
Review of Institutional and Legal Issues for the Development of the FinTech Industry

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Abstract:

The aim of the study is to identify institutional and legal methods for the development of the FinTech industry on the basis of a critical analysis of foreign experience in the implementation and practical application of the latest financial technologies.

The subject of the study is a complex of relationships associated with the emergence of new financial products, primarily on the basis of the technology of distributed registry (blockchain-technologies) and the transformation of the financial sector in the conditions of dissemination of digital technologies.

The methodology of system analysis, the dialectical method and its derivatives, primarily the methods and principles of determinism, induction, deduction and hypothesis, the principle of contradiction as a source of development and the principle of integrity in unity and diversity, were used to study the object of scientific research and to achieve its goals.

To systematize the obtained data the methods of functional and institutional classification, statistical analysis, methods of the current and prospective analysis and synthesis of theoretical and practical material were applied. The result of the study is the development of a system of institutional and legal methods for the development of the FinTech sector on the basis of analysis of the best foreign experience.

Keywords: *Financial technologies, FinTech-branch, investments, banking, blockchain-technologies.*

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1. Introduction

The current growth of financial technologies is the object of attention of many players in the financial sector. Many of them study the use of blockchain in several business areas. In the recent years global investments in financial technologies (hereinafter referred to as "FinTech") have exceeded the total amount of 24 billion dollars (Cuccuro, 2017). It is expected that such revolutionary development of FinTech will have a significant impact on financial markets through its introduction in the banking and payment services, insurance, asset management and stock markets. Many researchers and practitioners view the blockchain technology as a technology that will contribute to the development of the FinTech industry.

The appearance in the last decade of new financial products and processes, primarily based on the technology of distributed registry (blockchain), the rapid growth of the crypto-currency market, primarily, of bitcoin, the entry into the market of companies attracting investment resources through new mechanisms, require not only their interpretation as an economic phenomenon, but also dictate the need of legislative support for their regulation and implementation in the economic life and in the practice of civil circulation.

The emergence and rapid development of financial innovations destroys the barriers for the entry into the financial services market and stimulates the emergence of new business models among the active participants of the financial market leading to the emergence of new participants of this market.

In this connection, the monitoring of the latest financial technologies is required. With the development of models for their adaptation and under the influence of strict regulation, it is necessary:

- not to destroy the dissemination of promising financial technologies;
- to integrate the most promising of them taking into account the possible consequences for market participants;
- to protect the financial market from the threats to unsustainability that are related to the new financial technologies taking into account their anonymity, the possibility of financing terrorism and obtaining illegal revenues;
- to avoid financial bubbles;
- to protect the interests of consumers of financial services.

The purpose of this study is to identify key institutional and legal methods for the development of financial technologies on the basis of a critical analysis of foreign experience.

2. Methodology of the Research

This study includes the implementation of the following stages:

- 1) the analysis of research papers devoted to the definition of "FinTech";
- 2) the formation of a sample of countries that have effective legal instruments for the development of the FinTech industry;
- 3) the analysis of the legislation of foreign countries, which promote the development of financial technologies.

For the first time in the legal science this study made it possible to identify the institutional and legal foundations for effective development of the FinTech industry.

In order to carry out a comparative analysis of the conceptual approaches, legislative foundations and practical experience of the leading foreign states in the sphere of regulation of the application of the latest financial technologies, authors identified those countries that can be considered as the leading ones in the FinTech sphere. They include countries that according to the FinTech Adoption Index of 2017 have the highest ratings in terms of the level of penetration of FinTech services: China, India, the United Kingdom, Brazil, Australia, Spain, Germany, South Korea, Hong Kong, New Zealand, France, Netherlands, Ireland, Singapore, Canada, Japan, Belgium. The following countries are also considered: The United States, Switzerland, the United Arab Emirates, Malaysia, and the Isle of Man.

The subjects of the study are normative legal acts of 23 countries.

3. Results and discussion

According to the IOSCO (The International Organization of Securities Commissions (IOSCO) is the international body that brings together the world's securities regulators and is recognized as the global standard setter for the securities sector. IOSCO develops, implements and promotes adherence to internationally recognized standards for securities regulation) Research Report on Financial Technologies, the latest financial technologies (FinTech) represent various innovative business models and new technologies that can transform the existing financial services industry through the possible acquisition of financial services (products) in automatic mode by using the Internet (OICU-IOSCO, 2017). The Financial Stability Board (FSB) (international organization created by the G20 countries) understands FinTech as a technological financial innovation that generates new business models, applications, processes or products that can have a significant impact on the provision of financial services.

A branch of financial technologies ("FinTech") usually means the use of innovative technologies for the provision of financial services. However, due to the relative youth of the industry as well as a variety of technologies used in the financial industry the boundaries of the definition of financial technology industry are blurred (Gabor and Brooks, 2017).

