The Digitalization of Financial Markets

The Socioeconomic Impact of Financial Technologies

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Chapter 10

Challenger bank as a new digital form of providing financial services to retail customers in the EU Internal Market: The case of Revolut

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10 Challenger bank as a new digital form of providing financial services to retail customers in the EU internal market

The case of Revolut

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Introduction

Digital transformation has resulted in redefinition of business models and retail services in the financial sector. The emergence of challenger banks is found to be one of the manifestations of this transformation and an example of a financial innovation. 'Challenger banks' are banks or FinTech, non-banking start-ups, the operations of which are based on digital technologies and which challenge big, traditional banks. It is a new approach to provide financial services, where an agile organization and new technologies are the key success factors. Due to branchless and often mobile operations, challenger banks are focused on offering their customers better user experience and attractive pricing for selected financial services. Challenger banks are established in many European countries, e.g., Revolut and Monzo in the United Kingdom, N26 in Germany, Golden Sand Bank in Gibraltar, Aion in Belgium. Providing investment products to mass retail customers is a significant feature differentiating challenger banks from traditional banking institutions. An inclusive and simple formula of offering those products via mobile apps enables a numerous group of customers to invest in financial assets in a comfortable and comprehensible way. Nevertheless, provision of such an offer is a challenge requiring an innovative business model obeying strict legal regulations.

Due to their relative novelty, innovations in business models of challenger banks have not been studied thoroughly, yet. The topic has been discussed in only a handful of studies. Schepinin and Bataev (2019) and Bataev (2019) estimate efficiency of such organizations based on the number of their clients and operations performed by them. Cable (2014), in his analysis of the UK banking industry, notices growing intensity of competition due to the emergence of challenger banks. Bruggink and Coehlo (2020) observe the role of BNI Europa in servicing niche customers in some segments of the Portuguese market. Sibanda et al. (2020) employ a questionnaire survey in the context of the United Arab Emirates banking sector to analyze

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the 'impact of digital technology, via Fin-Tech challenger banks on banks' business models'. Bataev et al. (2019) study development of a Russia-based Tinkoff Bank as well as they compare and contrast its profitability, return on assets and the long-term capital against traditional banking institutions.

An initial review of literature points out that research on challenger banks has been limited. Thus, taking into account the identified research gap, the aim of the study is to explore the operations of challenger banks and their new digital approaches to provide banking and investment services to retail customers in the EU Internal Market as an innovation in the financial market. Revolut, the most recognized challenger bank, which succeeded in attracting 12 million customers until 2020, is used as a unit of the single case study analysis.

The study combines a narrative literature review in its theoretical part with a single case study methodology in the empirical part. Due to a limited number of publications related to challenger banks, we decided to give up a systematic literature review (Tranfield et al., 2003) and employ a narrative review of refereed and non-refereed publications, in spite of limitations of this methodology. Nevertheless, as highlighted by Cook et al. (1997), narrative reviews are useful for describing development of an issue, especially if a research field is new and its scientific output is limited in number. Moreover, our literature review is embedded in a wider context of more advanced and abundant research on FinTech development (Gomber et al., 2018; Milian et al., 2019). The case study methodology (Myers, 2010; Patton & Appelbaum, 2003; Rowley, 2002) is used as a framework to analyze empirical data. The remainder of the chapter is structured as follows: firstly, digital innovations in the financial sector are discussed to provide the theoretical background for the study; secondly, the method of the study is explained; thirdly, Revolut's innovative services in the financial market and their legal formula are analyzed and finally, the findings from analysis are discussed.

Digital innovations in the financial sector

Digital technologies and new business models in the financial sector

Digitalization in the economy turned out to be a crucial breakthrough. These changes are referred to as the modern industrial revolution and are a part of the concept of Industry 4.0 which 'is based on the creation of value through the close interaction of all economic agents through digitalization' (Bilan et al., 2019, p. 70). Information and communication technologies (ICTs) completely change business models and the traditional way of providing financial services as well. This process is particularly visible in financial markets, which can be easily digitalized due to the intangible features of their products. Thus, the emergence of the 'FinTech' expression, which according to Philippon (2017) 'covers digital innovations and technology-enabled business model innovations in the financial sector'.

