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## **REGULATORY MECHANISMS IN THE SYSTEM OF STRATEGIC MANAGEMENT OF THE BANKING BUSINESS**

### ***Summary***

*The article discusses the directions of regulatory innovation in the banking sector in the context of financial globalization and unprecedented uncertainty. Global trends and national peculiarities of banking regulation at the present stage are highlighted. The characteristic features and peculiarities in the field of regulatory activity in this sector of the economy are revealed. Using specific examples, the author shows the emergence of completely new, original forms of banking regulation, unparalleled in world practice and made possible by a complex combination of reasons (financial crisis, technological revolution, outbreak of coronavirus, etc.). The expediency of introducing innovative practical measures to improve the efficiency of the system of banking regulation has been substantiated. The main directions of their influence on the transformation of this process, a comprehensive study of which will allow to develop fundamentally new approaches to its improvement, are presented. The conclusion formulates the main findings, which, from the point of view of the author, will contribute to the improvement of the mechanism of banking regulation in the future.*

### **Introduction**

The state and development of the world economy, the experience of the global financial and economic crisis of 2007–2009, on the one hand, show increased attention to the problems of economic growth recovery, on the other hand, are characterized by increased regulation of the economic and banking systems. At the same time, while market mechanisms remain important for economic development, there is a steady trend towards an increasing role of the state in regulating the monetary sphere and its institutions.

Modern practice and scientific developments indicate the search for new models of regulation in order to improve efficiency, harmonize the requirements of financial stability and solve the emerging problems in the banking system. There is also an urgent need for closer interaction and coordination of monetary policy with other related areas of economic development of the country.

The monitoring of scientific literature and research on this issue indicates that this subject area of financial science remains understudied. At the same time, the ongoing changes in the interaction and interweaving of relations between different sectors of the economy necessitate the use of systemic approaches in the study of such important objects for economic development, which in fact is the banking sector.

The financial and banking systems of countries in transition are the first to be impacted by global economic processes. For a comprehensive understanding of the objective necessity and essence of the regulation of banking structures as the main institutional participants of the financial market (both global and national) it is advisable to characterize this process through their main features, structure and functions. This will make it possible to analyze the spheres of activity of regulators and identify the specifics of the functioning of financial institutions in the context of the transformation of approaches to regulation.

The relevance of the article is determined by the rather high economic and social significance of the issue under consideration. The need to develop an effective mechanism for banking regulation arose, in particular, in post-Soviet states immediately after they gained sovereignty. However, the real results of this industry urgently require further improvement of regulatory mechanisms already in the context of the new paradigm of financial globalization and unprecedented uncertainty.

Given the importance of methodological importance, as well as the formative nature of regulatory mechanisms in these countries, of particular interest is the analysis of world experience in this subject area in terms of the possibility of its implementation in their banking systems. At the same time, new financial technologies and digital solutions are discussed in current literature, academia and among practitioners, and it is important to focus on the risks banks may face when implementing them, on the need for their organizational and methodological support from the regulator.

All of the above and other related factors combine to determine the complexity and universality of regulatory procedures in the banking system, the importance of their innovation, taking into account the accumulated progressive experience and new phenomena in domestic and foreign practice in the context of the pressing needs of all segments of the system.

### **Part 1. The objective necessity of banking regulation**

The events of the last 15 years, especially the global financial and economic crisis of 2007–2009 and the outbreak of the coronavirus pandemic, show the increasing role of regulatory mechanisms in the economy through more active government involvement in this process. As the reality has shown, both in Azerbaijan and in foreign countries, it is the state in these difficult periods of public life played the role of a catalyst and helper, stimulating and complementing the activities of private business.

The transition from market regulation to state regulation is due to a number of objective reasons, the main ones being the following:

- growing risks of instability of economic (including banking) systems;
- strengthening the position of large corporations and banks, the activities of which are closely linked to the state;
- the emergence of market bubbles due to the inefficiency of certain areas of the economy, reduced competition and other negative phenomena of an economic and social nature;
- the era of increasing business responsibility to modern society;
- strengthening of the political factor in the regulation of market processes, etc.

