of economics and business management development (Buriak, Tatarin 2006). Strategic management and performance analysis remain relevant also in the case of integrated business organization (Korsakienė, Baranauskienė 2011; Travkina, Tvaronavičienė 2010; Korsakienė 2009; Adekola et al. 2008; Korsakienė 2004).

The present study aims to develop approaches to economic management based on a comparison of mining and metal production business key performance indicators on the national scale as well as for Ukrainian iron and steel holdings belonging to the transnational corporations.

# 2. Proposed universal model of group management organization

The iron and steel production complex of Ukraine comprises more than 300 companies and is basic for its economy (Geyets 2009). The base of the complex is formed by 146 large enterprises related to the industry sector, among them 12 being iron and steel industry enterprises, 7 - pipe production enterprises, 10 – metalware production enterprises, 20 - non-ferrous metallurgy enterprises, 35 – secondary metals production enterprises; 26 – mining enterprises, 3 – ferroalloys production enterprises, 16 – byproduct-coking industry enterprises, 17 – refractory materials production enterprises. The rest of the complex is represented by smaller enterprises related to the industry sector and infrastructure businesses. Before 1989, all iron and steel enterprises were state owned. Further, in connection with acquiring the status of an independent state, a policy of privatization was launched, and a joint-stock company became the principle mining and metals production sector (MMPS) of Ukraine business pattern. During 1999 – 2004 a major modification occurred in the ownership structure of mining and metals production sector of Ukraine. Under the pressure of competition vertically integrated structures were being actively created (World Bank 2004). The prerequisite for iron and steel enterprises of Ukraine joint stock capital joining major transnational corporate structures is complex technological chain of production and the continuing globalization of the world economy. Corporations merge to form larger ones, which are supra-sectoral and often supranational corporate associations, large and extra-large corporate Groups. As a result, associations are formed, that have a better chance to achieve the necessary competitiveness level (Benks, Stenli 2006). Management systems development has shown that currently a divisional structure is the most efficient form of management system organization. Divisional structure is a management structure, which clearly divides individual products and individual functions control. The key figures in the management of organizations with a divisional structure are top managers in charge of production units (Korsakienė 2004; Korsakienė et al. 2010, Maital 1996). The appearance of such structures is caused by sharp increase in the size of enterprises, the diversification of their activities and technological processes complication that takes place in a dynamically changing environment. The very fact of adding another hierarchy level to the structure of the company under these conditions leads to the chief executive of the enterprise being no longer able to make strategic decisions on specific activities. The way out of the situation lies in using the principle, when strategic and coordination objectives are separated from operational tasks solving. Under the divisional structure the principle is embodied in giving wide-ranging powers and relative autonomy to the managers in charge of certain divisions, while reserving for the top management development strategy, research work, financial and investment policy etc. A. Sloan defined divisional structure as a "coordinated decentralization". When the Group reaches a considerable size of corporate capital, there appears a necessity to structure the assets within the Group into the correspondent holdings and divisions using divisional management structure. In order to provide with a methodical aid for achieving this target we have proposed a universal model of Group management organization that describes the various options for organizing management using divisional principles (Vereskun et al. 2011).

In the proposed model a business of a group is divided into a number of separate organizational structures, which form holdings on a sectoral basis. The owners of the group direct and control the activities of holding companies with the help of managing company, which is generally entrusted the strategic management. At this level, key management and investment decisions are made, the candidates for top positions are appointed.

At the second level of management (i.e. holding company level) the following management system organization forms may be implemented:

- Strictly divisional.
- Mixed.
- Direct.

Under strictly divisional form of management organization (holding 1) all holding assets are merged in the intermediate structures, i.e. divisions. The merge is accomplished so that each division specializes in the same kind of products or service. Division administration is exercised by supervisory board comprising the representatives of a managing company, the representatives of minority shareholders, as well as outside experts.

