

EDITORIAL: Introduction on Special Issue on the Banking System and Financial Markets of Russia and other Countries: Problems and Prospects

Peter Brusov*

Financial University under the Government of the Russian Federation, Moscow, Russia

The special issue is dedicated to the problems and prospects of **the banking system**, as well as **the financial markets** of Russia and other countries. We discuss these problems mainly for Russian banking system, as well as for Europe Union one, Nigerian banking system etc. Some of these problems are general for all banking systems: inflation, liquidity, capital adequacy, combating money laundering, stability of the banking system, introduction of innovative technologies in finance (Fintech), cryptocurrencies etc, while some others are very specific for particular country. For Russia, for example, there is a problem of financing of the real sector of the economy, sanctions, as well as of narrowing of commercial banks pool, which practically leads to dictate of deposit rate values by the Central Bank of Russia, etc.

The Russian banking system as well as banking system in other countries has a two-tier structure: the Central Bank of Russia and banks and non-bank credit organizations. The kind of functions and powers of Central Bank distinguish it from the other banks.

We discuss the role of the Central Bank in creating of a favorable investment climate in the country, in financing of the real sector of the economy, in creating and regulating of the rating industry, as well as in targeting of inflation, by other words the main activities of the Central Bank in the system of integrated financial regulation. Problems of stability of the banking system, as well as of financial stability of credit institutions are considering.

The second level of banking system is represented by commercial banks. The following problems are considered for the banks and non-bank credit organizations. Methods for determining of **the**

creditworthiness of commercial banks and their customers are discussed. The application in accordance with **Basel-III** of new requirements for the adequacy of share capital and total capital are discussed, taking into account of the conservation buffer, as well as the introduction of the mandatory requirements (norms) of the leverage index.

Various aspects of **Russia's economic growth** are discussed including different macroeconomic scenarios. **Modern monetary policy** in Russia and other countries are considered. Factor analysis of the Russian **stock market** has been done. We discuss the Financial and Credit Institutions' Asset Management. Development of **electronic money** in the Russian banking system is described. It is very important to discuss the innovative technologies in finance (**FinTech**), their recent and future trends in Russia and other countries.

The problems with cryptocurrencies are discussed very intensively recently. Central banks express various positions with respect to cryptocurrency from strong denial to non-intervention. One of the features of these problems is the private cryptocurrencies, which became an integral part of the financial market and is discussed in this issue.

In conditions of a bank-oriented financial system the Central Bank's "signals" about the decisions in a monetary sphere are being received via banks as well as mail channels of the transmission mechanism of monetary policy is being implemented. The analysis of the performance of banks as the actors of monetary policy appears to be relevant.

The effect of the traditional channels of the transmission mechanism of monetary policy, where banks acts as subjects, is extremely low, which makes the achievement of the strategic aims of the economy's development – financial stability and economic growth, problematic. Thus, the practical suggestions about the credit and percent channels of the transmission

*Address correspondence to this author at the Financial University under the Government of the Russian Federation, Moscow, Russia; Tel: +79060675975; Fax: +79060675975; E-mail: pnbrusov@fa.ru

mechanism of monetary policy in Russia will be very useful.

Components of financial stability of credit institutions are considered. In addition to the traditional quantitative indicators of the bank's activities, such as capital, assets, profit of the credit institution and others, relative indicators are of particular importance for assessing the effectiveness of banking activities. It is necessary to evaluate both quantitative and qualitative indicators of the activity of credit institutions, the synergy of which will help determine the components of financial soundness and their assessment. An assessment of the financial stability of an individual credit institution is based on the results of a comparison with the industry average components of financial stability.

Quantitative assessment of the impact of credit on economic growth is one of the criteria for the effectiveness of the credit market in the national economy. It will be interesting to estimate the positive impact of the Russian credit market on the country's GDP.

As well it is interesting to consider the peculiarities of the development of Fintech in Russia and its influence on the lending processes as well as formulate the recommendations aimed at further development and expansion of lending to individuals in Russia.