Despite the recognition of the creative role of state regulation in the banking system, this issue is still debatable. Different points of view are expressed both justifying the intervention of the state in the process of monetary regulation [1, p. 55], and questioning this thesis [2, p. 15–16].

At the same time, it should be recognized that the banking system by virtue of its purpose and functional specifics has always been in the field of regulation. In modern conditions the task is to improve the efficiency of this regulatory impact. This problem is considered one of the most topical, both on the theoretical and applied levels, which, in the author's opinion, is due to certain reasons:

- continuing theoretical debate about the effectiveness of existing regulatory mechanisms in the banking sector and how to evaluate them;
- insufficient efficiency of the regulatory system of the banking system, especially in conditions of recurrent crisis phenomena, significant recession and uncertainty;
- weak connection of banking activity with the needs of the economy and its subjects;
- unsatisfactory level of harmonization of interests of society and the banking business;
- inadequate parameters to ensure the functioning of the banking system within the required framework.

Regulation of banking activity is carried out on a systemic basis, taking into account its goals, objectives, features and principles (Table 1).

State regulation of the banking system includes the following main functions performed by regulatory bodies [7, p. 175–176]:

1. Institutional (institution-building and development function).
2. Regulatory (function of banking regulation and regulatory policy).
3. Social (function of providing social assistance and protecting the rights of participants).
4. Control (function of state control over the activities of the objects of state regulation of banking activities).
5. The security function of the country's banking sector.
6. Coordinating (function of establishing interaction between the regulatory bodies of state power).
7. Integration (function of facilitating access to the global banking market).

Table 1

Goals	Tasks
<ul style="list-style-type: none"> <li>- ensuring financial stability of the banking system;</li> <li>- stability of the banking sector in general and its individual institutions in various economic conditions;</li> <li>- active participation of the banking sector in solution of general economic problems, its functioning in the interests of national economy;</li> <li>- harmonization of interests of the banking business and needs of the national economy;</li> <li>- protection of depositors' interests from inefficient bank management and fraud;</li> <li>- development of a system of standards and requirements to implement interests of banking services consumers.</li> </ul>	<ul style="list-style-type: none"> <li>- creating conditions conducive to the development of the real economy, as well as knowledge-intensive, innovative production and digitalization;</li> <li>- ensuring fair competition and transparency of policies in the banking market and the financial market as a whole;</li> <li>- maintaining the stability of national payment systems;</li> <li>- preventing capital outflows abroad;</li> <li>- minimization of risks in the banking sector;</li> <li>- combating tax evasion, money laundering and terrorist financing schemes.</li> </ul>
Signs	Principles
<ul style="list-style-type: none"> <li>- knowingly external influence on banking activity;</li> <li>- regulation carried out by the authorized body;</li> <li>- focus on sustainability and stable development of commercial banks and the whole banking system;</li> <li>- establishment of certain benchmarks and parameters on the most important and problematic areas of banking activities;</li> <li>- supervision over compliance with these benchmarks, analysis of the state of the regulated sphere and implementation of preventive measures.</li> </ul>	<ul style="list-style-type: none"> <li>- independence of the regulator from other public authorities;</li> <li>- responsibility of the regulator for the implementation of legally enshrined functions;</li> <li>- monopoly in the issue of cash and organization of cash circulation;</li> <li>- promotion of competition and prohibition of monopolization;</li> <li>- parity of interests of all subjects of the banking sector;</li> <li>- the permissive principle of banking regulation;</li> <li>- banking secrecy;</li> <li>- freedom of banking activities.</li> </ul>

*Source: compiled by the author on the basis of [3, p. 16–18; 4, p. 42–73; 5, p. 21, p. 16–49; 6, p. 7–32]*

The process of regulation and supervision of the banking business largely ensures the stability of financial markets. In this regard, every state needs regulations that regulate the activities of banks at all levels and set certain limits on their behavior, contributing to the reliable and efficient functioning of the banking system. Moreover, the system of banking regulation is not static, on the contrary, it is dynamic and changing in response to the modern challenges of globalization, which leads to the emergence of new rules and methods here [8, p. 100–102].