The main functions of the supervisory board are to define holding development strategy and business principles, to approve major transactions and to control the way they are carried out, to appoint top managers, and to define top management motivation and performance evaluation system. (Korsakienė et al. 2011). Each holding is headed by a general director, appointed by a supervisory board. He is directly responsible for all of the results of holding company activities and is accountable to the supervisory board. The supreme body of a holding company operational management is the Board. The composition of the Board is formed in each holding on a collegiate basis. A general director is the chairman of the board. In the mixed form of management system organization (holding 2) a part of the assets is merged in divisions that are managed according to the above scheme. The part of the assets for which it is impossible or impractical to be included into a division, is managed directly by supervisory boards of individual assets.

Under the direct form of corporate management organization (holding 3) assets management is exercised directly through the supervisory boards of the individual assets without merging the assets within a division. (Vereskun *et al.* 2011.)

## 3. Integrated iron-and-steel works corporative ownership

As a result of the integration process almost all the major MMPS companies of Ukraine became a part of holding companies and Groups. Currently, 12 out of 12 iron and steel works (Table 1), 7 out of 7 pipe production enterprises, 12 out of 20 nonferrous metals plants, 12 of 16 by-product coking plants are the part of corporate integrated structures. Today, iron and steel industry of Ukraine is determined not by individual plants, but by large concentrated structures owning mining and metal production enterprises, such as "System Capital Management" (SCM), "Evraz Group SA", the "Privat" Group, "ISD" Corporation. Apart from owning assets in Ukraine, these Groups hold assets in the USA, Russia and Europe (Vereskun, Kolosok 2010; Kolosok, Rashevskyi 2010). Under these conditions, the dominant form of mining and metal production business organization is a hold-

ing company, and divisional management structure is the principal structure. Each of the Ukrainian mining and metal production holding companies (Groups) is organized as a vertically integrated structure based on the principle of processing chain continuity, like, for instance, "iron ore - coke - metal" chain in iron and steel business. This means that the assets owned by a Group belong to different sectors of mining and metal production business. (Kolosok et al. 2012.) The point should be stressed that foreign as well as Ukrainian assets of the Group are owned by a holding company. It should also be emphasized that the holding company comprises both Ukrainian and foreign assets of the Group. For example, Metinvest holding company owns 32 assets, including 24 Ukrainian and 8 foreign ones, among them 7 ore mining and mining processing enterprises, 1 pipe factory, 4 by-product coke plants, 1 refractory processing plant, 2 coal asset, 12 iron and steel assets and 4 companies. As a rule, companies and enterprises engaged in resources and equipment purchase, as well as in selling holding production to a final consumer belong to holding's foreign assets.

## 4. Analysis on proposed corporate structured approach

The subject of the research is to compare the external analysis results of mining and metal production companies that are the part of holding companies efficiency as well as to define the peculiar features of methodological basis for such analysis. In determining the efficiency of the business, the economic units are the object of the economic analysis. If we consider the mining and metal production sector of Ukraine as a kind of economic system, both the system itself and its individual elements may be the object of analysis.

- Until now, the objects of the analysis for MMPS in Ukraine were:
- branches of the complex mining, processing;
- sub-branches of the complex fuel-energy minerals mining, metal ores mining, iron and steel manufacturing, coke, pig iron, steel and ferroalloys manufacturing, pipe manufacturing, non-ferrous metals manufacturing, fabricated metal products manufacturing;
- separate enterprises of the sector.

