

# The cross-border Kuzbass: diversification into international trade and sustainable development paths

O Seklecova<sup>1\*</sup>, O Komarcheva<sup>1</sup> and O Konshina<sup>1</sup>

<sup>1</sup> Kemerovo State University, 47 Boulevard Stroiteley, Kemerovo 650056 Russia

E-mail: seklecova@list.ru

**Abstract.** The presence of reserves of natural resources is an absolute advantage of the development of the region, using which it is important not to be limited only to the export of raw materials. The balance of foreign exchange is necessary to ensure the development of all sectors of the economy. Diversification of the regional economy is the basis for the strategy of the socio-economic development of the Kuzbass cross-border regions.

**Keywords:** Kuzbass, trade, export, development, production

## 1. Introduction

The scale and growth rate of the Russian foreign trade show a close relationship with the changing global market conditions and the dynamics of domestic production. Therefore, its decline is not accidental. In 1998-1999, 2009-2010, 2015-2016, there was a recession; in other periods, rising values of exports, imports, and foreign trade turnover took place. However, to a greater extent, the growth is not caused by the growth of physical volume and the qualitative improvement of the export structure, but the real reason behind is the favorable price changes in world trade for Russian exports.

However, a number of sides of the diversification of the modern foreign trade of Russia have not yet received their deep and comprehensive understanding. In modern conditions, the diversification of the Russian foreign trade should not be considered without taking into account the contradictory impact on it of such factors as the globalization of the economy, sanctions against the Russian Federation, financial and economic transformations in our country. The research related to the analysis of problems and barriers to diversification and ways to eliminate them requires its further development. The study focused on the areas of expansion of the geographical spectrum of foreign trade relations of Russia as a whole and of the Kuzbass in particular, in the aspect of ensuring sustainable economic growth, also requires development.

## 2. Materials and Methods

There is a solid theoretical foundation under the phenomenon of diversification. Already in the 1950s, based on the very rich empirical data, R. Prebisch hypothesizes that in the long term, export prices for commodities fall in relation to prices for the imported finished industrial products and engineering products. The ratio of export prices for raw materials and import prices for the finished goods changes in favor of the finished goods, and a steady deterioration in the terms of trade of raw materials occurs [1]. Because of this, the economic situation of countries exporting raw materials, especially those that do not have a well-considered macroeconomic policy, is gradually deteriorating. In the period of a

sharp fall in prices on the world market, the economic situation of the countries exporting raw materials may be on the verge of survival. The commodity export orientation can significantly limit the country's ability to develop in other directions and determines the concentration of resources in the extractive industries. As a result of high volatility in commodity prices, countries receive unstable export revenues and often fall into difficult economic and financial situations. The macroeconomic instability adversely affects the country's investment image and the number of investment projects with foreign investors being implemented. In this regard, the expansion of the set of exported goods contributes to the leveling of price fluctuations through a variety of ways of receipt of export earnings.

Also, the endogenous growth model, which was proposed by Kiminori Matsuyama, should be attributed to the theoretical foundations of the problem of export diversification [2]. In this model, a particular emphasis is placed on the positive effect of the “learning during production” effect when creating a product with a high proportion of added value. Namely, in the production of such products in the manufacturing industry, the “overflow” of knowledge and technology is observed with their subsequent adaptation to the needs of various industries. In addition, this model describes the various paths that the economy goes through in the process of developing export diversification. At the first stage, as a rule, the light industry, agriculture, and the mining sector develop. At the next stage of its development, the country begins to redirect the income received from the sale of raw materials in the foreign market and attracted investments into the engineering, automotive, and electronic industries, computer technologies. Therefore, we should not give up our national advantages associated with the possession of large reserves of natural resources and it is necessary to have in the structure of our exports a group of fuel and energy and raw materials. However, given the trend of growing differentiation of global demand, the expansion of its structure and the contradictions of globalization, an active course towards the diversification of economic activity and exports must be simultaneously ensured.

Diversification involves not only the expansion of export commodity items, but also the diversification of geographical areas. Strategic miscalculations in this regard can be costly for the economic growth of the region and the country as a whole. In the context of globalization, one of the most important tasks is to maintain the competitiveness of the national economy, including through a well-considered strategy of diversifying the economic activity and export.

### **3. Results**

An analysis of the structure of the Russian exports made it possible to conclude that the fuel and raw materials orientation of Russian exports has been preserved. Most of the exported goods are related to raw materials and intermediate goods. We can distinguish only a small number of internationally specialized branches of the Russian economy.

The rated of sustainable development rates cannot be achieved on the basis of the “raw” model of the economy in modern conditions. Such an economic model is not able to ensure the rates of sustainable growth of the international competitiveness of the Russian enterprises, macroeconomic stability, and the well-being of the population.

Consequently, in these conditions, the question of the problems and barriers that arise in the course of transformations in the structure of production and exports of our country inevitably arises.