## **Part 2. International experience in regulating banking activities**

The global financial and economic crisis, which began in 2008 and turned into a prolonged depression, created a number of complex problems both for the global financial market and for national economies, including transition economies. The resulting state of financial instability in the national financial markets of these countries has forced adjustments to the existing mechanisms of banking regulation. First of all, the main reference points of the monetary policy of central banks as the main mega-regulators of the national banking sector in periods of financial instability are changing.

The rapid development of digital technologies is leading to an unprecedented transformation of the banking industry, which is reflected in changes in the competitive environment, as well as in the process of interaction between banks and regulators. Under these conditions, it is necessary to improve the traditional regulatory framework and develop new types of effective regulatory solutions aimed at the structural development of the financial market and ensuring the stability and competitive potential of banks under conditions of global technological and behavioral changes. In the economic literature, effective banking regulation is characterized, in particular, by the optimal level of regulatory burden, which shows how onerous it is for financial institutions to comply with regulatory measures [9, p. 8].

It is important to understand that an increase in this burden is usually a consequence of the improvement of regulatory measures aimed at ensuring the sustainable functioning of financial institutions. Therefore, it is advisable to talk not about its minimization, but about achieving and maintaining the optimal level.

The main developers of international standards for regulating the banking sector are international organizations. These include the Basel Committee on Banking Supervision (BCBS), the International Accounting Standards Board (IASB), the International Organization of Securities Commissions (IOSCO), the Financial Action Task Force on Money Laundering (FATF), and the Financial Stability Forum (FSF). It should be noted that the objectives pursued by each of them in the regulation of banks are different.

It is important to emphasize that traditional regulatory approaches, which mainly focus on setting capital or liquidity requirements, do not fully cover the challenges associated with the development of digital technology in the banking sector. In this regard, it seems important that regulators develop innovative methods of regulation that would contribute to the transformation of the banking sector, optimization and balance of its functioning.

According to most international experts, in particular specialists from the Institute for Financial Stability, the United Kingdom, Singapore, the United States, China, Australia, Canada and Hong Kong are the countries that have made the most progress in adapting approaches to banking regulation in the context of the development of digital technology [10]. The systematization of the main approaches to the transformation of banking regulation used by these

countries in the context of the development of digital technology, and their content is as follows [10; 11; 12, p. 212–213; 13]:

– *Establishing (adjusting) the scope of prudential regulation.* In connection with the active development of financial technology in the financial market there are new players, not related to the banking sector and, accordingly, not subject to traditional prudential regimes. To address this problem, individual states are shifting their focus from regulating certain types of institutions to regulating certain types of activities, which implies that the regulator moves beyond the regulatory perimeter. The establishment of the scope of prudential regulation allows regulators, on the one hand, to expand the range of secondary tools (e.g., innovation centers, cooperation agreements, regulatory sandboxes, etc.) to accelerate the adaptation of new entities to comply with the regulatory regime, and on the other hand, to interact harmoniously with the industry to better understand the risks and determine the objectively necessary level of regulation.

– *Creation of innovation centers and incubators.* Designed to facilitate the development and implementation of innovative banking products and services. They facilitate the simultaneous involvement of industry specialists, regulators and other participants in joint expertise. These entities can advise on the legislative framework and help regulators learn more about new banking developments, assist banks in accessing funding and include specific data, technology or software that banks may not have access to.

– *Regulatory sandboxes.* This regulatory regime applies to both existing banks and other organizations. It is reasonable to introduce it in conditions, when legislative norms are an obstacle for development and implementation of innovative banking products and services. It is a regulatory mechanism that allows innovative banking products and services to be developed and tested in a controlled environment during a trial period, without the usual licensing requirements and in compliance with minimum legal provisions, and to work with regulators to better adapt to existing regulatory requirements. It's an experimental space with strict regulatory oversight to ensure customer protection.

– *Conclusion of cooperation agreements with the regulators of other countries.* This mechanism is agreements between countries and their regulators to work together to improve mutual understanding of regulatory issues, identify changes and trends in the market, promote innovation, help with necessary enforcement and legal advice for banks as they enter other markets.

– *Internal reorganization of the banking regulator.* The importance of ensuring effective regulation of the banking system makes it necessary to change the traditional banking business models, their structure and range of operations, which, in turn, may require bank regulators to redistribute their resources, in particular, to create special structures that address the tasks associated with the development of financial technology.

