

THE DEVELOPMENT OF THE FINTECH INDUSTRY AND ITS INFLUENCE ON THE FINANCIAL SECTOR

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FinTech field began to develop rapidly since 2008, after the Global Financial Crisis. This was due to the fact that financial institutions could not quickly respond to consumer needs because of a number of regulatory and legislative restrictions that were implemented to overcome the consequences of the crisis. At the same time the main factors of FinTech development were technological evolution, emerging customer expectations, availability of funding and capital, and support from governments and regulatory authorities.

FinTech makes traditional financial services more affordable, flexible and secure, and therefore FinTech is one of the main drivers of digital transformation of the whole financial sector and the development of financial accessibility in the world. The development of the FinTech industry has a huge influence on the financial sector. FinTech strives to make financial services more accessible for both consumers and businesses.

FinTech companies are fast growing and attract a large amount of investment each year in their development. At the same time, traditional financial institutions feel threatened on their part, because with the increasing number of FinTech companies, competition in the financial services market is growing too. In order to stay on the market, traditional banks are forced to adapt to modern realities and develop cooperation with FinTech companies. FinTech companies can help banks provide financial products and services more effectively and strengthen their competitive advantages. For example, they can improve financial inclusion, enhance customer experience, increase transparency, improve security, and provide support and guidance.

Thus, financial institutions in cooperation with FinTech companies are able to provide new financial products and services to groups of customers who previously did not have access to traditional financial services. In addition, thanks to new technologies, financial institutions can offer personalized services and communicate online with customers, which significantly increases their engagement and experience. Furthermore, FinTech companies can help financial institutions detect fraud and deal with cyber-attacks and other online risks.

Key words: FinTech, financial technologies, financial services, financial innovations, FinTech adoption

DOI: 10.21272/1817-9215.2019.4-10

INTRODUCTION

At the broadest level, FinTech refers to the application of technology to finance. In a narrower sense, FinTech services are services provided by technology companies using special software and focused on meeting the financial needs of customers by offering convenient, efficient, automatic and transparent online products compared to traditional financial services. It is one of the most dynamic business areas in the world. In 2018 global investment in FinTech companies hit \$111.8 billion with 2,196 deals [1].

Internet user penetration rates play the main role in FinTech adoption, particularly mobile internet usage. According to «Ernst & Young» survey, adoption of FinTech services has moved steadily upward, from 16% in 2015 to 64% in 2019. Consumer awareness of FinTech services is high across all categories, but particularly money transfer and payments services. Payments is the most digitalized sphere of banking services. Worldwide 96% of consumers know of at least one alternative FinTech service available to help them transfer money and make payments.

In average, 75% of global consumers use a money transfer and payments FinTech service. This indicator sharply increased from 18% in 2015 to 75% in 2019. 48% of global consumers use an insurance FinTech service. 34% of global consumers use a savings and investments FinTech services, 29% - a budgeting and financial planning FinTech services, 27% - a borrowing FinTech services.

Small and medium-sized enterprises (SMEs) are also increasingly using FinTech services. 56% of SMEs use a banking and payments FinTech service. 46% of SMEs use a financing FinTech service [2].

This rapid development of FinTech has a strong impact on the financial sector. In order to survey, financial institution need to adopt new reality and cooperate with FinTech companies.

AIM

The aim of the research is to investigate the influence of FinTech development on the financial sector in the world and particularly in Ukraine. Achievement of this goal includes research of FinTech development and opportunities partnering of financial institutions with FinTech companies.

RESULTS

Before the Global Financial Crisis of 2007–2008, the development of FinTech has not threatened the traditional banking sector. But, crisis was a watershed and as a result, the following situation has emerged in all world markets. Banks have slowed down and complicated lending, both for individuals and SMEs. In the desire to withstand the difficult times of crisis and meet the rigorous regulatory requirements for capitalization, bankers practically did not invest in the innovation and development of their own IT systems. Regulators in most countries have further strengthened their banking regulation to keep money laundering and customer identification in check. Money transfer requirements have increased. A considerable number of our compatriots went abroad for work. In this regard, the issue of transferring money to their families at home became acute. The technology companies of the Big Five (Facebook, Amazon, Apple, Google, Microsoft) have continued to actively develop, offering new innovative products to the market - smartphones, tablets, social networks and applications. Everything that has happened has shaped a new user experience.

Now technology firms competing with traditional banks. FinTech start-ups are offering products that used to be previously by traditional banks. In addition, big market players propose own financial services. For example, Facebook has around 50 different regulatory licenses that allow their users to transfer money by the messenger app in US. Users can use Facebook and Messenger to buy and sell things, send and receive money, make donations and more [3]. Amazon experimented with student loans off its platform [4]. WeChat has become one of the most common tools to transfer money in China. The main rival to WeChat Pay is Alipay [5]. Due to the great popularity of the above-mentioned fintech service, banks in China are losing most of their consumers in the field of payments.

Today FinTech industry is tackling with gap between things that banks offering customers and things that customers expect especially from a user experience and conveniences prospective. Despite the power of technology, FinTech have not replaced banks in financial services, but do directly threaten institutions that are slow to change, unwilling to adapt, or unaware of a consumer's evolving preferences.

