Formation of Banking Institutions at the Present Stage of Development and in the Future

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Abstract. This article analyzes the basics of banking institutions’ activity in the evolutionary development in order to identify the peculiarities of their formation at the present stage and in the future. There have been distinguished the non-correspondence between the current legislative norms of banking regulation and the practice of circulation of financial and non-financial instruments in the context of the recent technological development, global market integration and redistribution of the capital. The article presents the analysis and assessment of the banks’ activities in Russia and Ukraine, which made it possible to identify problems and give recommendations for improving their regulation.

1. Introduction

The development of the society, the formation of national economies of all countries of the world in the context of the latest technologies introduction has led to the development of banking, the necessity for serious changes in legislation and performing banking operations.

In the conditions of financial globalization, the distribution and redistribution of capital are performed at the national and international levels, which gives modern banks a special mission—participation in economic processes at the global level.

2. The Research of Features, Problems and Prospects of Development of Banks’ Activity at the Present Stage and in the Future

Banks have come a long way of development: from performing a limited range of operations to expanding functions and areas of activity. The understanding and definition of the bank [1, 2] have also changed. At first, the bank was an institution that was created to solve certain problems without the goal of making a profit. Then it was an enterprise that regulates cash and non-cash turnover. It is true that when creating a single economic space with international economic integration, the consideration of the bank’s activities solely as those of an enterprise engaged in certain banking operations does not fully describe its specifics, possibilities and problems of functioning in the current conditions of the development of the national economy of any country in the world [3].

In the developing countries, such as the Russian Federation, Ukraine and others, the legislative definition of a bank only as a credit institution performing operations of opening accounts to individuals and legal entities, placing temporarily free cash funds on deposits and investing formed resources in active operations does not reflect the real situation and the specifics of a modern bank in the conditions of information technologies development and intensification of integration processes. Non-bank credit organizations are entitled by the regulator to carry out exclusively one particular type of operations. Credit organizations are not allowed to carry out production, trade and insurance activities. Thus, the legislative interpretation of a bank as a credit institution is rather narrow. Also the norms of national legislation restrict the activities of banking and non-banking organizations.

However, it should be noted that at this stage of the society and technology development, it is going to be even more in the future, the banking activity cannot remain at the current level.
The integration processes and the distribution of the world capital contributed to the mergers and takeovers of banking and non-banking organizations, as well as the integration of bank capitals with the capitals of other enterprises, for example, industrial capital and others. Financial and industrial groups, holding companies and other types of corporations appeared. The legislative limitations on the banks’ activity in such areas have generated the use of insider schemes of not direct ownership of the capital, but through third parties, in other organizations and enterprises. In our opinion, improving the legislation requirements to meet the new development conditions will openly show the real relationships of business entities and, thus, determine the real financial condition of their financial statements, both for individuals and for the whole association, as well as at the state level. Such financial statements will facilitate the timely identification and prevention of financial risks. This is especially significant for unformed, highly volatile markets in developing countries. Moreover, the main trends and features of the recent global financial crises have shown a strong interdependence of the markets of all states. Thus, the solution to this problem is important not only at the national level of banking activities regulation of a particular state, but also at the global level.

The second important aspect is while regulating banks’ activities to take into account the circulation of new types of not only financial but also non-financial instruments, without which banks will lose their dominant place in the country’s financial system in the future. Such instruments, on the one hand, will expand the sphere of banks’ activities, on the other hand, they will cause qualitatively new risks, which, consequently, requires the introduction of a new system for managing all instruments and cash flows of banks, as well as maintaining security and stability.

Even nowadays the International Financial Reporting Standards require the mandatory reflection of financial instruments that are taken into account on the off-balance sheet as contingent liabilities and contingent assets. In the future, in the conditions of digital revolution, in order to maintain its position in the financial market the bank will need to expand and conduct operations not only with the onset of events in the present recognizing them as financial liabilities and financial assets, but also possible liabilities and possible assets if some events happen in the future. But it is also important to consider the ability of banks to conduct transactions with non-financial instruments. The latest technologies that are introduced in the financial market by all business entities allow today to carry out operations and earn income, limiting the activities of banks. The development of uncontrolled, unregulated financial companies and others that, through the introduction of financial technologies, carry out purely banking operations, will destabilize the financial market in the future.

However, since banks initially have competitive advantages—legislative mandatory requirements to open and maintain accounts of individuals and legal entities, to make non-cash payments—they are the only institutions that have a comprehensive information base. With legislative, regulatory and legal improvement, these advantages will allow banks to take advantage of this to expand the market for their activities at the legislative level. And the regulator will be able to monitor the state of the monetary market and timely prevent financial crises.