The development of new regulatory standards by international organizations and national regulators to prevent crises and increase bank stability has been typical for recent years. These standards are aimed to maintain the financial stability of banking sector and prevent crises, but the results of their practical implementation are not so clear. It is important to analyze the new capital requirements and financial leverage indicator introduction impact on the credit institutions business activity.

The transition to integrated financial regulation raised the issue of the role of central banks in the new configuration of financial supervision; on the necessity of confrontation financial crises and systemic risks; on overcoming sectoral fragmentation of regulation and standardization of supervisory activities based on best supervisory practices.

Blockchain technologies with a high level of functionality and security in trade finance processes reduces processing time for documents, transaction

costs, expanding number of participants and increases level of transparency.

The regulatory and supervisory function has evolved into a critical factor in managing the stability of the financial system. Rethinking the content of financial integral regulation has allowed to allocate three separate directions: ensuring financial stability, macroprudential supervision, regulation of moral hazard risk in the banking sector and business behavior of financial institutions and limiting the emergence of regulatory arbitrage.

The objective of this special issue is to provide wide discussions of the researchers on this important issue. This special issue focuses on advanced topics in the banking system and financial markets of Russia and other countries, on their problems and prospects.

ABOUT THIS SPECIAL ISSUE

The role of the Central Bank and commercial banks in creating and maintaining a favorable investment climate in the country is studied in the first paper **The impact of the Central Bank key rate and commercial banks credit rates on creating and maintaining of a favorable investment climate in the country** by Peter Brusov, Tatiana Filatova, Natali Orekhova, Veniamin Kulik, Irwin Weil and Andrey Brailov. Within the framework of modern investment models created by the authors, the dependence of the efficiency of investments on the level of debt financing within a wide range of values of equity costs and debt capital costs under different project terms (long-term projects as well as projects of arbitrary duration) and different investment profitability coefficients is investigated. It is found that NPV depends practically linearly on leverage level L , increasing or decreasing depending on profitability coefficient and credit rate values k_d . The cut off credit rate values k_d^* , separating the range of increasing NPV(L) from range of decreasing NPV(L), are determined. The Central Bank should keep its key rate at the level which allows commercial banks to keep their credit rates below the cut off credit rate k_d^* values in order to create and maintain a favorable investment climate in the country.

Fintech today changes the banking and financial services. The paper **Fintech Ecosystem and Landscape in Russia** by Vladimir I. Soloviev discusses features and characteristics of contemporary Russian fintech landscape and ecosystem. The online banking and accounting, new payments and transfers

services, platforms for crowdfunding and peer-to-peer lending, blockchain initiatives, etc. are discussed. Russian banks encourage technology companies and fintech startups to focus their efforts on innovations improving processes. The activity of Government on introduction of regulation of cryptocurrencies circulation and of blockchain in regtech and cybersecurity is discussed as well as the interests of customers in new and more convenient functionality in mobile applications.

In addition to the traditional quantitative indicators of the bank's activities, such as capital, assets, profit of the credit institution and others, relative indicators are of particular importance for assessing the effectiveness of banking activities. The paper **Components of financial stability of credit institutions: a new perspective and new horizons** by Davydov Vyacheslav, Lavrushin Oleg, Sokolinskaya Natalia, Khalilova Milyausha describes a financial model characterizing the stability of credit institutions. In authors opinion, it is necessary to evaluate both quantitative and qualitative indicators of the activity of credit institutions, the synergy of which will enable them to identify the components of financial soundness and their assessment.

Russian equity market has become the leading market in Eastern and Central Europe. However, in the last decade the Russian stock market has demonstrated one of the worst returns in the world among the 20 largest economies. The Russian market looks very much undervalued. Boris B. Rubtsov and Natalya E. Annenskaya in the paper **Factor analysis of the Russian stock market** analyzed the causes of this situation, defined the factors which impact the Russian stock market (ownership structure, volatility, dividend policy, the role of foreign investors, correlation with oil prices) and made conclusion that the most important factor has been the sanctions imposed upon largest Russian companies after 2014.