In some spears of financial services FinTech became more popular than traditional banks due to following factors:

- changes in consumer behaviour: perform financial transactions online became more quick, convenient and cheap, e.g. without overdraft and monthly service fees);
- advances in cloud-based technology, with the help of which it became possible to carry out transactions in real time;
- availability of mobile devices: the evolution of mobile devices, especially app-based smartphones, conveniently brought banking from a desktop to a customer's pocket [6].

In addition, FinTech companies offer their customers much cheaper products than traditional banking services and apply innovative risk assessment methods: from analysing their clients' behaviour based on social networks and up to machine-learning algorithms [7].

In 2017, 30% of adopters ranked the ease of opening an account as their top priority when selecting a FinTech provider, while only 13% said attractive fees or prices were most important. In the 2019 survey, the priorities flipped, with 27% ranking price first and 20% picking ease of opening an account [2].

According to recent research of PWC, 88% of traditional banks fear losing revenue to FinTech companies in areas such as payments, money transfers, and personal loans. The amount of business at risk continues to grow, and has already risen to an estimated 24% of revenues [8]. PwC's FinTech Survey shows, that consumer banking, fund transfer and payments, investment and wealth management financial sector are likely to be the most disrupted by FinTech over the next 5 years [9].

Financial institutions need to modify their approach to business from product-centric to customer-centric based on the fallout from the Financial Crisis. There are two ways how banks can coexist with FinTech companies: build up the competence or establish cooperation. From our point of view, banks will gain from partnering with FinTech companies, because it is empowering banks and forming the synergy effect.

Benefits from collaborating between banks and FinTech companies:

- strengthening existing core competitive positions;
- improving of customer management;
- expanding of product line;
- increasing access to new markets;
- lower cost of doing business [10].

So, in order to stay viable and competitive banks and FinTech companies should continue to partner with one other, because it has huge impact on long-term growth for both sides. Ultimately, both financial institutions and FinTech companies are focused on increased market share growth that can clearly come from a successful FinTech partnership with banks.

In recent years, the financial industry has seen fast-growing adoption of FinTech. Banks have made sizeable investments in FinTech, reflecting their expectations for substantial change in the industry [11].

Nowadays there are following priorities of banks digital transformation:

- redesign / enhance digital experience for consumer;
- enhance data analytics capabilities;
- find ways to reduce operating costs;
- automate core business process;
- increase investment in innovation;
- meet regulatory requirements;
- improve component of security and authentication.

According to PWC, partnering of financial institutions with FinTech companies is rapidly increasing. Approximately 82% of traditional banks plan to increase collaboration with FinTech companies in the next three to five years. So, we expect, that FinTech investment from the banking sector will increase in near future. PWC estimates, that the cumulative investment in FinTech globally could exceed \$150bn within the next 3-5 years [8].

Regarding Ukraine, the number of banks has reduced dramatically since 2014. Out of 180 banks operating in the beginning of 2014, 94 were declared insolvent or liquidated by the NBU and 5 were liquidated or reorganized voluntarily [12].

At the same time, according to Ukrainian Fintech Catalog, the number of FinTech companies in Ukraine is steadily increasing. The FinTech industry has begun rapidly growing since 2014. In this year, 9 new companies were established in the FinTech field. In 2017 and 2018 near 40 new FinTech companies were established. Overall above 100 FinTech companies are operating in Ukraine to date, with more than half of them founded over the past three years [13].

Today, Ukraine Digital Readiness Scores and Stages is 12.36 (scores could range from 0 to 25). This indicator includes technology infrastructure, technology adoption, human capital, basic needs, easy doing business, business and government investment and start-up [14].

According to Mastercard research, Ukraine ranks fourth in the world by the number of cashless transactions via cashless payment services like Apple Pay and Google Pay. Near 72% Ukrainians want to pay with a smartphone. 18 Banks launched digital wallets on Mastercard digital platform (Apple Pay, Google Pay, Garmin Pay, issuer wallets).

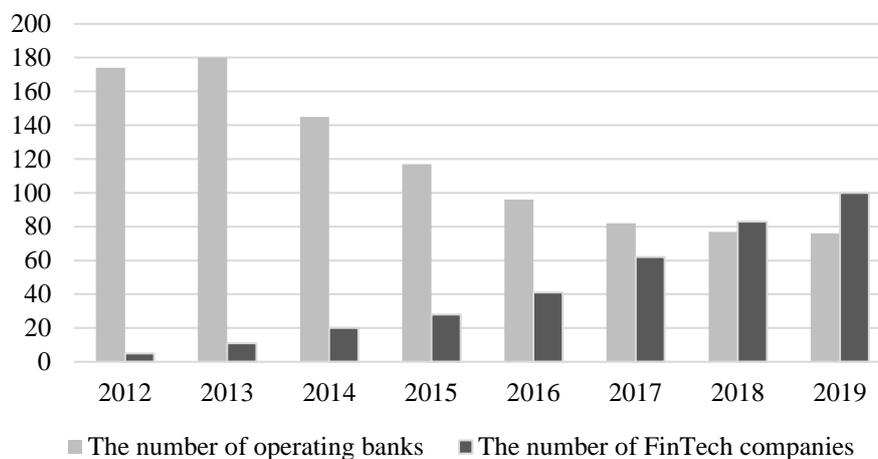


Figure 1 – The number of operating banks and FinTech companies in Ukraine from 2012 to 2019 (Compiled by the author based on NBU and Ukrainian Fintech Catalog data [12, 13])