Traditional banking, associated with physical bank branches, is being increasingly replaced by e-banking (Nsouli & Schaechter, 2002). Within the e-finance business, which refers to forms of financial services performed with the use of electronic communication channels, many business models have emerged in the 1990s. They included the process of services automation and development of self-service interfaces, such as online banking, online brokerage services and even the first attempts of mobile banking and mobile payments (Gomber et al., 2018). The first important new business model – the Internet-only bank – was aimed to radically reduce fixed costs by resigning from owning the branches and taking advantage of the economies of scale (DeYoung et al., 2007). The low price strategy attracted mass customers, and the transaction volume generated the profit. In brokerage services, an online access enabled investors to quickly react to the changes in financial markets and to reduce commissions from transactions. This model was also gradually adapted to traditional banks and led to reducing the number of physical branches of banks and other traditional institutions, resulting in improvement of financial results (Akhisar et al., 2015; Hernando & Nieto, 2007).

New types of technologies contribute to the development of financial innovations. The crucial are blockchain- and distributed ledger technology (DLT)-based solutions, in particular cryptocurrencies (Polasik et al., 2016), but also new document storage and payment services, new solutions for creditworthiness research based on artificial intelligence, InsurTech and improvements in the regulatory requirements process - RegTech (Butor-Keler & Polasik, 2020). Through the years, mobile and other ICTs have been developed, which led to merging different services as well as creating new business models. The main direction in changing business models was the disintermediation and reintermediation of the financial services value chain (Schmidt et al., 1999; Sibanda et al., 2020). New FinTech business models vary and might include many different elements, such as crowdfunding, Person-2-Person (P2P) lending platforms, wealth management automation, robo-advisors mechanisms and mobile trading (brokerage) platforms (Lee & Shin, 2018). The latter solution is the most important for the study as it enables customers to make direct investments in financial assets, including alternative investments

Socio-economic impact of digital finance innovations and financial inclusion

An important aspect of the development of new technologies and products is also strengthening the financial inclusion of society (Sahay et al., 2020). 'Mobile money' services offered in developing economies (Lashitew et al., 2019), where the mobile phone operators provide customers with basic banking services, e.g., M-PESA in Kenya, may be an example of inclusive innovations (Van Hove & Dubus, 2019). Another example of changes in the

banking sector, resulting from financial innovations, is the emergence and development of challenger banks. As of 2020, as reported by International Money Fund (Sahay et al., 2020), digital finance has a significant impact on financial inclusion. It is also associated with a higher GDP growth in a country. It is worth noticing, that financial inclusion processes changed due to the global COVID-19 pandemic. The abovementioned report suggests that the digital financial inclusion might have an important role in recovering from both the economic as well as social crisis (Sahay et al., 2020). It might be due to the fact, that, as presented in a World Bank research from 2017 (Demirgüc-Kunt et al., 2018), 'mobile money services (...) can help improve people's income earning potential and thus reduce poverty'. The saving and investing inclusion remains an important issue also in the European Union (EU) countries (Korzeniowska & Huterska, 2020). The need for financial inclusion applies also to the current sanitary regimes as digital finance services enable dealing with financial matters without the need of a physical contact with a representative of a given financial institution. As noted by Financial Stability Board (2017), in the end, digital financial innovations might translate into a greater efficiency and transparency of services offered to customers. New entities on the market mean higher competition, which creates new ways for financial inclusion and economic growth, especially in developing economies.

Digital finance innovations have also an impact on the retail investors' accessibility to trading services, previously reserved (due to the high entry threshold) for a selected part of this group (Musabegović et al., 2019). Easier access for small investors to the investment offer may also affect the different investment patterns used by such persons compared to professional investors. The pioneer in this market segment was Robinhood Brokerage established in 2013, which introduced the 'investing for everyone' model (Robinhood, 2021). The FinTech entrants increase also the access to many types of alternative investments, such as gold certificates and cryptocurrencies. The development of mobile-based market offer directed to small investors is resulting in democratization of financial markets (Palladino, 2019).

