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METHODICAL BASES OF FORMULATING THE STRATEGY FOR LARGE POTASH COMPANIES

Summary. The importance of strategic behavior has increased dramatically in the recent decades. In the article the basic principles of formulating the strategic alternatives for large potash companies, such as the ones on the oligopolistic market, specific features of the product and influence of the state, are set and justified. The strategic alternatives for the potash company “Uralkali” are formulated and the main directions for these alternatives are presented. The group and individual criteria for the strategic choice for the potash companies are provided. The necessity of strategic choice by using the multiple criteria decision-making methods is justified. The article contains 3 tables and 1 figure.

Keywords: strategy formulation, potash companies, strategic criteria, strategic alternative.

METODOLOGICZNE PODSTAWY FORMUŁOWANIA STRATEGII DLA DUŻYCH PRZEDSIĘBIORSTW POTĄŻOWYCH

Streszczenie. W ostatnich latach istotnie wzrosło znaczenie planowania strategicznego, dlatego też w artykule określono i uzasadniono podstawowe zasady formułowania alternatyw strategicznych dla dużych przedsiębiorstw potażowych, działających na rynku oligopolistycznym. Dodatkowo zidentyfikowano specyficzne cechy wytwarzanego przez nie produktu oraz wpływ państwa na prowadzoną przez nie działalność. W części empirycznej zaprezentowano alternatywy strategiczne oraz potencjalne kierunki rozwoju dla rosyjskiego przedsiębiorstwa potażowego “Uralkali”. Przy ostatecznym formułowaniu strategii uwzględniono grupowe i indywidualne kryteria, dotyczące działalności przedsiębiorstw potażowych, wykorzystując analizę wielokryterialną.

Słowa kluczowe: formułowanie strategii, przedsiębiorstwa potażowe, kryteria strategiczne, alternatywa strategiczna.

1. Introduction

All companies facing competition should focus not only on the companies' internal operations, but also on the long-term development strategy. Strategic management is the process of specifying the organization's objectives, developing policies and plans to achieve these objectives, as well as allocating resources in order to implement the plans. An organization's strategy must be appropriate for its resources, environmental circumstances and core objectives. The process involves matching the company's strategic advantages to the business environment the organization operates in. One objective of an overall corporate strategy is to put the organization into a position that allows carrying out its mission effectively and efficiently. Above all, the management should acquire the ability to predict the environmental reaction and to manage changes. There are many models of strategic management process but in general, it may be seen as a combination of 3 steps: strategic analysis, strategy formulation and choice and strategy implementation¹.

Strategic analysis is a theoretically based understanding of the environment in which an organization is operating, together with an understanding of the organization's interaction with its environment in order to improve the organizational efficiency and effectiveness by increasing the organization's capacity to deploy and redeploy its resources intelligently².

Strategic choice involves the production of series of strategic alternatives, based on the objectives of the company, its strengths and weaknesses as well as external opportunities and threats identified through the strategic analysis. Each strategic alternative may represent the possible directions of development for the company³.

2. Methodical principles for formulating the strategic alternatives

The following principles represent the methodological basis for formulating the strategic alternatives for potash companies:

¹ Dmitrieva D.M.: Strategic Event Analysis of the Market Of Potash Fertilizers, Latest Developments in Mineral Industry – Geology, Mining, Metallurgy, and Management. Scientific Reports on Resource Issues (established in 2010), TU Bergakademie Freiberg, Vol. 1, Germany 2012, p. 332-335.

² Worrell L.: Strategic Analysis: a Scientific Art. Wolverhampton: Wolverhampton Business School, 1998, Grant R. Modern Strategic Analysis/R. Grant. - 5th ed. - Translated from English. ed. V.N. Funtova. St. Peter 2011.

³ Drucker P.: Effective management. Economic problems and optimal solutions, "FAIR-PRESS", Moscow 2002, p. 288.

2.1. Oligopolistic market

Oligopoly - is the market structure where the biggest part of production and sales is carried out by a relatively small number of large enterprises⁴.

The main indicator of oligopoly is the degree of production concentration in the hands of a few firms. The higher it is the less competition characterizes the industry. One of the simplest measures of this degree is the concentration ratio, which is defined as the sum of market shares (S_i) of a certain number (n) of the largest potassium chloride producers (1).

$$CR_n = \sum_{i=1}^n S_i \quad (1)$$

If the ratio value of the four firms is up to 35%, then the market is considered to be weakly concentrated. If it is up to 70% the market has the average concentration and over 70% - a highly concentrated market.

