

SAFEGUARDING ITS WAY TO SECURITY OR NOT – SHOULD FINTECH BECOME A BANK(TECH)?

Kamila Pawlak*



<https://doi.org/10.18778/2391-6478.3.39.04>

SAFEGUARDING ITS WAY TO SECURITY OR NOT – SHOULD FINTECH BECOME A BANK(TECH)?

Abstract

The purpose of the article. This article explores the trend of fintech firms obtaining banking licenses, challenging their traditional advantage of not being banking institutions. It investigates two hypotheses:

H1 – Banking licenses bring more opportunities than threats for fintech companies;

H2 – Obtaining licenses positively impacts their profitability.

Methodology. The study utilizes the literature review and applies Porter’s Five Forces methodology to assess the strategic implications of banking licenses for fintech firms. Financial analysis is conducted on three selected companies based on market capitalization, banking license timeline, and geographical diversification. Profitability ratios (ROE and ROA) are analyzed before and after obtaining the license.

Results of the research. Fintech firms with banking licenses experience more opportunities than threats, as confirmed by Porter’s analysis. However, only one out of three analysed companies immediately improved profitability ratios after obtaining the license. In conclusion, obtaining banking licenses opens growth opportunities for fintech firms, but immediate profitability improvements are not guaranteed. Additional requirements and challenges arise during the transition to a banking area. The study acknowledges limitations and suggests further research to confirm and expand these findings in the evolving fintech landscape.

Keywords: fintech, digital banking, digital innovations, banking licence, banking regulations.

JEL Class: G21, G23, G28, E51, O33.

* PhD Candidate, University of Economics in Katowice, e-mail: kamila.pawlak@edu.uekat.pl
<https://orcid.org/0009-0007-9658-5574>

INTRODUCTION

Digital technologies are transforming the landscape of financial services. The emergence of fintech (financial technology) companies has accelerated the development of a wide range of new digital financial products and services. Its innovative and unique value propositions seem to be gaining popularity. Financial services are continuing to go through a surge of innovations, which are revolutionising the industry. New financial service providers are being added to new digital financial solutions. New market players beyond traditional banks now include technology firms, fintech firms, start-ups, or fully digital banks. Simultaneously, new players are expanding at a pace of a wide catalogue of terms used in the literature: fintech, neobanks, challenger banks and non-banks. The choice of terminology is wide, perplexing and confounding. That is why, first, the author of the paper aims to structure and systematise the terminology used to describe fintech companies with a focus on those that obtained banking licences and became banks. The author notes the overcrowding of terms but at the same time, notices a gap which calls for a temptation to describe fintech companies that became banks as banktechs (bank technology firms). This term will be applied throughout the paper in order to differentiate fintech companies from the group of fintech firms that joined a regulated ecosystem of banks. Second, the research will begin by employing Porter's Five Forces methodology to conduct a strategic review of the fintech industry, with a specific focus on banktech firms. Subsequently, a financial analysis will be conducted using selected case studies of large fintech companies that pursued banking licenses. This analysis will address the following research questions and verify the main research assumptions:

Q1: Fintech firms that obtained a banking licence experience more opportunities than threats.

Q2: Fintech companies that obtained a banking licence have recorded more positive impacts on their profitability than before.

Understanding the evolving landscape of digital financial services is crucial for researchers and financial practitioners. It is essential to highlight the benefits and risks of these advancements continually. This paper focuses on the trend of fintech firms that became bank(techs). It is particularly interesting to keep a pulse on these market developments as they seemed to be originally a reason for the differentiation of fintechs from banking institutions. However, from the understandable perspective of regulators, it can be derived that the aspiration to regulate the environment of payment players is just a logical step forward. On the one hand, regulation brings safety to the market, on the other one, it brings challenges to the players that do want to stay ahead and keep up with innovations. Thus the question concerning benefits to fintech companies that no longer want to

be just fintech companies remains up-to-date. A limited number of research publications elaborate on the fintech firms regulated via banking licences, therefore, this study aims to address the topic.

1. FINTECH OR BANKTECH? CONFUSION AVOIDANCE

In this section, based on the literature review, the basic knowledge, information and definitions, together with a brief history of the emergence of financial technology firms (fintech) will be discussed.

1.1. The Onset of Fintech

The intensified emergence of fintech dates back to the aftermath of the Global Financial Crisis 2007–2009. During that time, people became doubtful of banking institutions as the origins of the financial crisis came to light, leading to a deterioration in the public perception of banks (Giglio, 2021: 600–627). The financial crisis rapidly escalated into an economic crisis, impacting the jobs of millions of people (Arner, Barberis and Buckley, 2015). As a result, many groups lost trust in the traditional banking sector. Simultaneously, financial professionals sought employment and personal development opportunities in the evolving sector of financial technology (Esposito and Tse, 2014: 4–9). This period also witnessed the rise of a new wave of financial innovations (Cojoianu et al., 2021: 1715–1731).

