

Applying the ‘Uncertainty-Strategy-Actions’ Model in the Export Strategy Analysis of PJSC Gazprom in the European Gas Market

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Abstract

The study tested the ‘uncertainty-strategy-actions’ model by K.P. Coyne and S. Subramaniam, which the authors proposed earlier as a theoretical basis for analyzing the export strategy of the Russian company PJSC Gazprom in the European gas market. The conclusion was as follows: the company will act as a balancing supplier in the European market in the medium term, maintaining a stable level of exports and diversifying supplies along three routes, and in the long term, the unified Eurasian gas transmission system created within the framework of the company’s forming strategy will become an energy ‘bridge’ between the markets of Europe and Asia.

Key-words: ‘Uncertainty-strategy-actions’ Model, PJSC Gazprom, European Gas Market, Competition, ‘Turn to the East’.

1. Introduction

The current state of the global market for raw materials is determined by the construction of a new spatial structure, by low level and high volatility of prices. In conditions of high uncertainty, commodity companies oriented to foreign markets are required to make non-standard combinations

of decisions when conducting operational policies and implementing a long-term strategy, which necessitates the use of formal models in analysis and forecasting. The present research aims to form more flexible sales and investment and pricing strategies that allow adapting the company's activities to high volatility and uncertainty of the external environment.

The far abroad (non-CIS countries) is a traditional export market of Gazprom and includes three directions – the countries of the near abroad (CIS countries, former USSR), the countries of Europe and the Asia-Pacific Region; supplying pipeline gas to these markets provides high profitability. In 2019, Gazprom sold 232.4 bln m³ of gas to non-CIS countries. Net sales proceeds (excluding excise and customs duties) amounted to 2,490.4 bln RUB. Table 1 shows that in 2019, gas sales to non-CIS countries decreased by 4.5%, prices by 14.5%, and net revenue by 15.6%. The sales proceeds drop in 2019 was mainly due to a decline of average prices denominated in rubles and of volume in physical terms. The sales decrease was both influenced by the weather factor and the growth of *liquefied natural gas* (LNG) supplies, as well as by the economic situation in certain countries (primarily in Turkey).

Table 1 - Gas Exports to Non-CIS Countries by Gazprom, 2017-2019

	2017	2018	2019	%
Gas sales, bln m ³	242.0	243.3	232.4	-4.5
Average selling price, USD / thousand m ³	200.2	246.4	210.6	-14.5
Net sales proceeds, bln RUB	2221.2	2951.2	2490.4	-15.6
RUB to USD exchange rate, December 31 of the current year	57.6	69.5	61.9	-
Capital expenditures, bln RUB*	1504.6	1795.9	1818.7	1.3

Source: Gazprom annual report, 2019. <https://www.gazprom.ru/investors>. Accessed 10 June 2020.

*Capital expenditures in 2020 will be 1610.0 bln RUB according to the annual investment program of Gazprom.

2. Literature Review

Certain elements of the scientific approach to building an effective strategy in a period of uncertainty, developed by K.P. Coyne and S. Subramaniam (Coyne & Subramaniam, 2000), are used in the studies by A-M. Grigore (Grigore, 2014), T.W. Malone, R. Laubacher, M.S. Scott Morton (Malone, Laubacher, Scott Morton, 2003), D. Kundisch (Kundisch, 2003), Stanley C. Abraham (Abraham, 2012). The problems of forming competitiveness at the macro level were considered by T.

Hemphill and M.A. Perry (Hemphill & Perry, 2012), N. Hensel (Hensel, 2011) and M. Yücel (Yücel, 2018).

Numerous scientific schools and institutes focus on the European gas market as a highly competitive segment of the world gas market. The problems of liberalizing the European gas market are considered in studies by P. Heather, B. Petrovich (Heather & Petrovich 2017), D. Stokes and O. Spinks (Stokes & Spinks, 2016), P. Heather (Heather, 2020), S.I. Melnikova, E.I. Geller, T.A. Mitrova and V.A. Kulagin (Melnikova, Geller, Mitrova, Kulagin, 2016). The issues of pricing formation in the gas market are studied in the publications by N.M. Svetlov, L.L. Razumnova and A.K. Pakin (Svetlov, Razumnova & Pakin, 2017), H.V. Rogers (Rogers, 2015), S. Alterman (Alterman, 2012), D. Stern (Stern, 2013), R. Roesser (Roesser, 2009), I.Y. Mironova (Mironova, 2015), F.C. Graves and S.H. Levine (Graves & Levine, 2010).

