Methodical Approach To Assessing The Development Of Foreign Economic Activity In Financial Instability Conditions.

Nina Vladimirovna Lipchiu*, Anna Alexandrovna Khramchenko, Evgenia Alexandrovna Kovryakova, Valentina Leontievna Zazimko, and Irina Aleksandrovna Nevodova.

Kuban State Agrarian University named after I.T. Trubilin, Kalinina str., 13, Krasnodar 350044, Russia

ABSTRACT

The relevance of the research direction is determined by the fact that the global consequences of the global financial crisis gave rise to the need to strengthen competitive positions in national markets and improve the efficiency of export operations. The paper analyzes the current trends in the formation of inter-farm relations in the systems of the world economy, specifies the features of conducting foreign economic activity in conditions of financial instability. Particular attention is paid to the methodological tools for a comprehensive study of foreign economic activity in the region. A management mechanism is presented to improve the financial results of export operations of Russian companies.
Keywords: financial crisis, financial instability, management, foreign economic

*Corresponding author

INTRODUCTION

In the context of ensuring external economic security, the national economy should strive to maintain a balance between the country's openness to participate in world economic relations and the creation of conditions for the country's least susceptibility to negative macroeconomic and geopolitical transformations. The relevance of the study of the current state and promising areas for improving the efficiency of Russia's foreign economic activity is due to the preservation of the resource orientation of the Russian economy, which is becoming aggravated in the context of the new pricing environment on world energy markets and geopolitical instability. In such circumstances, Russia will not be able to ensure the security and sustainability of the national economic system without paying close attention to the issues of improving the efficiency of foreign economic activity regulation.

MATERIALS AND METHODS

The research methodology involves several stages: the formulation of the research problem, the identification of a spectrum of tasks and criteria; preparation of information for analysis; analytical processing of the received information; development of recommendations for the possibility of making a rational solution to the selected problem registration of results.

In the course of the study, various methods are used, balance calculations are carried out, etc. The general scheme can be presented as follows (Fig. 1.).
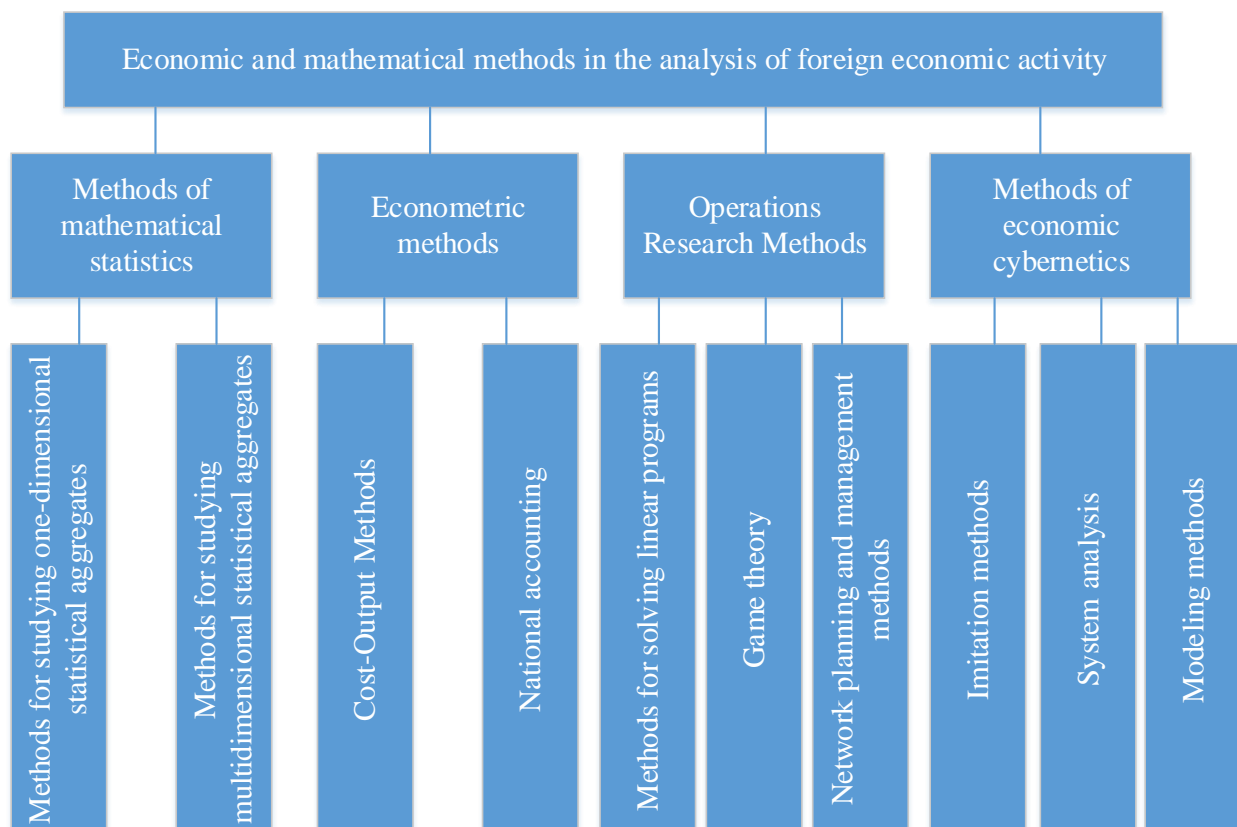