The term “fintech” is the amalgamation of finance and technology, bringing together two of the biggest industries in harmony. The union of finance and technology means the development of technology that is used in financial services. It also describes the relationship between technologies, including cloud computing and mobile internet, with other businesses from financial services such as loans, payments, transfers, and banking (Giglio, 2021: 600–627).

Over the past years, an increasing number of start-ups and non-bank payment providers have entered the payments industry taking advantage of an array of new technology conditions prevailing in the market, and using alternative business models that could both disrupt and complement conventional payment practices. This new paradigm of non-bank payment providers has led to the emergence of fintech start-ups (which seek to apply technological advances in payment services) as well as incumbent firms in other non-payment industries, such as Facebook and Apple (Giglio, 2021: 600–627).

With the emergence of the fintech industry, regulatory topics continue to be luminous subjects within the industry. The financial sector is a significant yet elusive part of society, leading to heavy regulation by regulators (Jain et al., 2023: 36). This has resulted in a diaspora between regulated and unregulated banking. Regulations aim to protect consumers and investors, and this notion is being reiterated almost universally.

1.2. Regulating an Epoch-making

Traditional incumbent banks in the financial sector are subject to more stringent regulatory requirements than start-ups that make use of cutting-edge financial technology. Fintech disruption presents a challenge for established banks. On the one hand, banks are being pressured by the ongoing escalation in regulation to lower their risk levels, increase capital adequacy, and enhance the stability of their revenue pools. Fintech companies, on the other hand, pose a threat to banks because they could reduce the banks' market share, forcing them to make riskier investments (Varma et al., 2022: 186).

The trade-off between competition and financial stability is crucial from a regulatory standpoint. In theory, a less stringent regulatory approach than for conventional financial services should result from the desire to promote competition in financial markets. However, there are inherent concerns about financial stability raised by the growth of fintech firms that cannot be ignored.

For deeper understanding we turn to the history and evolution of the regulatory framework. It occurred in the 1980s when traditional banking was already being challenged by IT and innovations like money market funds. In those years, a deliberate pattern of deregulation was implemented with the express purpose of enhancing competition and efficiency in the financial market. As a result, shadow banking increased, banks engaged in risky off-balance sheet activities and ultimately, the disruptive global financial crisis of 2007–2008 emerged (Navaretti et al., 2018).

In the study by Bofondi et al. (2018: 107–119), the argument is suggested that too light approach to the regulation of fintech today may lead to the same consequences. This interesting view implies a need for levelling up the regulations for all the providers in the same field. Therefore, regulation should focus on the service being provided rather than the institutional body providing it. Innovative payment services are one example of an activity that partially straddles uncharted ground and raises new regulatory requirement questions. Other innovative products, like peer-to-peer lending, should, at the very least, be completely transparent to their users.

Although no compulsory regulations have been imposed on the fintech companies yet, the noticeable trend in recent years has been for fintechs to seek banking licenses themselves. It may seem counterintuitive for these businesses to follow in the footsteps of big, lumbering banks and obtain a banking licence. It is with certainty that stimulations from institutions largely helped to steer these movements. To name a few, the European Banking Authority (EBA) has initiated the establishment of the FinTech Knowledge Hub. As part of this initiative, the EBA conducts and publishes reports on the emergence of fintech firms in Europe to monitor the developments in the sector, addressing concerns about fintech

companies being unregulated entities. According to the latest report issued by KPMG, between 2017 and 2021, 852 firms were granted authorisation as Payment Institutions (PIs), Electronic Money Institutions (EMIs), or Account Information Service Providers (AISP) for the European Economic Area (EEA). The second Payment Services Directive (PSD2) and Brexit firms relocations appear to have contributed to this sharp incline (KPMG, 2022). Nevertheless, questions have arisen about the benefits for fintech companies becoming banks.

1.3. Banking Licence

Many fintech firms have been working to establish themselves as respectable rivals to the established players. Obtaining a banking licence essentially frees up fintech companies from the need to collaborate with legacy banks.

A banking licence can lead to the creation of a vast array of new banking products, aligning with the growing preference among consumers for digital services found in a single, all-encompassing digital banking application.