At the current period the diversity of approaches, including those with respect to legal frameworks and practical experiences in the sphere of regulation of the application of the latest financial technologies, stimulates the states to form legislative bases, which, in turn, are based on successful practices. It should be noted that given a decisive leap in the development of the FinTech industry, the practical experience in regulating the use of the latest financial technologies has not been formed even in the leading foreign countries, which in turn affects the formation and development of legislative regulation.

At the same time, it is possible to speak about the existence of the established conceptual approaches in the sphere of regulation of the use of the latest financial technologies by leading foreign countries.

3.1 Basic approaches of FinTech regulation by the leading foreign states

The conducted analysis of the experience of the leading foreign states in the sphere of regulation of FinTech makes it possible to formulate the following basic approaches, the implementation of which enables the states to stimulate the introduction and development of the latest financial technologies:

- the launch of the regulatory sandbox;
- the opening of various virtual reception desks and other contact centers of the regulator in order to consult FinTech companies on the regulation of their activities;
- the development by the regulator of guidelines, explanations, publications, other consultation and explanatory documents, the pursuance of the research;
- the preparation and implementation of government programs, initiatives, strategies, including appropriate financing;
- the formation by the regulator of working groups, committees, councils, centers;
- the development and adoption of legislative acts aimed at supporting and developing FinTech, including the provision of tax and other benefits;
- cross-border cooperation between states on the development of the FinTech industry.

The most progressive approach is the introduction of a regulatory sandbox, which in the majority of states is a certain regime that allows FinTech organizations to test their products and services under the direct supervision of the regulator for a certain period of time subject to certain conditions stipulated by the regulator (for example, with respect to the test period, the number of consumers of the test products and services), and, as a rule, under the conditions of significant easing of traditional legal requirements (for example, no requirements to obtain licenses, etc.).

Within the framework of the regulatory sandbox the Monetary Authority of Singapore (MAS) provides an opportunity for any financial institution or interested company to

apply for the testing of innovative financial services. On November 16, 2016 the Monetary Authority of Singapore published guidelines for the regulatory sandbox (FinTech Regulatory Sandbox Guidelines, 2016).

In the United Arab Emirates (UAE) within the special economic zones (ADGM and DIFC) regulators implement the following initiatives: ADGM FSRA (Financial Services Regulatory Authority ADGM (FSRA) launched a regulatory sandbox/regulatory laboratory "RegLab", whose participants are not subject to standard requirements to companies that provide financial services (Financial Services and Markets Amendment Regulations, 2016).

In Hong Kong, three regulatory sandboxes were launched: on the basis of the Hong Kong Monetary Authority (HKMA) "FinTech Supervisory", in which the authorized institutions conduct experimental tests of initiatives of FinTech companies related to banking services. In Hong Kong, on the basis of an independent non-governmental body of the Insurance Authority (IA) (The Independent Insurance Organization (IA) was established on December 7, 2015 in accordance with the Regulation on Insurance Companies (Amendment) of 2015 ("IC (A) O"); it is a new regulator in the field of insurance, which is independent of the government. The objectives of its creation are the modernization of the insurance industry regulation infrastructure to promote sustainable development, provide better protection and compliance with the requirements of the International Association of Insurance Supervision. The initiative "Insurtech" was launched - a sandbox for insurance technologies and other technological initiatives designed to be launched in Hong Kong by authorized insurers (Insurance Authority, 2018).

The Central Bank of Indonesia (BI) created a FinTech office (regulatory sandbox), which makes it possible for companies of the FinTech branch, especially small-scale start-ups that meet the criteria defined by BI, to test their FinTech products and services.

The Dutch Authority for the Financial Markets (AFM) and the Central Bank of the Netherlands (DNB) created a regulatory sandbox for companies in the FinTech industry to test and develop new products under certain conditions.

Regulatory sandboxes are also launched in Australia by the Australian Securities and Investment Commission; in Switzerland - by the Federal Department of Finance of Switzerland (FDF); in Malaysia "Framework" - the Malaysian Central Bank; in Canada - by the Canadian Securities Authority (CSA) (Zubairi, 2017).

In September 2016 the United States developed a draft law on innovations in the sphere of financial services, which is aimed, among other things, at forming a regulatory sandbox in various financial bodies of the state (FinTech Sandbox, 2016).

In Switzerland one can observe the easing of regulatory requirements for companies offering innovative financial technologies. In particular, the Federal Department of Finance of Switzerland (FDF) within the framework of the strategy "FinTech Strategy Switzerland" of November 2016 aimed at promoting innovative forms of financial services, introduced amendments to the Banking Charter as a result of which the period for receiving monetary resources for financial settlements without the need to obtain a banking license was prolonged from 7 to 60 days (the amendment came into force on August 1, 2017).