Challenger banking

In our paper, we define challenger banks as banks or FinTech, non-banking start-ups, the operations of which are based on digital technologies and which challenge big, traditional banks. It is a new approach to provide financial services, where an agile organization and new technologies are the key success factors. These companies are focused on providing their customers with excellent user experience and they target their offerings at young people, mainly of those of the generation of millennials. In the literature, challenger banks are labelled also as 'mobile-only banks' or 'neobanks' (Gomber et al., 2018; Hopkinson et al., 2019), to highlight their radical approach to reject traditional distribution channels such as: branches, phone banking or

even WWW transaction applications. Using their smartphones, customers are able not only to set up an account but also to make a wide array of other available financial operations (Capgemini & Efma, 2020).

Challenger banks are usually established as new entities without an extensive organizational structure. The basis for the functioning of challenger banks is constituted by the IT department, which 'occupies up to 80% of the entire institution, and therefore, introducing and developing this form of credit organization can be presented as an IT-project' (Schepinin & Bataev, 2019, p. 2). Challenger banks usually use a monthly subscription model that includes a selected service package.

Burdened neither with legacy systems nor inertia of employees accustomed to traditional banking, challenger banks are good at creating innovations and achieving cost-effectiveness. In consequence, they can provide customers with speed services at competitive prices, which are also available in cross-border options. Potential to increase competitiveness and challenging the traditional banking sector is an essential aspect of their operations. Thus, challenger banks are perceived as market disrupters (Lu, 2017).

Nowadays, bank customers are increasingly focused on the convenience and speed of transactions. Good customer experience is one of the characteristic elements of the functioning of challenger banks. As a result of the personalization of services and use of information technology, this type of bank has been consistently gaining popularity. According to the FT Partners Research report *The Rise of Challenger Banks*. Are the Apps Taking Over? (2020), first challenger banks began to emerge in Europe after the 2008 crisis (Lu, 2017), and this trend began to develop around the world. In the opinion of Schepinin and Bataev (2019), the development of challenger banks took place somewhat later, that is, in 2014 in the United Kingdom. What is important, the United Kingdom remains a leading European center in the development of financial innovations and FinTech (Polasik et al., 2020), including challenger banks.

Legal antecedents of new business models in the financial sector

The issue of a 'challenger bank' has not yet been thoroughly analyzed in the legal literature. However, we can find studies devoted to the broadly understood legal framework of financial innovation (FinTech), including those related to payment services. For instance, Gurrea-Martínez and Remolina (Gurrea-Martínez & Remolina, n.d.) explore the most common regulatory strategies used by financial regulators around the world to address the challenges generated by the rise of FinTech. According to Khiaonarong and Goh (2020), regulatory approaches and their legal foundations need to augment entity-based regulation with increasing focus on activities and risks as the market structure changes. On the other hand, there are studies dedicated to specific phenomena occurring in the activities of challenger banks. Romanova et al. (2018) study the impact of the Revised Payment

Services Directive (PSD2) on competitiveness of the financial sector. Remolina (2019) explains the open banking and BaaS foundations and what they exactly entail. The author also explores the benefits and risks of this interaction between financial institutions and third parties for the financial services industry and analyses from the comparative perspective different approaches that the financial, data privacy and competition regulators have implemented to boost the open banking phenomenon.

In regard to organizational efficiency, the phenomenon of regulatory arbitrage is used, which results in conducting cross-border activity within the EU on the basis of licenses issued in the Member States with favorable conditions for conducting operations and a friendly financial supervisory authority (Houston et al., 2012). In combination with a decentralized organizational structure, such a solution ensures a high level of cost competitiveness.

In regard to fractional shares trading, it should be mentioned as an example of legal innovation in investment services. In general, it is not a new legal institution/solution in securities law in a number of common law and civil law jurisdictions, therefore there is comprehensive legal literature in this field (Roberts, 1959). But fractional shares trading as a new phenomenon still demands in-depth analyses at the level of national legal systems.

In regard to cryptocurrency, Nabilou (2019) proposes a number of detailed policy recommendations for regulatory intervention in the cryptocurrency ecosystem. In the context of the EU regulatory framework, Nahorniak and Leonova (2016) investigate cryptocurrency, its legal basis in the EU, concluding that the lack of legal foundation of cryptocurrencies exists and proves the necessity of adopting the EU regulation. In September 2020, European Commission adopted legislative proposals on crypto-assets regulation (Proposal for a regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937) (MICA). MICA proposes rules to regulate stablecoins (crypto-asset type) as well as sets out the provisions on authorization and operating conditions of crypto-asset service providers (CASPs).