From a marketing and brand perception standpoint, it can also be a significant decision. For instance, it may be possible to issue branded payment cards, enabling online-based businesses to expand their “offline” operations. Finally, a banking licence can be seen as the fintech industry’s final step toward wider acceptance and legitimacy. This will help dispel obstacles and mistrust that shall lead to greater safety for fintech customers (Goo & Heo, 2020: 43).

1.4. Navigating Through Foggy Terms

There seems to be some conceptual confusion regarding a number of terms used to describe fintech companies. It is, therefore, worth reviewing and compiling definitions that are being used to describe the firms selected for the case study. The aim is to clarify the definitions and eliminate distractions from further reading the paper. There has been an uncomplicated test run for the terminology using the particular examples selected for the case study. Each company has been searched alongside the term being explained using a Google search. The number of results has been captured in the overview and saved as a reference point, indicating the popularity of the terms’ use. The results are grouped in Table 1.

The information presented in Table 1 demonstrates the inconsistency of terms used to describe particular companies with their accompanying definitions. For instance, Revolut is often referred to as a fintech or digital-only bank in most publications. However, some literature uses definitions such as a challenger bank or neobank. They do not necessarily go along with the changed business model the company is functioning under.

Table 1. Terms and definitions

Term	Description	Example	Frequency of use
Neobank	Neo-banks are not considered banks, as they do not have a banking license. They are fintechs that operate in a relationship with full-fledged banks, providing financial services in a customer-friendly and convenient manner.	Revolut Klarna Adyen	106 000 times 26 800 times 14 300 times
Challenger bank	Challenger banks originated in the UK, and that is where their name also comes from. They were supposed to compete with the “big four” banks, which dominated the English market. Challenger banks are institutions operating under a full banking license, using modern technology, often without offices, branches, or sub-branches.	Revolut Klarna Adyen	101 000 times 757 000 times 31 100 times
Digital only bank	Fintechs operating under a full banking license, providing financial services online. These institutions have no subsidiaries, branches, or stationary offices. They were created from scratch, and are not dependent on other banks. Most of them were established after the global economic crisis of 2007–2009.	Revolut Klarna Adyen	2 970 000 times 12 800 000 times 464 000 times
Non bank	Fintechs providing various types of financial services, fast growing technology companies. They operate without a banking license and without cooperation with banks holding such licenses.	Revolut Klarna Adyen	no match no match no match
Fintech	Fintech, short for financial technology, is a broad term used mainly to refer to firms that use technology-based systems either to provide innovative and cheaper financial services directly (i.e. without the involvement of banks or other intermediaries) or to make traditional financial business more efficient.	Revolut Klarna Adyen	2 310 000 times 547 000 times 219 000 times

Source: own elaboration based on: Schmidt-Jessa, 2022.

In the fast-paced, changing environment of fintechs, the terms and definitions no longer serve the purpose of describing these companies to the expected accuracy level that would match the speed of changes and the role the companies play in the banking ecosystem. It is therefore tempting to suggest that fintech firms that obtained banking licences deserve a separate set of definitions that would reflect their activities as a regulated bank. This provokes assigning a definition to newcomers to the banking industry that use technology as bank+tech, following the same taxonomy of fin+tech. The author will, therefore, continue the discussion on fintech firms that obtained a banking licence, giving them a simplified name and referring to them as “banktechs”. The term is assumed to be used for regulated companies that use technologically advanced tools to offer bank-related products.

2. RESEARCH METHODS

The present study employs two methods to answer the research questions and verify research assumptions. The first methodology used to analyze the fintech industry, with a particular focus on the fintech companies that obtained a banking license, is Porter's Five Forces. The strategic model shows that rivalry among firms in an industry depends upon five forces:

- 1) the potential for new competitors to enter the market;
- 2) the bargaining power of buyers;
- 3) the bargaining power of suppliers;
- 4) the availability of substitute goods;
- 5) the competitors and nature of competition.

The second part of the analysis method is a case study that performs a profitability analysis based on the selected samples.

2.1. Comparison of The Threats and Powers Using Porter's Five Forces

Porter's Five Forces model of industry competition is a tool for examining the business environment from the perspective of basic competitive forces. It considers attributes shaping the industry and governing the profit structure (Lumpkin et al., 2011). The industry's value may be weakened by the strong supplier or customer bargaining power. The weakening value of the industry is influenced by the threat of new entrants and the threat of substitutes, also by the competitive rivalry among market participants. Any changes in the forces may change the competitive landscape and impact businesses' profitability. As observed, different forces are gradually changing or gaining prominence.

Regulating fintech companies has changed the ways these businesses function and interact with each other, as well as with consumers. In some cases these changes have affected industry forces in ways that created opportunities and strategic challenges. In this section, Michael Porter's Five Forces model will be applied in terms of the fintech companies that obtained banking licence and became regulated institutions.

