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DEVELOPMENT OF FINTECH AND BIGTECH COMPANIES AND THEIR EXPANSION ON THE BANKING MARKET

ROZWÓJ SPÓŁEK FINTECH I BIGTECH I ICH EKSPANSJA NA RYNKU BANKOWYM

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Summary: The main research goal set in the article was to consider the reasons for the intensive development of the FinTech sector and the classification the BigTech sector – which may pose a greater threat to traditional financial institutions than the activities of FinTech companies. Surveys conducted among FinTech companies show that they have a positive impact on the financial market, leading, among others to the better adaptation of financial products and services to the needs of consumers. Companies from the FinTech sector increasingly cooperate with banks in the field of implementing financial innovations. Therefore, the financial products and services offered are relatively cheaper and delivered to consumers faster – especially during the period of progressing digitization of the financial market. FinTech companies note that consumers are attached to traditional financial institutions that have the status of public trust institutions and are characterized by a high level of reputation and stability.

Keywords: FinTech, BigTech, traditional banking institutions.

Streszczenie: Cele badawcze artykułu stanowiły ocena przyczyn intensywnego rozwoju sektora FinTech oraz próba zdefiniowania sektora BigTech, który może stanowić większe zagrożenie dla tradycyjnych instytucji finansowych aniżeli działalność spółek FinTech. Z badań ankietowych przeprowadzonych wśród spółek FinTech wynika, że mają one pozytywny wpływ na rynek finansowy, prowadząc m.in. do lepszego dostosowania produktów i usług finansowych do potrzeb konsumentów. Spółki z sektora FinTech coraz częściej współpracują z bankami we wdrażaniu innowacji finansowych. Dlatego też oferowane produkty i usługi finansowe są tańsze i są dostarczane konsumentom szybciej – zwłaszcza w okresie postępującej digitalizacji rynku finansowego. Przedstawiciele spółek FinTech mają świadomość, że konsumenci są przywiązani do tradycyjnych instytucji finansowych, które mają status instytucji zaufania publicznego oraz charakteryzują się wysokim poziomem reputacji i stabilności.

Słowa kluczowe: FinTech, BigTech, tradycyjne instytucje bankowe.

1. Introduction

The main research goal set in the article was to consider the reasons for the intensive development of the FinTech sector and the classification the BigTech sector – which may pose a greater threat to traditional financial institutions than the activities of FinTech companies. The FinTech (Financial Technology) sector is the subject of more and more frequent analyses in the Polish literature. In Western Europe, innovative companies related to implementing financial innovations have been the subject of a wide discussion in both the business and academic area for several years. In Poland, J. Koleśnik noted an important and prospective research issue, which is the FinTech sector, and the lack of sufficient coverage of this issue [Koleśnik 2017, pp. 45-50]. In 2017, banks in Poland already observed the significant impact of the FinTech sector in the field of payment services and individual banking, although they treated companies from this sector as competition and showed willingness to take them over [Raport PWC 2017, p. 18]. Currently, banks note the positive impact of the FinTech sector on the banking market [Miklaszewska et al. 2019, pp. 63-83], while central banks as a market regulator suggest that banks and FinTechs should cooperate with each other in a regulated environment [Folwarski 2019, pp. 145-149].

The Polish banking sector is considered one of the more innovative sectors in EU countries. This includes the BLIK system, a high level of mobile banking development and instant payment systems, which are the basic FinTech solutions in Poland. Nevertheless, Poland is not included among the countries that are leaders or even strong innovators in the EU. According to the report for the European Innovation Ranking, in 2019 Poland was ranked 25th out of 28 EU countries – ahead of only Romania, Bulgaria and Croatia [European Commission 2019, p. 7].

