Geofinancial Safety of Regions: Theory and Methodology

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Abstract
In article the theoretical and methodological importance of geofinancial safety at the mesolevel in connection with aggravation of the current geopolitical situation is revealed. The offered methodology expands tools of assessment of geofinancial safety of the region, including inclusion of safety of corporate finance and intra country level of safety. On the example of regions of the North Caucasian Federal District strained from the point of view of geofinancial and geopolitical safety the ranged assessment as the final stage of complex assessment of geofinancial safety of regions is given. At the same time, the novelty of a research consists not only in updating of a technique of assessment of geofinancial safety of regions, but also in reduction of this technique to a universal look. The geopolitical instability finds reflection in this technique in a number of qualitative criteria. At the same time, these criteria are compared with quantitative criteria for evaluation of geofinancial safety by ranging.

Keywords: Globalization; Geo-financial security; Geo-financial balance; Fiscal security; National security.

1. Introduction
According to most economists and political scientists, modern geopolitical crisis is caused by geopolitical interests. The strengthening of Russian Federation influence on the political field is associated with the need to ensure national security, which is based on financial security.

Due to the globalization of finances, we note the strengthening of geo-financial component of the theory and the methodology of national security, including economic security.

The most important geopolitical consequence of the penetration into the region of the world globalization processes was the intensification of political and commercial confrontation over the control of vast energy resources.

The problem of financial security was described in the works of such scientists as V.K. Senchagov, L.I. Abalkina, I.N. Petrenko, A.I. Tatrkina et al.

The emergence of "geofinance" concept is associated with globalization development. According to Sh. Goldfinger, geofinance, that is, a new financial space-time, ignoring the laws of geography and national boundaries, is the synthesis of world money, information technology and the liberalization of legislative regulation (Chernaya, 2012).

Chernaya I.P. gives the following definition: "Geofinance is a global network of traditional and virtual, dematerialized financial markets and intermediaries acting on them.

The geofinancing system that developed at the beginning of the modern era in terms of its scope and functioning mechanisms is the most adequate to the process of globalization. An important characteristic of geofinance is their development according to their own laws, which leads to the separation from the national financial systems, meaning a partial transfer of regulatory functions to the world financial centers, whose main criterion for economic activity is maximum profitability" (Lachininskii, 2012); (Anokhin and Lachininskii, 2015); (Лачининский, 2013); (Semenova and Lachininskii, 2014).

B.R. Fulchery says that "from the geo-economic point of view, financial resources are raw materials, the availability of which is strictly limited at every moment; so the use of financial resources is based on the struggle for their sources" Ariozzi et al.

Chuyev D.A. notes that in view of the dominant position occupied by the financial component in the modern economy, we are entitled to characterize the latter as an economy managed financially through financial mechanisms, through financial leverages, financial incentives and for financial purposes (Lukin, 2015).
According to Mironova O.A., the driving force behind the development of geo-finance is the scientific and the technological revolution in the field of communications among other things, which facilitates the acceleration of asset ownership right transfer on an international scale and the ability to make instantaneous transfers of huge amounts of money to any locations of the world (Eglen et al., 2006).

In the work by Chuvilova O.N. the following indicators of geo-financial safety are distinguished in the system of indicators: the level and the quality of life, the rate of inflation, the rate of unemployment, economic growth, budget deficit, public debt, integration into the global economy, gold and currency reserves, and the activities of the shadow economy. At that, the provision of economic security is not the exceeding of the threshold values for these indicators.

Chernaya I.P. determines the geopolitical security as the creation of conditions for a stable, reliable functioning of the financial system of a country, a state, a region, preventing the emergence of a financial crisis, a default, the destruction of financial flows, the failures in financial resource provision concerning the main participants of economic activity, and the violation of monetary circulation stability (Orlova et al., 2016).

The state geopolitical security is the main condition for its ability to carry out an independent financial and economic policy in accordance with its national interests (Chuvilova and Romanyuta, 2014).

According to Rozhkov Y.V., the state geopolitical security consists in the ability of its bodies to ensure the stability of the economic development of the state; to ensure the stability of the payment and settlement system and the main financial and economic parameters; to neutralize the impact of global financial crises (Zubarevich, 2015).