Method of study

To explore financial innovations introduced by challenger banks, we employed the case study methodology, which is increasingly used in highly contextualized studies (Lis, 2018). The study process was structured in accordance with a five-step model including (Rowley, 2002; Yin, 2010): (i) definition of contextualized study questions, (ii) selection of the case and internal sampling, (iii) data collection, (iv) data analysis and discussion, (v) report production.

The study was focused on the following research questions: (i) What product innovations have been implemented by Revolut in regard to the customers' access to financial markets? (ii) How does Revolut compete with other challenger banks and traditional financial institutions? (iii) What

are socio-economic consequences of innovations introduced by challenger banks? (iv) What is the legal formula of Revolut's operations?

Revolut was chosen as a unit of analysis for this descriptive and exploratory single case study analysis as it is the most recognized challenger bank, which succeeded in attracting more than 12 million customers at the end of 2020. The start-up was founded in 2015 in the United Kingdom by Nikolay Storonsky and Vlad Yatsenko. Revolut became famous for its quick and cheap currency exchange, thus meeting customer expectations. In 2018, Revolut became authorized Electronic Money Institution under number 08804411 (Financial Conduct Authority, 2021). In connection with Brexit, in 2020 Revolut obtained a banking license in Lithuania. At the end of 2018, Revolut operated in over 44 countries and enabled customers to make transfers in over 30 currencies, commodities, and cryptocurrencies. Single case study methodology provided an opportunity to explore thoroughly the case and its context as well as to identify the relationships used to formulate propositions for further studies.

In order to triangulate data collection methods, we used three following sources of data: (i) review of financial reports and other information publicly disclosed by Revolut; (ii) analysis of the Revolut's offering, compared with the offers of selected market competitors; (iii) expert interviews. Expert opinions for analysis were collected from qualitative structured interviews with a representative of the company under the study, its customers and FinTech experts. Due to the restrictions caused by the pandemic of COVID-19, the videoconference or telephone interview techniques were employed to collect the observations and insights of the respondents. Interviews were conducted in September of 2020. We employed the following techniques and mechanisms in order to ensure quality of the study and its appropriate validity: (i) construct validity: collecting data from diverse sources and revising the study report by key respondents; (ii) internal validity: pattern matching and explanation building; (iii) external validity: referring to theoretical assumptions; (iv) reliability: study protocol and database (cf. Rowley, 2002; Yin, 2010).

Revolut's innovations for financial markets

Product innovations and their mechanisms

Revolut is branchless and entirely digital and mobile, which enables it to provide services to a wide audience in many European countries. All the services are provided online via a mobile application. As a new and completely online business, the company is not burdened with old legacy systems and servicing unattractive products or channels. As indicated by the interviewed experts, comparing to traditional banks and other challenger banks, Revolut's strategy is characterized by a significant share of cross-border services in relation to its size and revenues.

Challenger banks in various areas of their activity apply technological, business and legal solutions that increase their product innovation or organizational effectiveness. Product innovations include, for instance, proactive implementation of open banking solutions based on the PSD2 directive. Payment services are the core of Revolute offer value proposition. It includes a source of earnings of Revolut – as a card issuer – i.e. interchange fees charged on merchants under international payment card schemes (Górka, 2018, pp. 14–19).

Moreover, other product innovations can be identified among investment products offered by Revolut, including:

- Investment brokerage solutions based on the concept of 'fractional share investing/trading'.
- Digital currencies trading platform.
- · Commodity trading, including gold.

Fractional shares mechanisms offer an opportunity to invest in a part of a single stock, which allows customers to invest in stocks of high price and therefore allows even low-income customers to broaden their portfolio. The fractional shares scheme, provided by Revolut's subsidiary, i.e. Revolut Trading Ltd. Fractional Shares, is integrated with the online platform enabling even small investors to exercise their voting and dividend rights.