The article consists of an introduction, an analysis of the literature related to the definition and classification of companies in the FinTech sector, a description of the BigTech sector and a presentation of the opinions of companies from the FinTech sector on the changes taking place in the financial market (based on a survey). The article ends with a summary and conclusions. It attempts to analyse the situation on the financial market under the influence of subjective changes on this market – i.e. the increasingly powerful role of FinTech companies on the financial market – from the point of view of companies from the FinTech sector. The main research goal set in the article was to analyse the reasons for the intensive development of the FinTech sector and to attempt to define the BigTech sector which may pose a greater threat to traditional financial institutions than the activities of FinTech companies.

2. The FinTech sector – definition problems

The development of innovations brings numerous benefits, both microeconomic and macroeconomic. According to the DELab report of the University of Warsaw and the Polish Business Roundtable, the use of new technologies may increase

GDP by 0.1-0.2% per annum [Białek-Jaworska et al. 2018, p. 6]. Therefore, the safe implementation of innovations can bring numerous benefits to many segments of the economy. Nevertheless, the definition of innovative solutions proposed by companies from the IT sector in finance is complex. Companies from the FinTech sector implement financial innovations that are understood as new [Grennbaum et al. 2015, p. 432]:

- types of financial claims,
- institutions,
- markets,
- business practices,
- processes of distributing financial services.

The FinTech sector is one of the fastest growing financial market entities in recent years. One of the key reasons for the rapid expansion of this sector is the decline in public confidence in traditional financial institutions which followed the financial crisis 2007-2009 [de Hann et al. 2015, pp. 54-60]. A company from the FinTech sector is most often defined as an entity that offers innovative technology in financial services, which may result in the creation of new business models, mobile applications, processes and even products that have a significant impact on the provision of financial services by financial institutions [FSB 2017, p. 9]. Sometimes FinTech companies are also described as companies operating on the financial market, constituting a new special category of parabanks [Szpringer 2017, p. 9]. According to KNF (the Commission for Banking Supervision), the FinTech sector means companies using modern technologies in the area of financial services.

As a result of numerous proposals for defining companies in the FinTech sector and their classification, one of the most thorough market segmentations was carried out at the Basel Committee on Banking Supervision (BCBS). Within the classification of the FinTech sector, entities were distinguished dealing with:

- credit, deposit, and capital-raising services (crowdfunding, lending marketplace, mobile banks, credit scoring),
- payments, clearing and settlements services:
 - retail (mobile wallets, peer-to-peer transfer, digital currencies),
 - wholesale (value transfer networks, FX wholesale, digital exchange platforms),
- investment management services (high-frequency trading, copy trading, e-trading, robo-advice),
- market support services (portal and data aggregators, ecosystems, data applications, distributed ledger technology, security, cloud computing, mobile technology, artificial intelligence) [BCBS 2018, p. 9].

3. BigTechs – a real threat to the banking sector?

Banks do not always keep up with the development of technology, which is why technology companies can appropriate a significant number of their customers. However, banks enjoy greater trust and are treated as secure entities that are subject to extensive regulations and over which various institutions of the financial security network supervise [Szpringer 2019, p. 11]. According to EBA analyses, the FinTech sector is growing very fast, as a result of which many consumers are not prepared to implement these innovations. It is also worth emphasizing that the rapid development of the FinTech sector increases the cyber threat and the level of data security [EBA 2019a, pp. 60-65].

Big technology companies (BigTech) have special features that distinguish them from companies in the FinTech sector. FinTech companies offer financial services using digital technology, while the main activity of large technology companies is technology, not finance [BIS 2018, p. 1]. Companies from the BigTech sector very often obtain licenses from payment institutions and electronic money institutions. One of the main challenges facing these companies is to strengthen customer loyalty and trust in these institutions. A very large number of financial institutions consider companies from the BigTech sector as direct competition and a current threat to the operations of financial institutions. According to research, financial institutions treat 60% of BigTech as partners, 47% as customers, and 42% consider them as competitors [EBA 2019b, p. 16]. BigTech companies very often start their activity with providing services on the payment market. Then some entities extend the scope of their services to include credit, insurance, savings and investment products – directly or in cooperation with financial institutions. However, according to research it is too early to assess the extent of the potential impact of BigTech companies on the provision of financial services, but preliminary results allow for determining the impact of the BigTech sector on financial stability and economic well-being [Frost et al. 2019, p. 3]. The dynamically developing BigTech market means that the literature on the subject already contains classifications of this segment (Table 1).

