

Evaluation of Banking System Monitoring: the Case of Russia

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ABSTRACT

The paper evaluates Russian banking monitoring system after the creation of mega regulator on the basis of the Bank of Russia in 2013, when this authority combined both control and supervising functions in financial market. The study starts with testing of the two hypothesis using Bank of Russia dataset to assess the factors which are significant for banking operating risk evaluation. The testing of the stated hypothesis was performed by means of statistical analysis using SPSS Statistics 22.0. As the result of the study the hypothesis on factor estimation were rejected, and it was revealed that the Bank of Russia is efficient for monitoring affiliated bank systems. To illustrate the findings we evaluate the case of 42nd largest bank in Russia for which the estimation of debt provided by the mega regulator was inaccurate, confirming existing literature that major risk of single authority for control and supervising financial sector has the risk of over-regulation with relevant decreasing monitoring and control efficiency.

Keywords: financial markets, financial regulation, central bank, banking monitoring, financial system.

1. INTRODUCTION

Since 2013 central bank of Russian Federation, the Bank of Russia, became the mega regulating authority for the

financial markets within the country by acquiring the functions that were previously divided between the bank of Russia and Federal Committee on Financial Markets. This merge made the Bank of Russia chief authority for the whole financial market in the country, and one of the outcomes of this reform was intensification of monitoring and control procedures in the banking system. One of the main reasons for setting a mega regulating authority on the basis of the Bank of Russia was to improve control of the systemic risks in the financial system, to exercise consolidated control of banking groups which was previously divided between financial authorities.

The other challenge faced by Russian financial system at the point of mega regulator creation was the declared low quality of financial institutions activities, which led to the need for monitoring optimization to assess perspective shortages and bankruptcies in the system. As the economy itself was highly centralized at the moment, creation of mega (or systemic) regulator, which combined regulation and control in the financial system, seemed the best solution.

In this paper we evaluate the results of banking system monitoring which was being performed since 2013 by the bank of Russia to estimate whether it was efficient, by means of quantitative and qualitative assessment tools.

2. LITERATURE OVERVIEW

Analysis of existing literature indicates that the case of emerging markets require special approaches towards financial system regulation as a result of specific challenges - in these economies the main development risks arise from under-developed financial institutions [20]. The research, undertaken for the case of underdeveloped financial markets, stresses the question whether adding objectives and control power to a central bank's existing ones really leads to higher quality of financial services and institutions; in many cases it tends to become a source interfere into banking system procedures, which does not lead to any improvements in the state of both financial institutions and their clients. For instance, some of the researchers [10] argued that regulator needs to focus on inflation target rather than try to assess upcoming bubbles, and come to a conclusion that such an approach is more rewarding compared to bank monitoring and crisis prevention.

The other point of view in existing literature is the opposite – in any case the key aim of financial market regulation is to prevent underestimation of the upcoming risks of financial system which is natural in the growth and stable stages of business cycle, and to prevent exaggeration of risks in the crisis and post-crisis stages [7]. Those who favor this approach, indicate, that the key task of national regulator, whether it is a single institution of the set of institutions, is to assess risks of financial system on continuous basis, and to share the findings with the actors in financial markets. Within this approach the regulator body aims to (a) ensure financial market confidence; (b) increase public awareness of the situation in financial markets, including providing information to the actors with relatively low financial literacy; (c) securing the consumers in financial sector by means of transparency and information provision and (d) reduce financial crimes [21].

The main issues discussed in the existing literature in relevance to regulatory boundaries of the national level are estimation of the level of desired competitions in the financial market, optimal level of regulation and relevant interference, and the level of responsibility of each financial market actor. Within this framework, researchers argue whether these goals should be integrated in a single regulation agency (a mega regulator), or it is preferable to split the tasks between a few regulatory bodies. One can find arguments in support of both approaches – on the one hand, a single regulation agency is a trend in modern economy (see examples of UK, Korea, Sweden, the majority of post-Soviet countries), but on the other hand, there is no direct evidence that merging of regulation and supervision in a single institution leads to higher stability – on the contrary, financial crisis of 2007-2009 had shown that both types of regulators failed to achieve above mentioned goals. The absence of possibility to find one-suits-all solution for financial market regulation was

overseen by researchers [8, 17] prior to the global crisis, and the way countries treated consequences of financial bubble prove the thesis.