– *Using SupTech.* This technology allows to automate and simplify regulatory processes and on the basis of supervision of participants in the financial sector. Increases the efficiency and effectiveness of risk and compliance monitoring by financial institutions. Allows for greater relevance and quality of data available to regulators, improves digitalization and process automation processes, enhances analytical capabilities, strengthens control and oversight of the development of new banking products and services, and regulates new, non-traditional business models more effectively. SupTech solutions are primarily aimed at improving the quality of regulatory data, automating and optimizing procedures and working tools, significantly improving analysis technologies (increasing the speed of data analysis and using more advanced, sophisticated tools). They can be provided for bank regulators by external vendors, developed by internal departments of the regulator or be a combination of these methods.

– *Regulation of third-party service providers for banks.* Most fintech companies that directly offer financial services to their clients act as third-party service providers to banks, which can provide banks with access to a wide range of innovative products and technical expertise. At the same time, all risks (operational, security, reputational, etc.) remain the banks' responsibility. Consequently, bank regulators in a number of countries are developing regulations to ensure that banks comply with risk management programs and due diligence with respect to such counterparties. The most common regulatory regime for third-party providers is to gain access to third parties through contracts (agreements) they enter into with banks.

– *Implementation of differentiated licensing regimes.* Licensing regimes for innovative banking business models are differentiated. In a number of cases, new banks that originally existed as fintech companies have received full banking licenses, allowing them to offer the full range of banking products and services. At the same time, most new players have obtained licenses for certain types of operations, while avoiding most of the prudential requirements imposed on traditional banks, as well as having more lenient entry requirements. Regulators are advised to analyze the business models of emerging fintech companies and banks, which could potentially lead to gaps in best practices and regulations. Regulators are advised to closely monitor changes in banks' business models and, if necessary, provide guidance to banks to adapt their activities to the existing regulatory framework. In this process, regulators can be assisted by the creation of a matrix of risks and requirements based on the classification of banking products and services. When a threat to financial stability arises, regulators are advised, first, to establish processes for assessing and monitoring potential risks posed by banking innovations, and second, to determine appropriate responses.

Analysis of the experience of foreign countries shows that regulators have already taken a number of actions in this direction [14–27]. In particular, banking regulators:

- have conducted a study of potential risks (Canada, China, UK);
- have developed regulations on new technologies (U.S., Australia, Hong Kong);
- have adjusted the perimeter of prudential regulation to include previously unregulated activities (New Zealand);
- have responded to the challenges of financial technology development by organizing special units with various mandates, including functions such as developing regulatory frameworks, conducting analytical studies, licensing, interacting with banks, using SupTech, etc. (Singapore, Hong Kong, Canada);
- have created mechanisms for interaction with traditional banks and new entrants to the sector using digital technology (U.S., U.K., Australia);
- have formed a regulatory framework that provides for the possibility of a differentiated regulatory regime for banks whose business models are based on the use of digital technology (Singapore, New Zealand);
- have legislative authority to directly regulate and supervise third-party service providers (U.S. – Federal Reserve System, FDIC and Monetary Control Authority; Luxembourg – Financial Supervisory Commission; Saudi Arabia – Foreign Exchange Office).

In the context of financial regulators' interest in developing financial innovation and implementing more effective regulatory systems, one of the new directions is the formation of a new data-driven approach to regulation. The basis for the formation of this approach was the increased use of regulatory technology (RegTech), both in terms of monitoring digital transformation and responding to internal operational challenges [28, p. 10–11]. Financial regulators in a number of countries, in particular Canada, Great Britain, Singapore, India and Australia, have already declared their readiness to use RegTech [29, p. 7, 12].