In addition to the BigTechs listed (Table 1), the payment market also includes technology companies that have their own subsidiaries:

- Apple – Apple Pay,
- Samsung – Samsung Pay,
- Microsoft – Microsoft Pay,
- Vodafone – M-Pesa,
- Mercado Libre – Mercado Pago.

BigTech companies are also categorized as technology companies segmented by various criteria – usually underlining the scale of their business:

- Big Four/Gang of Four – Amazon, Apple, Facebook, Google,
- GAFA – Google, Apple, Facebook, Amazon,

- GAFAM – Google, Apple, Facebook, Amazon, Microsoft,
- GANDALF – Google, Amazon, Netflix, Dell, Apple, LinkedIn and Facebook.

Table 1. Selected financial activities of BigTech firms

	Alibaba	Tencent	Baidu	Amazon	Facebook	Google
Payments	AliPay	Tenpay	Baidu Wallet – cooperation with PayPal	Amazon Pay	Messenger Pay	Google Pay
Lending and short-term credit	MYBank	WeBank	Baixin Bank	Temporary financing in Amazon Lending	Pilot in collaboration with Clearbanc	Collaboration with Lending Club
Current accounts	Offered through MYBank	Offered through WeBank	Offered through Baixin Bank	Reports of talks with banks		
Asset management	Yu’e Bao	License to offer mutual funds				

Source: own study, based on [FSB 2019].

Analysing the activities of BigTech companies, it can be stated that their activities pose a significant challenge to the functioning of traditional financial institutions. BigTech companies have a competitive advantage over banks with a very large customer database which can offer not only comprehensive services (including financial) but also can provide these services much cheaper than traditional institutions whose activities generate high costs – by maintaining a traditional distribution network and a high level of employment.

4. FinTech companies on the financial market – survey

In the period December-January 2018/2019 a survey was conducted addressed to the largest FinTech companies in Europe, classified according to the reports of the consulting company KMPG and the map of Polish FinTech. The survey was directed to 140 European FinTechs, from which 35 responses were obtained. The test results are presented in Figures 1 to 5. The research is own research, and the research questions posed to FinTechs were those used as the titles of graphic forms.

FinTech companies are aware of their important role in shaping the financial system. In the vast majority of responses they state that their impact on the financial system is positive, resulting in improved customer satisfaction and business models of existing financial institutions by introducing new financial services and products to the market (Figure 1). Such answers indicate that FinTech sector entities offer financial products and services more tailored to the needs reported by consumers.

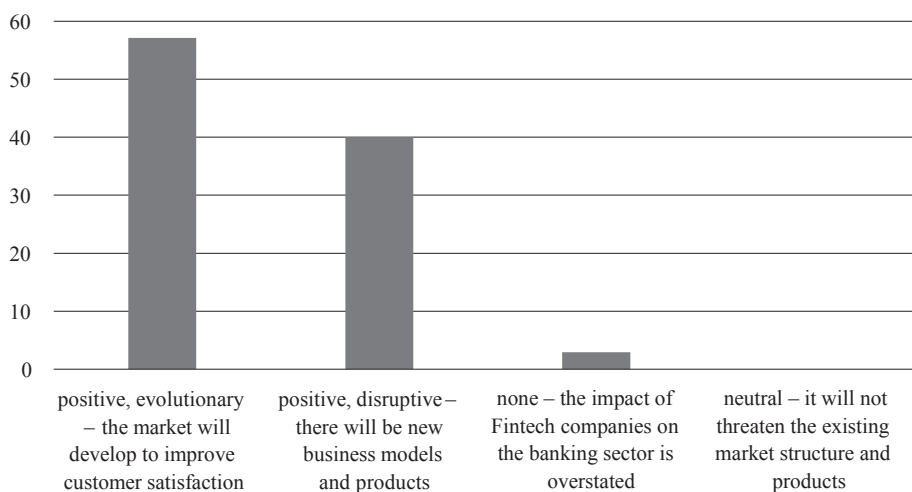


Fig. 1. “In the regulatory assessment of your institution, the impact of FinTech sector on the financial markets will be (%)”

Source: own study.