On the potash market the largest companies are: “Uralkali” (17% of market), “Potash Corp” (16% of market), “Mosaic” (15% of market), and “Belaruskali” (13% of market) (Fig. 1)⁵.

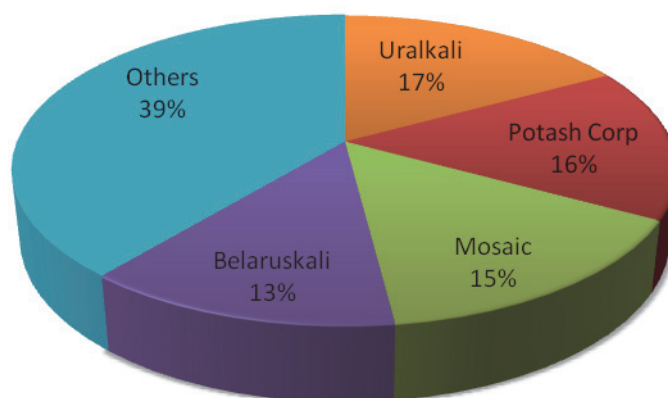


Fig. 1. Market shares of the largest potassium chloride producers

Rys. 1. Udziały rynkowe największych producentów chlorku potasu

Source: <http://www.mineral.ru/>; <http://www.potashcorp.com/>; <http://www.uralkali.com/>

So the concentration ratio is:

$$CR_4 = 17\% + 16\% + 15\% + 13\% = 61\%$$

That fact indicates concentrated market at a medium level, however taking into account that the companies “Potash Corp” and “Mosaic” have the common trader – “Canpotex”, and

⁴ Stankovskaya I.K., Strelets I.A.: Economic Theory: The Complete MBA course, EKSMO 2005, p. 441.

⁵ The official websites: <http://www.mineral.ru/>, <http://www.potashcorp.com/>; <http://www.uralkali.com/>.

“Uralkali” and “Belaruskali” until recently operated within a single trader – Belarusian Potash Company, the market can be determined as highly concentrated.

In the context of potash oligopoly, each participant has a significant influence on the whole market⁶. One of the characteristics of such market is the degree of influence of the company on market prices.

Market power is determined by the relative excess of the market price of the company over the value of its marginal cost (The Lerner index) (2).

$$L = \frac{P - MC}{P} \quad (2)$$

P – is the market price of the product, \$;

MC – is the value of the marginal cost of companies, \$.

We can consider the market power of the largest potash producers, with taken price 350 \$ per ton. The results are represented in the Table 1:

Table 1

The market power of the largest producers of potassium

Company	The value of the Lerner index
Uralkali	0,9
Potash Corp.	0,8
Belaruskaly	0,88
K+S	0,7

Source: <http://www.mineral.ru/>; <http://www.potashcorp.com/>; <http://www.uralkali.com/>

As the table shows, the Russian company “Uralkali” has the greatest degree of influence on the market. Consequently, all other companies are dependent on “Uralkali” policy. At the same time this circumstance allows the company “Uralkali” to form its strategy less dependently on its competitors.

The interdependence of oligopolistic companies on the market determines their specific behavior. Unlike other market structures, the oligopolistic company should always take into account that the change in the strategy of one company leads to a change in the situation on the market⁷. Prices and production volume selected by the company is directly dependent on the market strategy of its competitors, which in turn is determined by the chosen strategic

⁶ Pitere T., Waterman B.: In search of effective management, Progress, Moscow 2001, p. 234.

⁷ Ponomarenko T.V., Dmitrieva D.M.: Methodological Foundations of the External Environment Strategic Analysis of an Integrated Mining Company//Organizational-economic mechanism of rational use of subsoil: assessment, effectiveness and strategic management: Individual articles Mining information-analytical bulletin (scientific and technical journal). M.: of "Mining Book", No. 10, 2011, p. 57-70.

decision. Therefore, this principle is the most important in formulating the strategic alternatives for the potash companies.