2.1.1. THE THREATS OF NEW ENTRANTS

This refers to the potential for new competitors to erode the profits of long-standing businesses in the sector. The threat of entry is low if there are significant entry barriers and/or the newcomer can expect swift retaliation from established rivals. These factors deter potential competitors (Lumpkin et al., 2011).

The threat of new entrants into the fintech sector is considerable. While a few countries have already emerged as European leaders in the fintech space, such as the United Kingdom or the Netherlands, the potential for start-ups and further growth is strong everywhere in the region. According to the Statista report, in 2019, there were 3583 new fintech start-ups in EMEA. In 2020, the number of new fintech companies almost doubled to 7385. The data for the year 2021 indicates 9323 new fintech start-ups, which shows an increasing trend in the number of fintechs being set up (www1). The downside of such a trend is the increased competition to existing and functioning fintech firms in the market. Admittedly, the upside could be meaningful for the economy and other fintech companies.

Some arguments suggest that the time of entry is significant for start-up companies entering a new market. The deteriorating macroeconomic conditions in Europe (and the world) caused by the chain of unforeseeable events such as the global pandemic, Russian aggression against Ukraine, or soaring inflation have an indirect impact on the valuation of fintech companies. The market values have been declining, and access to financing has become more and more difficult (Europe's fintech opportunity, 2022).

Cost reductions implied by advances in digital technology, as well as improved and novel products for consumers, enable these developments to have a significant impact on economies of scope. More specifically, lower search costs that allow financial market matching, economies of scale in data collection and manipulation, less expensive and more secure information transmission, and lower verification costs are all benefits that fintech operators enjoy as a result of technological advancements (Navaretti et al., 2018).

Eventually, successful innovations put new entrants in an advantageous position. Start-ups and scaleups are more directly connected to their target customers and can therefore access the development suggestions and feedback on new products. By contrast, banks cannot afford to give customers a product for testing purposes that may contain errors because of the potential reputational damage (Horváth, Kerényi and Szabó, 2022: 289–308).

Finance and banking are heavily regulated industries. There are consumer protection laws, anti-money laundering laws, protection and use of information laws as well as a wide range of other related rules and regulations that tend to be overly complex. For potential new market entrants that would like to become regulated entities (like, for instance, N26 bank, which asked for the license just one year after being in business), these could be roadblocks. Dealing with all these regulations can be quite a barrier (www2). For the fintechs already functioning on the market, obtaining a banking licence is a lengthy process. It took Klarna around 20 months to receive the necessary documents and licences.

2.1.2. BARGAINING POWER OF BUYERS

By driving down prices, negotiating for higher quality or more services, and pitting rival businesses against one another, consumers pose a threat to an industry. These actions reduce the profitability of the sector. Each large buyer group's influence varies depending on market conditions and how significant its purchases are in relation to the sector's overall business (Lumpkin et al., 2011).

In the case of fintech, bargaining power is moderate. The growing appeal is that they create value with superior service at lower costs. One of the reasons may be that they focus on a single product or service (mostly) and can dedicate their attention to providing that service at an excellent level. A recent report published by McKinsey&Company on Europe's fintech opportunity (2022) shows that customers cite pricing and easy access as the main and primary reasons behind using fintech. But buyers are often a demanding lot. In an open economy, they can particularly compare and contrast the charges, products, speed and quality of services.

Fintechs play a leading role in the innovation and growth of financial products using technology. They do it with agility and speed. Therefore, they are front runners in offering new and competitive financial products that other institutions, such as traditional banks, do not provide, or can not at such speed and convenience to their customers. Fintechs can launch new products and services much faster than incumbent banks, with an average time to market of 2 to 6 months versus 12 to 18 months for incumbents. Fintechs are also well known for offering new, out-of-the-box products and services resulting from unique business models (Europe's fintech opportunity, 2022). Many fintech companies rely on partnerships with institutional or corporate partners. Klarna is an excellent example of using such a business model. If Klarna's major partners can find the same or alternative services on the market, their bargaining power may be increased with a higher ability to seek increasing discounts and offers. This puts pressure on fintech companies in the long run.

2.1.3. BARGAINING POWER OF SUPPLIERS

Suppliers can affect both the price and accessibility of resources and inputs. When businesses depend on them and cannot switch to other suppliers due to higher costs, or a lack of available alternatives, suppliers are most powerful (Lumpkin et al., 2011).