### **Part 3. Prospects of introduction of foreign practices of bank regulation in the financial and credit system of Azerbaijan**

In Azerbaijan, international regulatory reforms are acquiring specific features. It is known that under the concept of a mega-regulator of the financial market, which in our country is the Central Bank of Azerbaijan (CBA), the regulation here is characterized by high centralization. In this regard, there may be certain difficulties and additional risks in the conditions of consistent implementation of the requirements of international BCBS standards. It is also necessary to take into account the not quite perfect material, legislative and regulatory base of the regulatory process, the streamlining and development of which will require considerable effort. The coronavirus pandemic has left an unfavorable mark on the economic situation in the republic, which was accompanied by a weakening of the stability of economic life, deterioration of the financial situation of producers of goods and services, which will need significant government support. All these and other related factors combine to determine the complexity and versatility of regulatory procedures in the



banking system of Azerbaijan, the importance of their innovation, taking into account the accumulated progressive experience and new phenomena in domestic and foreign practice (for example, digitalization) in the context of the urgent needs of all segments of this system.

The system of banking regulation in Azerbaijan is increasingly demonstrating its adherence to the ideas of international institutions, trying to integrate harmoniously into international regulatory trends, increasing capital requirements, together with the international banking community to form a more stable structure that protects banks from crisis shocks.

Timeliness and completeness of fulfillment by the banking system of its functions largely depend on banks' liquidity, which is one of the qualitative characteristics of its activity determining the provision of banking security. An important component of banking system liquidity management is its regulation by mechanisms and instruments of monetary policy of the Central Bank. In Azerbaijan, such management is legislatively based mainly on effective tools developed by the world practice. In particular, according to the current legislation, the CBA has such tools of bank regulation as economic norms, obligatory reserves, interest rate policy. Insufficient liquidity leads to insolvency of credit institutions. The level of liquidity risk is influenced by various factors, among which are such factors as the quality of banks' assets and their diversification; interest rate policy of banks and the general level of profitability of their operations; the value of currency and interest rate risks; stability of bank liabilities; consistency in terms of raising resources and placing them in active operations, and the image of banks.

Given the above, it is advisable to implement the following measures to change the current regulatory framework of banking regulation in Azerbaijan (in particular, the Law of the Republic of Azerbaijan "On Banks", other related legislative acts of the republic, instructions of the domestic regulator, etc.) aimed at providing conditions for the development of banking innovation (Figure 1).

<b>Measures to change the current regulatory and legal framework for the regulation of banking activities in Azerbaijan</b>
Implementation of legislative provisions governing remote banking.
Establishment of a differentiated licensing regime for banks using innovative business models.
Define the boundaries of legal responsibility for organizations outside the banking sector, but which play a crucial role in the functioning of the entire digital banking system, as well as those responsible for the most vulnerable points of the digital infrastructure.
Introduction of rules of law allowing bank customers to claim for funds lost as a result of digital theft, as well as receive compensation in the event of software failures and leaks of confidential information and information containing personal data.

**Figure 1. Measures to change the current regulatory and legal framework for the regulation of banking activities in Azerbaijan**

In a set of basic problems of mechanisms of transformation of banking regulation in the context of development of digital technologies, facing the Central Bank of Azerbaijan (CBA), the following can be highlighted:

<b>Problem</b>	<b>Commentary</b>
<i>Organization of the Department of Financial Technology</i>	The creation of this unit does not solve the question of the need for interagency cooperation. Operational and coordinated development of legal norms to ensure adequate regulation of the digital sector is possible only with the participation of all interested departments.
<i>Creation of regulatory sandboxes</i>	Because of the need for significant investment, most banks will not be able to participate in its work. The main interest to the mechanism can be shown, mainly, only by a number of the largest banks.
<i>Use of SupTech technology</i>	The CBA does not apply it for the purpose of reforming approaches to bank reporting. At the same time, in foreign practice this direction, being aimed at reducing the regulatory burden, is the main one.
<i>Creation and use of financial platforms (marketplaces)</i>	This may provoke a further outflow of customers from small banks to larger banks as a result of unequal price competition.
<i>Application of biometric remote identification</i>	According to a number of foreign studies, this technology has been found to be insufficiently reliable, as well as associated with high risks of fraud.
<i>Organization of a quick payment system</i>	In this case, the activation of fraudulent schemes, the inability to refuse payment in the absence of clarity about the sender of funds, failures as a result of incorrectly configured binding customer accounts to phone numbers is possible.