The main concern for one-body regulation and supervision (the case of our study object, Russian Federation) is the possibility of financial market over-regulation [17] as the financial authorities are fully independent. The single regulating body tend to oversee the needs of economic agents in the financial market alone the timeline, resulting in unnecessary regulation procedures that lead to high density of informational flows [6, 11, 15, 22]. In turn, the majority of economic agents tend to stop analyzing incoming information, thus being unable to assess significant risks in the market. In Russian case the trend was in place since 2013 – hence leading to simultaneous over-demand and over-supply in financial market, as predicted by the literature. As a result, Russia faces a contradictory situation: it's central bank is unable to assess internal market risks for more than four years (and relevant bank bankruptcies), and at the same time the Bank of Russia is being awarded for the best governance practices in macro-level financial regulation.

Our research intends to assess monitoring practices of the Bank of Russia to define relationship between the power in banking regulation and quality of economic agents' life in the financial market.

3. EVOLUTION OF FINANCIAL REGULATION IN RUSSIA

At the initial stage of our research we have analyzed evolution of Russian financial market regulation after the breakdown of Soviet Union. Before March 2004, the regulation of the financial market in Russia was performed by a number of separate bodies, including Ministry of Finance, Ministry of Labor, etc. Such a complex structure led to overlapping and doubling of functions in regulation and supervision of the financial market, which did not contribute to improving the effectiveness of the system of state regulation [12]. Such complexity can be explained by existing at this time mixed model of stock market which integrated both banking and non-banking system, coming under economical and political instability and absence of financial market regulation experience [16]. Further on Russian regulatory bodies were continuously merging, resulting in creation of single mega regulator in 2013; the process of financial regulation can be viewed as a set of following stages:

1st stage (1991-1996). Creation of a financial market regulation system, which was working under supervision of the State Property Committee and the Ministry of Finance. Stage 2 (1996-2000). The Federal Law "On the Derivatives and Stock Market" was approved by the

Parliament, resulting in regulation of the stock and derivatives market by special independent body, Federal Committee for Securities and Derivatives (FCSM). At this time an attempt was made to divide responsibility for financial market regulation between the Bank of Russia (responsible for monetary policy) and the newly developed Federal Service. Stage 3 (2000-2004). Inefficient regulation of financial market, which was due to unstable structure of regulating and supervising bodies – within this time period regulatory and supervision functions were redistributed between existing authorities, including FCSM, Ministry of Finance, central bank and a few others. Stage 4 (2004-2011). The first stage of the reform of the financial market regulation system was performed during this period, aiming to future consolidation of regulation and supervision under one roof. Federal Commission for the Financial Markets (FCFM) was created instead of FCSM, and this body was given significant regulation authority [14]. Stage 5 (2011-2013). The second stage of the reform of the financial market regulation system was performed along the global trend of financial monitoring centralization. At this stage of development FCFM had gained authority over insurance market, thus combining supervision and regulation over all financial institutions except traditional banking system, Stage 6 (2013- present). At the final stage of financial system regulation reform the Bank of Russia acquired FCFM and became the mega regulator for national financial system. Further during this period the Bank of Russia was gaining extra authority to monitor financial institutions, including banks, on regular basis. The other important feature of this time period is constant growth of obligations for the banking sector – for example, reserve rate for operation with population had grown from 4.25% in 2013 to 6% in 2017.

The trend of financial market regulation and supervision evolution clearly states the tendency from decentralization towards concentration of power in the hands of central bank, which makes the Russian case interesting to analyze to define if higher centralization has positive effect on banking system monitoring and risk evaluation.