Crypto-currency trading platforms are integrated with the Revolut application and provide customer friendly mechanisms for crypto-assets investment. Their functionality is limited in comparison to trading platforms for crypto-assets that provide private wallets (cryptocurrency accounts) allowing to send or receive crypto-assets from external wallets. Revolut offers a service, in which customer's cryptocurrency is stored by Revolut as an agent in the virtual account that also holds cryptocurrencies for other Revolut's customers. In consequence, it can be considered that a customer holds not a cryptocurrency but a financial instrument that creates beneficial right to the cryptocurrency. This model creates higher compliance security for Revolut as the institution is less exposed to a number of risks, including money laundering, which is one of the main challenges for regular cryptocurrency exchange platforms.

Revolut offers services of exchanging e-money or cryptocurrencies into precious metals (e.g., gold and silver) for investment purposes. The precious metals held by Revolut's users are backed by real precious metals held in a secure third-party financial institution. This activity is not regulated. Most of the traditional banks do not offer this service.

Revolut focuses its operations on selected market niches, instead of providing a full scope of banking and investment services. Nevertheless, the delivered products are well designed. It seems that the high quality of user experience, often indicated as a benchmark for the industry thanks to its excellent ease of use and simplicity, constitutes another source of

competitive advantage of Revolut (Deloitte, 2020). Although, some experts also noticed potential inconveniences for customers such as lack of possibility to have contracts in languages other than English or a lower level of legal security as Revolut's selected services are not always covered by national banks guarantee funds (e.g., in Poland).

Market strategy

The primary market target audiences of Revolut are young customers (millennials), who are active users of mobile technologies and frequent travelers or frequent online shoppers. For some young customers Revolut may be a bank of the first choice. Nevertheless, for the majority of customers, and especially those more demanding customers, it is usually a secondary bank that serves them with products not available in local traditional banks. Revolut started servicing small and medium-sized enterprises (SME) business customers, but this segment remains the secondary audience.

It is worth noticing that easiness of using Revolut's services with smartphones as well as affordable prices are essential enhancers of financial inclusiveness. Nevertheless, this effect is limited only to the digitally skilled customers, who still do not use the services of traditional banks. The inclusiveness effect is the most visible in the case of investment products, which enable customers to have an easier and cheaper access to financial markets.

The analysis of Revolut's offering and opinions of the interviewed experts indicate that the company employs the 'freemium' pricing model, i.e. it offers a free of charge basic package of services while going beyond basic limits is paid or it requires service upgrading. The experts highlight that additional charges for exceeding limits are relatively low and transparent for customers. Revolut offers three types of packages: Standard (free of charge), Premium (6.99 GBP per month) and Metal (12.99 GBP packages). The comparison of the investment offerings of Revolut, other challenger banks and traditional financial institutions is presented in Table 10.1.

The majority of challenger banks offer basic banking services such as: a current account, a foreign currency account, a debit card for the account. Some of them include in their offers savings products, e.g., safes or rounding the ends of amounts. Few challenger banks offer investment products such as: ETFs or buying shares (e.g., Aion, 2020; Vivid, 2020).

Compared to other institutions providing financial services, Revolut stands out of the crowd with its unique investment offer and user-friendly interface. These characteristics result in the number of more than 10 million downloaded applications and a very high assessment by users of the Google Play shop (4.7/5) (Google Play, 2021). Revolut's customers are offered unique services, mostly connected to investing in financial markets, e.g., stock trading in a fractional way, including the US stock exchanges (New York Stock Exchange (NYSE) and National Association Securities Dealers Automated Quotations (NASDAQ)) quoting global IT companies. Customer-friendly

Table 10.1 Comparison of the Revolut's offer to other challenger banks and traditional financial institutions

