# The Impact of FinTech on the Development of Traditional Banking

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Abstract – The article explores the essence of financial technologies and their role in the development of the financial sector. The FinTech classification and the analysis of FinTech-services is presented. The advantages and disadvantages of using FinTech in comparison with traditional banking services are analyzed. New strategic priorities of banking institutions based on financial technologies are proposed.

Keywords – financial technologies, FinTech, innovations, bank, traditional banking.

#### Introduction

The sector of financial (in particular, banking) services today is under the significant influence of the "digital revolution", which is associated with the development of so-called financial technologies. Most experts believe that those financial technologies that have recently emerged in banking create an atmosphere of uncertainty in financial markets, as they are already beginning to change the paradigm of traditional intermediary services, making them unnecessary. Therefore, the research of the latest financial technologies, as well as the opportunities and threats they create for classical banking, is becoming extremely urgent.

### The essence of FinTech

Within the limits of our research it is necessary first of all to define the terminological content of the concept of "financial technologies". According to domestic and foreign scholars, Financial Technologies, or FinTech – is an industry of companies that combine banking expertise with modern management practices to improve the efficiency of financial systems and thus compete with traditional financial institutions represented by banks and intermediaries in the financial services market [1, p.52].

An analysis of the historical and technological evolution of the FinTech concept has been made, which makes it possible to state that it has unfolded in three stages [5, p.264]

- The first stage (FinTech 1.0) lasted from the laying of a trans-Atlantic telegraph cable to the development of the global telex network; it covered long-term interactions between technology and finance (lasted until 1987).
- The second stage, FinTech 2.0, includes the global financial pre-crisis period, due to the digitization of traditional financial services, from the first ATM to Internet banking (continued during 1987-2008).
- The third stage (FinTech 3.0) began after 2008, when the post-crisis regulation and balance problems of financial institutions pushed for the emergence of numerous start-ups that offered effective solutions beyond the limits of traditional concept.

## **Advantages of FinTech**

In the FinTech 3.0 era companies provide services that are directly related to traditional banking services. The range of services provided by FinTech companies is given in Table 1.

As we see, the range of services offered by FinTech companies is quite wide and is not limited only to intermediary or credit and deposit services. In addition, FinTech companies have some other advantages over banks due to [2, p.797]:

- minimal dependence on regulators and the lack of need for strict territorial affiliation; to open FinTech business you do not need to buy a server and build a large infrastructure of offices;
- the convenience of using Internet-based services for clients that can not be provided by traditional financial consultants who work under the usual "9 to 6" schedule;
- loyal requirements for the entry of new participants who were not previously members of the banking system and do not have a bank account (38% of them live in only three Asian countries, such as India, Indonesia and China).

Table 1
Areas of activity of modern FinTech companies and the range of offered services

Activity direction	Types of services
Credit, deposit and	Kraudfounding, P2P lending (without financial institutions),
capital increase services	neobank (online bank), alternative credit scoring, investment
	platforms, on-line betting
Payment, clearing and	Mobile purses, digital platforms of currency exchange, wholesale
settlement services	trade in foreign currency, B2B-finance, cryptocurrency
Asset management	Social trade, robots-counselors, e-commerce, mobile and desktop
services	software for personal finance management, auto insurance with the
	use of telematics, RegTech, InsureTech
Services to support the	Ecosystem (infrastructure, open source, APIs), Big Data analysis,
market	blockchain, cloud programming, IoT, Artificial intelligence

Source: formed by the author using [2, p.795-796] and [4, p.102]

## The impact on the economy

Due to the wide range of services and the above-mentioned advantages, the so-called "FinTech revolution" over time can destroy about half of the banking institutions in the world. According to PwC, more than 77% of respondents believe that technology development will change the requirements to banks by 2021, and by 2025-2030 the world will exist completely without banks in the traditional sense. And according to estimates of the largest American Citibank, the further growth of FinTech-startups will lead to the fact that by the year 2025, 30% of banking employees (1.7 million) of the world banking system will lose their jobs [3]. This confirms their potentially large impact on the functioning of the financial system, which requires a more detailed analysis of the impact of FinTech-innovations on the economy. Such an analysis is given in Table 2.