Figure 1: The approximate scheme to use the economic and mathematical methods into an analysis of foreign economic activity

The use of the following tools is aimed at improving the understanding of foreign economic relations of individual regions, obtaining the most accurate forecast model, and also based on them choosing the ways to improve the efficiency of foreign trade transactions.

To build predictive models for the development of foreign economic activity, it also becomes possible

to use tools of situational analysis and forecasting. Initially, the task of researching the conditions of formation of an economic entity is determined and the degree of impact on the effective research criteria is established. For this purpose, a simulation model is used, which is designed to build a predictive assessment. The model is a multidimensional table of the main criteria for evaluating the activities of various economic entities over time. The underlying table contains related indicators. In the predicate - the results of the forecast estimates of the conditions under the scheme: "what will happen if ...". According to the final assessment of imitation, one or several actions can be chosen; the value of the conditions selected during the modeling process serve as predictive reference points in the next stages of the study. As a rule, sequential actions are implemented on a personal computer by means of programs in the environment of a table processor in accordance with an unlabeled scenario.

As another method of situational analysis, it is possible to use the method of scenarios.

Also, when studying the degree of development of foreign economic activity in regional systems of the world economy, cluster analysis methods can be used, for example, for grouping according to the level of efficiency of foreign economic activity of market economy subjects. This is possible with the help of cluster analysis, based on the Euclidean metric of distances between objects, which can be expressed in the following formula:

$$d_e(X_i, X_j) = (x_k - x_{jk})^2)^{1|2}, \qquad (1)$$

$$d_e(X_i - X_j)$$ - distance between measurement vectors.

Further, the definition of a cluster (group) occurs based on the choice of the minimum distance between the included objects, which are represented in the multidimensional space, defining their characteristics.

To obtain reliable information based on the cluster approach, preliminary calculations are made on the rationing of the indicators used, the elements of which are determined by the following type:

$$\sum ij = \frac{y_{ij} - \overline{y_i}}{d_i}, \qquad (2)$$

$$\overline{y_i}$$ - average valueYi;

$$d_i = \sqrt{\frac{1}{n-1}\sum_{i=1}^{n}(y_{ij} - \overline{y_i})^2}, \qquad \text{standard deviation of the indicator } Y_i \qquad (3)$$

Further, on the basis of analysis of variance, it is possible to show sufficiently accurate or inaccurate affiliation of objects to a cluster (group).

The smaller the value of intragroup dispersion (*Within SS*) and (*Between SS*) the greater the value of intergroup dispersion, the more "qualitative" is clustering. The criteria *F* and *p* also determine the significance of the attribute in the division of objects into groups. Optimal clustering corresponds to large values of the first indicator and less than the second criterion. Characteristics with the highest values of *p* (which, for example, greater than 0.05) should be excluded from the procedure.

Thus, the study allows to draw conclusions about the most active regions according to the degree of their inclusion in foreign economic relations. As a rule, such an approach allows to divide regions into three groups: 1) weak development and organization of foreign economic activity, 2) medium level of development and organization of foreign economic activity, 3) high level of organization and development of foreign economic activity. The territories included in the third cluster have, as a rule, a high level of economic

development. They have all the conditions for the formation of a stable economic climate, they are able to enter into competition in the international market. For most regions of the second group, measures are needed to increase the effectiveness of interregional cooperation.

The tasks of analysis and forecasting of foreign economic relations determine the need to use generalized ideas about the factors of development of interregional relations, by which are understood the conditions, causes, and effects that have a significant impact on the performance indicator.