FinTech companies observe changing consumer trends in the forms of using financial products and services. The increasing progress of digitization is making internet and mobile banking more and more popular. Traditional financial institutions recognize this trend, but nevertheless limiting the number of branches and reducing employment is a relatively long and difficult process. FinTech companies since entering the market offer access to financial products and services through electronic distribution channels. Therefore, they note that clients of financial institutions willingly give up physical contact with the bank in its branch, in favour of using financial products and services from mobile banking (Figure 2). They also point out that clients will willingly use electronic banking if it is cheaper for them and that they are increasingly ready to robotize financial services.

The development of the FinTech sector according to entities creating this market is an incentive for the development of traditional financial institutions. Competition, but also cooperation between traditional financial institutions and FinTech companies will lead to improved profitability, efficiency, and also to the appearance of financial products and services that are more personalized and cheaper for consumers (Figure 3).

Figures 4 and 5 show, respectively: the advantages of banks over entities from the FinTech sector, and the advantages of FinTech companies over banks (in the opinion of FinTechs). FinTech sector companies note that the biggest barrier to their development is the lack of consumer confidence. Therefore, the biggest competitive advantage of banks over FinTech companies is their stability and reputation. Through

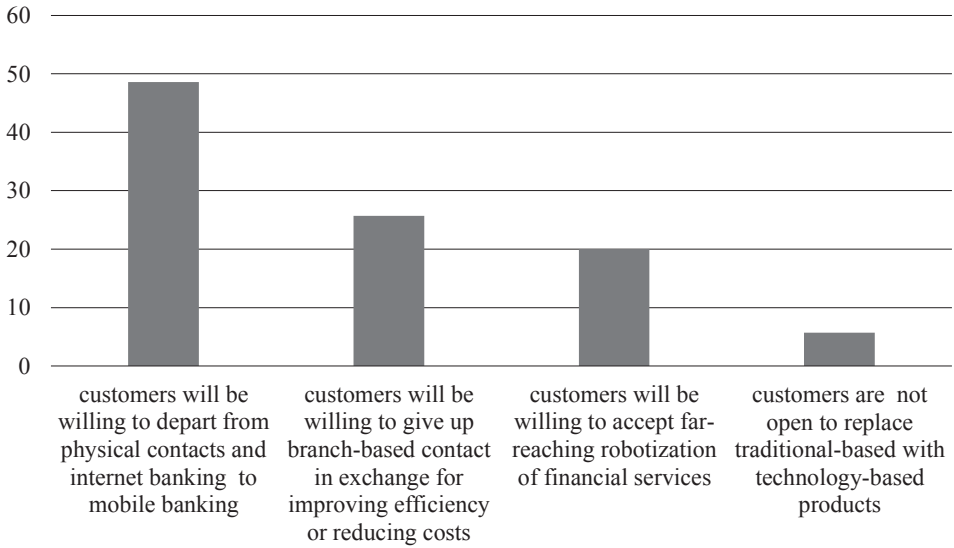


Fig. 2. “Assess the customers’ openness to technological challenges (%)”

Source: own study.