The role of suppliers involves providing products or services to other businesses. The effect of fintech companies on the bargaining power of suppliers is that they may find it difficult to hold onto customers or partners as they are able

to compare the products and services, eventually turning to other suppliers should the competition be greater. Nowadays, many traditional banks look up to fintech companies and rely on various partnerships with financial technology companies. However, in the era of financial technology, companies having the momentum of becoming banks will aim to be independent. At the same time, interest in arranging for a partnership with other banking institutions may not seem to be that appealing. Some incumbents acquire fintech companies themselves. This fact will impact potential partnerships with other fintech companies as well.

Financial technology firms that act as middlemen in facilitating transactions between a company and its suppliers could revolutionise global supply chains. They make it possible for the buyer to postpone paying its creditors while simultaneously accelerating payment to the supplier, helping both parties increase their working capital. Both parties benefit from this, as there is more liquidity and less fluctuation in the timing of payments. These fintech companies are being used by multinational corporations like Apple, Colgate, Dell, P&G, Kellogg's, and Siemens to access previously inaccessible capital in their supply chains to support the new products' development, strengthen their financial positions, and increase available capital. In the circumstance of banktech, the bargaining power of suppliers is considered weak as there is a big incentive for large corporations as they offer a comprehensive solution to support a procedure that starts with a purchase order and ends with payment to suppliers (Rogers, 2017). Because they close the loop between purchasing and accounts payable and offer a framework that streamlines these processes, these integrated systems help buying firms significantly reduce the workload associated with managing these functions. Incumbent banks lack these technology solutions and therefore are not competitive.

Finally, now that banktechs can strengthen their position on the market themselves by offering deposit services, they can start gaining more consumer trust as the deposits will be covered by a government guarantee. The depositors will have wider savings options as the choices to deposit capital will be broader.

2.1.4. THE THREAT OF SUBSTITUTE PRODUCTS AND SERVICES

The threat of limiting an industry's potential returns by putting a cap on the prices that businesses can charge profitably without losing too many customers to alternatives (Lumpkin et al., 2011).

For fintech companies, the threat of substitute products is low. Consumers will generally choose to use a product or service until a substitute that meets the same need becomes available at a lower cost. With fintech operating under the same regulations as banks, the customer will have a choice for the products

the banks can offer. However, most likely, they will eventually choose a cheaper alternative, a competitive advantage of banktech. The economies created by fintech, and further banktech, led to the development of numerous substitutes for traditional banking businesses.

As a result, the small scale will initially be an issue for new players. Naturally, data accessible to the general public may also be used. Additionally, legislation may compel a private information owner to make it available to applicants. For instance, the new Payments System Directive (PSD2) mandates that banks honour requests to share account information with other financial institutions (Bofondi et al., 2018: 107–119).

2.1.5. THE INTENSITY OF RIVALRY AMONG COMPETITORS IN AN INDUSTRY

The strong rivalry between companies equals customers' potential to switch their businesses to industry rivals (Lumpkin et al., 2011).

Currently, the biggest competition that banktech companies face is from traditional banks as well as other fintech firms.

Active fintech companies primarily take advantage of better ability to match needs, mainly due to the advanced technologies they have, but also due to the access to the information they can transform into meaningful insights. They have not had (yet) a dramatic impact on the type of information gathered or information management. However, it is possible to imagine significant advancements in fintech operators' capacity to handle information from various sources, including social networks, multiple media, and unofficial ratings. Handling big data, as well as using it to gain market competitive advantage, is certainly a potential fintech companies could use in the future. At the same time, it seems that traditional banks do take the lead in having access to more historic and reliable information that they use when providing their services. Customers, however, may be able to rely on multiple relationships in banking if banktech operators improve their ability to manage customer information efficiently. The risk here might be that once banktechs achieve such excellence in information processing, the margins from traditional banking business would further deteriorate (Sharpe, 1990: 1069–1087; Rajan, 1992: 1367–1400). Traditional banks, however, have many options to handle this competitive pressure, supported by unbundling, cherry-picking, and enhanced information processing.

Some traditional banks have already started to either acquire fintech companies, followed by a recent example of Goldman Sachs. The bank finalised its \$2.2 billion acquisition of the massive BNPL Greensky online loan platform in March 2022 (iTechArt Group, Custom Software Development, 2023). Another strategy used by traditional banks is setting up their own start-ups that rely heavily

on technology. A recent example is the Dutch bank AbnAmro which launched a new company N10 advertised as a digital lending spinoff the banking giant. N10 is a fully digital business lending platform targeting SMEs (Suazo, 2023). These recent shifts of well-settled banks' responses to the competition may signify continued competition from traditional banks that banktech firms may keep on experiencing.

2.2. Financial Analysis

The goal of financial analysis is to verify the abovementioned research assumption:

Q2: Fintech companies that obtained banking licence have recorded more positive impacts on their profitability than before.