2.2. Orientation on the specific features of the product

The product produced by potash manufacturers is not raw material. It is a complete, highly concentrated commercial product, which is strongly demanded in the global market. There are different varieties of potassium chloride: fine-grained, fine-crystalline, granular, etc., so consumers can use the most suitable product for their climate zone, soil structure and the type of cultivated crops. There are no substitute products for potassium. It is possible to use other types of fertilizers, but they cannot fully compensate the deficiency of potassium in the soil. Besides, the demand for potassium is not elastic. The periodicity of potassium fertilization in the soil is once per 3 years. Accordingly, during formulating the strategy, the companies have the ability to predict the demand and to manage it in some aspects.

2.3. Taking into account the influence of the state at the federal level during formulating the strategy

- State restricts access to resources

Mineral resources are under responsibility of the state, and a license for its usage is given as the result of a tender or auction, for example, carried out in 2008 auction made it possible for new producers to enter the potash market.

- State regulates the domestic market

Antimonopoly authority should provide regular monitoring of the dominant subjects pricing policy on raw materials markets and avoid unjustified excess of domestic prices over export prices. On the one hand this measure protects the interests of domestic consumers and the state, but on the other hand it limits the company's pricing policy and, therefore, its strategy.

- State regulates the competitive environment

Federal Antimonopoly Committee controls mergers and acquisitions, which puts certain frameworks on the strategy forming.

2.4. Taking into account influence of the state at the regional and municipal levels

One of the specific features of the mining companies is their strategic importance for economic and social development of the country and regions where they operate⁸. The

⁸ Alushkin Y.A.: Mono-town in the regional economy of Russia: the main characteristics of the new conditions. Problems of Modern Economy, No. 3, 2010.

activities of such companies are affected by the development of engineering, economic and social infrastructure of the region, the municipality policy and the regional authorities, the investment attractiveness of the area, etc. In its turn, integrated mining companies also affect the region by:

- providing employment;
- forming incomes of the population;
- having social and cultural objects, housing and communal services and engineering infrastructure on their balance;
- forming the budget of the city and the region, etc.

And if other companies can form its strategy based only on their own interests, the city-forming and socially significant enterprises must take into account the interests of local, national and regional interest during strategy forming, i.e., strategy of potash companies must be in some way coordinated with the strategy of the region.

3. Formulation of strategic alternatives for the potash companies

Thus, the potash companies need to formulate their strategy in the conditions of oligopolistic market taking into account the specific features of the product and the institutional constraints and incentives. Based on these principles the strategic alternatives for the company “Uralkali” were determined. The main strategic orientations within the alternatives are listed in Table 2.

Table 2

Strategic alternatives for the company “Uralkali”

Strategic alternative	Strategic orientations within the alternative
Alternative №1	<ul style="list-style-type: none"> • Reducing prices on the world market to \$ 300 per ton • Increasing sales by reducing prices (in order to maintain the profitability in the conditions of price reduction) • Increasing the share on the foreign market by consumers attraction of the competitors • Lack of coherence of price and volume issues with the competitors that in the oligopolistic conditions negatively affect the market • Implementation of distribution through “Uralkali Trading”, and in the channels that were previously used by “Belarusian Potash Company” – by itself • Reducing the level of investment in new projects • Pausing increasing production capacity that was planned • Increasing the share of spot transactions

continuation of table 2

Alternative № 2	<ul style="list-style-type: none"> • Increasing the share of spot transactions • Maintaining the product prices on the world market at the level of at least 350 \$ per ton • Expansion of “Uralkali Trading” by introducing the areas previously held by “Belarusian Potash Company”
Alternative № 3	<ul style="list-style-type: none"> • Maintaining the product prices on the world market at the level of at least 400 \$ per ton • Increasing the share of domestic market sales through the sale of stocks and increasing the utilization capacity (now the capacity is underutilized) • Establishment of preferential prices for the domestic consumers • Establishment of an integrated and efficient distribution system instead of “Belarusian Potash Company”, perhaps due to the joint efforts with Belarus • Long-term contracts with customers (China, India, Brazil)

Source: own work.

4. Criteria for the choice of strategic alternatives for the potash companies

At the same time it is necessary to compare and evaluate the strategic alternatives in order to choose the best variant. For this purpose, firstly it is necessary to develop the relevant and justified criteria of the choice⁹.

The author proposes to use the system of evaluation criteria consisting of complex group criteria, representing a generalized assessment of the importance of the particular strategic alternatives taking into account the specific features of the industry and the individual criteria, which are an integral part of a group criterion¹⁰.