The necessary balance and off-balance sheet transactions, which will take into account financial and non-financial instruments, for the banks in the future will be those that are not often carried out in Russia and Ukraine:

Asset securitization operations, which simultaneously improve the quality of the loan portfolio and attract new cash flows to the bank of the “future” (with the obligatory observance of the responsibility of the regulator and the relevant authorities, rating agencies, which are required to monitor the quality characteristics of the transactions);

Off-balance sheet sales of loans, exchange transactions with interest rates;

Financial guarantees (bank guarantees, digital bank guarantees using smart contracts, credit guarantees, sale of assets with recourse, guarantee letter of credit);

Off-balance sheet activities related to investment and hedging: forward foreign exchange transactions, interest rate and currency swaps, option, interest-bearing futures;

Traditional debt obligations and exchange financial transactions (documentary letter of credit, digital letter of credit);
Those that currently are not development sufficiently, but are necessary for the development in the future:

Services for digitizing information, mobile applications, the use and provision of cloud technologies, services of payment chips, services for providing and using data arrays, information to third parties in order to meet the needs of the customers, including websites and mobile applications;

Off-balance sheet operations related to the implementation and development of retail banking platforms, innovative trading platforms, P2P lenders and payment service providers, blockchain technology;

Services based on online technologies, investing in fintech startups when creating and using financial and banking platforms, innovative trading platforms, P2P lenders and payment service providers; and the combination of the possibilities of cryptography and biometrics will provide verification of customer identity and reliable access to the entire financial system;

Off-balance sheet liabilities and requirements arising from the implementation of artificial intelligence systems that facilitate optimal management of customer funds, the transfer of assets from long-term to short-term or more liquid forms;

Services of information brokers for potential vendors or customers, social commerce services.

Of course, the degree of the economic, social and political development of a particular state has a significant impact on all performance indicators of a modern bank. The banks that operate in countries with developed market economies initially have advantages in improving banking activities with a high degree of development of a total of markets and financial instruments, implementation of effective state regulation taking into account international requirements for banking risks management, which is impossible for banks in developing countries with increased risks, unstable political situation, unresolved social problems, underdeveloped markets and financial instruments.

3. The Analysis and Evaluation of the Results of Banks’ Activity in Developing Countries at the Present Stage of Development

The analysis of the banks’ activities in Russia and Ukraine allows us to assess the role of these institutions in the economic development of states and the level of development of their activities [4].

The main disadvantage that affects the reliability of banks is the insufficient use of all existing financial instruments, which contributed to the formation of non-diversified portfolios of liabilities, assets and off-balance sheets of banks, and, accordingly, a significant increase in banking risks. Only five percent of Ukrainian banks’ assets are investment operations in 2007 and ten percent in 2018 (Fig. 1, Fig. 2).

Figure 1. The correlation of the balance statement of the banking sector of Ukraine, %.
The operations of banks in Russia and Ukraine on the interbank market are insignificant. In Ukraine the share of highly liquid funds is even more insignificant than in Russia.

Naturally, in order to increase the market value of banks and maximize profits, the banks should direct their cash flow between investors and business entities. In all developed countries they are the main institutional investors. The above analysis of the asset structure of commercial banks in Russia and Ukraine clearly demonstrates the insignificant investment of all banking resources in active operations with securities, despite the wide opportunities of banks to form portfolios of securities depending on the intention, purpose, acquisition of these assets, and on the financial capabilities of each individual bank, as well as on the types of securities.

Almost all own, attracted and borrowed funds of banks are allocated for lending to legal entities. Lending to legal entities in Ukraine doubled (1.78) from 2007 to 2018, whereas lending to individuals decreased significantly; the gap between the volumes of financing legal entities and individuals increased three times. The same trend is noticed in Russia. This reflects the choice of banks over the years to invest their resources in various types of enterprises, rather than in the development of lending to individuals, individuals - private entrepreneurs.

During economic crises and an unstable banking system, the unconsidered policy for managing liabilities, assets and unbalance was established: the banks of Russia and Ukraine significantly increased the volume of issued loans, overdue loans—an aggressive credit policy was carried out, which entailed the deterioration in the quality of the loan portfolio due to non-payment of borrowers’ debts and finally obtaining the financial result—the losses for many banks, which caused the decrease of their reliability (Fig. 3).

In case of losses on credit operations, the accumulated reserves together with banks’ own funds will not be able to cover losses. Therefore, the banks need to pursue an effective policy of integrated management of liabilities, assets and off-balance. Banks’ own funds are represented by regulatory capital and are 10% and 12% in 2007 and 2018 respectively. But it is necessary to note the negative trend of reducing equity due to losses on operations during 2009–2011, and in 2014 in the banks of Ukraine this result began to deteriorate significantly, and it continued later.