4. METHODOLOGY

To conduct the quantitative part of the research we have used the dataset present at the Bank of Russia website [2], and assessed the indicators within a yearly timeline from April 1st, 2016, to April 30th, 2017, covering every workday. The set of indicators included original variables (absorption operations balance, reserving rates, monetary volume, seasonally adjusted monetary volume, assets and liabilities of the 100th bank, assets and liabilities of the 30th bank and assets and liabilities of the 5th bank, quantity of licenses cancelled by the Bank of Russia, number of banks and banks’ branch offices, average reserves of first 100 banks, the number of indicators collected the by Bank of Russia on everyday basis) and

developed variables (average reserves per bank, assets to monetary volume ratio). In total during the assessed period the Bank of Russia had cancelled 109 licenses for bank services, which means that 15.4% of licenses were cancelled within a year, resulting in closing of 100 banks and 271 banks branch office. The sample includes 268 dates, each featuring a set of above mentioned indicators.

Statistical analysis of the dataset was implemented by means of SPSS Statistics software (version 22.0) to evaluate the following hypothesis.

Hypothesis 1. The number of cancelled licenses is positively related to the original indicators that characterize national banking system for the integrated sample.

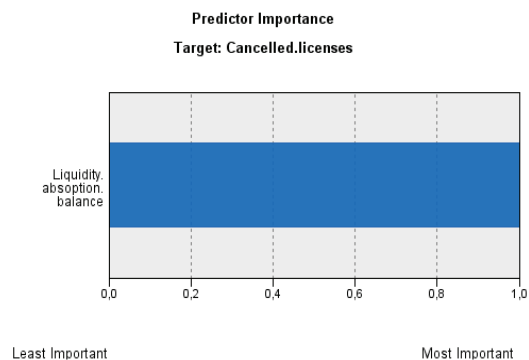
Hypothesis 2. The number of cancelled licenses is positively related to the developed indicators that characterize national banking system for the integrated sample.

5. MAIN FINDINGS

Statistical analysis

On the first step of the this research we performed automated regression analysis for the number of cancelled licenses as dependent variable, and a set of other above indicated variables as possible predictors. The results of regression analysis (followed by relevant Pearson correlation analysis) indicated the absence of relationship between the dependent variable and any of independent variables. Among others, the amount of data collected and the intensity of control procedures are not related to the cancellation of banking licenses.

Figure 1a. Main predictor number of cancelled licenses (filtered for the dates with cancellations)



Then we have filtered the dataset to the dates when the licenses were called, leaving out the dates when the Bank of Russia did not interfere into banking sector

functioning. The results of automated linear regression analysis with this filter can be seen in Figure 1.

In this case only one predictor appears to be statistically significant – liquidity absorption balance, and even this factor explains only 3.8% of cancelled licenses dependent variable. Hence, both in case of whole sample, and sample which includes all dates when the Bank of Russia cancelled licenses, indicate that neither characteristics of banking system, nor the number of procedures implemented by the Bank of Russia are related to the efficient risk evaluation (cancelled licenses being the measure for it).

The results of automated linear regression analysis for each date when more than 1 license was cancelled, can be seen in Figure 2.

For this case, which in practice indicates that the Bank of Russia cancelled licenses of 2 or more affiliated banks, three predictors were revealed: average reserves per bank, the number of existing banks in the system, and the liabilities of the 100th bank in Russian banking system at the date measured. This set of variables explains license cancellation probability with 26.3% accuracy. In accordance with this findings we can reject both

hypothesis for a single bank situation – banking system characteristics become an indicator of central bank behavior only if it is cancelling more than 1 license of affiliated banks.

Figure 1a. Main predictor number of cancelled licenses (filtered for the dates with more than 1 cancellation)