The financial analysis was performed based on the sample of three banktech firms with the highest market capitalisation. They were chosen based on the ranking of fintech companies (www3). As the list included the companies that have not obtained a status of the bank, such companies have been manually excluded from the sample. For comparability reasons, the company's maturity as a banktech company was important to highlight the length of functioning under banking regulations. Additionally, it was particularly important that fintech companies operate in the financial industry with their own, sometimes particular, business models, but also that they are based in different European countries. It was, therefore, decided to compare Klarna (Sweden), Revolut (United Kingdom) and Adyen (The Netherlands). The selection criteria ensured covering the biggest fintech companies that became banktechs around the same year 2017/2018, but also that are based in the biggest fintech hubs in Europe (Europe's fintech opportunity, 2022). The basic general information about each of these companies is available in Table 2.

The financial and comparability analysis is achieved by analysing profitability ratios across multiple years – before obtaining the banking licence and at least three years of profitability performance after operating under strict banking regulations. The profitability ratios of return on equity and return on assets were calculated and used in the analysis (Table 3).

In the analysed group, the majority of banktechs generated losses which are reflected in a negative return on equity (ROE) and return on assets (ROA). The generated losses were already revealed at the level of bank operations and were mainly due to staff and administration expenses.

Table 2. Detailed characteristics of research samples

	Klarna Bank SA (Sweden)	Adyen (The Netherlands)	Revolut (United Kingdom)
Country	Sweden	The Netherlands	United Kingdom
Founders	Sebastian Siemiatkowski, Niklas Adalberth	Pieter van der Does, Arnout Schuijff	Nikołaj Storonski, Vlad Yatsenko
Founded	2005	2006	2015
Year of receiving banking licence	2017	2017	2018
Active users globally (latest available – 2021)	147M	350K	20M+
No of transations/day	2M	0,5 trillion	
Markets	50 markets	23 markets	36 markets
Employees	5000	2000	6000
Market valuation	45,6 billion	47,2 billion	33 billion \$

Source: Banktech official sites.

Table 3. Profitability analysis

	Klarna Bank SA (Sweden)	Adyen (The Netherlands)	Revolut (United Kingdom)
ROE in 2021	-38,45%	25.95%	2.45%
ROE in 2020	-21.76%	21.43%	-53.60%
ROE in 2019	-17.4%	23.49%	-111.01%
ROE in 2018	2.54%	22.62%	-16.94%
ROE in 2017	8.57%	18.53%	-33.74%
ROE in 2016	4.06%	No data	-205.72%
ROE in 2015	5.05%	No data	-112.27%
* ROE is calculated as a proportion of Net Income to Shareholders equity * 100. The negative results in ratios highlight the loss for the financial year as per the financial statements.			
ROA in 2021	-6.75%	8.13%	0.31%
ROA in 2020	-2.23%	6.28%	-4.21%
ROA in 2019	-2.26%	7.82%	-4.05%
ROA in 2018	0.38%	7.08%	-3.32%
ROA in 2017	1.82%	6.35%	-33.74%
ROA in 2016	0.94%	No data	-205.72%
ROA in 2015	1.45%	No data	-79.00%
* ROA calculated as Net Profit divided by Total Assets * 100. Adyen financial results for year 2016 and 2015 are no longer retrievable from company website.			

Source: original calculations based on financial statements of banktech companies.

In the case of Klarna, ROE was a positive figure before the company obtained a banking licence, with the performance deteriorating and achieving high ratio results in the past three years (latest accounts available 2021). Klarna published mid-year results for 2022 covering a period Jan-July during which further losses would persist, with the return on equity ratio being on a level of -61%. Exactly the same results were achieved for ROA. Revolut follows almost the same scenario; however, the return on equity and return on assets were historically negative, turning into an increase in 2021. Revolut reported a total annual loss in 2019 and 2020 but also adjusted operating losses, which include crypto revaluation income. It is the cryptocurrencies segment of the business that Revolut does not bet on only, but is volatile and highly risky, which comes with a cost.

Adyen, the Dutch payment provider allowing companies to accept e-commerce, mobile and point-of-sale payments, seems to book good profitability ratios year by year. Most companies expanding at the rate Adyen is, or following similar business models aren't profitable or are breaking through. However, Adyen maintained outstanding profits and can be considered a stable and profitable business.

In conclusion, after receiving a banking licence, two out of three analysed banktechs noticed low profitability ratios. And while these businesses are close to breaking even, it is fair to say that being a bank comes with additional requirements to which these institutions have been exposed.