Thus, financial security has the geofinancial character in the context of globalization.

The goal of geo-financial security is the maintaining of the geo-economic (geo-financial) balance at an optimal level, that is, the balance of the country expenditures and revenues in global exchanges. Undoubtedly, without this goal achievement, the normal functioning of the state and the dignified life of the peoples living in it is impossible, which can easily be proved by revealing the meaning that is laid in the concept under consideration (Chernaya, 2012).

Kochetov E.G. put such a tool as geo-economic balance in the basis of economic security. We believe that the national (economic) security of the country and its regions should be based on a geofinancial balance - an analytical and synthetic tool that reflects the position of analysis object in the global financial space.

In our opinion, geo-financial balance shall be based on the balance of payments, as well as on all financial and investment incoming and outgoing cash flows.

The methodology for geo-financial, as well as the geo-economic balance calculation “is based on the fact that a country (a region, a territory) always restores their equilibrium in international (interregional) exchanges, paying something for the resources they receive. If a country (a region, a territory) does not pay for goods and services, then it pays with its own population, youth (its own future), skilled or unskilled labor, cultural phenomena and artifacts; it pays with natural resources, sovereign power and, sooner or later, its own territory”.

An optimal state of the geo-financial balance is achieved due to both traditional and innovative methods, by the means of which the following most important tasks of financial and geo-financial safety are addressed:

- the compliance with Russian economic interests during the entrance to the WTO;
- the strengthening of domestic security market in the capital market structure;
- the improvement of insurance market and the approximation of insurance standards to the world ones;
- the support of the banking sector participation in the development of the economy real sector;
- the support of Russian exporter, producer and investor commercial interests at foreign markets in order to restore and strengthen their positions in the global economy;
- the increase of state financing rate for high-tech industries;
- the growth of venture financing;
- the stabilization of ruble against stronger currencies;
- the opposition to geo-economic expansion and geo-economic wars and other tasks.

The task of negative consequence reduction from global challenges and the provision of Russian economic growth, while preserving its national identity, necessitates the drawing on the theory and the practice of economic and financial security.

Theoretical analysis of the issues under consideration allowed us to draw the following conclusion: geo-financial security is the most important component of the country economic security, which reflects the state and the readiness of the state financial system to meet economic needs timely and appropriately in the amounts sufficient to maintain the level of the country economic security.

Most authors dealing with the problems of geo-financial security evaluation on the territories identify a number of areas in the sphere of financial security provision: fiscal, monetary and credit and banking.

The state budgetary policy is implemented in the collection of taxes, deficit management and public debt, as well as in the implementation of budgetary obligations and the construction of intergovernmental fiscal relations.

Since the dynamics of budgetary indicators makes an impact on the real economy sector, the calculation of revenues and expenditures also serves as the criterion for the state geo-financial security.

Due to the multilevel nature of RF budget system, a serious threat to the country geofinancial security is the violation of the fixed principles of interbudgetary relations, since it can lead to the emergence of regional separatism, will strengthen the differentiation of RF subjects and will reorient the regions to foreign markets (RUSESTKIY et al., 2018).

An important step in this direction was the creation of RF Financial Support Fund for regions (now the regional fund for financial support), as well as the transition from individual coordination of financial assistance volumes for
the regions to the unified rules of its definition and distribution (Fridman et al., 2017). Further reforming of interbudgetary relation system should be aimed at a clear regulation of financial ties between budgets.

The most general form of geo-financial security in the monetary sphere is characterized by the fact that the issue is carried out in strict accordance with the current legislation excluding the possibility of such abuses as counterfeiting and the creation of various financial pyramids, while the national currency has a high purchasing power and acts as the main means of accumulation and settlement in the country.

Taking into account that the annual export of capital is about 5-10 billion dollars, the consequence of this problem solution will be the opportunity to accumulate significant financial resources within the country and to use them for investment in the national economy (Demidenko et al., 2012).