**Table 1.** Iron and steel works and integrated iron-and-steel works corporative ownership (Source: generalized and structured by the author based on data from State Statistics Service of Ukraine 2011; Enterprises of Ukraine 2011)

Enterprise	Group (corporative ownership)
Integrated iron-and-steel works	
PJSC «Ilyich Iron and Steel Works of Mariupol»	Group "SCM" (Metinvest holding)
PJSC «Azovstal iron & steel works»	Group "SCM" (Metinvest holding)
PJSC «Zaporizhstal»	Group Midland (Midland Resources Holding)
PJSC «ArcelorMittal Kryviy Rih»	Group "MITTALSTEEL"
PJSC "Dnipro Metallurgical Works named. Dzerzhinsky"	"ISD" Corporation
PJSC "Alchevsk Integrated iron-and-steel works"	"ISD" Corporation
Iron and steel works	
PJSC «Kramatorsk Metallurgical Plant»	"ISD" Corporation
PJSC «Yenakiyevo Steel Plant»	Group "SCM" (Metinvest holding)
PJSC «Dnepropetrovsk Metallurgical Plant named. Petrovsky»	"Evraz Group SA"
PJSC «Kremenchug Steel Plant»	Group "TAS"
PJSC «Donetskstal - Metallurgical Plant»	"Donetsksteel"
PJSC «Dniprospetsstal im. A.M. Kuzmina»	"EastOne"

The described changes in the ownership structure of MMPS in Ukraine suggest that some elements of corporate groups operating in the metallurgical business-mining and metallurgical holding companies and divisions can be considered as the elements of the system as well.

The article proposes the new approach defined as corporate structuring for economic analysis. The current sectoral approach to the analysis requires the development as currently large vertically integrated structures that determine the profile of the metallurgical industry in Ukraine have a corporate form of business organization and divisional management structure. To characterize the correlations between efficiency indicators in a sector and the suggested corporate structured approach, a comparative analysis of KPI trends was held. At the level of Ukraine industry is analyzed in the context of sub-branches (iron ore, coke and coal, and steel rolled tubes). At the holding Metinvest level the sub-branches were regarded as the relevant divisions (Kolosok *et al.* 2012). The proposed corporate structured approach has been checked for objective valuation with the method of

the hypothesis testing applied. To do this, the hypothesis as for the correlation between efficiency indicators in a sector and the new approach is formulated and verified. Correlation coefficients were calculated (Kolosok *et al.* 2011), regarding the sales volumes and rates of financial results between divisions of mining and metallurgical holding and their respective sub-branches of MMPS in Ukraine. This correlation analysis of the volume of sales and financial results of sub-sectors in the industry of Ukraine and Metinvest holding confirmed the hypothesis of the connection between indicators of KPI in the sector and in the proposed approach.

The results of the hypothesis validity check confirmed that the proposed approach adequately reflects the valuation of the corporate structuring of the mining and metal production complex. It is concluded that the results of the analysis according to industry and corporate structured approach are comparable. This confirms that in terms of transnational vertically integrated structures, where the main form of mining and metal production business organization is corporate, the use of corporate structured approach allows for economic analysis and objective measuring, both within the same group - between the holding companies and divisions, and outside - between the competing holding companies and groups within the nation.

# **5.** Developing the fundamental principles of strategic management

The formation of holding companies in the industry has allowed the participant companies to increase their assets significantly, develop capital investment, and optimize taxation by means of subsidiaries using in-house means. As part of the holding company structure the participant enterprises may implement a number of schemes and mechanisms, which has allowed to organize a system of mutual settlements, to reduce costs, to improve efficiency and to gain a real opportunity to control the cost of the final product, that in a fiercely competitive global steel market appears very important for Ukrainian companies (Kolosok, Nabebina 2011). The transfer pricing comes as an important mechanism for the redistribution of financial resources within the holding. One understands the transfer pricing as the sale of goods or services within a group of related individuals at prices different from those in the market. Manufacturing and mining holding companies can sell products of the distribution company of the same holding company for the inner (lower) price, which will cover the production costs, i.e., operating for achievement of not less than the breakeven

point, and then sales company sells the goods to final consumers for the market (higher) prices. As a result, financial resources are concentrated in a single profit center (sales company) and then can be redistributed in accordance with the needs of the holding company as a whole (Kolosok, Nabebina 2011, O'Shaughnessy 1995). In the process of consolidating, steel industry is no longer considered as a combination of technological industries, with marketing, economic management, investment and finance having occupied the central place in the management system. Each holding company exercises control over the activities of the incorporated affiliated companies (enterprises) and defines the strategic line of development of their enterprises. Thus, strategic management within the holding company is undergoing significant changes. As part of strategic management, the process of developing the fundamental principles of corporate development must be embraced, effective strategies are to be found, the most suitable options should be chosen from, a complex plan for the active business policy of its constituent units must be developed, all above followed by careful monitoring of the implementation of the strategy.