But at the same time, there are some challenges for FinTech adoption in Ukraine:

- more than 30% of the economy is shadow;
- 37% adults in Ukraine still do not have a bank account;
- only 38% SME accept cashless payments. For comparison, in the European Union it is 60% on average [15].

In Ukraine development of the FinTech market is one of the bullet points of the Comprehensive Program of Ukraine Financial Sector Development Until 2020. The Cabinet of Ministers defined financial technologies and cashless payments among the primary objectives of the Concept for the Development of the Digital Economy and Society of Ukraine for 2018-2020. In April 2019, the National Bank of Ukraine established its Expert Council on Communications with Innovative Companies. This will enable the National Bank to understand the requirements and the development directions of an innovative financial market, while for innovative companies, the peculiarities of the current regulatory and legislative framework [13].

The National Bank of Ukraine (NBU) launched a pilot project to stimulate the development of FinTech solutions in Ukraine. Based on the project, the NBU established the Expert Advisory Board on communications with innovation companies (hereinafter – the Expert Board). Implementation of the pilot project will last until the end of 2019. The Expert Board will become a platform for communications between the NBU and innovation companies [16].

Today, in Ukraine NBU is taken the following steps in FinTech sphere:

- bankid system of the nbu has been deployed simplifying provision and reception of banking, financial and other commercial services;
- the nbu electronic payment system is being upgraded to provide 24/7 instant payments across the country with the application of iban and iso 20022 international standards;
- the european psd2 directive guidelines are being incorporated into national legislation under the open banking concept to intensify competition in the financial markets and promote advances in technologies;

– the electronic hryvnia (e-hryvnia) has been tested in a pilot project based on blockchain technology, and the nbu keeps on investigating the possibility of issuing its own digital currency [13].

CONCLUSIONS

FinTech is the innovative use of technologies in design and delivery of financial services. Over the past few years, the FinTech industry has made a huge leap forward. More and more companies offering new FinTech solutions worldwide every day. At the same time, the willingness of traditional banks to cooperate with FinTech companies is growing. Today banks and FinTech companies switching from competition to mutually beneficial cooperation, because innovation is a primary aspect of survival for traditional banks. We expect in the near future banking system become more open and digitalize. Furthermore, there will be more collaboration between traditional banks and FinTech companies.

АНОТАЦІЯ

Сфера FinTech почала швидко розвиватися з 2008 року, після Глобальної фінансової кризи. Це було пов'язано з тим, що фінансові установи не могли швидко реагувати на потреби споживачів через низку регуляторних та законодавчих обмежень, які були застосовані для подолання наслідків кризи. У той же час основними факторами розвитку FinTech були технологічна еволюція, нові очікування, доступність фінансування та капіталу, а також підтримка з боку уряду та регулюючих органів.

FinTech робить традиційні фінансові послуги більш доступними, гнучкими та безпечними, тому FinTech є одним з головних рушіїв цифрової трансформації всього фінансового сектору та розвитку фінансової доступності у світі. Розвиток галузі FinTech має величезний вплив на фінансовий сектор. FinTech прагне зробити фінансові послуги більш доступними як для споживачів, так і для бізнесу.

FinTech компанії швидко розвиваються та щороку приваблюють велику кількість інвестицій у свій розвиток. У той же час традиційні фінансові установи відчувають загрозу зі їх боку, оскільки зі збільшенням кількості FinTech компаній, конкуренція на ринку фінансових послуг також зростає. Для того, щоб залишитися на ринку, традиційні банки змушені адаптуватися до сучасних реалій та розвивати співпрацю з FinTech компаніями. Компанії FinTech можуть допомогти банкам ефективніше надавати фінансові продукти та послуги та посилювати їх конкурентні переваги. Наприклад, вони можуть покращити фінансову привабливість та досвід клієнтів, підвищити прозорість, поліпшити безпеку, а також надати підтримку та рекомендації.

Таким чином, фінансові установи у співпраці з FinTech компаніями здатні надавати нові фінансові продукти та послуги групам клієнтів, які раніше не мали доступу до традиційних фінансових послуг. Крім того, завдяки новим технологіям, фінансові установи можуть пропонувати персоналізовані послуги та спілкуватися в режимі он-лайн з клієнтами, що значно збільшує залучення клієнтів та їх досвід. Крім того, компанії FinTech можуть допомогти фінансовим установам виявити шахрайство та боротися з кібератаками та іншими онлайн-ризиками.

Ключові слова: *FinTech, фінансові технології, фінансові послуги, фінансові інновації, прийняття FinTech*

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