The studies by J. Stern and H. Rogers (Stern & Rogers, 2014), S. Cornot-Gandolphe (Cornot-Gandolphe, 2016), S. Boussena and C. Locatelli (Boussena & Locatelli, 2016), V.A. Kulagin and T.A. Mitrova (Kulagin & Mitrova, 2015), M. Belova and E. Kolbikova (Belova & Kolbikova, 2017), T. Migaleva, L. Razumnova, A. Pakin (Migaleva, Razumnova & Pakin, 2016), T. Mitrova, T. Boersma (Mitrova & Boersma, 2015), E. Orlova (Orlova, 2017) are devoted to competition issues in the European gas market and export strategies of Russian gas suppliers.

The scientific works by J. Henderson (Henderson, 2016), D. Stokes, O. Spinks and H. Rogers (Stokes, Spinks & Rogers, 2015), J. Stern (Stern, 2014), J. Henderson and T. Mitrova (Henderson & Mitrova, 2015), P. Lunden, D. Fjaertoft, I. Overland and A. Prachakova (Lunden, Fjaertoft, Overland & Prachakova, 2013), A.M. Mastepanov (Mastepanov, 2014), L.L. Razumnova and E.G. Lisovskaya (Razumnova & Lisovskaya, 2018) consider different aspects of Gazprom's strategy in the European gas market.

3. Research Methodology

For Gazprom's export strategy analysis in the European market, the authors of the present study chose the 'uncertainty→strategy→actions' matrix described by K.P. Coyne and S. Subramaniam (Coyne & Subramaniam, 2000) which allows forming an optimal set of actions and select a type of strategic posture taking into account the uncertainty factor. The model was proposed as a basis for building Gazprom's export strategy in an earlier publication (see Razumnova & Lisovskaya, 2018).

The analysis of the European market in 2017 allowed the authors of the present study to conclude that the gas market develops under the conditions of the second and third levels of uncertainty. Therefore, it is suitable for Gazprom to reduce this uncertainty with a ‘shaping strategy’, that is, by building a structure and increasing the likelihood of the industry development according to its favorable scenario. At the second level of uncertainty, it is necessary to track the signal indicators, which will permit to quickly move from a ‘shaping strategy’ to an ‘adapting strategy’ or to ‘reserving the right to play’. On the third level of uncertainty, it is important to adjust the goal setting of a ‘shaping posture’ to give impetus to the market development in a direction favorable to the company, which is possible by making large investments that provide an organization with free choice of any of the emerging scenarios (Razumnova & Lisovskaya, 2018).

4. Testing the Model

The model was tested based on the empirical data and factual material analysis provided by Gazprom on the official website and by the investment companies analysts regularly reporting on the activities of Gazprom, as well as the research results of other experts.

Gazprom’s strategy is based on the fact that Russia is currently able to benefit from the monopoly position in the gas industry. At the same time, this statement does not mean that in the future the created organizational system will provide Gazprom with the same high competitiveness and world leadership and also exclude the liberalization reforms. Since 2009, under the influence of the integration processes of gas transmission systems of Russia and the EU, Russian gas trade in the European market becomes more flexible, adapting to the conditions of the Third Energy Package (TEP). Due to the lack of a sufficiently high domestic demand for new technologies in the long term, it is very important for the Russian Federation to attract foreign capital to create joint ventures that form the drivers for the development of domestic energy, and to develop the processes of energy markets decentralization (Plakitkin, 2011). However, this strategy is currently constrained by sanctions against Russia.

Gazprom’s current overall strategy compared to mid-2010 remained unchanged: the goal is to establish PJSC Gazprom as a leader among global energy companies by diversifying sales markets, ensuring reliability of supplies, increasing operational efficiency and using scientific and technical potential. Gazprom remains the world leader in gas production, in the length of the gas transportation system (GTS), in gas sales among the largest companies in the world and has the smallest carbon footprint. Technological leadership is confirmed by the constant growth of the R&D volume, which

in 2017-2019 increased from 8.2 to 12.1 bln RUB, and by patent rights from 2365 to 2674. The commercialization of R&D results over a three-year period amounted to 34.8 bln RUB (Annual report of Gazprom, 2019).

At the same time since 2014, high prices volatility on the gas market and a decrease of external demand for Russian gas had a significant impact on the company’s gas strategy – it led to the formation of a new development vector, determined by the common concept of the Russian state strategy of ‘Turning to the East’. As a result, China began to be viewed as a promising new market for Russian hydrocarbon resources.