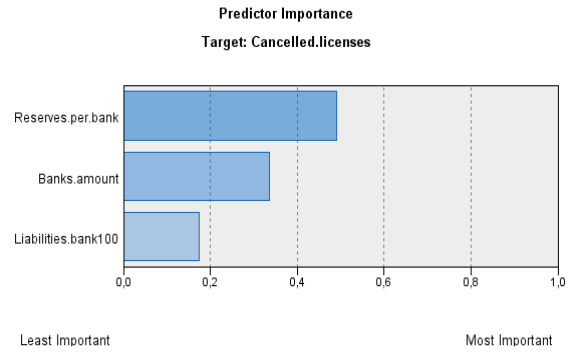
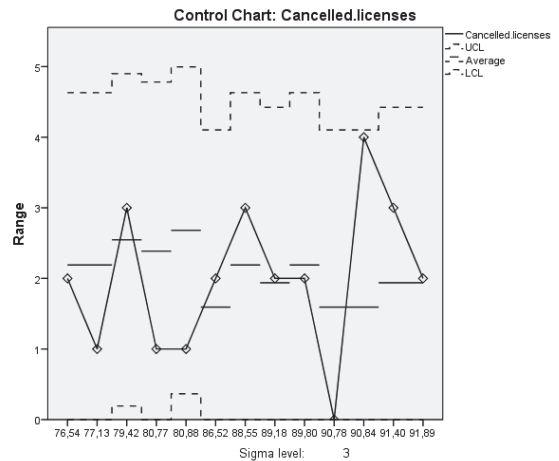
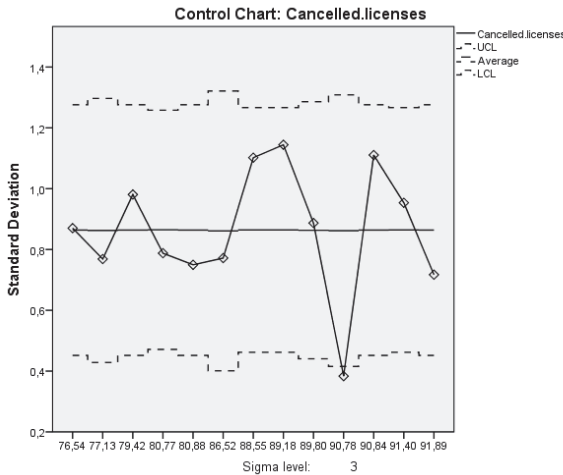


Figure 2. Control charts for the number of cancelled licenses (the left graph represents full sample, the right graph represents filtered sample)

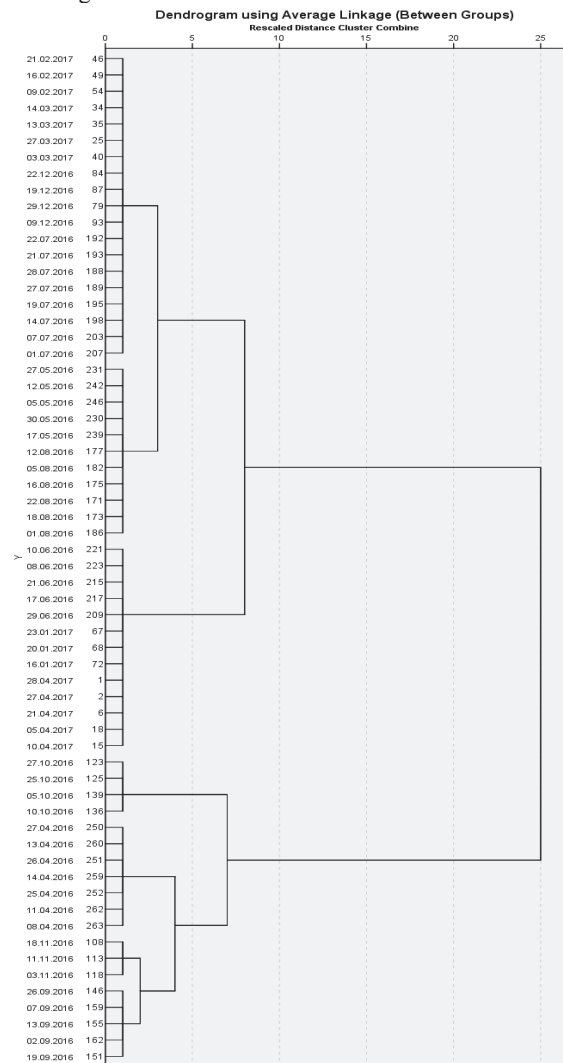


In Figure 3 we present the charts that categorize number of cancelled licenses on the scale of average reserves per bank (the left diagram presents full dataset, and the right diagram represents the dataset filtered to the dates when licenses were cancelled). As it can be seen from the Fig. 3, as reserves are getting larger, the Bank of Russia tends to cancel more licenses. The average amount of reserves in this case can be considered indirect indicator of regulation burden in the financial system, and the graphs clearly indicate the extra control procedures do not lead

to better situation with monitoring. The same results were acquired when we evaluated the number of control procedures and indicators collected by central bank – extra information does not lead to higher quality of risk assessment in national banking system.

