

**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ
ФАКУЛЬТЕТ ІНОЗЕМНОЇ ФІЛОЛОГІЇ
ТА СОЦІАЛЬНИХ КОМУНІКАЦІЙ**



**СОЦІАЛЬНО-ГУМАНІТАРНІ
АСПЕКТИ РОЗВИТКУ СУЧАСНОГО
СУСПІЛЬСТВА**

**МАТЕРІАЛИ VII ВСЕУКРАЇНСЬКОЇ НАУКОВОЇ КОНФЕРЕНЦІЇ
СТУДЕНТІВ, АСПІРАНТІВ, ВИКЛАДАЧІВ ТА СПІВРОБІТНИКІВ**

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FINTECH INNOVATIONS AND THEIR INFLUENCE ON BANKS AND THE BANKING SYSTEM

The digitalization of the economy and disintermediation performed by non-bank service providers, financial institutions as well as high-tech companies and start-ups, have led to the situation when traditional approaches to providing banking services are no longer in line with market needs and requirements for increasing the efficiency and profitability of banking business. As a result, banks are forced to implement FinTech (Financial technology) development and to make innovative decisions in order to stay in the market and maintain their competitive position. Therefore, the concept of FinTech is gaining in popularity.

Basel Committee on Banking Supervision defines the term “FinTech” as a "technology-supported financial innovation that can lead to new business models, applications, processes or products that have a significant impact on financial markets and financial service providers "[1].

The analysis of the historical and technological evolution of the FinTech concept has been made. It makes it possible to state that it is unfolded in three stages. The first phase (FinTech 1.0) is characterized as a period of extending from the laying of a trans-Atlantic telegraph cable to the development of a global telex network, which encompasses multi-year interactions between technology and finance.

The second phase, FinTech 2.0, includes a pre-world financial crisis period, due to the digitization of traditional financial services, ranging from the first ATM to Internet banking. With the onset of the global economic crisis, the speed of technological development and the spread of start-ups and IT-companies that provide financial services characterized the era of FinTech 3.0. [2]

In the FinTech 3.0 era, Fintech companies provide services that are directly related to traditional banking services: credit, deposit and capital increase services

(crowdfunding, P2P lending, non-bank, alternative credit scoring); payment, clearing and settlement services (mobile wallets, cryptographic exchanges, digital currency exchange platforms, wholesale trade in foreign currency, asset management services (social trade, job-consultants, electronic trading). Therefore, at present, determining the impact of FinTech's innovations on banks and the banking system is relevant [3].

The impact of FinTech's innovations on banks and the banking system is given in Table 1.

Table 1 – Influence of FinTech innovations on banks and the banking system [3]

| Risks | Opportunities |
|---|---|
| Strategic risk and profitability risk | Improving and increasing the efficiency of banking processes |
| High operational risk - systemic | Innovative use of data for marketing and risk management purposes |
| High operational risk - idiosyncratic | Potential positive impact on financial stability due to increased competition |
| Risk Management by Third Party / Suppliers | Regtech |
| Complex risk, including inability to protect consumers and regulate data protection | |
| AML / CFT risk | |

According to the analysis of the state and trends in the domestic FinTech market, it can be stated that the Ukrainian FinTech industry is at the stage of active development. This is manifested in an increase in the number of FinTech companies and communities that support and ensure the development of the domestic FinTech market (table 2). This is mainly due to the growing number of Internet users, a high degree of penetration of the Internet and the development of e-Commerce.

Table 2 – Dynamics of the number of registered FinTech companies in the monetary market of Ukraine during 2014-2018 [Compiled by the author on the basis of sources: 4-5]

| FinTech-services | Number of FinTech companies, units | | | | | |
|---------------------------------------|------------------------------------|------|------|------|------|--------------------------|
| | 2014 | 2015 | 2016 | 2017 | 2018 | Growth rate,% (basic) |
| Payments / transfers | 2 | 4 | 8 | 18 | 23 | 1050 |
| Mobile wallet | 2 | 2 | 3 | 4 | 6 | 200 |
| Terminal networks | 1 | 1 | 1 | 2 | 3 | 200 |
| Electronic money / payment systems | 2 | 2 | 2 | 5 | 4 | 100 |
| Retail banking | 2 | 2 | 3 | 3 | 4 | 100 |
| Loans / Financing | 1 | 2 | 2 | 3 | 3 | 200 |
| Kraudfanding | 2 | 2 | 2 | 2 | 3 | 50 |
| Blokchain / Bitcoin | - | 1 | 1 | 4 | 5 | 400 |

The analysis of the regulatory framework of Ukraine indicates the lack of legal acts and recommendations related to the regulation of FinTech innovations in the monetary market. Therefore, to create and improve the domestic regulatory and Advisory framework in the field of regulation of FinTech innovations of the monetary market, it is necessary to use the practice of foreign countries in the field of innovative approaches development in the regulation of FinTech. It is also necessary to implement international directives and recommendations related to banking regulation and supervision.

After the study of ways to improve the mechanism of regulation of Fintech in the monetary market had been made, it was determined that currently a significant number of financial regulators have created regulatory "sandboxes". These sandboxes offer many potential benefits, improved dialogue between the regulator and innovators in particular.

In accordance with the indicators of the development of the domestic market Fintech and due to the lack of a constructive approach to its regulation, a model was developed to create a regulatory "sandbox". This model will help the internal regulator determine the best approach to FinTech regulation according to its scope. It will also allow to work out the details of regulatory sandbox at an early stage of the design process more effectively .

This structural-recommendation model consists of two stages. The first stage ("determining the scope of sandbox regulation") includes the definition of regulators, risk assessment and determining the scope. The second stage ("definition of the plan of functioning of the regulatory sandbox and its introduction") includes the definition of its participants, definition of an initial set of rules, studying of influence on branch, introduction of amendments to initial rules.

Summarizing the foregoing, it can be argued that FinTech, on the one hand, is a real threat to the development or even to the existence of the banking sector, given that they, along with new technological solutions, seek to become leaders in its highly profitable segments, and on the other hand, it may become a new stage of its development if banks can overcome traditional conservatism and collaborate, forming new, progressive relationships with Fintech.

References:

1. Basel Committee on Banking Supervision. (2018). Sound Practices: Implications of fintech developments for banks and bank supervisors. bis.org. Retrieved from <https://www.bis.org/bcbs/publ/d431.pdf>.
2. Gyori D. (2016). FinTech Is the Future Itself. S. Chishti, J. Barberis (Eds.), *The FinTech Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries*. (Vols. 9), (pp. 264-266). Chichester, UK: John Wiley & Sons.
3. Financial Stability Board. (2017). Financial Stability Implications from FinTech. fsb.org. Retrieved from <http://www.fsb.org/wp-content/uploads/R270617.pdf>.
4. Vnutrishnoderzhavni Platizhni Systemy Ta Mizhnarodni Platizhni Systemy Platizhnymy Orhanizatsiiamy Yakykh Ye Rezydenty [Domestic payment systems and international payment systems, payment institutions of which are residents]. (n.d). bank.gov.ua. Retrieved from https://bank.gov.ua/control/uk/publish/article?art_id=7746551.
5. Operatory posluh platizhnoi infrastruktury. [Operators of payment infrastructure services]. (n.d). bank.gov.ua. Retrieved from https://bank.gov.ua/control/uk/publish/article?art_id=10650978.

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