Based on the analysis of numerous studies concerning long-term forecasts of the development of Europe and East Asia gas markets, the authors of the present research concluded that Gazprom’s medium-term strategy will be implemented mainly in the conditions of the second level of uncertainty, which does not allow formulating a strategy based on confident forecasts but allows developing alternative scenarios.

The current strategy corresponds to two types of postures described in the model by K.P. Coyne and S. Subramaniam – ‘shaping posture’ and ‘reserving the right to play’. The former allows changing the structure of the industry in accordance with the company’s own concept and creating new market opportunities by establishing control over market development; the latter implies achieving a dominant position in the market through incremental investments (See Table 2). The authors of the present study believe that an ‘adapting posture’ which requires a predictable business environment in the regional gas markets was more suitable for the initial period of implementation of the EU's Third Energy Package (2009-2014) and is currently not possible.

Table 2 - Analysis of Gazprom’s Strategy at the Second Level of Uncertainty based on the ‘Uncertainty-strategy-actions’ Model

Strategic postures/ actions	Shaping	Reserving the right to play
Big bets	Investing in the construction of the gas pipeline Power of Siberia 2, creating gas production centers in the eastern regions, constructing a unified transport infrastructure West-East.	Commissioning of Nord Stream 2: developing the infrastructure that provides its raw material base; investing in the construction of infrastructure focused on gas supplies to the West.
Options	Developing the transport infrastructure to ensure the functioning of the Turkish Stream gas pipeline.	Developing LNG capacities targeted at European markets; developing an import substitution program.
No-regrets moves	Developing a complex of processing industries in the eastern regions based on gas production centers.	Maintaining long-term take-or-pay contracts; flexible supply policy for the Yamal gas pipeline; participating in auction trade in Europe; expanding electronic trading in Russia; optimizing gas transportation infrastructure; withdrawing excess capacities of compressor stations and gas storage facilities.

Source: Compiled by the authors based on K.P. Coyne, S. Subramaniam. Bringing discipline to strategy. *The McKinsey Quarterly*, 2000, No. 3. P.29-38; Razumnova, L.L., Lisovskaya, E.G. 2018. The innovative strategy of commodity companies in conditions of uncertain demand in the European gas market (the case of PJSC GAZPROM). *Bulletin of Plekhanov Russian University of Economics*, 6 (102):199-213; data from the official website of Gazprom.

The risks taken into account in Gazprom's strategy on the second level of uncertainty allow forming alternative future scenarios and including:

- Risks associated with a slowdown in the global economy and a drop in global demand for gas and especially domestic demand in China;
- Political risk coming from the desire of the EU countries (contrary to economic considerations) to reduce the presence of Russia in the gas market of Europe, as well as from the aspiration of the United States (through the adoption of restrictive measures) to replace Russian supplies with their LNG exports and to prevent putting into operation the gas pipeline Nord Stream 2;
- Risks associated with changes in state regulation of the gas industry;
- Risks associated with the development of gas production from unconventional sources and the expansion of the use of renewable energy sources;
- Market risks including those caused by the EU policy of gas supplies diversification and increased competition in European market.

At the same time, this list is not exhaustive and can be expanded due to the new factors which at the moment the authors of the present study refer to risks of the third level. These risks do not allow describing specific scenarios and limit the authors in determining the range of possible scenarios. These risks include, for instance:

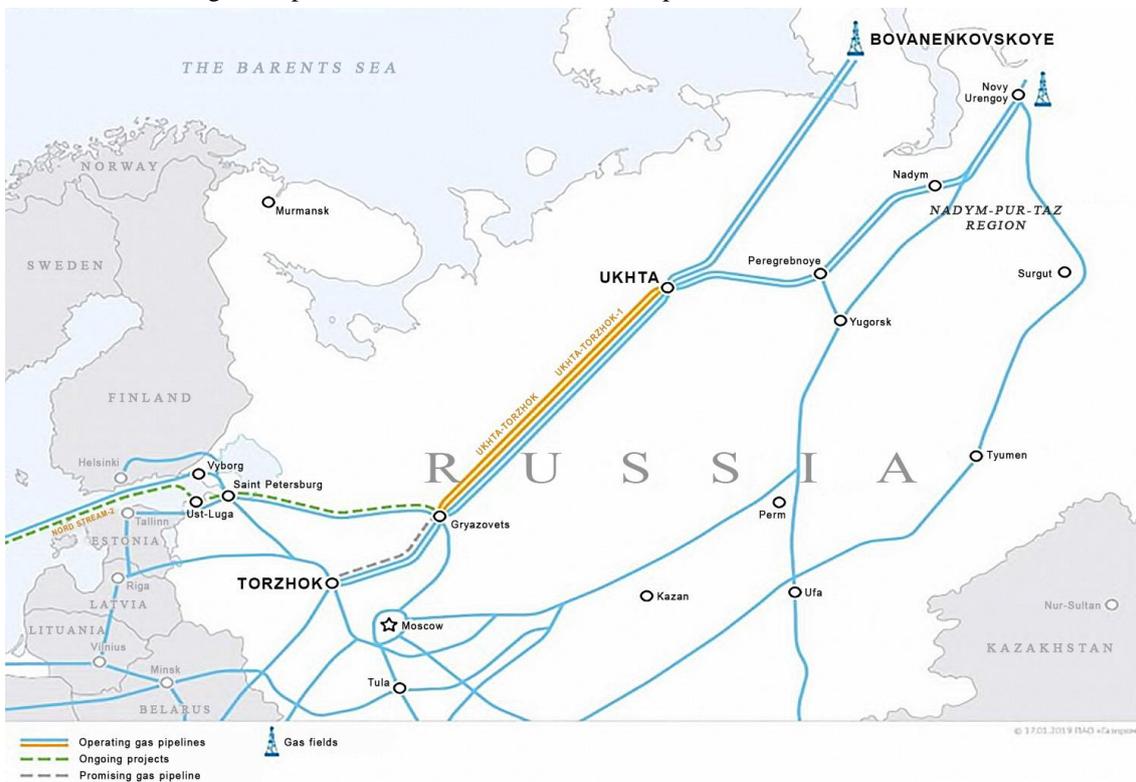
- The risks associated with future gas substitution with hydrogen (green gas), which will reduce decarbonization costs but create a high degree of political uncertainty and a low degree of coherence in terms of objectives, methods and timing within the EU;
- Qualitative changes in global industrial production and energy demand associated with the long-term consequences of the spread of COVID19, the implementation of technological innovations, social upheavals, etc.

In the contest of 'shaping strategy' Gazprom can take actions classified as 'big bets' capable of bringing the company both large profits and significant losses. They include the construction of the gas pipeline 'Power of Siberia 2' and the expansion of the production resource base on the Yamal

Peninsula which in 2002 was designated as a region of strategic company's interests¹. The company continues to develop the Cenomanian-Aptian deposits of the Bovanenkovskoye field (capacity 4.8 trillion m³) which is a resource base for the pipeline 'Nord Stream 2'. The development of the Kharasaveyskoye field which will be commissioned in 2023 and provide consumers with gas for over 100 years is now full-scale. The development of new fields in the Nadym-Pur-Taz region and the continental shelf of the northern seas continues as well. The investment program of the Yamal Peninsula fields development, which will become a main volume of developing the domestic gas industry, is twice the investment in the West Siberian oil and gas complex in the 70-80s.

To transport the resources of Yamal, the Northern Gas Corridor is being expanded through the construction of gas transmission capacities at the Gryazovets-Slavyanskaya CS section (North-Western Region), which continues two gas pipelines: Ukhta-Torzhok-2 and Bovanenkovo-Ukhta-2. After these gas pipelines reach full capacity of in 2021-2022, new branches Ukhta-Torzhok-3 and Bovanenkovo-Ukhta-3 will be put into operation (Fig. 1).