In the bank-oriented financial system the "signals" from the central bank regarding decisions about the monetary policy go to the economy via banks, through which the main channels of the transmission mechanism of the monetary policy are implemented. The analysis of the effects of banks as the actors of the monetary policy is therefore relevant. The article **Banks as the actors of a modern monetary policy in Russia: effects of exposure on the economy** by Abramova Marina, Dubova Svetlana, Maslennikov Vladimir, based on a study of the elements of

investment potential for their impact on GDP, contains conclusions about the possibility of achieving economic growth as one of the strategic goals the monetary policy through the main channels of the transmission mechanism using its standard tools.

The problem of emigration of Russian citizens to other countries poses a threat to national security, as among the emigrants there are many economically active young people with a high level of education. A comprehensive study of these processes has been done in the paper **The Estimation of Losses of the Russian Economy from Population Migration to Developed Countries in 2000–2017** by Vladimir Maslennikov, Aleksandr Linnikov and Oleg Maslennikov. Authors developed a methodology for assessing the losses of the Russian economy in value terms as a result of emigration of citizens abroad.

The new sources of income of banks connected with digitalization and development of new technologies are considered in the paper **Impact of bank cards transactions on banking fee income growth in Russia** by Olga M. Markova, Olga S. Rudakova, Nadezhda N. Martinenko. In spite of dynamic bank cards market development, there are many unresolved issues and challenges in this sphere, which generally relate to the necessity to enhance legal framework regulation; development of effective anti-fraud methods; utilization of innovative technologies and others.

The model for the development of the Russian economy is based on the need for its structural adjustment. A big role in this process is played by commercial banks, whose credit policy is not yet aimed at actively supporting of investment processes in the economy. The purpose of the article **The influence of the credit policy of commercial banks on the modernization of the Russian economy structure** by Ternovskaya Helena, Lavrishko Alexander is to study the directions and instruments of the influence of credit activity of commercial banks on the sectoral structure of the Russian economy.

The search of investments in the domestic financial market is an important problem for the Russian economy. The authors of the article **Functional improvement of pension system as mechanism of investment in Russian economy** by Irina A. Guseva, Elena I. Kulikova, Nikolay M. Rebelsky, Lidia S. Arkhipova believe that pension funds attracted by non-state pension institutions are an essential resource for

the Russian economy. The practices of foreign pension institutions need to be examined and implemented to tap this resource more efficiently.

The transition to integrated financial regulation brought the issue on the central banks' role in the new configuration of financial supervision; on the necessity of resistance to financial crises and systemic risks; on overcoming of sectoral fragmentation in the area of regulation and supervisory activities' standardization based on best supervisory practices. These problems are considered by I.E. Shaker, N.S. Shaker in the paper **The main directions of the bank of Russia's activity in the system of integrated financial regulation**. In countries, that have adopted the integral regulation of the financial market, in relation to all its sectors, the authors propose to develop and apply standards of the moral hazard risk regulation in the banking sphere and the business behavior of financial institutions; universal standards and technologies of regulation and supervision in order to limit the establishment of regulatory arbitrage; leveling of systemic risks of financially–credit sphere.

The Russian credit market reflects the significant range of problems faced by the national economy, such as structural and regional imbalances; restrictions that prevent the free movement of funds in the interbank market; uncertainty that leads to a slowdown in the rates of attraction and placement of credit resources. The purpose of the paper **A quantitative assessment of the impact of credit on economic growth in Russia** by Byvshev Victor and Brovkina Natalya is to assess the impact of credit on economic growth as one of the criteria for the effectiveness of the credit market in the national economy.

The actual topic of forecasting of sharp changes in exchange rates is discussed in the paper **Kinematical model of currency dynamics** by Boris Boyarshinov, Nina Yuzhakova. The authors use the analytical approximation of data on the dynamics of the USD and EUR currency pair, based on the physical model. The paper shows signs of an approaching sharp change in the exchange rate of a currency pair.