Along with the advantages, FinTech-innovations can potentially lead to a negative systemic impact on the financial system and the provision of critical financial services. Among the risks of too wide use of FinTech services, one can distinguish: liquidity risk (due to lack of secured loans), cyber risk of hacking, legal / regulatory risk, risk of excess volatility, risk of relending to the economy, systemic risk, and others.

### FinTech in Ukraine

As for the Ukrainian FinTech market, it is, in general, at an early stage of development: focused only on digital payments. Therefore, it does not face any of these risks today. Its main investors are banks that are currently not inclined to increase the cost of improving their technology.

Table 2 Influence of FinTech-innovations on the macro level

Potential benefits	Specific impact on the economy
Decentralization and	1. Big data analysis and automation of loans reduces barriers to entry the
diversification	market.
	2. Robo-consulting introduces new players to the asset management
	sector.
Efficiency	1. Robo-consulting can improve the business model of existing financial
	institutions.
	2. Machine learning and artificial intelligence can help to improve
	decision-making processes.
	3. Using credit scoring algorithms allows platforms to work at relatively
	low cost.
	4. FinTech lending can reduce the cost of finding a customer.
Transparency	1. Reducing the asymmetry of information on the financial services
	market.
	2. Credit FinTech and Crowdfunding can combine households and
	businesses.
Access to financial	1. Neobank allows consumers to quickly and efficiently receive credit
services and	services and make purchases.
convenience	2. Digital identity and TDR-based applications can support improved
	quality and availability of financial services.

Source: formed by the author using [4, p.103] and [5, p.265]

Banks traditionally dictate the rules and force the consumer to follow them, while the new FinTech companies have the readiness and ability to recognize the needs of consumers of financial services and try to meet them. In order to survive, traditional financial institutions, in our opinion, will need to constantly digitize their own services, widely use mobile applications, as well as cloud technologies. In essence, the natural step in this situation is the interaction with FinTech to form a competitive advantage in quality of the offered services and a spectrum of services. According to G.M. Pochenchuk, traditional banks should be fully united with FinTech-companies, having created a qualitatively new financial ecosystem [1, p.54]

### Conclusion

Financial technologies today form a new branch of the economy, combining the banking experience with modern management methods. The development of the FinTech market took place gradually and has now become impressive. This was largely due to the wide range of innovative services offered by FinTech companies, while banking institutions remain relatively conservative. This, in turn, can have a significant impact on the economy: diversification of the financial services market will take place, its efficiency and transparency will improve, and traditional banks will eventually cease to exist. Therefore, banks are invited to widely apply new

financial technologies and, possibly, even to combine with certain FinTech companies, so as not to lose their positions in the market.

### References

- [1] G.M. Pochenchuk "FinTech in the structure of the financial system". *Global and national problems of the economy*, vol.21, pp.49-55, 2018.
- [2] L.A. Dudynets "Development of financial technologies as a factor of modernization of the financial system". *Global and national problems of the economy*, vol. 22, pp. 794-798, 2018.
- [3] USAID Project "FinTech in Ukraine: Trends, Market Overview and Catalog. Transformation of the Financial Sector". [Online]. Available: http://FinTech.unit.city/guide2018 [12.10.2018]
- [4] Y.M. Kryvych and A.J. Semenog. "FinTech-services: essence, role and importance for the country's economy". *Bulletin of the ONU named after I.I. Mechnikov*, vol.2 (67), pp.100-105, 2018.
- [5] Y.M. Kryvych and S.V. Tsirulyk. "FinTech innovations and their impact on banks and the banking system". *Problems and prospects of development of financial and credit system of Ukraine: a collection of materials of the 2nd All-Ukrainian scientific-practical conference*, 2017, pp. 263-266.