II International Scientific Conference GCPMED 2019
"Global Challenges and Prospects of the Modern Economic Development"

ANALYSIS OF EXTERNAL CONDITIONS OF FUNCTIONING OF RUSSIAN OIL AND GAS COMPANIES

A.V. Shepelev (a)*, P. N. Bukin (b), O. V. Tomazova (c), Yu. A. Ageeva (d)

*Corresponding author
(a) Samara State University of Economics, 443090, Soviet Army Str., 141, Samara, Russia, sseu313@mail.ru
(b) Samara State Technical University, 443001, Molodogvardeyskaya Str., 244, Samara, Russia, bukin.pavel@mail.ru
(c) Samara State Technical University, 443001, Molodogvardeyskaya Str., 244, Samara, Russia, ovtom@mail.ru
(d) Samara State Technical University, 443001, Molodogvardeyskaya Str., 244, Samara, Russia, ageeva_julia04@mail.ru

Abstract

Actively changing environmental conditions interpret the need for enterprises to respond quickly to them. The influence of various environmental factors has a significant impact on the functioning process of enterprises. One of the leading sectors of the Russian economy is the oil and gas industry. It is largely dependent on different state structures. One of the problems of the oil and gas industry functioning is a high dependence degree on environmental factors that affect it. Therefore, it is important for the enterprises of this industry to respond to challenges of the external environment in a timely and accurate manner. The study provided answers to questions about specific environmental factors that affect the functioning of the oil and gas industry, the degree of influence of these factors, as well as the question of what factors have the greatest impact on the industry. The purpose of the study is to identify the influence degree of environmental factors on activities of oil and gas companies. In the course of the study, the main theoretical methods of research were used: analysis and synthesis of information relevant for the research issues, PEST analysis. It is concluded that Russian oil and gas enterprises are largely dependent on political and technological factors of the external environment.

Keywords: Oil and gas corporations of Russia, operating conditions, external business environment.
1. Introduction

In the conditions of constantly changing external environment, a question about the assessment of influence of these factors on business activities is highly relevant for enterprises of all economic branches. It is important to react quickly to upcoming or already accomplished changes in the operating environment. This is especially important for enterprises of those industries that are leading for the country's economy. In Russia, one of these industries is the oil and gas industry. It is heavily influenced by government agencies and other environmental factors.

2. Problem Statement

One of the problems of the oil and gas industry functioning is a high degree of its dependence on environmental factors that affect it. Taking into account the fact that this industry is one of the leading industries in the country's economy, we can conclude that the sustainability and efficiency of its functioning plays an important role for the country's economy. Therefore, it is important for enterprises of this industry to respond to challenges of the external environment in a timely and accurate manner. This problem is actively studied by domestic and foreign scientists (Adams, Adams, Ullah, & Ullah, 2019; Al Azeez, Sukoharsono, & Andayani, 2019; Kinchy & Schaffer, 2018; Orekhovsky, 2018; Schmitt & Podar, 1994; Shevchenko, Puchkina, & Tolstov, 2019; Shulus, Doguchaeva, Gukasyan, Bobkov, & Prasolov, 2019) and others.

3. Research Questions

In the course of the study, the authors tried to answer a number of questions: What environmental factors affect functioning of oil and gas industry enterprises? What is the influence degree of these factors? What factors have the greatest impact at the current stage of the economy development?

4. Purpose of the Study

The purpose of the study is to identify the influence degree of environmental factors on the activities of Russian oil and gas enterprises. Understanding the impact of a particular factor, companies can focus on mechanisms of adaptation to them. This will contribute to their sustainable functioning and development.

5. Research Methods

In the course of the study, the main theoretical research methods were used: analysis and synthesis of data. PEST analysis was also used for a solution of a specific research task. This method allows us to identify and analyze environmental factors that affect oil and gas corporations.
6. Findings

In order to assess the influence degree of environmental factors on the activities of enterprises, it is required to conduct a PEST-analysis, considering political, economic, social and technological factors relating to a particular enterprise. This analysis helps to identify possible difficulties that the company may face under the influence of external factors.

Political factors are presented by the following ones:

- Global economic development: adverse economic conditions can significantly affect the growth rate of energy demand. This, in turn, can lead to a rise in the cost of borrowed capital, lower revenues from the energy production. In order to solve this problem, Russian representatives are differentiating markets and sales channels, as well as expanding the scope of natural gas usage.

- Changes in the European gas market: recently, the EU policy is aimed at diversifying gas suppliers and increasing the share of exchange trading in gas, which negatively affects the activities of oil and gas corporations in Russia.

- Development of renewable energy sources: in some countries, the use of renewable energy sources is gaining popularity, which can lead to a decrease in gas consumption in these countries.

Among the economic factors, especially important is the activity of contractors. It provides a possibility to increase selling prices for products or services rendered by contractors. There is also a risk of incomplete or untimely fulfillment of contractual obligations by counterparties.

In addition to the above factors, it is possible to add other, no less significant factors that can affect the activities of oil and gas enterprises (table.01).

