

# METHODS OF ESTIMATION OF BANK SYSTEM DEVELOPMENT IN VOLGA FEDERAL DISTRICT

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## ABSTRACT

*Nowadays all preconditions for the active development of the methods of bank sector monitoring in Russia have been formed. These methods however cannot reliably and accurately estimate the bank system development in a region or district of the country. In addition, the possibility of building the rating model is not always available. It is a model with the determination of the total fixed value taking into account the meaningfulness of the financial activity values, characterizing all aspects of the bank organizations' activity. Consequently, the problems of the development of complex estimation methods for the financial state of the regional bank system is topical.*

*The authors offer the system of values for the bank system development estimation in Volga federal district, consisting of four groups of values: Capital values, assets quality, liquidity and profitability. Using the method of multi-criteria expert estimation the list of values has been formed and the bank sector state in the regions of Volga federal district of the RF has been analysed.*

*The method of determination of the total fixed value calculated considering the values, included into the system of estimation criteria for the regional bank financial state, enables the enhancement of the high-quality bank management, reliability of forecasting the results of its activity and allows execution of the multi-criteria optimization of the basic values of the financial state in the regions.*

**Keywords:** Regional Bank Sector, Integral Value, Standardization.

## INTRODUCTION

Nowadays all preconditions for the active development of the methods of bank sector monitoring in Russia have been formed. However, it is rather difficult to estimate the bank system development in a region or district of the country using these methods. This means there is no model of instructions for the monitoring or analysing the bank development of a district of Russia Federation independently and separately. In addition, the possibility of building the rating model is not always available. It is a model with the determination of the total fixed value taking into account the meaningfulness of the financial activity values, characterizing all aspects of the bank organizations' activity. Consequently, the problems of the development of complex estimation methods for the financial state of the regional bank system are topical.

Several studies have been conducted on the defining and monitoring the financial development of banks in Russia as well as on estimating the banking system development in the Federation including Abrokova (2014), Dubrova, Egunova and Shergina (2017), Rudneva, Zaitseva (2015) (Abrokova, 2014; Dubrova, 2017; Rudneva, 2015). The problems of regional banking systems are investigated in the works of Ilyasov (2012), Oveyan (2015), Oleinikova (2014), Staverskaya and Shevchuk (2017), Yakubenko (2017) (Ilyasov, 2012; Oleinikova, 2014; Oveyan, 2015; Staverskaya, 2017; Yakubenko, 2017).

Volga Federal District is one of the eight federal districts of Russia and on the important districts because of its special geographical and geopolitical position. It forms the south-eastern part of European Russia and in close connection with European countries. Volga federal district includes 14 subjects of the Russian Federation. Bank system of Volga district includes 106 credit organizations and 518 subdivisions of the credit organizations, which contain 85 branches of the local banks and 433 branches of the foreign banks (Yashina, Makarova & Makarov, 2015) (Yashina, Makarova & Makarov, 2015). In this study we proposed a system of values for the bank system development estimation in Volga federal district, consisting of four groups of values: Capital values, assets quality, liquidity and profitability. Using the method of multi-criteria expert estimation the list of values has been formed and the bank sector state in the regions of Volga federal district of the RF has been analysed.

## **METHODS OF THE STUDY**

The current literature on the development estimation of the Russian banking system has been reviewed and the relevant information was extracted. The principals of banking development estimation have been applied on the extracted information. The main approach of this study was analytical and theory driven approach. In the course of study the general scientific methods of cognition including methods of induction and deduction, analysis and synthesis, classification and grouping, abstracting and observation have been used.

## **DISCUSSION AND RESULTS**

The main aims of the Bank of Russia as the bank regulation and surveillance authority in comply with the Federal Law “About Central Bank of the Russian Federation (The Bank of Russia)” are the support of bank system stability of the Russian Federation and protection of the interests of the depositors and creditors.

First of all, it goes about the establishment of the reasonable minimal requirements to the capital sufficiency for all credit organizations by the bank surveillance authorities. These regulations should reflect risks accepted by the banks and determine the capital constituents taking into account their ability to absorb losses. At least, for the banks acting in the international scale these requirements should be no less than those established in Basel agreement on capital amended (Ohorodova, 2016).

In order to achieve the set aim of the development and consolidation of the bank system of the Russian Federation, it is necessary to develop the monitoring tools of the bank sector financial stability.

We believe that the system of values should be formed with accounting the following requirements:

1. Coefficients should be the most informative;

2. Coefficients should be calculated by only the date of the real accounting, approved in the RF;
3. Coefficients should enable conduction of the credit organization rating estimation both in comparison with the other banks and in time (month, quarter, year and so on);
4. The numerical standards of the minimal satisfied level or the change range should be stated for all coefficients (Yashina, Makarova & Makarov, 2015).

The choice of the value system and its substantiation of the regional bank sectors state based on using official information only—financial accounting of a bank is the most important task for the banks, supervision authorities and other entities.

The system of values is offered for estimation of the bank system development in Volga federal district, consisting of four groups of values: Capital values, assets quality, liquidity and profitability. The capitals values include the standard of sufficiency of own money (capital) of a bank, the value of total capital sufficiency, the value of capital quality estimation. The values of liquidity include the value of loan quality, the value of assets quality, the value of past-due loan share, the value of reserves covering losses on loans and other assets, the value of concentration of the large credit risks, the value of concentration of the credit risks for shareholders, the value of concentration of the credit risks for insiders.

The group of values for liquidity estimation includes values of assets liquidity, liquidity and structure of obligations, total bank liquidity, risk on the large creditors and depositors.