CONCLUSIONS

This research article delved into the trend of fintech firms obtaining banking licenses and entering regulated banking systems, which represents a significant shift in the competitive landscape. The study aimed to test two research hypotheses:

H1: Fintech companies that obtained a banking license experience more opportunities than threats;

H2: Fintech companies that obtained banking licenses have recorded more positive impacts on their profitability compared to the period before.

The paper demonstrated that fintech firms are actively striving to strengthen their strategic positions in the markets, adopting various approaches such as launching innovative business models and introducing unique products like BNPL (buy now pay later). Additionally, they are forming collaborations and partnerships with traditional banking institutions, while some are even aspiring to become banks themselves. As the strategies are executed, evident differences in activities and product offerings emerge. The transformation of fintech firms into banking technology firms (banktech) is leaving a notable mark on the industry by introducing rival products and services that were previously unseen within traditional banking establishments.

Addressing the first research hypothesis (H1), the application of Porter's Five Forces methodology demonstrated that fintech firms obtaining banking licenses indeed observed more opportunities than threats. This indicates that the regulatory status change opens up new avenues for growth and development in the industry, allowing these firms to expand their offerings and services, thus increasing their competitive advantage.

However, the second research hypothesis (H2) did not receive unequivocal support. The financial analysis of the selected fintech companies (Klarna Bank, Adyen, and Revolut) revealed that two out of three analyzed companies did not immediately experience an improvement in profitability ratios after obtaining a banking license. While Revolut showed positive signs of becoming profitable in the recent year, Klarna's profitability ratios deteriorated over time after obtaining its banking license. This suggests that the transition to a bank may not always result in immediate positive impacts on profitability, and further examination is required to understand the factors influencing profitability in such cases.

In summary, obtaining a banking license presents fintech companies with new growth opportunities within the industry, but it may not always lead to immediate improvements in profitability. These institutions must navigate additional requirements and challenges to become successful banks, and the specific strategies they adopt during this transformation can significantly impact their financial performance.

The study recognizes certain limitations, such as the influence of macroeconomic factors like the recent pandemic and geopolitical events on the companies. To solidify and expand upon these initial findings, future research should employ broader methodologies and include more examples from various regions. Additionally, should the availability of data allow, it is to consider other profitability indicators, such as a net profit margin, a gross profit margin, return on investment (ROI), and cash flow return on investment (CFROI), to gain a comprehensive understanding of the financial performance of these banktech firms. A more extensive analysis of these indicators could shed further light on the profitability dynamics after obtaining a banking license. By continuing to explore the implications of fintech companies obtaining banking licenses, researchers can provide valuable insights into the ever-evolving financial landscape and the integration of technology-driven solutions. This research could offer valuable guidance to both the fintech industry and regulators as they navigate the complexities of this evolving sector.

AUTHOR'S DECLARATION

There is no conflict of interests.

REFERENCES

- Arner, D.W., Barberis, J., Buckley, R.P. (2015). The Evolution of Fintech: A New Post-Crisis Paradig? *Social Science Research Network* [Preprint]. <https://doi.org/10.2139/ssrn.2676553>.
- Bofondi, M., et al. (2018). The Big Promise of Fintech. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.3099337>.
- Cojoianu, T., et al. (2021). Fin vs. tech: are trust and knowledge creation key ingredients in fintech start-up emergence and financing? *Small Business Economics*, 57(4). <https://doi.org/10.1007/s11187-020-00367-3>.
- Esposito, M., Tse, T. (2015). From Hubris to Disgrace: The end of Finance as we know it. *The World Financial Review*, 2.
- Europe's fintech opportunity (2022). <https://www.mckinsey.com/industries/financial-services/our-insights/europes-fintech-opportunity>.
- Giglio, F. (2021). Fintech: A literature review. *European Research Studies Journal*, XXIV(2B, 2021).
- Goo, J., Heo, J. (2020). *The Impact of the Regulatory Sandbox on the Fintech Industry, with a Discussion on the Relation between Regulatory Sandboxes and Open Innovation*. *Journal of Open Innovation*, 6(2). <https://doi.org/10.3390/joitmc6020043>.
- Horváth, D., Kerényi, Á., Szabó, R. (2022). Intended benefits and challenges of cooperation between FinTechs and commercial banks. *Acta Oeconomica*, 72(3). <https://doi.org/10.1556/032.2022.00023>.
- KPMG (2022) *The Netherlands: Europe's number one fintech hub?*. KPMG.com. <https://assets.kpmg.com/content/dam/kpmg/nl/pdf/2022/services/the-netherlands-europes-number-1-fintech-hub.pdf>.
- iTechArt Group, Custom Software Development (2023). *The strategy behind fintech acquisitions*. <https://www.itechart.com/blog/fintech-acquisitions-by-banks/>.
- Jain, R., et al. (2023). A Systematic Literature Review of the Risk Landscape in Fintech. *Risks*, 11(2). <https://doi.org/10.3390/risks11020036>.
- Lumpkin, G.T., et al. (2011). *Strategic Management: Text and Cases*. McGraw-Hill Education.
- Navaretti, G.B., et al. (2018). Fintech and Banking. Friends or Foes? *Social Science Research Network* [Preprint]. <https://doi.org/10.2139/ssrn.3099337>.
- Rajan, R.G. (1992). Insiders and Outsiders: The Choice between Informed and Arm's-Length Debt. *Journal of Finance*, 47(4). <https://doi.org/10.1111/j.1540-6261.1992.tb04662.x>.
- Rogers, D. (2017). The Rise of FinTech in Supply Chains. *Harvard Business Review*, 23 June. <https://hbr.org/2016/06/the-rise-of-fintech-in-supply-chains>.
- Sharpe, S.A. (1990). Asymmetric Information, Bank Lending, and Implicit Contracts: A Stylised Model of Customer Relationships. *Journal of Finance*, 45(4). <https://doi.org/10.1111/j.1540-6261.1990.tb02427.x>.
- Schmidt-Jessa, K. (2022). The impact of COVID-19 on digital-only banks: are they winners or losers? *Journal of Banking Regulation* [Preprint]. <https://doi.org/10.1057/s41261-022-00198-0>.