**Figure 2. The main problems of transformation of the regulatory mechanism of the banking system in the context of digitalization**

To improve the efficiency of the banking regulation system it seems expedient to introduce such effective, in author's opinion, measures as identifying outdated and partially duplicating regulatory requirements, working out approaches ensuring development of banks' partnership relations and expanding the range of banking operations available to them, as well as increasing technological efficiency of regulation and expanding the use of regulatory and supervisory technologies by regulators themselves. This will facilitate the improvement of banking regulation in the context of digital transformation, the objective perception of digital realities by regulators and the development of adequate solutions to respond to them, and, ultimately, the achievement of a balance between stimulating innovation, protecting the rights of banking consumers and ensuring financial stability.

As noted in the CBA statement "On the main directions of monetary and financial stability policy for 2020 and the medium term" [30, p. 13], the Central Bank will increase efforts to improve the resilience of the financial sector to

risks and deepen financial intermediation, money markets and capital markets. Effective measures are envisaged to complete the restructuring of the financial sector and regulate troubled assets. All this should increase the role of the banking sector in strengthening the country's economic security.

Further transformation of banking regulation associated with the development of digital technologies may be accompanied by both the emergence of new regulatory institutions (departments, agencies, etc.) and changes in the existing institutional and regulatory structure in Azerbaijan.

### **Conclusions**

Control over the progressive development of digital technology and adequate regulatory measures are on the agenda of many countries because:

– First, the activities of new actors in the financial market, on the one hand, increases the financial inclusion of the population by providing simple and accessible financial services, accelerates the market entry of new banking products, but, on the other hand, may pose threats to the integrity of the financial system, if not included in the regulatory perimeter;

– Secondly, transformation processes can negatively affect the stability of traditional financial institutions; accordingly, it is important to manage the process of orderly transformation of the financial sector.

At the same time, the vector of transformational transformation of the financial sector depends, according to the author, on the following factors:

a) the vision of digital transformers represented by non-banking institutions and their ability to transform;

b) the response of traditional banks to transformational challenges and the ability to respond quickly and flexibly to them;

c) the role of regulators and supervisors as drivers or restraints of change.

Given this, it can be argued that at the current stage of the digital transformation of the financial industry, the regulatory paradigm is changing: changes in the objects of regulation require updating the perimeter of regulation, transforming the role of the regulator and developing fundamentally new approaches to regulating both traditional and new participants the activities of which extend beyond financial services, since the existing approaches do not fully meet the needs of the market. Such processes also create the need for closer interaction between the regulator and supervised entities, as well as increased technology and "predictability" of regulation. From a regulatory perspective, effectively managing the digital transformation of the financial sector requires refining regulatory approaches to meet the challenges faced by regulators and traditional financial institutions.

In order to achieve the above-mentioned goal and solve the set tasks it seems necessary to introduce and use the following mechanisms of financial regulation, which will contribute to improving the efficiency of the banking system. First, it is advisable to work to identify duplicative or redundant norms in the banking regulation, which, inter alia, create a technical burden on market

participants, and if necessary, eliminate them. Second, it is important to formulate approaches that ensure the development of partnership forms of interaction between banks and expand the list of operations available to banks, which, according to the author, is extremely important in terms of providing a level playing field for banks and non-banks, as well as increasing the strategic stability of banks and financial inclusion of the population. Third, the digital transformation of the banking services market, which is also expressed in the variability of the regulatory environment, creates a demand for improving the technological effectiveness of regulation and implies the use of regulatory and supervisory technologies by the regulators themselves. Fourth, solving the problems of ensuring a level playing field and increasing the accessibility of digital banking services urgently requires the provision of effective incentives for the development of non-bank financial intermediation. Fifth, the goals of increasing financial inclusion and accessibility of banking services are achieved with the full consideration of consumers' interests, in this regard, it seems appropriate to improve the skills of the bank regulator for an in-depth study of the needs and consumer habits of users of financial services.

Thus, the mechanisms proposed by the author will improve the system of banking regulation in the context of digitalization, will promote an objective perception of digital realities by regulators and the development of adequate responses to them, which, in turn, will achieve a balance between stimulating innovation, protecting the rights of consumers of banking services and ensuring financial stability.

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