Regional financial security as a basis for sustainable economic development of the region

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Abstract — The issue of financial security for Russia and for any other countries becomes one of the key in the context of global economic globalization and formalization and also the existing restrictions in the movement of international financial flows. The existing problems of differentiation of regions, a serious imbalance in resource availability and sustainable development of territories were the one of the key problem of regional financial security and challenges facing the country. The relevance of the article is due to the fact that in Russian conditions the problem of ensuring financial security on the macro-and meso-level becomes systemic and chronic, covers strategies, political mechanisms, regions, economic entities, Finance, resources, etc. The article describes the theoretical and methodological issues of financial security of the region, analyzes the positions of various scientists on the issues under consideration, and formulates a methodological approach to assessment and management, justifies the need to modify approaches to assessing the financial security of the region.

Keywords — financial security, region, sustainable economic development, sanctions

I. INTRODUCTION

In the context of the impact of sanctions and the economic crisis, the most important task of the state became to ensure its economic security and financial in particular. The finance is the driver of any economic system. But their main drawback is the limited nature in solving a large number of equal strategic objectives of sustainable development. It is necessary to create a new powerful financial block of national security given the unstable nature of political and economic relations between Russia, the United States and the European Union. At the same time, public administration of financial security should not only be a "response to Western sanctions", but should be formed an effective mechanism of public financial management within the framework of national economic policy. This determines the relevance of the chosen research direction of financial security as the basis of national economic security.

The financial security of the state is undoubtedly linked to the sustainable economic development of all regions. Each region must adapt to new conditions and the unstable economic situation, the impact of crisis processes and to determine the vector of its development. Therefore, talking about regional financial security, it is necessary to point about the stable functioning of all elements of the territorial financial system, as well as to take into account the differentiation in the development of the regions of Russia, the unevenness of all types of resource availability and multidirectional threats to the territorial economy development.

The problem of financial security is now being discussed by regional scientists is particularly acute, but despite the large number of publications, there is no single approach to the interpretation of the essence, methodology of assessment and tools for providing both macro and meso-level. And it should also be noted that today, there is no legally fixed unified system of indicators for assessing financial security both at the Federal and at the regional level.

At the federal level, financial security is traditionally defined as the most important element of the state's economic security (V. Burtsev) [1]. At the same time, E. Rohatenyuk notes that financial security, unlike national (the protection of priority national interests) or economic (the protecting economic interests), determines the adequacy of financial resources to ensure the "normal" functioning and development of the economy in conditions of uncertainty and increased instability of the external environment. S. Klimchuk [5] draws the attention to the fact that "the goal of national financial..."
security is the solving the problem of stable, sustainable, dynamic behavior of the economic system, which in turn will avoid imbalances in the development and functioning of the economy, taking into account the limit of available financial resources.

It should be noted that the considering this definition at the regional level, researchers are even more divided about its content. A critical analysis of the Russian scientists positions in the interpretation of the term "regional financial security" let us to reveal several basic approaches in determining its content.

Thus O. Zhalsapova, A. Korableva [4] consider the regional financial security in statics (at a certain point in time) and believe that this is substance of the economy which provides stability and sustainability of the regional economic development in the conditions of limited resources (economic, labor, social, organizational, etc.), the required standard of living, full employment etc., which compensate for the negative impact on the regional economy of the external environment. A similar approach is followed by Yu. Vorobyov, D. Porisky [2], who consider that the financial security of the territory is a set of conditions to ensure the stability and the regional development. In contrast to them, Sh. Magomedov, L. Ivanitskaya, M. Karataev, M. Chistyakov [2,3,7] believe that the national financial security takes place if the region is able to resist destabilizing factors and improve the quality of life of the population, ensuring sustainable economic growth in the long term and saving all types of resources. P. Danilov, A. Nazarov, E. Mitrofanov [6] claim that in case of achievement of the regional financial security has an opportunity to improve the social and economic indicators that allow, in turn, to resist threats, etc. Also the regional financial security can be interpreted from organizational or administrative positions. In particular E. Kormilkin, O. Causewa, O. Fedonin [3] suggest the complex of measures which aimed at the sustainable development and the protection from internal and external stimuli.

The study of approaches and interpretations to the content of the definition "the regional financial security" allows us to formulate its content as a resource base of the regional economy, which provides stable and dynamic development of territory through the effective use of its own capacity, the neutralization of external and internal threats, as well as an integration into a global economic space.