Thus, the concept of national security is being transformed constantly, but geo-financial security as a set of measures, methods and means of state economic interest protection remains its main internal component invariably. Financial security makes a significant, and sometimes decisive impact on security in other spheres of society, since all types of security have a material foundation and need financial support, without which they can not be implemented sufficiently. This circumstance testifies to the universal nature of financial security and the need for its legislative settlement as an important national priority.

2. Methodology

At present, in order to assess the geo-financial safety of territories, you can not limit yourself to only such components as fiscal, monetary and credit and banking one.

Financial security at the regional level was studied by such scientists as L.I. Abalkin, B. Gubin, V.V. Kopein, V.V. Krivorotov, A. Logvin, Yu. Lyubimtsev, and others.

The state of financial security of a region depends on objective reasons - the prevailing distribution of productive forces and a territorial resource intensity and subjective reasons - the quality of socio-economic process management. In our opinion, the assessment of the financial security of the regions should be based on six levels of financial security, the main place in which is occupied by budget security (Figure 1).

![Figure-1. Financial security levels in a region](image)

Each level of financial security is represented by a set of indicators - standard statistical indicators (Table 1).

Based on the formed system of indicators - the indicators of geo-financial safety level of the regions, we have formed an information array that allows us to generalize the analysis results.

In the practice of financial analysis, they use the dendograms of regional division into clusters by the methods of "neighbor", "far neighbor", "medium link" (weighted method), as well as by the Ward method for each unit or level of indicators.
Table 1. Indicators of a region financial security

<table>
<thead>
<tr>
<th>Levels</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget and Tax Security</td>
<td>1. Budget revenues, in % to GRP</td>
</tr>
<tr>
<td></td>
<td>2. Budget expenditures, in % to GRP</td>
</tr>
<tr>
<td></td>
<td>3. Receipt of taxes and fees to the budgetary system, in % to GRP</td>
</tr>
<tr>
<td></td>
<td>4. Indebtedness for taxes and fees to the budgetary system, in % to GRP</td>
</tr>
<tr>
<td>Monetary security</td>
<td>1. The number of credit institutions and their branches for 1000 people.</td>
</tr>
<tr>
<td></td>
<td>2. The average amount of bank deposits by individuals in rubles attracted by credit institutions, thousand rubles.</td>
</tr>
<tr>
<td></td>
<td>3. The average amount of bank deposits by individuals in foreign currency attracted by credit institutions, thousand rubles.</td>
</tr>
<tr>
<td></td>
<td>4. The average size of bank deposits by legal entities in rubles attracted by credit institutions, thousand rubles.</td>
</tr>
<tr>
<td></td>
<td>5. Average amount of bank deposits by legal entities in foreign currency attracted by credit institutions, thousand rubles.</td>
</tr>
<tr>
<td></td>
<td>6. The average amount of debt on loans in rubles provided by credit institutions to individuals, thousand rubles.</td>
</tr>
<tr>
<td></td>
<td>7. The average amount of debt on loans in foreign currency provided by credit institutions to individuals, thousand rubles.</td>
</tr>
<tr>
<td></td>
<td>8. The average amount of debt on loans in rubles provided by credit institutions to legal entities, thousand rubles.</td>
</tr>
<tr>
<td></td>
<td>9. The average amount of debt on loans in foreign currency provided by credit institutions to legal entities, thousand rubles.</td>
</tr>
<tr>
<td>Corporate Finance Security</td>
<td>1. The average annual cost of fixed assets in thousand rubles for one enterprise.</td>
</tr>
<tr>
<td></td>
<td>2. Number of enterprises and organizations per 1000 men</td>
</tr>
<tr>
<td></td>
<td>3. The volume of industrial production, in % to GRP</td>
</tr>
<tr>
<td></td>
<td>4. An average size of organization profit, thousand rubles.</td>
</tr>
<tr>
<td></td>
<td>5. Average amount of organization losses, thousand rubles.</td>
</tr>
<tr>
<td></td>
<td>6. Average amount of accounts receivable, thousand rubles.</td>
</tr>
<tr>
<td></td>
<td>7. Average amount of accounts payable, thousand rubles.</td>
</tr>
<tr>
<td></td>
<td>8. Specific weight of unprofitable organizations, thousand rubles.</td>
</tr>
<tr>
<td>Safety of insurance</td>
<td>1. Number of insurance organizations per 1000 men.</td>
</tr>
<tr>
<td></td>
<td>2. Insurance premiums, in % to GRP</td>
</tr>
<tr>
<td></td>
<td>3. Insurance payments, in % to GRP</td>
</tr>
<tr>
<td>Domestic security level</td>
<td>1. Ranked assessment of economic security per capita</td>
</tr>
<tr>
<td></td>
<td>2. The level of population income differentiation</td>
</tr>
</tbody>
</table>