Of course, external challenges, risks, and restrictions for the Russian exports do not disappear and even increase, competition in the world market intensifies, protectionist sentiments increase, geopolitical tensions persist. All this greatly limits the access of the Russian companies to external financing and in general worsens the conditions for doing business in foreign markets. In modern conditions, another serious challenge is to strengthen the export potential of China, which has refused the Russian exports in many positions. China also actively promotes its products to the markets of countries where Russia's position was stable before. This situation requires decisive measures to diversify the economy along the lines of infrastructure and industrial construction.

Among the factors that prevent the diversification of exports, we would like to highlight the following: the dominant positions of oil and natural gas in the structure of Russian exports; a low level

of internal competition; time-consuming bureaucratic problems; a lack of adequate support from the state; slow rates of import substitution; a poorly developed infrastructure.

Deficiencies in the infrastructure provision were particularly evident in the transportation and export of grain. Due to the lack of storage places and poorly established logistics, domestic agricultural producers cannot increase grain exports to those indicators that would meet the potential. The main obstacle is the lack of capacity for storing grain and the uneven distribution of available capacity among agricultural producers. Therefore, to the detriment of themselves, they are trying to sell the grain directly after harvest, despite the fact that the price is significantly lower.

At the moment, a total of 325 infrastructure projects have been announced in Russia. They should be implemented until 2020. The largest amount of investments is planned to be spent on improving the system of rail transport ensuring the high-speed and high-speed railway traffic, and on the construction of roads and bridges. At the same time, the largest number of projects is planned in the field of energy and water supply. However, it should be noted that the predominant share of these investments goes to the development of the western territories of the country, where the population density and economic activity are higher [3].

Despite some improvement in macroeconomic indicators in 2018, many problems in the banking sector and the current structure of the economy continue to make our country vulnerable to numerous factors and changes related to fluctuations in the situation and prices in the energy market. Under the conditions of sanctions (and their possible strengthening), the danger of a significant outflow of capital from Russia and the freezing of part of our foreign assets remains.

The above restrictions significantly narrow the scale of Russian exports and require serious work to eliminate them.

#### **4. Discussion**

For the Kuzbass, the problem of export diversification is highly relevant, the region is one of the largest industrial regions of the country, where the main contribution to industrial production is made by the coal, chemical, and metallurgical industries, much of the production is exported. The economy of the Kuzbass region has a raw material specialization and a distinct export orientation. The share of exports in the structure of trade is more than 95%. The low level of sectoral diversification of the economy leads to a high degree of dependence on the unstable conjuncture of world commodity markets. When, in the last crisis, the fall in commodity prices occurred, this significantly affected the Kuzbass economy, namely, the fall in the region's GRP, the overall scale of exports, as well as employment and the average wage. As the crisis is over, the geography of the Kemerovo region's foreign trade shows an increase.

More than half of the coal mined in the region is exported. First of all, it is due to the Kuzbass Russia remains in third place in the world in terms of exporting this product. The export geography has significantly expanded. For instance, in the late 1990s, the Kuzbass coal was supplied to 34 countries of the world. As of now, this coal is supplied to more than 50. The most promising geographical direction for the coal industry is the Asia-Pacific region. The expansion of geography and growth of the volume of coal supplies from the Kuzbass are planned for the future, both in this direction and to new markets in South Asia.

In order to diversify, the development of new areas of industrial production is carried out in the region. Since the beginning of 2000, the new direction of the Kuzbass industry has been implemented ("Experimental industrial production of methane from coal beds in the Kuznetsk basin"), which is carried out jointly with the PJSC "Gazprom". Methane reserves in coal seams in the Kemerovo region are estimated at 13 trillion cubic meters. They constitute 9% of the global proven gas reserves (26% of in Russia).

However, increasing investment in the commodity sector further reinforces the traditional industry structure. In order to reduce commodity specialization and dependence on the conjuncture in the commodity markets, significant attention in the region is paid to the development of other industries. The potential of the engineering industry is actively used. The complex of activities "Clean Coal –

Clean Kuzbass” has been developed. It involves the introduction of technologies that reduce the harmful effects of the coal industry on the ecology of the region.

The “VIST Group” is implementing the first project in Russia called the CIS “Intellectual Quarry,” a fully robotized mining enterprise. The company's customers are the mining enterprises of Russia, Kazakhstan, Ukraine, Mongolia. The company “Gorny TsOT” developed instruments for controlling the atmosphere in the coal face, including information on the concentration of the main gases in the atmosphere in real time – oxygen, methane, carbon monoxide, and carbon dioxide. Currently, devices are supplied to all coal enterprises of Russia and the CIS countries.

Considering that 90% of coal for export is exported by rail, an important direction in ensuring its uninterrupted supply abroad is the development of the railway transport infrastructure. In this regard, the Kuzbass coal companies are investing in the construction and strengthening of the production base of 13 seaports of Russia (Ust-Luga, Vanino, Posyet, Vostochny, Nakhodka, etc.).