To finalize quantitative analysis within this research, we have performed cluster analysis of the set of indicators, including the number of cancelled licenses. The dendrogram developed within hierarchical cluster analysis is presented in Figure 3 (for the filtered sample).

Figure 3. License cancellation by the Bank of Russia dendrogram



The dendrogram indicates 7 license cancellation clusters which one can find between April 2016 and April 2017. Two of the featured cluster represent the situation when a “nest of banks” experiencing financial problems were revealed relatively quickly and a set of licenses was cancelled in a short time period, thus indicating relatively efficient assessment of the banking system; however, the clusters in the top of dendrogram feature the dates when the 42nd bank in Russian banking system was experiencing problems – and in this case it took 9 month for the Bank of Russia to initiate bankruptcy procedure.

The results of cluster analysis allow to reject both hypothesis – as indicated, the number of controlled indicators did not allow the Bank of Russia to assess the risk of certain banks as the first indicators appear, thus leading to massive license cancellation.

Qualitative evaluation: the case of Tatfondbank

At the final stage of the research we assessed the case of 42nd largest bank in Russia, Tatfondbank, whose license was cancelled on March 3rd, 2017, followed by prompt cancellation of 3 affiliated bank licenses. The first cluster on top of dendrogram in Figure 3 features the dates when it was later reported that Tatfondbank was experiencing problems.

The reporting on the situation with Tatfondbank by the Bank of Russia reveals low level of understanding of the situation in one of the largest national banks. In April, July and August 2016 [4] the bank was penalized for violation of minimal reserve rate; the sum of penalty was a few times lower than the amount the bank needed to put in reserves. The next problem appeared in October, when 15% of Tatfondbank assets disappeared due to problems with Peresvet bank [3]. The reported shortage announced at the moment was assessed as 30-35 billion rubles. Later, on December 7th, 2016 the bank announced limitations for the customers – population was allowed to withdraw no more, than 15 thousand rubles per day; this measure did not help the bank – on December 15th it stopped operations.

The most interesting part of the analyzed case is the evaluations of the deficit Tatfondbank had as made by spokespersons of the Bank of Russia: in August the debt was estimated at the level of 29 billion rubles [18], in October after the crash of Peresvet bank – at the level of 30-35 billion; at the moment operations stopped – about 80 billion rubles, and finally in the end of December the debt was estimated at the level of 120 billion rubles; by March the debt estimation dropped down to 97 billion. During operation time Tatfondbank was requesting the Bank of Russia’s support in regaining liquidity [5]. The case illustrates, that despite the Bank of Russia had weekly reports from Tatfondbank starting August, it was unable to estimate the debt of the bank even with 50% probability, indicating that concentration of regulation and supervision under one financial authority leads to over-regulation of the system, but does not add value to risk estimation even in case of large financial institutions.

6. CONCLUSIONS AND LIMITATIONS

The research allows to come to several conclusions regarding efficiency of mega regulator banking system monitoring in case of Russian Federation after creation of single regulation body in 2013.

The findings of the paper support the concern that was expressed in existing literature concerning the efficiency of single regulation and supervising financial authorities [1, 9, 19, 23]. Analysis of the situation in Russia indicates that despite of intensive control imposed by the Bank of Russia on national banking system, it is unable to predict

risks of the bank development until the bubble in the bank's capital becomes times higher than its existing assets. The reaction of mega regulator to this situation is also as predicted by existing literature: the chief financial authority requests extra power to proceed with monitoring, yet again oversees the risks within overwhelming information flow.

The main limitation of our study is the sample size and type, as we have used the dataset provided by the Bank of Russia, which is made along the timeline by implementing different methodology that did not allow to compare two close cases of large banks – the Vneshprombank and Tatfondbank cases. The use of only Tatfondbank case is the second significant limitation of the study.

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