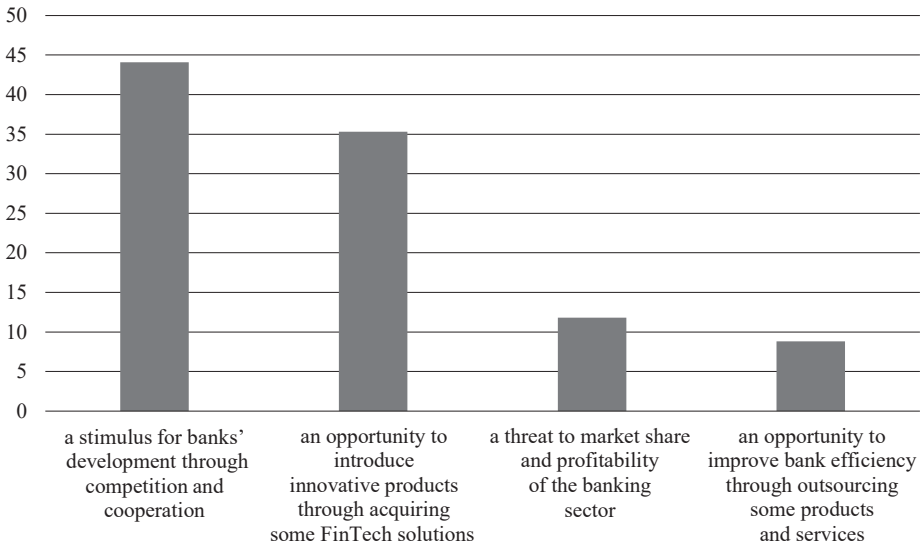


Fig. 3. “The development of the FinTech sector will pose (%)”

Source: own study.

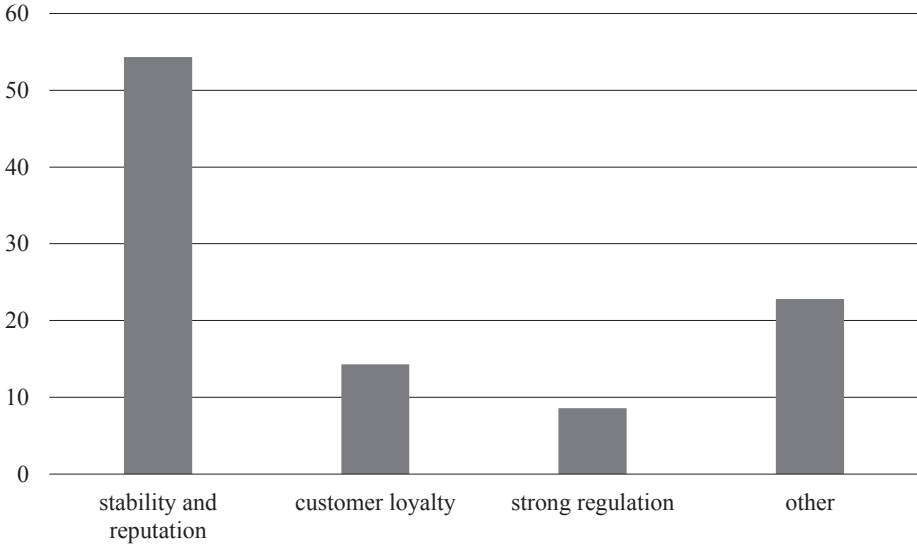


Fig. 4. “Banks’ competitive advantages over the FinTech sector are (%)”

Source: own study.