The analysis of the terms for issuing loans made it possible to conclude that banks invest funds mainly in short-term loans without developing active long-term operations. Since the banks in developing countries have a serious problem of the lack of long-term stable cheap funds for financing projects, which is mainly explained by the difficult situation with the legal protection of assets of bank customers. When some banks are withdrawn from the market, which has often been used by the regulator for the last decade, individuals partially, and legal entities practically completely do not return their funds, which leads them to the loss of solvency.
The banks do not use all the opportunities to attract long-term, stable and cheap resources, for example, such as raising funds on the terms of subordinated financial instruments by concluding direct agreements and issuing debt obligations.

The banks of Russia and Ukraine in the financial statements reflect only off-balance sheet liabilities that are displayed in the bank’s off-balance sheet without reflecting off-balance requirements. This article consists of irrevocable liabilities and issued guarantees. At the same time, irrevocable liabilities exceed the issued guarantees during ten years. It is advisable to include a full detailed reflection of all off-balance sheet instruments in the financial statements of banks in order to be able to timely identify and evaluate by all interested parties the potential risks for the bank as a whole.

Thus, the analysis of the banks’ activities in developing countries revealed the problems of forming a long-term, stable resource base, undiversified asset and off-balance portfolios, and pursuing an aggressive active policy even during the financial crisis.

4. Building an Expert System for Continuous Monitoring of Banking Institutions

Therefore, the next proposed step for improving the regulation of banks is to build a regulatory expert system for continuous monitoring of banks.

From the point of view of the management theory, the process of the regulator’s management of monitoring the policy of banking institutional components in the form of organizing financial instruments in order to optimize monetary relations (object \( A \)) at each stage or phase (Fig. 4) is a managing entity \( B \), which is the bank itself or the banking system. The performance of a bank (banking system) is affected by a certain probabilistic process \( Z(t) \), for example, foreign policy, foreign economic instability, deficit or instability of investments, etc. The function \( X(t) \) determines the phase coordinates of the final state of the banking system.

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**Figure 3.** The dynamics of indicators of banks of Ukraine and Russia: (a) banks’ assets, bln.USD, (b) bank’s profit, bln. USD.

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at each stage of the banking policy, and \( x = (x_1, x_2, \ldots, x_n) \) — the phase coordinates of object \( A \), describing its state by certain \( n \) parameters, which are functions of time (output signals for the regulator). Thus, for the effective implementation of managerial decisions the rational regulatory policy in the form of constructing a regulatory function \( u(t) \) with feedback \( x(t) \) is needed.

\[
\begin{align*}
  z(t) &= (z_1(t), z_2(t), \ldots, z_n(t)) \\
  \tilde{x}(t) &= \left( \tilde{S}(t), \tilde{Z}(t) \right) \\
  x &= (S, Z), \quad \varepsilon_0 \leq S \leq \varepsilon, \quad \delta_0 \leq Z \leq \delta
\end{align*}
\]

Where \( \varepsilon, \delta \) — are constants that determine the confidence limits of the system profitability at each stage of regulatory policy.

\[
u(t) = (u_1, u_2, \ldots, u_k).
\]

Where \( u(t) \) — is a vector function of the management.

For the realization of continuous monitoring of the policy of banking institutional components in the form of organizing financial instruments in order to optimize monetary relations (object \( A \)) the regulator is proposed to use expert assessment methods. These are the methods of organizing work with specialist experts and processing the thoughts of experts, expressed in quantitative or qualitative form, in order to prepare the information for regulator’s decision-making, that is, by the source of influence (Influencer)—individuals or groups that are not directly related to the use of any financial or non-financial instrument recorded in the assets, liabilities or off-balance portfolios, but due to their institutional position in the banking system, they can positively or negatively affect the course of management (nominally or actually) by the expert commission. The purpose of the expert commission is to prepare a draft decision for the Regulator by building a regulatory control function \( u(t) \) with feedback \( x(t) \).

The constructed expert model will allow the regulatory body or the bank to continuously monitor the bank’s performance, determine the reference bank with the best indicators of the development of financial instruments, make and implement management decisions in a rational strategy regarding each implemented financial instrument in the strategy of a particular bank in comparison with the reference bank, which will increase the efficiency of management, development and maintaining the reliability of the entire banking system of the country as a whole.

5. Summary

Based on the conducted analysis, the article grounds the development trends, the role and condition of banks in developing countries on the example of Russia and Ukraine. The problems and the need to improve the legislative framework regulating the activities of banks in accordance with the needs of the society, technology development and the integration of financial markets are identified and reasoned. It is suggested that the regulator should build an expert system for continuous monitoring in order to establish reliable banks at the present stage of development and in the future.
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