Table 01. PEST-analysis of Russian oil and gas corporations

<table>
<thead>
<tr>
<th>Political (P)</th>
<th>Economic (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- implementation of the diversification policy of gas suppliers in the European gas market;</td>
<td>- the world economy development contributes to the slowdown in the growth of energy demand;</td>
</tr>
<tr>
<td>- change of the legislative base regulating the activity of natural monopolies;</td>
<td>- increase in the cost of supply and maintenance of imported equipment and components;</td>
</tr>
<tr>
<td>- imposition of sanctions by other countries on import of goods produced in Russia and Russian retaliatory measures;</td>
<td>- reduction of prices for oil and gas resources on the world market;</td>
</tr>
<tr>
<td>- degree of the state intervention in the activities of enterprises partially or completely owned by it.</td>
<td>- the exchange rate affects selling prices for exports, as well as the cost of purchased imported components, equipment, materials;</td>
</tr>
<tr>
<td></td>
<td>- the inflation level reflected in the increase in prices for raw materials.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social (S)</th>
<th>Technological (T)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- the education level of population, lack of highly qualified personnel;</td>
<td>- development of renewable energy sources;</td>
</tr>
<tr>
<td>- modern requirements to the quality and safety of gas transportation in the territories of settlements;</td>
<td>- changes in the basic technologies of gas transportation;</td>
</tr>
<tr>
<td>- pollution of the environment by waste associated with the production, processing and transportation of oil and gas.</td>
<td>- costs of research and development of new gas transportation technologies;</td>
</tr>
<tr>
<td></td>
<td>- changes in the field of information technology to ensure communication within the organization.</td>
</tr>
</tbody>
</table>

Next, we consider the possible impact of the most significant factors on the activities of oil and gas corporations in Russia.

Political factors:
- the legislative framework regulating the activities of natural monopolies: there may be significant changes concerning the activities of such large structures (monopolists) in the field of taxation, which may lead to a significant increase in costs, as well as the regulation of the price level. Such an enterprise as a natural monopoly falls under the Federal law from August 17, 1995 No. 147-FZ "On natural monopolies" and depends on the changes made to it;

- imposition of sanctions by other countries may entail the inability to export products and to import the necessary equipment, raw materials and materials (since 2014, sanctions have been imposed in the EU and the U.S.A. to limit imports of products produced in Russia; the emergence of new conflict situations may lead to an increase in restrictive measures and the duration of sanctions);

- the degree of state intervention: increased state control will lead to increased reporting and the need to take into account the views of public authorities by decisions making.

Economic factors:

- decrease in oil prices may lead to lower prices for natural gas and energy, and hence the fuel industry as a whole, this will lead to a significant reduction in revenues (after the decline in world oil prices in 2014, Russian oil and gas corporations were forced to reduce prices for the fuel they produce, and now we can observe a decrease in prices for gas transported by their enterprises);

- the exchange rate: changes in the exchange rate play an important role in the export of manufactured products (at the same time, their cost can both increase and decrease);

- the inflation rate: a high inflation rate will significantly affect the value of the acquired assets, which will lead to an increase in the costs of the enterprise.

Social factors:

- the level of education: a modern company requires highly qualified personnel to perform work related to the main technological processes in the organization (for many years, there was a decline in the prestige of working specialties in Russia, the applicants’ preference was given to higher education institutions, after the graduation young professionals still do not want to "work with their hands"; because of the absence of a sufficient number of young professionals, we can see personnel aging: experienced specialists are no longer flexible and adaptable as young professionals, and this fact can reduce the efficiency of companies’ activities);

- quality and safety requirements: processing and transportation of various types of fuel and gas is a quite difficult and dangerous process that requires special control (in this regard, the question is raised about ensuring a sufficient quality level, which can be provided with the application of quality management standards ISO 9000 and 9001 series; the occurrence of such risks will largely affect the reputation of the enterprise, as well as entail legal and financial consequences);

- environmental pollution: the main activities of oil and gas enterprise can lead to environmental pollution (this feature requires undertaking of measures to reduce the impact of industrial activities on the environment; the occurrence of such risks will largely affect the reputation of the enterprise, as well as entail legal and financial consequences too).

Technological factors:
- changes in basic technologies: new modernized equipment is needed to control the safety and trouble-free transportation of gas, as well as new equipment and production technology can reduce the costs of the enterprise, which will positively affect the financial results;

- costs of research and development: it is possible to realize the risk of costs increase associated with research activities related to changes in production technology, as well as the development of new fields (the increase in expenses will affect the increase in costs and cost prices, which is unacceptable in the current situation with oil and gas prices);

- changes in the field of information technology can contribute to the simplification of accounting at enterprises, the implementation of the information transfer and various forms of control (this will help to more efficiently regulate the activities of both individual departments and the enterprise as a whole).

7. Conclusion

In general, it can be concluded that the greatest impact on the activities of the oil and gas enterprises is provided by political and technological factors that can significantly affect the business processes and results of the companies. According to the research results, it can be concluded that Russian enterprises of the oil and gas industry are also dependent on environmental factors. Enterprises cannot influence the listed factors, but can adapt to changing conditions, thereby ensuring their functioning stability.

References