3. Results

The abovementioned analysis of indicators for the main types of regional financial security potential giving an objective picture allows to perform their ranking.

An example of this is the ranking of the North Caucasus Federal District regions by the proposed methods and tools (Table 2) (Demidenko et al., 2012).

Table 2. Ranking of NCFD regions by the levels of financial security

<table>
<thead>
<tr>
<th>Regions/levels</th>
<th>Budget and Tax Security</th>
<th>Monetary security</th>
<th>Corporate Finance Security</th>
<th>Safety of insurance</th>
<th>Investment security</th>
<th>Financial security of population</th>
<th>Domestic security level</th>
<th>Security level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stavropol region</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>2,0</td>
</tr>
<tr>
<td>Karachay-Cherkess Republic</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>4,3</td>
</tr>
<tr>
<td>Kabardino-Balkaria Republic</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>3,7</td>
</tr>
<tr>
<td>The Republic of Dagestan</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>3,0</td>
</tr>
<tr>
<td>The Republic of Ingushetia</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>3</td>
<td>5.0</td>
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</tr>
<tr>
<td>The Republic of North Ossetia- Alania</td>
<td>7</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4.8</td>
</tr>
<tr>
<td>Chechen Republic</td>
<td>1</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>5.2</td>
</tr>
</tbody>
</table>

We see that the highest level of financial security is inherent in the Stavropol Territory - 2 points, the smallest one - to the Chechen Republic - 5.2 points.

### 4. Discussion

It should be noted that, apart from objective factors, the level of financial security is also affected by subjective factors: the level of social tension in a region, information transparency, the level of crime, and other factors that are extremely difficult to quantify.

This assessment can reveal the following key problems of a region ([Votintseva et al., 2012](#))

1. A limited access to capital and a financial system imperfection.
2. A low level of budget revenues in comparison with the gross regional product.
3. A significant debt on taxes and fees in a budget system.
4. A large proportion of loss-making organizations in their total number.
5. A low level of foreign investment within the structure of investment financing in fixed assets.
6. Relatively low population incomes.
7. Relatively low level and living condition quality for the population of a region.

In order to ensure the geo-financial security of the regions (internal financial security taking into account the geographical priorities), it is necessary to pursue the policy of their financial security and budgetary self-sufficiency.

At present, along with the mechanism of vertical equalization (from the federal budget to the recipient regions), it is expedient to initiate the creation of a horizontal equalization mechanism in which "rich" regions implement the transfers to the budgets of "poor" regions in a certain way.

Besides, it is necessary to strengthen the financial self-sufficiency of the regions, which is especially important in the case of the NCFD. It is necessary to develop the standards for minimum financial costs to provide state and municipal services. Such standards should determine the minimum guaranteed volume and the quality of such services and be used during respective budget evaluation.

Control bodies should play a special role in the strengthening of geo-financial security of the regions. The role of the control bodies in the strengthening of regional financial security should be expressed, of course, as a result of the joint action of external and internal control and audit aimed at the strengthening of fiscal, monetary, investment and financial security of the population in the regions.

Thus, the development of geo-financial security concept is caused mainly by the threats to the financial and credit sphere of Russia. Therefore, the main activities of the state should include the creation of a unified balanced legal framework that ensures an effective formation and functioning of socially-oriented market economy financial and credit system, as well as the law enforcement mechanism to protect it from the impact of criminal processes and encroachments.

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