One example of the implementation of the program of import substitution, on the one hand, and the emergence of a new export product, on the other, is the 100-meter differentiated hardened rails. In 2014, the rails in Russia were first released in the rail and structural workshop of the “EVRAZ ZSMK” JSC. Today, the Kuzbass manufactures supply to the world market the unique rails of low temperature reliability, with an enhanced wear resistance according to European standards. At the same time, it was “EVRAZ ZSMK” in 2016 that introduced the guarantee indicators for the quality of its rails, which are twice as high as those adopted in world practice. The “EVRAZ ZSMK” JSC became the first company in Russia and the third in the world to produce such high-tech products in the field of metallurgy. Moreover, the price of rails produced at this enterprise is significantly lower. Currently, the delivery of 100-meter rails on the orders of the OJSC “Russian Railways” is already being carried out for the construction of the high-speed rail lines between St. Petersburg and Helsinki, as well as the 60-meter high-speed rail lines to Germany. At the same time, an increase in deliveries of the Kuzbass iron and steel products to markets in Asia (Mongolia, China), Latin America (Cuba, Brazil) and Europe (Germany) is planned.

After the technical re-equipment, the flagship of the chemical industry of the Kuzbass, the JSC “SDS Azot”, focuses its production on those products that are in demand both on the Russian and foreign markets: ammonium nitrate, ammonium sulfate, caprolactam. Currently, it supplies nitrogen fertilizers to 49 countries.

First appeared in the region in 2003, the oil refining is an important sector of the economy of Kuzbass today. It gives 9% of the total industrial output of the region, which has already reached the international level. The Yaya oil refinery operates here, it is equipped with modern equipment at the level of leading global companies. This has led to a significant expansion of the export opportunities of this industry. Until 2020, there are plans to invest about 90 billion rubles into the development of oil refining. This will fully meet the needs of the Kuzbass in diesel fuel, gasoline, and fuel oil and enter the wider markets of neighboring regions and foreign countries [4].

The development of innovative engineering should be the engine of neo-industrialization. Its mining equipment segment should play a special role. In this connection, the development of the neo-industrial cluster of the Kuzbass is supposed, it is aimed at a radical reconstruction and technological modernization of regional engineering. This would require the creation of a unified investment program that reflects the needs for the subsequent equipment of the coal, chemical, metallurgical industry in the region, the credit and investment opportunities of banks and investment companies, as well as the technological capabilities of manufacturing enterprises. Among the high-tech products, the products of the Kemerovo company CJSC “NeoKor” should be noted. On a specially developed automated laser complex, this company produces prosthetic heart valves from tissues of biological origin, comparable in quality and clinical results to use with imported analogues. However, its products are sold at a significantly lower price. The company is considered unique to Russia. Today, it provides all regional and federal clinics beyond the Urals, various institutions in Moscow, St. Petersburg, the Volga region, and the “NeoKor” exports bioprostheses to Kazakhstan and Belarus.

Exports of food products and agricultural raw materials is increasing rapidly from the Kuzbass. In 2018, it amounted to \$186.9 million, which was 1.4 times more than a year earlier. It has exports to dozens of countries. At the same time, almost 90% of this export went to a small group of countries, including Kazakhstan, China, Belarus, Latvia, Kyrgyzstan, Mongolia, Germany. Compared to 2015, exports of alcoholic beverages increased in three times, and exports of cocoa products (chocolate, candy, halvah) were higher in 2.9 times. The Kuzbass ice cream exports to China and Mongolia grew by 7% [4].

The tourism industry is also actively developing in the cross-border. The pride of Kuzbass is the Sheregesh ski resort, one of the five best in the country. In recent years, the resort accepts up to one million holidaymakers per year, with the potential for up to five million. More than 10 billion rubles invested in the development of this tourist and recreational complex. Until 2020, there are plans to invest more than 6.7 billion rubles. In the long run, the task is to make it a resort of international importance. But the development of the resort is impossible without a corresponding development of the transport infrastructure, including its connection to the other bordering regions.

## 5. Conclusion

Thus, the availability of raw materials is one of the major advantages for the economy of Kuzbass, which must be used for the development of other industries. Successful realization of such an advantage is possible under the condition of a balanced foreign trade exchange, an increase in the share of products with a high degree of processing and overcoming the barriers to the infrastructure provision of development.

The Kuzbass is a cross-border region, a region of international cooperation in which a unique process of regional international cooperation is developed. This is a region with broad perspectives and benefits.

## References

- [1] Prebisch R 1977 Actual problems of socio-economic development *Latin America* **6**
- [2] Matsuyama K 1999 Geography of the world economy *Discussion Papers* **1239**
- [3] Lobova S V, and Ponkina E V 2012 Theoretical aspects of the functioning of interregional clusters *Economic Analysis: Theory and Practice* **17**(272)
- [4] Rosstat (n.d.) *Kuzbass in numbers* Available at <http://kemerovostat.gks.ru>