The key objectives of regional financial security are twofold: on the one hand, ensuring sustainable economic regional growth while reducing the level of differentiation (strategic level of regional management); on the other hand as part of the national security of the Russian Federation is aimed at achieving its main priorities in the field of national defense, a quality and a standard of living, a development of science, education and health, solving environmental problems and environmental management.

II. MATERIALS AND METHODS (MODEL)

The methodology of the regional financial security assessing is one of the most important tools to substantiate the directions and rates of socio-economic development of the region, as it is based on forecasting methods, identifying the correlation between the evaluation indicators, modeling of individual areas of regional development. From the point of view of the content, it allows to determine both the position of the regional economy, its potential and real financial resource availability, stability and the degree of dependence on the impact of threats and the effectiveness of the regional authorities activities. It focuses on the refinement of the methodology for the regional financial security assessing, based on economic and mathematical methods of integrated assessment.

An integral indicator was developed to assess the level of the regional financial security. The method of its calculation is based on determining the level of impact of positive and negative factors on the resulting indicator – the regional gross product. There were 56 estimated indicators in the calculation, reflecting 5 types of regional financial security: budget, investment, banking, foreign economic, financial market. As a result, after normalization of the incoming indicators, the integral indicator was calculated based on the calculation of the average value of the assessing parameters. Calculations (on the example of the regions of the North Caucasus and Southern Federal districts) distinguish regions in which the value of the integral index tends to 1, have a higher level of financial security, and the regions with the value of the indicator close to zero – full dependence and the instability of the economy. Using of cluster analysis tools allow to distribute regions according to the level of financial security (FSA) into 4 groups: with a high level of security $0.7 \leq \text{FSA} \leq 1.0$; with an average level at $0.5 \leq \text{FSA} \leq 0.7$; with a low level $0.3 \leq \text{FSA} \leq 0.5$; with a critical level (fully dependent regions) FSA $\leq 0.3$.

III. RESULTS AND DISCUSSION

The regional financial security includes the following structural elements:

1) Budget financial security. It reflects the position of the regional economy in which the region has enough of own financial resource for covering of the necessary expenses (balance of income and expenses) and ensure the socio-economic development of the territory through the effective using of financial capacity. Also budget security includes debt security which manifested in the stability of the financial system and a protect from the threats of external and internal debt, including the cost of maintenance and efficiency of using. Thus budget security characterizes the stability of the regional financial system to the impact of various financial risks, the necessary level of solvency and enough credits rating of the regional economy.

2) Investment financial security characterizes the state of the regional economy, ensuring the attraction, effective distribution and redistribution of domestic and foreign investment resources, resistance to "panic attacks" of
investors, the impact of investment risks and an attractive investment climate.

3) Security of the credit and financial sector characterizes the state of the regional credit system, ensuring the stability of the banking and non-banking financial institutions, the availability of credit resources for all participants, sufficient liquidity for the regional economic growth, increasing real incomes, resistance to the impact of real and potential threats.

4) Foreign economic security reflects the state of the regional economy which provides a balance in export-import operations, resistance to exposure of external risks and global "financial infections».

5) Security of the stock market characterizes the optimal amount of the regional financial market capitalization (in terms of structure and level of liquidity), providing a stable financial condition of all participants and the protection from excessive volatility and "inflating stock bubbles".

The analysis of approaches to the assessment of regional financial security presented in the researches of scientists (Sh. Magomedov, L. Ivanitskaya, M. Karataev, M. Chistyakova, I. Dolzhikova, T. Feofilova, T. Lomachenko, etc.) allowed us to form the author's system of indicators that assess comprehensively the regional financial security [4,5,7].

System of indicators for assessing regional financial security

1. Indicators of fiscal security
   1.1 Revenue budget to GRP, %;
   1.2 Ratio of income and expenditure of the regional budget, % (total coverage ratio);
   1.3 Per capita Income to the subsistence minimum, %;
   1.4 Ratio of uniformity of budgetary funds expenditure during the year;
   1.5 Coverage Ratio of regional budget deficit;
   1.6 Share of programme expenditures in total budget expenditures, %;
   1.7 Ratio of autonomy (concentration of own funds) budget;
   1.8 Ratio of the tax regional budget independence;
   1.9 Share of non-tax revenues in total budget revenues, %;
   1.10 Ratio of solvency of the regional budget (absolute liquidity);
   1.11 Ratio of financial dependence of local budgets;
   1.12 Ratio generating own revenue by region;
   1.13 Ratio of tax revenues to total tax payments;
   1.14 Ratio of the controllability of the budget;
   1.15 Level of accounts payable of the regional budget;
   1.16 Ratio of the regional tax payments to the Federal budget to the amount of got federal transfers to the regional consolidated budget;
   1.17 Level of budget risk of the territory.