Now banking systems are experiencing unprecedented influence of both external and internal macroeconomic factors. Autonomous factors in the banking sector liquidity formation are factors that are not related to the Central Bank operations for its management. The paper **Unbalanced liquidity management evaluation of the Russian banking**

sector by Nina Morozko, Natalia Morozko, Valentina Didenko presents a model answering the following questions: how is the influence of autonomous factors on the banking sector liquidity carried out and in what stages of development are their manifestations stronger?

Now a number of Russian financial institutions are developing their own projects using blockchain. During last three decades financial markets have moved from a highly centralized to a globalized system that includes all the world's stock exchanges and other financial institutions. The global stock architecture has united the world market. The paper **The digitalization of the russian financial market: the use of technologies of the distributed ledger by the institutions of custodian infrastructure** by K.R.Adamova and I.E. Pokamestov studies the possibility of using the technology of the distributed ledger by institutions of custodian infrastructure.

Blockchain technologies with a high level of functionality and security in trade finance processes reduces processing time for documents, transaction costs, expanding number of participants and increases level of transparency. The paper **Adoption of blockchain technology in trade finance process** by A.V. Bogucharskov, I.E. Pokamestov, K.R.Adamova and Zh.N.Tropina examines areas and ways of blockchain application in trade finance and to identify key aspects of improving transactions process.

The development by international organizations and national regulators of the emergent standards purporting prevention of crises and increase of banking stability is typical for the last years. However, practical implementation of the standards is not so definitive. The study of correlations between capital adequacy ratio of banks and their credit activity is still very important. The paper **The capital requirements (Basel III) and the banking sector business activity** by I.V. Larionova, E.I. Meshkova, S.V. Zubkova is devoted to the analysis of impact of new requirements in the field of control over the quality and adequacy of the capital of banks, introduction of the additional parameters of risk–related load on the basis of financial leverage on business activity of banking sector.

Inflation on the consumer market can be managed by reducing its rate and lowering inflation–related risks. Vladimir Popov in the paper **Inflation and consumer basket** investigates the formation of consumer basket by means of probability theory. The approach is based

on the treating the inflation risks of particular ingredients of the consumer goods basket as component of the whole complex rather than separate units. The proposed management strategy is focused on the degree of correlation between the rates of price increase of the items in the basket. Portfolio theories of Markowitz and Tobin are used.

The basis of the emergence and periodic aggravation of the crises of the international monetary system, the causes of the new exacerbation, and the changing role of monetary gold in the process of globalization of the world economy are studying in the paper **Can the world monetary system be saved from collapse by monetary gold** by S.Varlamova, M.Medvedeva.

The overdrafts to corporate customers are attractive for a lending institution in terms of maintaining liquidity and increasing revenues from operating activities. The introduction of overdrafts does not require additional capital investments, while enhances its competitive position, since this service can not be provided by non-bank financial services operators, but exclusively by banks, because they act as financial intermediaries and settlement centers. Paper **Corporate Lending in Overdraft Mode: Determination of Limit and Criteria for Economic Justification** by Elena P. Shatalova studies the importance of overdrafts for banks activities.

One of the features of problems with cryptocurrencies is the private cryptocurrencies, which became an integral part of the financial market. In the paper **Central bank policy and cryptocurrencies** by Svetlana Krivoruchko, Vladislav Ponamorenko, Anatoly Nebera authors found out a common and dominating trend in the central bank's policy to lead the further development of crypto-currency by restrictions, robust surveillance and licensing.

High risks and volatility in the stock market of Russia hinder the transformation of savings into investments and increase the speculative nature of transactions. Russian business does not use the securities market mechanism of financing investments widely enough. One of the causes of this is the faults in the model of securities market regulation in Russia and the legislative gaps. The aim of the paper **The concept of fair pricing in the regulation framework of the Russian securities market** by E.V.Semenkova, L.N. Andrianova and K.V. Krinichansky is developing suggestions concerning the improvement of

government regulatory practice and self-regulation in securities market in Russia. The study is based on the methods of institutional, comparative and graphic analysis.