In accordance with the specific features of the industry, the basic criteria for the choice of strategic alternatives for the potash companies are as follows:

- Coordination with the external environment requirements. First of all, the strategy must correspond with the external environment and with the changes occurring in it¹¹. Business relationship with the environment has two aspects - the enterprise should conform to it as well as adapt and at the same time the enterprise should compete with other companies that are also trying to adapt.
- Strategy feasibility. The strategy should neither overestimate the available resources nor create unsolvable problems in the future. It must meet the expectations of the certain members of the organization.

⁹ Roy B.: Multicriterial Methodology for Decision Aiding. Kluwer, Dordrecht 1996. Chapter 1-2; Winterfeldt D.: Decision Analysis and Behavioral Research, Cambridge University Press, Cambridge 1986.

¹⁰ Smirnov E.A.: Management decisions, INFRA-M, Moscow 2001, p. 264.

¹¹ Freeman R.E.: Strategic Management: A Stakeholder Approach, Boston 1984, Lorange P.: Corporate Planning: An Executive Viewpoint, Prentice Hall 1980.

- Acceptability to stakeholders. The strategy should meet the expectations of specific support groups. In addition, a competitive advantage for the company should be provided due to the strategy.
- Acceptability of strategic risks. The implementation of any strategy leads to the emergence of certain risks, so it is necessary to choose the strategy with minimal risks¹².
- Economic efficiency of the strategy. The goal of any strategy is to provide the increasing economic efficiency of the company.

The results are summarized in Table 3.

Table 3

Criteria for the choice of strategic alternative for the potash companies

Strategic group criteria	Strategic individual criteria
The criterion of strategy coordination	Coordination of corporate strategy with the conditions and parameters of the external environment
	Coordination with the strategy of the region
	Conformity of the strategy with the objectives of the company
	Coordination of corporate strategy with the company's internal potential ¹³
The criterion of strategy feasibility	Internal balance of the parameters of corporate strategy
	Realization of the possibilities of the strategy due to available technological, human and financial resources
The criteria of strategy acceptability (suitability)	Acceptability of stakeholders (satisfying the interests of the largest possible number of stakeholders)
	Creating a competitive advantage
The criterion of strategic risks	The risk of global demand reduction in the potash industry
	The political risks (changes in antimonopoly legislation)
	The investment risks (development of capacities)
	The risk of reduction in production and incomplete capacity utilization
The criterion of economic efficiency	EBITDA margin
	Sales volume
	The level of domestic demand satisfaction

Source: own work.

¹² Skoromnik B.: Problems of strategic management organization in Russia. [electronic resource]. Mode of access: <http://www.neweconomic.ru/pbl/mf2.html>

¹³Ibragimov M.H.: Analysis of the external environment of the company to make strategic decisions // Problems of the modern economy, No. 2 (42), 2012, p. 140-143.

After the strategic alternatives have been formulated their choice is made on the basis of developed criteria by using the multiple criteria decision-making methods, for example, the analytic hierarchy process.

5. Conclusion

In the modern conditions the strategic choice for the large potash companies should be made after a detailed analysis of all factors influencing the company activity. Despite the fact that in order to develop strategic alternatives the potash companies have to take into consideration the basic principles which represent the methodological basis. The most important of them are: oligopolistic market, orientation on the specific features of the product, influence of the state on a federal level during formulating the strategy, influence of the state on the regional and municipal levels. By using these principles the potash companies will develop the effective strategic alternatives.

After the strategic alternatives formulation is completed the system of effective criteria should be developed. Such system may consist of a complex group criteria, representing a generalized assessment of the importance of the particular strategic alternatives taking into account the specific features of the industry and the individual criteria, which are an integral part of a group criterion. And only after conducting these processes the strategic choice could be made.

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Omówienie

W budowaniu strategii organizacji należy brać pod uwagę jej zasoby, warunki otoczenia oraz nadrzędne cele działalności. Proces formułowania strategii musi zatem uwzględniać dostosowanie źródeł przewagi strategicznej do środowiska biznesowego, w którym dana organizacja funkcjonuje. Dla badanego w artykule przedsiębiorstwa potażowego ważnym elementem formułowania strategii jest także uwzględnienie specyfiki branżowej. W tym

przypadku najważniejszą cechą jest oligopolistyczna struktura rynku, która oznacza, że każdy jego uczestnik ma znaczący wpływ na cały rynek. W procesie formułowania strategii istotne jest także opracowanie alternatyw strategicznych, spośród których, przy zastosowaniu analizy wielokryterialnej, zostanie wybrany jej ostateczny wariant.