Fig. 1. Expansion of the Northern Gas Transportation Corridor of Russia

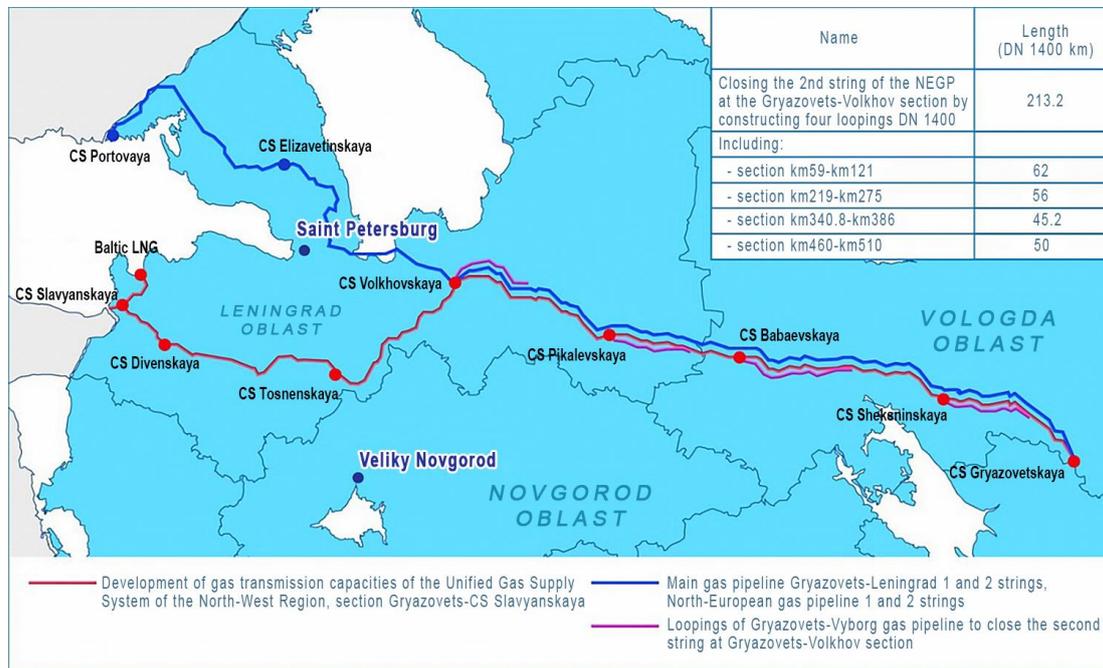


Source: Projects of the company Ukhta-Torzhok and Ukhta-Torzhok-2. <https://invest.gazprom.ru/about/projects/ukhta-torzhok-i-ukhta-torzhok/>

¹ The active development of its deposits began in 2006.

At the compressor station Slavyanskaya (the head station of Nord Stream 2), the construction of eleven gas pumping units with the total capacity of 352 MW is envisaged which will provide the necessary overpressure of 22.15 MPa (217 times higher than atmospheric pressure)² (See Figure 2).

Fig. 2 - Formation of the Gas Transmission System of the Nord Stream 2 Project



Source: <https://invest.gazprom.ru/about/projects/gryazovets-ks-slavyanskaya/>

The cost of the project ‘Development of gas transmission capacities of the North-West Region, the Gryazovets-CS Slavyanskaya section’ will reach 479 bln RUB, or 7.85 bln USD³ (See: Section Gryazovets-CS Slavyanskaya: Gazprom shifted the supply of pipes to Nord Stream 2 by 1.5 years, 2018). The main long-term risk for the implementation of this program is the lack of return on investments in case of low gas demand in Europe and the lack of opportunities to diversify gas supplies (Kharitonova & 2009). The high degree of uncertainty in global gas demand is determined by the fact that scenario forecasts, as shown in the study by A.M. Mastepanov, differ significantly in quantitative estimates. Thus, its share in the global energy consumption in the climate-oriented IEA 450 Scenario is 22%, while in the WEC's Modern Jazz scenario it is up to 27.1% (Mastepanov, 2017). Gazprom believes that short-term political risks for western gas exports associated with US attempts to impede the completion of the project Nord Stream 2 were neutralized by transferring

² Gazprom. <https://invest.gazprom.ru/about/projects/gryazovets-ks-slavyanskaya/>

³ Average annual RUB / USD exchange rate in 2015: 1 USD= 61 RUB.

Gazprom's Akademik Chersky pipe-layer to the Russian fund STIF, which allows the pipeline to be completed in 2020 without being subject to restrictions (Beutelsbacher, 2020).

At the same time, among 'big bets' there is also creation of gas production centers and construction of gas transport infrastructure in the eastern export direction. The Eastern Gas Program (approved in September 2007) will develop the Sakhalin projects – Sakhalin-2 and Sakhalin-3 (Kirinskoye, Yuzhno-Kirinskoye and Mynginskoye fields in the Kirinsky, Ayashky and Vostochno-Odoptinsky blocks). Four eastern gas production centers also will be formed – Yakutsky (based on the Chayandinskoye field, about 1.4 trillion m³ of gas), Irkutsky (Kovyktinskoye field, 2.7 trillion m³), Kamchatsky (Kshuuskoye and Nizhne-Kvakchikskoye fields) and Krasnoyarsk (Abakanskoe and Vostochno-Imbinskoe fields). In 2020, the investment program of Gazprom assumes the start of gas pipeline 'Power of Siberia 2' (2600 km) construction to connect gas pipelines of Eastern and Western Europe (See Fig. 3). Natural gas will be supplied to China via Mongolia from the Irkutsk Region fields, Krasnoyarsk Territory and Yamal.