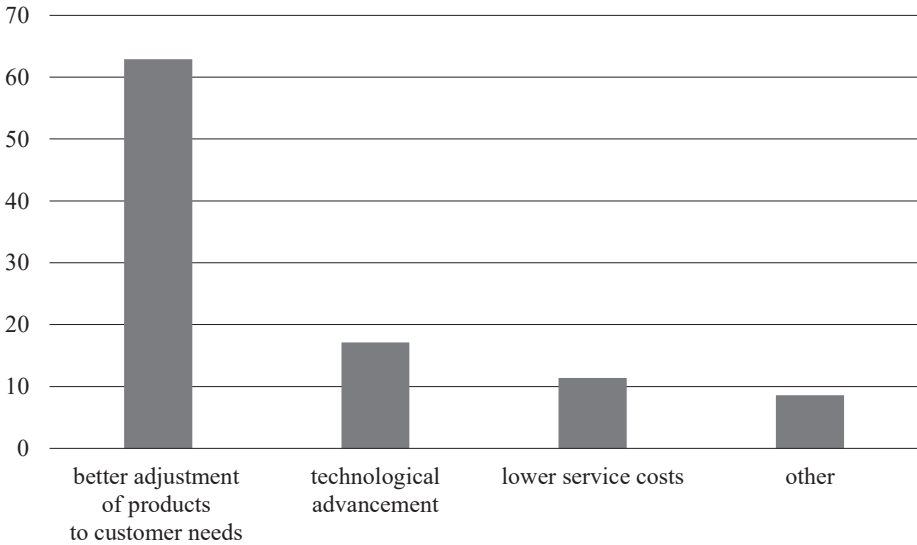


Fig. 5. “The competitive advantage of FinTech companies over banks are (%)”

Source: own study.

a long period of operation of financial institutions, they have gained the status of public trust institutions – which is why they have a large group of consumers who are loyal and attached to these institutions. Nevertheless, this status has been undermined by the financial crisis of 2007-2009. Therefore companies from the FinTech sector can take advantage of the decline in confidence in traditional financial institutions, especially among young people. In addition, companies from the BigTech sector, having various segments of their activity, being on the market for many years, already have a certain degree of public confidence in their activities. Consumers are willing to share their sensitive data with companies from the BigTech sector. Therefore, these companies, entering the market of financial products and services are not anonymous and may pose a significant threat to the activities of traditional financial institutions. Companies from the FinTech sector are aware of their competitive advantages over traditional financial institutions. First of all, it is the better adaptation of products to the needs of consumers. These companies also note that they have technological solutions that respond to consumer demand, and such solutions are not used in banks, e.g. due to the relatively long period of implementing innovative solutions. By using technological solutions and offering their services and products mainly through smartphones, such companies gain a competitive advantage over traditional financial institutions by offering the same or better adapted products much cheaper – both for FinTechs and for the consumers.

5. Conclusion

In recent years FinTech companies have increased the scope of their activities, and have become more recognizable. After the financial crisis of 2007-2009, FinTech companies noticing a drop in confidence in traditional financial institutions, intensified their activities. The wide scope of operations of FinTech companies, the lack of broadly understood transparency in their operations and the complex technological solutions have caused problems related to establishing one definition of these entities. Banks have noticed the dynamic development of the FinTech sector and not only change their business models, for example leading to the liquidation of the traditional distribution network, but also increasingly cooperate with such entities, reducing the costs of their operations. The banking sector faces the challenge of developing the BigTech sector. These are companies from the technology sector that have a very large number of customers and an established market position. Therefore, the acquisition of these entities is not possible, and the growing activity of BigTech companies on the financial market may significantly threaten banks in terms of revenues from their activities.

FinTech companies are aware of their positive impact on the financial market as it is possible with the use of new solutions, including IT services, to provide consumers with much cheaper financial products and services. FinTech companies

note that the main competitive advantage of banks over FinTechs is a high level of trust in these institutions – which does not have to be a competitive advantage of banks over companies from the BigTech sector. Thus the dynamic development of the FinTech and BigTech sectors should be subject to intense observation, especially by market regulators. Banks are subject to numerous regulations in the financial system, while the financial safety net supervises the situation in these institutions. The activities of FinTechs, and in particular the scale of BigTechs' activities, may in the long run lead to the appearance of various types of risks that may be the cause of another crisis in the financial sector. Moreover, the regulations in the financial system (including the PSD2 Directive) and the so-called open banking, enable entities that are not financial institutions to provide financial services. It is also worth noting that companies from the FinTech and BigTech sectors are not covered by the deposit guarantee, and to some extent may also provide deposit services.

Yet the mobile payments market in the world is already dominated by technology companies that offer such solutions through Apple Pay, Google Pay, Samsung Pay, AliPay and Tenpay. Companies from the BigTech sector may also pose a challenge for market regulators in the field of analysing the security of their operations, especially in the area of systemic risk and consumer protection.

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