Suazo, R. (2023). ABN AMRO's New10: A fully digital approach to business lending. <https://www.bundl.com/articles/examples-abn-new10-digital-approach-to-business-lending>.

Varma, P., et al. (2022). Thematic Analysis of Financial Technology (Fintech) Influence on the Banking Industry. *Risks*, 10(10). <https://doi.org/10.3390/risks10100186>.

[www1] <https://www.statista.com/statistics/893954/number-fintech-startups-by-region> [Accessed 15.03.2023].

[www2] <https://research-methodology.net/square-porters-five-forces-analysis/> [Accessed 15.03.2023].

[www3] <https://courses.cfte.education/ranking-of-largest-fintech-companies/> [Accessed 15.03.2023].

ZABEZPIECZAJĄ SWOJĄ DROGĘ DO BEZPIECZEŃSTWA CZY NIE – CZY FINTECH POWINIEN STAĆ SIĘ BANKIEM (BANKTECH)?

Streszczenie

Cel artykułu/hipoteza. Celem tego artykułu jest zbadanie trendu uzyskiwania licencji bankowych przez firmy fintech, które podważają tradycyjną korzyść związaną z nieposiadaniem statusu instytucji bankowych. Badanie to analizuje dwie hipotezy:

H1 – Licencje bankowe przynoszą więcej możliwości niż zagrożeń dla firm fintech,

H2 – Uzyskanie licencji pozytywnie wpływa na ich rentowność.

Metodyka. Badanie wykorzystuje przegląd literatury i stosuje metodologię analizy Portera w celu oceny implikacji strategicznych licencji bankowych dla firm fintech. Przeprowadzana jest analiza finansowa trzech wybranych firm, uwzględniając wielkość kapitalizacji rynkowej, czas uzyskania licencji bankowej i różnorodność geograficzną. Analizowane są wskaźniki rentowności (ROE i ROA) przed i po uzyskaniu licencji.

Wyniki/Rezultaty badania. Firmy fintech posiadające licencje bankowe doświadczają więcej możliwości niż zagrożeń, co potwierdza analiza Portera. Jednak tylko jedna na trzy analizowane firmy natychmiast poprawiła wskaźniki rentowności po uzyskaniu licencji. Wnioskiem jest, że uzyskanie licencji bankowej otwiera możliwości rozwoju dla firm fintech, ale natychmiastowa poprawa rentowności nie jest gwarantowana. Pojawiają się dodatkowe wymagania i wyzwania obserwowane przy przejściu do sektora bankowego. Badanie rozpoznaje ograniczenia i sugeruje dalsze badania w celu potwierdzenia i rozszerzenia tych wyników w zmieniającej się rzeczywistości w jakiej funkcjonuje fintech.

Słowa kluczowe: fintech, bankowość cyfrowa, innowacje cyfrowe, licencja bankowa, regulacje bankowe

Klasyfikacja JEL: G21, G23, G28, E51, O33.

Zakończenie recenzji/ End of review: 11.07.2023

Przyjęto/Accepted: 25.08.2023

Opublikowano/Published: 28.09.2023