For this purpose, the constructed Sakhalin-Khabarovsk-Vladivostok gas transmission system and Power of Siberia (commissioned on December 2, 2019) will be connected in the Khabarovsk region and merged with the Unified Gas Supply System of Russia. This system will become the world's largest unified technological complex, which could ensure reverse and averse deliveries of gas in the eastern and western directions.

The actions qualifying as options that give the opportunity to maximize profits in favorable scenarios and minimize losses in extremely adverse conditions include the development of Gazprom gas transportation infrastructure in the southwest direction. These actions include putting into operation of the Turkish Stream pipeline and joint work with Serbia to expand the GTS (implemented by the Russian-Serbian design company GASTRANS D.O.O Novi Sad) for its successful functioning. Deliveries along this route may balance a critical demand increase in the European market and decline in case of Ukrainian transit suspense.

Another area that maximizes Gazprom's revenues is the development of production and transport infrastructure for LNG in the new situation of the European gas market, which is due to: the entry into force of the EU Third Energy Package (in 2009), new investment plans of Norway to expand gas fields exploration in The Barents Sea (2016), an increase of gas production at the Troll field (Migaleva & Co, 2016.), the expansion of gas transmission network towards Europe, and also a new EU strategy to complete the construction of gas infrastructure in order to maximize the use of existing LNG terminals and storage facilities (EESC opinion: EU Strategy for liquefied natural gas

and gas storage, 2016; CEER response to the European Commission strategy for liquefied natural gas and gas storage, 2016).

Gazprom's LNG trade strategy involves creating high-tech facilities along the entire production chain, including a phased commissioning of one of the world's largest high-tech Amur gas processing plant and an integrated LNG complex in the North-West of Russia in Ust-Luga in 2021-2024. In 2020, it is planned to put into operation the production, storage and shipment LNG complex at the compressor station Portovaya in the Leningrad Region and to start constructing an LNG plant in Vladivostok (investment feasibility stage).

At the same time, Gazprom is adapting production and sales activities to the changing prices of the European gas market and the imposing sanctions by Western and other countries in order to prevent cost increase in the future. For this purpose, it implements a large-scale import substitution program for goods supplied from Germany (Atlas Copco Energas GmbH, Borsig ZM Compression, Voith GmbH), the USA (BHGE, Schlumberger, Halliburton, Paradigm), Norway (Aker Solutions (Norway), Great Britain (TechnipFMC), PRC (China Offshore Oil Engineering Co., Ltd.), etc. (Annual Report of Gazprom, 2019).

Maintaining the long-term system of 'take or pay' contracts and more active sales in spot markets (where prices in certain periods may exceed the prices of long-term contracts) can be considered as **no-regrets moves**. Such actions bring benefits to the company in any scenario in high uncertainty conditions. A more flexible pricing policy may be prompted by the growing competition in the European market from the United States and other gas suppliers such as Algeria, Qatar, Nigeria, Iran, Norway, Great Britain and the Netherlands, and also from other Russian gas exporters, for example, LNG producer in Yamal Novatek (Karpov, 2019).

According to Dmitry Marinchenko, senior director of the group for natural resources and commodities at Fitch, gas export via the Yamal-Europe gas pipeline which runs through Poland is the specific mechanism for balancing gas supplies to Europe. Notably, Poland did not renew the contract for the purchase of gas with Gazprom on May 16, 2020, and from May 17, 2020 it buys Russian gas only based on the results of auctions. At the moment, the reserved capacity of the gas pipeline is used by about 68%, while as of June 2020, the capacity of the Polish section of the pipeline is 93% reserved. Due to a supply overabundance on the European market, Gazprom periodically stops transit and thus balances export supplies. There is a significant reduction of deliveries via the Turkish Stream gas pipeline (by 72% compared to 2019), although according to Gazprom CEO Alexei Miller, they fully cover all Gazprom's contracts with consumers in Bulgaria, Greece and North Macedonia

(the Yamal-Europe gas pipeline is working again, and the Russian Federation is losing the Turkish gas market, 2020).