2. Indicators of investment security
   2.1 Index of industrial production;
   2.2 Index of agricultural production;
   2.3 Dimension of products produced by small enterprises to GRP, %;
   2.4 Ratio of accounts payable of enterprises to GRP, %;
   2.5 Ratio of net income of enterprises to GRP;
   2.6 Consumer price Index;
   2.7 Ratio of economic efficiency of regional investments;
   2.8 Ratio of the regional investment activity;
   2.9 Investment in fixed capital per capita;
   2.10 Investments in fixed assets to the value of fixed assets, %;
   2.11 Dimension of investment in fixed assets to GRP, %;
   2.12 Level of fixed assets depreciation, %;
   2.13 Level of the regional inversion risk.

3. The security of the financial sector
   3.1 Number of credit institutions in the region, units;
   3.2 Ratio of funds raised by banks to GRP, %;
   3.3 Ratio of invested assets to GRP, %;
   3.4 Ratio of the funds attracted, %;
   3.5 Level of credit risk, %;
   3.6 Share of regional banks in the total number of credit institutions in the region, %;
   3.7 Level of savings quota, %;
   3.8 Ratio of loan debt to the economic sector to GRP, %;
   3.9 Number of microfinance institutions in the region, units.

4. Indicators of foreign economic security
   4.1 Growth Rate of foreign trade turnover, %;
   4.2 Dimension of foreign trade turnover per capita, RUB/person;
   4.3 Share of exports per capita, RUB/person;
   4.4 Share of imports per capita, RUB/person;
   4.5 Ratio of the volume of regional foreign trade turnover to GRP, %;
   4.6 Share of import to GDP (import quota, %);
   4.7 Share of export to GDP (export quota, %);
   4.8 Foreign Trade quota (%%);
   4.9 Share of machinery exports in total exports, %;
   4.10 Share of FEC exports in total exports %;
   4.11 Share of machinery exports in total exports, %;
   4.12 Coverage Ratio of imports by exports;
   4.13 Trade deficit to GRP, %;
   4.14 International Competitiveness Index.

5. The safety performance of the stock market
   5.1 Number of issuers of the region in the rating of the largest companies in Russia in terms of sales and market capitalization;
   5.2 Level of capitalization of the regional stock market;
   5.3 Ratio of efficiency of the regional stock market integration into the national market;
   5.4 Ratio of efficiency of institutional investors investments;
   5.5 Dimension of resources attracted to the GRP on the regional stock market.
The integral indicator reflecting the level of the financial security is calculated as the geometric mean of the 5 represented structural elements. At the same time within each group after the normalization of indicators, the group indicator is determined by a simple summation of the incoming normalized indicators.

This research allowed us to conclude from 30 to 80% the level of the regional financial security is determined by the indicators of budgetary and investment stability, that tell about their decisive influence on the regional financial security and sustainable development of territory.

IV. CONCLUSION

Thus, it is necessary to implement the following measures for determination the level of the regional financial security, its position on a country-wide scale, identification strengths and weaknesses in the stability of the territorial financial system and ensuring the capacity of the regional socio-economic development and improvement the level of competitiveness and "controllability" of regional processes:

1. To approve the methodology and to fix the list of indicators determining the level of financial security of the region. Assessment of financial security is advisable to use in the development of programs and strategies of socio-economic development of meso and macroregions as an analytical block.

2. Regular monitoring of socio-economic development using the proposed indicator of the level of regional financial security allows to timely identify "failures" and "UPS" in the structure of resource availability of the territory and possible structural changes. The applied indicators of regional financial security assessment can be modified and improved taking into account the specifics of the development of a particular region.

3. It is necessary to modify the system of assessing the effectiveness of public authorities, taking into account the identified aspects of regional financial security, and the effectiveness of their activities in solving the problems of territorial imbalances, the proportionality between the structural elements and further overcoming this imbalance.

The presented results are ambiguous, as it is necessary to continue an in-depth research of the relationship of the structural elements of the regional financial security by subjects, terms, level of imbalance, etc.. However submitted qualitative assessments allow to define the objectivity of the links and to identify the most significant features. In this case the presented approach determines the need for an integrated access to identifying the depend structure of the GRP on the regional financial system parameters in order to identify its impact to the regional financial security and national security in general.

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