In the field of modeling processes of foreign economic activity, taking into account a variety of signs, econometric multifactor models are most often used, the task of which is to define an analytical expression that shows the degree and nature of the impact of a group of indicators on the effective criterion under study.

The main direction of the first stage of building a model is the competent formulation of the final result, as well as the criteria by which various solutions will be compared.

Then a comprehensive assessment of the results obtained in the study of economic processes.

The main models describing the development of processes in the external economic complex include: standard, gravity models; project LINK and the cost-output method.

The export and import function is usually presented as a function of several variables:

$$E(u) = f(x_1, x_2, \ldots, x_n)$$

$E(u)$ – volume of export (import) of goods;

$x_1, x_2, \ldots, x_n$ – factors on which the value of exports (imports).

Matrix is used to develop interrelated calculations of the development of foreign economic activity in different countries, in particular, trading partners. The use of world models is aimed at improving the presentation of international relationships and obtaining more accurate predictive estimates.

Total exports i country E_{it} and cumulative imports j country M_{jt} during the period t are determined by the formulas:

$$E_{it} = \sum_{i=1}^{m} E_{ijt}, i = \overline{1,n}$$

$$M_{it} = \sum_{i=1}^{m} E_{ijt}, i = \overline{1,m}$$

$Э_{ijt}$ - export i country to j country to t country - importer per year t.

When calculating and analyzing the results at each of the stages, along with economic and mathematical methods, expert assessments are used.

RESULTS AND DISCUSSION

The consequences of the global financial crisis are still actively traced in the regional economy, and the external economic complex is no exception. From 2007 to 2017, Russia lost about a third of its economic weight, i.e. more than 30% of economic weight to the global economy and today we are a country with a constantly decreasing share in world production, and therefore, in the global structure of foreign economic relations. For the Russian Federation, the year 2015 was quite difficult: the cooling of relations with the

countries - trading partners, the decline in oil prices, the devaluation of the ruble. According to statistics from the Federal Customs Service (FCS) of Russia, in 2015 foreign trade turnover amounted to 530.4 billion dollars, 30 having decreased compared to 201430 by 33.2%. Over the past five years, the figures for 2015 were the lowest. Russia's imports were 184.5 billion dollars, a decrease of 36.7%, and exports of 345.9 billion dollars, a decrease of 31.1%.

As mentioned earlier, the reason for this was the decline in oil prices. Brent crude oil from 55 to 33 dollars per barrel fell in just one year. This fall resulted in the collapse of the ruble exchange rate: in December 2015, the dollar cost 70 rubles and the euro 80 rubles. Due to the low exchange rate of the ruble, currency prices became high, and this was the reason for the fall in imports.

The value of Russia's exports in the first half of 2016 decreased compared to the same period last year49 by 28.7% (130.48 billion dollars), and physical volume grew by 5.2%. The value of imports over the same period also showed a negative trend. It decreased by 8.9% ($ 79.9 billion).