### 6. Conclusions

The principal theoretical and analytical results, which justify of the methods of economics and company management based on the proposed approach of corporate structuring are expound in this scientific article:

The current stage of economic systems development is characterized by the growing competition and increased competitive conflict. Adequate response to this process by businesses is to combine into larger corporate entities at supranational and suprasectoral levels, which allow to accumulate the required amount of all types of resources to achieve the desired level of competitiveness. With groups beginning to compete with each other, one of the determining factors for the strategic competitiveness of a group is the efficiency of the administration.

Based on the analysis of the results of theoretical studies and management organization practice in the modern groups, the article offers a universal model of management organization in the group. The model is based on the principle of separation of strategic and coordination objectives from operational tasks, which is implemented by creating a divisional management system.

The valuation of corporate identity of ferrous metallurgy enterprises of MMPS showed that as a result of large-scale changes in the forms of man-

agement, up to 95 % of coal and ore mining, coke, ferrous and nonferrous metallurgy in Ukraine are actually incorporated into large multinational industrial-financial groups. Today, iron and steel industry of Ukraine is determined not by individual plants, but by large concentrated structures owning mining and metal production enterprises, such as System Capital Management (SCM), Evraz Group SA, the Privat Group, ISD Corporation. These suprasectoral and transnational corporate associations - Groups are composed of several different holdings covering the assets of several industries (businesses). The emerging property relations in integrated industrial capital (divisions, groups and holding companies) in Ukraine cause changes in economic management of the metallurgical enterprises - the Group's assets.

The analysis of the organization's assets possessed by iron and steel holdings has revealed that they include companies in Ukraine, the USA, Russia, Europe, which are structured on the principle of the process chain continuity, e.g. "iron ore coke – metal" chain in the iron and steel industry. Assets in holding companies are organized into divisional structures. Metinvest holding, which is a unit of mining and metallurgical business of the SCM Group, covers 32 assets, including 24 Ukrainian and 8 foreign ones. As a rule, apart from manufacturing, the companies and enterprises engaged in the purchase of resources, equipment, and sale to final consumer represent the foreign assets of the holding.

Employment of the sectoral approach to analyze the effectiveness of MMPS is limited, as the dominant organizational structure gains the divisional character, as enterprises are united not by a sector, but by product or functional lines. In the corporate structured approach presented in the article, the complexes of holdings and divisions are the objects of analysis.

The article presents the results of the effectiveness of mining metallurgical complex analysis according to traditional and new approaches. The same subject, method, and analysis performance were used to ensure comparability of the results of analysis with the both approaches applied. The subject of analysis was the production efficiency of basic products of MMPS. The methods of analysis are statistical, dynamic lines, averages ones. The direction of analysis is the KPI (key performance indicators) analysis. The object of the analvsis of sectoral approach is represented by complexes of Ukrainian mining and metal production companies, which are grouped into sub-branches. Under the proposed corporate structuring approach, the object of the analysis is represented by Ukrainian mining companies, which are grouped into holding companies and divisions. Testing of the proposed approach based on an analysis of key performance indicators of the mining and smelting business both at the national level and at the one of holdings and divisions demonstrates high results convergence.

The conclusion as for the analysis results comparability of the sector and corporate structured approach is illustrated. This confirms that in terms of transnational vertically integrated structures, where the main form of organization of the mining and metal production business becomes corporate, the implementation of a corporate structured approach allows for economic analysis and obtaining objective measuring, both within the same group - between holding companies and divisions, and outside - between competing holding companies and groups within the nation.

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