The second balancing mechanism is sales on electronic platforms, which Gazprom expects to increase. In December 2019, Gazprom Export updated the package of documents for working on the electronic trading platform, which allowed concluding framework contracts valid until January 1, 2022, while previously, contracts were limited to one calendar year. This opened up the opportunity to offer the longer delivery times: ‘year ahead’, ‘season ahead’ and ‘quarter ahead’. In 2019, the company concluded a deal of gas export to Europe in the summer of next year – delivery point Dutch TTF, delivery volume will amount to 4.22 bln m³ (Gazprom sold 4.2 billion m³ of gas through electronic trading to Europe with delivery in 2020).

Other actions that can be regarded as no-regrets moves ensuring flexible gas supplies include the policy of optimizing Gazprom’s capacities: reconstruction and technical re-equipment of existing transport facilities and also withdrawal of excess capacities of the Central Gas Transportation Corridor. A more flexible gas supply will be carried out through financing the replacement of outdated gas storage facilities, raising the daily productivity of existing facilities and building new ones in scarce regions (Siberian and Far Eastern), as well as increasing gas storage volumes abroad and creating peak gas storage facilities for small volume in Russia.

5. Discussion and Conclusion

As noted by Professor A.M. Mastepanov, Gazprom’s diversification of gas export flows has the most important geopolitical consequences for the Eurasian space (from Lisbon to Vladivostok) and also affects the interests of many APR states, including the countries of Northeast Asia, which is determined by the following prerequisites: firstly, creation of fuel, energy and raw materials base for the advanced socio-economic development of the East of Russia, in which oil and gas projects will play the role of the main driver of regional growth, innovation and new technologies and will make conditions for the accelerated growth of processing industries; second, increased reliability and safety of energy supply to the NEA region and partial replacement of coal with natural gas in its energy balance, which will ensure an increase in transboundary environmental safety (for example, through improving the quality of the natural environment in the Russian border regions with China); third, favourable conditions for the integration of the NEA states into a single economic space (Mastepanov, 2015).

One of the most essential long-term risks for Gazprom is the high uncertainty in China’s demand for external gas supplies, which is a key factor in the price formation in both the European and Asian gas markets. The Chinese government continues to pursue a controversial policy on the energy mix formation, supporting the coal industry (construction of new coal plants) and intensifying the development of renewable energy sources in the same time (Hove, 2020). The competitiveness of Russian gas could be negatively affected by a massive revision of LNG contracts in Asian markets due to a significant gas prices drop (Ason, 2020).

Building its strategy, Gazprom proceeds from the fact that in 2018-2030, the ratio between pipeline gas and LNG supplies in the world will not change significantly: the share of LNG will increase from 11% to 16%. Until 2030, the company expects to maintain supplies to the European market at 200 bln m³ based on four main trends: decrease in local production, climate changes, transition from coal to gas and from nuclear energy to gas. In 2020, Gazprom faced a new reality: a high level of gas reserves in Europe, an abnormally warm winter, a sharp drop in spot prices in the European market, an increase in LNG supplies from the USA and strengthening of the EU decarbonization policy.

Despite these trends, Gazprom manages to maintain its position in the European market (occupying about 35%) due to: low cost of gas production, entry into new segments and diversification of supply routes, including Nord Stream, Turkish Stream and the preservation of the Ukrainian route, expanding supply through the differentiation of price mechanisms, as well as expanding LNG supplies and sales on electronic platforms (see Table 3).

Table 3 - Structure of European Natural Gas Consumption by Source, %

	2016	2017	2018	2019
Domestic production	48	46	46	42
Export of Gazprom	33	34	37	36
LNG	10	11	13	21
Other imports	10	9	10	8

Source: Presentation “Next chapter: Balanced CFs. Higher shareholders returns”. Gazprom Investor Day. 2020. PJSC Gazprom. Eurostat, National Statistics, IEA, IHS Market. Slide 21. URL: <https://www.gazprom.ru/investors>

The analysis showed that due to the geographical location of Russia, Gazprom has the opportunity to become a kind of energy ‘bridge’ between the markets of Europe and Asia, supplying its own gas and providing gas transit services to other producers. This predetermines the company

shaping strategy in its key areas of activity. Only Gazprom with the support of the Russian government can cope with such a difficult task. Unfortunately, at the moment, the policy of pressure on Gazprom (actively supported by the USA and aimed at reducing its role in the gas market) dominates in Europe, and little attention is paid to the company's ability to contribute to solving the problem of high price volatility and gas demand uncertainty in various regions of the world. As a Russian proverb says, to do so is 'not to see the forest for the trees'.