The values of profitability estimation have the important meaning for the estimation of the credit organizations effective activity. The establishment of the minimal numerical values on the effective activity has become the essential innovation in the selection of banks into the insurance system. The group of values of profitability estimation includes the values of assets and capital profitableness, structure of profits and expenditures, profitability of the individual types of operations and bank as a whole. The values of assets and capital profitability include both the values of assets and capital profitableness (Yashina, Makarova, Makarov, Kuryleva & Ohorodova, 2016).

The essence of this method lies in that the following situations take place in the course of financial state estimation of the regional bank sector as the existence of the different dimensions of credit organization values and different importance or meaningfulness of the values.

In the situations specified the necessity in the complex estimation of the regional bank sector by the values totality appears.

For these purposes it is necessary to bring all the values to non-dimensional form, to the general start of counting out and to the single interval of change.

On the assumption of above-stated tasks, we offer the method of their solution based on the linear transformation of the outgoing values.

The state of the regional bank sector is determined by the value of the fixed coefficient on this region and compared with the respective value of the fixed total coefficient, which reflects the fixed value for the regions related to the group of the stable, satisfactory, as well as unsatisfactory and critical state.

We shall consider the application of the methods of total fixed value determination based on coefficients, which are included in the criteria system of bank sector stability monitoring based on the example of the regions of Volga federal district.

<b>Table 1</b>			
<b>RATING OF THE ESTIMATION IN THE REGIONS OF VFD FOR 2015</b>			
<b>No</b>	<b>Name of region</b>	<b>Total value of the bank sector development in the regions</b>	<b>Score</b>
<b>Stable state (&lt;16.45)</b>			
5	Republic of Tatarstan	6.35	1
12	Samara region	10.48	2
1	Nizhny Novgorod region	19.81	3
2	Republic of Bashkortostan	14.21	4
<b>Unstable state (&gt;16.45)</b>			
10	Orenburg region	16.56	5
13	Saratov region	16.65	6
8	Perm Krai	17.12	7
6	Udmurt Republic	18.79	8
7	Chuvash Republic–Chuvashia	18.81	9
9	Kirov region	18.94	10
4	Republic of Mordovia	19.03	11
14	Ulyanovsk region	19.05	12
11	Penza region	19.59	13
3	Republic of Mari El	19.81	14
15	Average standard (H15)	16.45	-

The values of bank sector development in the regions of Volga federal district included as follows:

The quantity of the acting credit organizations (CO), the quantity of the branches of acting CO; grouping of CO by the value of the registered statutory capital (from 60 to 150 million RUB); grouping of CO by the value of the registered statutory capital (from 150 to 300 million RUB); grouping of CO by the value of the registered statutory capital (from 300 to 500 million RUB); grouping of CO by the value of the registered statutory capital (from 500 to 1 billion RUB); grouping of CO by the value of the registered statutory capital (from 1 to 10 billion RUB); the volume of deposits (investments) of the natural persons in roubles and foreign currency, attracted by CO; the volume of deposits of the legal persons in roubles and foreign currency, attracted by CO; the funds of enterprises, organizations, institutions (state, private, on the accounts of organizations, which are on the estimated financing of a bank, on non-residents' accounts and also on the accounts of clients in the precious metals) on the accounts of credit organizations; budgetary funds on CO accounts (federal, subjects of federation and local budgets, the other budgetary means of non-budgetary funds on the assumption of place of fundraising); the volume of issued depositary and saving certificates and bonds; the funds of legal and natural persons, attracted by the way of promissory note issue; the volume of indebtedness on credits, provided by CO of the RF to the physical persons; the volume of indebtedness on loans provided by CO of the RF to the legal persons and individual entrepreneurs; the volume of indebtedness on loans, provided by CO of the RF to the natural persons for buying the dwelling; the volume of indebtedness on loans provided by CO of the RF to the natural persons for buying the dwelling in the form of mortgage dwelling credits; the volume of loans provided to the legal persons and individual entrepreneurs; the volume of loans provided to the natural persons; the volume of loans provided to the natural persons for buying the dwelling; the volume of loans provided to the natural persons for buying the dwelling in the form of mortgage dwelling loans; the data about amounts accounted by the credit organization promissory notes; the volume of CO investments into securities (liabilities, stocks, participation in the branch and dependent joint-

stock companies and other participation); financial results of the activity of the acting CO in relation to profits and losses.

The rating estimation of the regions of VFD for 2015, obtained based on calculation of the fixed values of the bank state financial estimation, is represented in the table 1.

## CONCLUSION

The method of determination of the total fixed value offered by the author enables to simplify the analysis of the financial state in regions and build the parameter of reflection of the probable bankruptcy risk in the researched region in the nearest future (1-12 months).

This method enables to achieve the following aims of increase of the financial management efficiency in the credit organizations:

1. *The possibility to obtain signal about possible bankruptcy in advance appears;*
2. *The total fixed value is the parameter that has memory—it can be determined and depends not only on the current results but on their dynamics too;*
3. *The total fixed value enables to reflect the changes of individual values, i.e., to find the interrelation of the current state of a bank with the dynamics of its development.*

The positive dynamics of the total fixed value is the sign of the regional development as a whole.

The method of determination of the total fixed value calculated considering the values, included into the system of estimation criteria for the regional bank financial state, enables the enhancement of the high-quality bank management, reliability of forecasting the results of its activity and allows execution of the multi-criteria optimization of the basic values of the financial state in the regions.

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