In Germany a regulatory sandbox was not launched, but the so-called system of proportional supervision of financial companies was implemented, the essence of which is a differentiated control by the regulator: small enterprises with low risks are controlled differently than large enterprises with high risks.

The next popular approach of the leading foreign countries in the sphere of regulation of the use of the latest financial technologies is the opening of various virtual reception desks and other contact points of the regulator in order to advise FinTech companies on the regulation of their activities. In a sense, such centers are an alternative to regulatory sandboxes. For example, in Belgium, the virtual reception area (FinTech Contact Point) contributes to the interaction of the regulators - the National Bank of Belgium, the Financial Services Market Regulator (FSMA) and FinTech companies.

The Financial Conduct Authority of the United Kingdom (FCA) within the framework of the project "Project innovate" created an innovative center and a consulting group to support innovative FinTech companies and help them understand the regulatory framework of FCA applicable to their projects; assistance in applying for a license; support of start-ups for up to a year.

Also, in the UK, since June 2016 the Central Bank launched the "FinTech Accelerator" platform, which, among other things, consults FinTech companies (The Bank of England, 2016). On the basis of the Australian Securities and Investments Commission (ASIC) an Innovation Center was established to advise FinTech companies. In Singapore, on the basis of the Monetary Authority of Singapore (MAS) the Smart Financial Center was formed to promote and develop innovations in the field of FinTech (Monetary Authority of Singapore, 2018). In Germany the FinTech Council under the German Ministry of Finance was established (Federal Ministry of Finance, 2017).

The next popular approach of the leading countries in the sphere of regulation of the use of the latest financial technologies is the development by the regulator of guidelines, recommendations, opinions, publications and other consultation and explanatory documents; the pursuit of the research. The Chinese authorities, including the State Council, the People's Bank of China (PBOC) and the Ministry of Industry and Information Technologies, jointly issued the Guiding Opinions on Promoting the Healthy Development of Internet Finance in 2015. The Opinions, among other things,

set out the principle according to which the FinTech branch will be regulated by various bodies and rules depending on the specific types of activities and offering a flexible approach.

The Government of Hong Kong created a FinTech Leadership Team to formulate recommendations for promoting Hong Kong as a FinTech center. In Japan, the Bank of Japan conducted a study LAB No. 17-E-6 of October 23, 2017, devoted to the issues of the lending structure P2P and protection of investors. In the framework of the study the analysis of P2P crediting by comparing international legal mechanisms was carried out (Samitsu, 2017).

In the UK, since June 2016 there is a functioning “FinTech Accelerator” platform, which is used by the Central Bank of Great Britain to work with FinTech companies to study the issues related to the innovative potential of FinTech in the interests of the Central Bank of Great Britain. Also, in the United Kingdom in April 2017 a discussion paper FC17 DP3 / 3 on distributed ledger technologies (DLTs) was published on the website of the Financial Services Authority (non-governmental regulator) (Financial Conduct Authority, 2017).

The next approach of the leading countries in the sphere of regulation of the use of the latest financial technologies consists in various government programs, initiatives and strategies financed by the state. Australia introduced a federal government program “FinTech” for the development of innovation and science, which is funded in the amount of 1,1 billion US dollars. This program has its own special information resource (Australian Government. The Treasury, 2017). The program’s goal is to promote Australia as an attractive center of FinTech for domestic and foreign companies (Australian Government. The Treasury, 2017). Another approach implemented by the leading countries in the sphere of regulation of the use of the latest financial technologies is the formation of various working bodies, committees, groups, councils, centers, etc.

4. Conclusions

It is possible to identify three main approaches to the legislative regulation of the FinTech by the leading countries:

1. the national legislation is technologically neutral: the existing and new business models of the FinTech are split into traditional, well-known institutions, which are subject to the usual national regulation (currently this is the main approach used in Australia, China, Spain, USA, Canada, Japan, Singapore, Malaysia, Russia, Germany, Estonia, Isle of Man, New Zealand);
2. changes aimed at reducing the barriers and establishing benefits (for example, on taxation, etc.), that is, the legislation becomes more flexible and focused on the formation of incentives for the development of the FinTech industry in the state:

- a) various exemptions and benefits (this approach is used in Korea, India, Switzerland, Spain, Ireland, UAE);
 - b) legislative changes due to the regulation of activities of regulatory sandboxes (Hong Kong, Japan, Singapore, UAE, Indonesia, Netherlands, the UK, Korea, Australia, Canada, Switzerland, Malaysia).
3. formation of a new, system-forming legal framework regulating the FinTech industry (this approach is typical for the UK, Hong Kong, UAE, Dubai, etc.).

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