The authors of the present research believe that in the medium term, Russia will act as a balancing supplier on the European market. Taking an adapting posture, Gazprom can maintain a stable level of gas exports against the backdrop of the supplies flexibility from Norway under the low prices level in the European market which can be expected to rise in 2021-2023 (Fulwood & Sharples, 2020). Breakeven costs can provide Gazprom with a competitive advantage over spot LNG supplies, and diversified transport capacities allow adjusting supplies to the European market in accordance with demand fluctuations. This goal will also be facilitated by accelerating the trend of Gazprom's transition to auction sales.

Thus, the performed analysis fits well into the previously proposed combination of strategies and actions based on the 'uncertainty→strategy→actions' matrix developed by K.P. Coyne and S. Subramaniam. Gazprom's strategy will be 'shaping' with regard to future development of the eastern and western direction of exports, while at the same time 'reserving the right to play' in the western direction in the medium term. Due to its predictive value, this model can be used as a general scientific approach for a systematic analysis of risks, development of an export strategy and building effective solutions system to achieve the goals set by a company focused on foreign markets.

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Annex

As follows from the characteristics of the model proposed by K.P. Coyne and S. Subramaniam, in conditions of different levels of uncertainty, a company can take one of three

strategic postures - shaping, adapting or reserving the right to play. This approach is described in the article by L.L. Razumnova and E.G. Lisovskaya (Razumnova & Lisovskaya, 2018).

Strategically shaped companies seek to restructure the industry according to their own vision by creating new market opportunities through radical industry reorganization (at the first level of uncertainty) or taking control of market development (at higher levels of uncertainty). With an adapting strategy, companies are not able to change the structure of the industry and themselves adapt to changing market opportunities. Typically, this strategy is used in a predictable business environment. In this case, the analysis aims to forecast the future state of the industry, and strategic decisions consist in the choice of market segments and means of competition.

Reserving the right to play is a form of adapting strategy and is only used at the second, third, and fourth levels of uncertainty. The implementation of this strategy presupposes an incremental approach to making investments to achieve a dominant position in the market through access to unique information, cost structure, special relationships between suppliers and customers, etc. As the level of uncertainty decreases, the strategy is replaced by shaping or adapting. Residual uncertainty that remains after the company in the process of making strategic decisions, was able to identify clear trends, on the basis of which it is possible to determine the potential demand for its products, as well as conduct the necessary research on previously unknown factors, including the effectiveness of the introduction of new technologies, elasticity of demand, plans of competitors to expand production capacity, etc. (Razumnova & Lisovskaya, 2018).

Big bets involve the implementation of large investments or participation in mergers and acquisitions and are associated with a high risk in which the company can receive large profits or, on the contrary, face significant losses. Options are used to maximize profits in favorable scenarios and minimize losses when extremely unfavorable ones are realized. These actions include pilot projects, a limited amount of investment in the creation of joint ventures, the purchase of licenses for alternative existing technologies, etc. No-regrets moves are seen as measures that benefit the company in the event of any scenario in the face of high uncertainty. These include policy measures to reduce costs, competitive intelligence, decisions to invest in expanding production capacity, entering new markets, etc. (Razumnova & Lisovskaya, 2018).

Table 4 - Matrix ‘uncertainty→strategy→actions’

		Strategic posture		
		shaping	adapting	reserving the right to play
Level of uncertainty	First level: First level: useful prediction	big bets, options, no-regrets moves	big bets, options, no-regrets moves	big bets, options, no-regrets moves
	Second level: Second level: discrete scenarios	big bets, options, no-regrets moves	big bets, options, no-regrets moves	big bets, options, no-regrets moves
	Third level: Third level: continuous uncertainty	big bets, options, no-regrets moves	big bets, options, no-regrets moves	big bets, options, no-regrets moves
	Fourth level: Fourth level: true ambiguity	big bets, options, no-regrets moves	big bets, options, no-regrets moves	big bets, options, no-regrets moves

Source: Compiled by the authors based on Kevin P. Coyne, Somu Subramaniam. Bringing discipline to strategy. The McKinsey Quarterly, 2000, No. 3. P.29-38; Razumnova, L.L., Lisovskaya, E.G. 2018. Innovative strategy of commodity companies in conditions of uncertain demand in the European gas market (the case of PAO GAZPROM). Bulletin of the Plekhanov Russian University of Economics, 6 (102):199-213.