Dependence of economic development of the Russian regions on their cultural level indicators is studied in the paper **Evaluation of cultural impact on regional economic development in Russia** by Inna V. Lukashenko, Elena A. Fedorova. Its objective is to determine and analyze the influence degree of cultural components of the region development on its economic factors using methods of economic and mathematical modeling.

Optimal investment strategy depends on the loan in currencies of developed economies (EUR, JPY) and lending in currency of energy economies (RUB, BRL). Four years ago there has been a shift to euro funding as the currency of financing for carry trade. Paper **Optimal carry trade strategy based on currencies of energy and developed economies** by Alexey Mikhaylov, Natalia Sokolinskaya and Anthony Nyangarika is devoted to the study of the optimal carry trade strategy based on currencies of energy and developed economies.

Accounting of the experience of mortgage lending in developed countries during the last financial crisis of 2008 is very important. This experience is analyzed in the paper **Mortgage lending to individuals in Russia during the financial crisis** by L.S. Alexandrova, O.V. Zakharova, S.S. Matveevskii, where authors give an overview of the main models of mortgage lending, and presented the results of their comparative analysis. They note that in Russia two-level model of mortgage lending is currently used, which allows the state to control the mortgage lending market, to realize refinancing of commercial banks issuing mortgage loans using securitization.

The credit derivatives are analyzed in the paper **World market of credit derivatives: problems of development and regulation** by O.A. Gorbunova, O.V. Ignatova, O.Yu. Tereshina. The analysis of development and functioning of the world market of credit default swaps is conducted. The problems of regulation of the world market of credit derivatives are revealed and ways of their solution are suggested.

The determinants of excess liquidity in the Nigerian banking system using generalized autoregressive conditional heteroscedasticity (GARCH) for the period

January 2008 to December 2015 are examined in the paper **Determinants of excess liquidity in the nigerian banking system** by Ujunwa Augustine, Okoyeuzu Chinwe, Wilfred I. Ukpere . The identified determinants of banking system excess liquidity are capital importation, Federation Account Allocation Committee (FAAC) distribution, exchange rate premium and policy instruments such as cash reserve ratio, special lending facility rate, Treasury bill rate and interbank rate.

The stability of the Russian banking system by machine learning methods is studied by Oleg A. Bayuk, Dmitry V. Berzin, Bogdan A. Timov in the paper **The research on stability of the Russian banking system by machine learning methods**, where a system of indicators, proposed by F.T. Aleskerov etc is used to describe the state of a commercial bank. For predicting the development of banking system, the machine learning system implemented in the Azure ML is used. To optimize the work of this software, authors suggested to use integral indicators.

The problem of the influence of major sociodemographic factors (including age, gender, marital status, education level and occupation) on the individuals' investment preferences for long-term

investment on tax-beneficial accounts is studied in the paper **The study of investment preferences of Russians on individual investment accounts study** by Daria Karpova, Svetlana Panova.

The current Special Issue provides high level discussions of the problems and prospects of the banking system, as well as the financial markets of Russia and other countries. Relevant problems are discussed very intensively. Sometimes the study is conducted from an unexpected point of view. The results obtained help to better understanding of the problems of the world banking system (and Russian one, in particular) and indicate ways of solving these problems. These results will be required and used by Central Banks of different countries, commercial banks and non-bank credit organizations.

Guest Editor thanks all authors for participating in this special issue and for their contribution, for useful discussions and suggested solutions of the discussed problems of the banking system and financial markets of Russia, EU, Nigeria and other countries. I would like also to thank reviewers from Russia, USA, UK, South Africa, Kazakhstan and many other countries for their work on careful reading of papers and recommendations, which help to improve the papers.