For most export-oriented industries, an effective mechanism of state regulation can be a way out of the crisis. The fulfillment of these conditions is possible only with an efficient control mechanism, the structural elements of which can be represented as follows (Fig. 2).
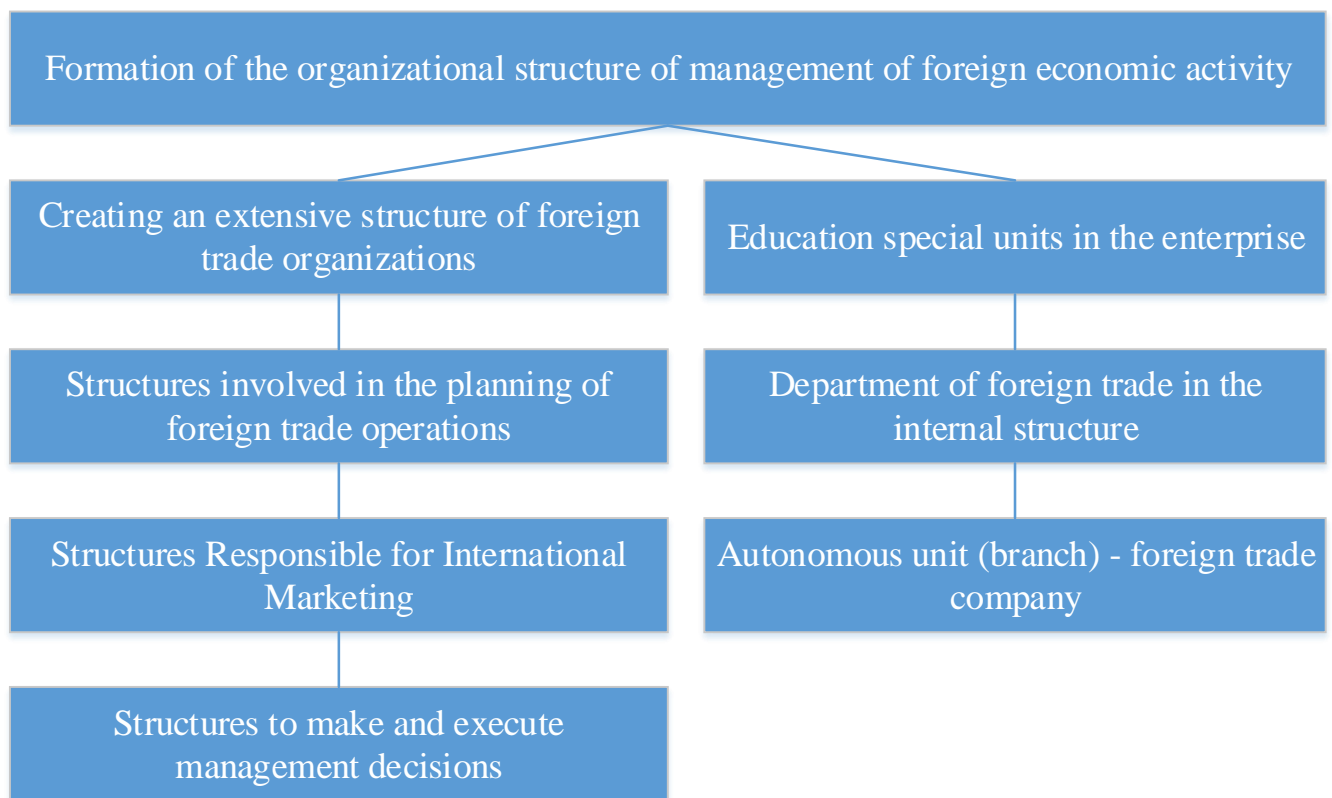

Figure 2: Approaching the formation of the organizational structure of the management of foreign economic activity of enterprises in the region

CONCLUSION

Studies show a decrease in the positive dynamics of the effectiveness of foreign economic relations in the regions of the country. To get out of the crisis financial situation in the framework of activating foreign economic relations, it is necessary not only to develop new markets but also to support the conquered. The complexity is caused by the inefficiency of the management system and the impossibility of its adaptation to the new conditions, in the conditions of the insolvency of the business sector. The solution of this task requires the construction of new management mechanisms, especially in such a sphere as a foreign economic activity. In general, the current situation may lead to two consequences: the structure of imports will change due to an

increase in the share of the means of production and a decrease in consumer products; demand for products will stimulate Russian producers in the food and light industries. As a result, there will be a desire to invest money in the development of the real sector of the economy. Even in difficult conditions, the openness of the economy should be maintained through measures taken to protect national production and the domestic market from adverse external influences.

REFERENCES

[1]   Gornostaeva Z.V., Lazareva N.V., Bugaeva M.V., Gribova O.V., Zibrova, N.M. Directions and tools of industry marketization in contemporary Russia. Quality-Access to Success, 2018. 19(2). P. 33-37.
[2]   Dotdueva Z.S.,Takhumova O.V.The methodology for the formation of the regional food-producing clusters.International Review of Management and Marketing.2016. 6(6). P. 27-31.
[3]   Takhumova O.V., Kasatkina E.V., Maslikhova E.A., Yumashev A.V., Yumasheva M.A. The main directions of increasing the investment attractiveness of the Russian regions in the conditions of institutional transformations. Espacios. 2018. 39(37). P. 6.
[4]   Zinchenko L.A.,Dzhamay E.V., Klochko E.N., Takhumova O.V. Main features of the Russian economy and its developmen. International Journal of Applied Business and Economic Research. 2017. 15(23). P. 265-272.
[5]   Fursov V.A., Lazareva N.V., Solovieva I.V., Fattakhova A.R., Vaslavskaya I.Y. Evaluation of performance of enterprise development strategy implementation. Journal of Advanced Research in Law and Economics. 2015. 6(1). P. 79-87.