Revolut	Other challenger hanks	Traditional institutions
Revolui	Other challenger banks	1 raditional institutions
Banking application Simple and intuitive (Arslanian & Fischer, 2019) No expert knowledge required for buying investment products	Simple and intuitive Opening a bank account in less than 5 minutes (Deloitte, 2020)	Technical and subject matter knowledge required The majority of traditional institutions do not offer a bank account and an investment account on one platform
Investment offer Broad investment offer in shares of more than 750 companies Possible investments from 1 USD	of challenger banks limited to savings products Some challenger banks, e.g., Aion Bank, offer ETF funds Customers may invest from 100 euro (Aion, 2020)	Broad investment offer in brokerage houses Limitations in buying shares of foreign companies No possibilities of fractional shares investing in Poland
Buying and exchanging cryptocut Possibility of buying and exchanging of many cryptocurrencies, e.g., Bitcoin, Ether, Litecoin etc. Customers can exchange between cryptocurrencies and several fiat currencies (Revolut, 2020)	Numerous challenger banks, e.g., Monzo, N26, Monese, have no option of buying and exchanging cryptocurrencies in their offers The British challenger Ziglu is the exception (Stevens, 2020)	Lack of possibility of buying and exchanging cryptocurrencies Moreover, as indicated by Marszałek (2019, p. 116): 'Lloyds Banking Group and Virgin Money apply a purchase ban of cryptocurrencies with the use of credit cards (like American JP Morgan Chase and Citigroup'
Costs of investment transactions Fees based on the subscription model Depending on the package, customers are allowed to from 3 free transactions to unlimited stock exchange transactions The cost of transactions beyond the limit is around 1 EUR (Poland – 4 PLN, the UK – 1 GBP, Eurozone countries – 1 EUR) and yearly fee 0.01% of the market value at the end of the purchase (Revolut, 2021b) Investing in Revolut's shares is free of charge and unlimited, regardless of a package (Revolut, 2021a)	Subscription model, depending on the package and individual offer of challenger banks For example, Aion Bank charges no investment fees and commissions (Aion, 2020)	making transactions, safekeeping of securities

Source: own study.

and interesting alternative investment offers should be mentioned, covering cryptocurrencies (e.g., Bitcoin) and commodities, e.g., gold. In the long term, it might be an option for Revolut to widen the scope of provided services. In the case of a typical retail customer, Revolut provides an inclusive offer for the above investment products.

Legal formula of Revolut's operations

Revolut operates across the EU on the basis of the EU passporting system enabling the provision of financial services throughout the EU on the basis of authorization granted in any EU or European Econocmic Area (EEA) state. The single passport regime is an emanation of the freedom to provide services and a key legal foundation that allows Revolut for cross-border activity and substantial reduction of regulatory and compliance costs.

Currently, customers from various Member States are served by various companies of the Revolut Group (Revolut Payments UAB, Revolut Bank UAB, Revolut Ltd., Revolut Trading Ltd.). From the legal point of view, the key service provided by the company is a payment account that holds electronic money. This legal concept is also applied in the case of the company operating under a banking license (Revolut Bank UAB). The customers of Revolut Bank have at least two parallel accounts (bank account and e-money account). The first one, a bank account, is for deposit-taking purposes. The second one is an e-money account which is used for payments as transfers to and from Revolut accounts are being made in electronic money.

Particularly noteworthy is the license of a specialized bank held by Revolut Bank UAB. The license of a specialized bank was introduced into the Lithuanian law in 2017. It is a unique concept in the EU jurisdictions. Originally designed to implement the credit union reform, currently this type of license serves as a basis for creating a more favorable regulatory environment, in which minimum capital requirements are much lower than in a traditional bank (EUR 1 million compared to EUR 5 million) and what is crucial a specialized bank license is considered as a credit institution and can benefit from the EU passporting regime¹. Therefore, it enables Revolut to have an access to markets across the EU Member States and to significantly reduce operational costs. This approach is also optimal in the context of Brexit, which is currently the biggest regulatory challenge for Revolut. The issue is transfer of the customers from the UK jurisdiction to the Lithuanian one, which was confirmed by one of the experts in interview.

Regarding investment services, customers have contractual relations with Revolut Trading Ltd., which does not hold an investment license. Revolut Trading Ltd. has the status of an Appointed Representative and a Tied Agent from the investment firm Sapia Partners LLP, which is authorized for advising, arranging and managing investments. It remains fully and unconditionally responsible for any action or omission on the part of the tied agent when acting on behalf of the investment firm. Orders are transmitted from Revolut Trading via Sepia Partners LLP to the Third Party Broker

(DriveWealth LCC registered in USA) responsible for execution. In investment services, Revolut adopted fractional shares, which allows its customers to buy less than one share for the minimum value of 1 EUR.

The company's regulatory strategy of carrying out different activities by different entities (authorized in different jurisdictions) and serving clients in different countries by different companies seems to be effective. However, from the customer's point of view, this approach may be less beneficial. A client enters a legal relationship with a foreign entity, the operations of which are based on the foreign law (British or Lithuanian). Moreover, the text of the contract is written in a foreign language (i.e. English). The place of out-of-court dispute resolution is also a foreign entity (Bank of Lithuania). One of the experts noted that customers in most cases are not aware, which entity they enter a relationship with, whether it is a bank or an electronic money institution and what is a jurisdiction of this entity. In addition, customers funds are protected by the Lithuanian bank guarantee fund, which in case of insolvency of the company of this scale might not be efficient due to its size connected with the size of the banking sector. This is confirmed by interviews with experts. One of the experts indicated that provision of crypto services (services that allow customers to buy, sell, receive or spend cryptocurrency) by Revolut creates substantial risks, due to the regulatory uncertainty and differences in approaches in specific Member States as legal frameworks of provision of those services are not harmonized in the EU. The same applies to trading of commodities.

Discussion

Digitalization and technological innovations in the financial services market made it possible not only to save resources, accelerate processes, reduce costs and reduce process irregularities but above all to build competitive advantages (Bataev et al., 2019; Gomber et al., 2018). New types of financial institutions continue to emerge and banking itself is undergoing a transformation (Galazova & Magomaeva, 2019). At the same time, new technologies and process automation open up opportunities for the development of products. Financial services become tailor-made for clients. New, mobile distribution channels not only supplement but start marginalizing traditional channels (Aldiabat et al., 2019). Mobile technologies enhance financial inclusion (Sahay et al., 2020). The following factors contribute to the changes in the way financial services: digitalization, constant access to information, increased knowledge, globalization, convenience, speed of transactions, saving of funds and the use of new information and communication technologies by customers (Schepinin & Bataev, 2019). The COVID-19 pandemic, resulting in the need for social distancing, is a new factor stimulating digital transformation of financial services, both at the side of customers and financial institutions (Sahay et al., 2020).

Traditional financial institutions watch carefully the new entrants to the market. Nevertheless, their infrastructure and the management structure

impede the implementation of innovations (Kasiewicz, 2018). This observation is confirmed by Lu (2017), who claims that new challenger banks benefit from lack of historical legacy. Challenger banks do not need branches to provide their services. The business models of challenger banks are simple, based on up-to-date solutions and IT infrastructure (Lu, 2017).

Revolut knowingly selected market niches, where customers' needs were not properly satisfied. Initially, it was currency exchange for travelers, which enabled the company to become one of the leaders of the pan-European market of financial services. Then, Revolut introduced significant innovations to both traditional and alternative investment products, offered with the use of a mobile application. Revolut was one of the first challenger banks to provide investment services consisting of stock and commodity trading. Thanks to this solution of fractional shares, investment services become more accessible to citizens with low levels of savings. What makes Revolut standing out of the crowd is the offer enabling small and non-technologically advanced investors to purchase gold and cryptocurrencies, which are inaccessible in traditional financial institutions.

The operations of challenger banks, and Revolut in particular, contribute to removing the barrier of inaccessibility to numerous financial services. So far, retail customers disposing only small amount of savings, usually young, less educated and low-income customers, had limited possibilities to diversify their investments (Goetzmann & Kumar, 2008). Their choices were confined mainly to the offer of mutual funds, which, however, were not giving the possibility to control investments, make free decisions and exercise investor rights. Fees and a long time of realization of transactions were additional barriers. The barrier of entrance to the investment market has never been so low as it is now, when customers may start buying shares from 1 USD. Thus, the offer of Revolut and other challenger banks is a significant factor in democratization of access to the investment market.

The sources of Revolut's success should be sought not only in its technological or product innovations but also in innovative legal solutions based on the EU legislation (Polasik et al., 2020). Revolut operates with the use of several companies registered in different Member States and having different licenses (electronic money institution license, banking license, investment firm license) for specific types of financial activities, such as payment services, investment activities and others. At the same time, the entity's operating activities are carried out from yet another country. The decentralized business model in legal terms is an expression of the use of the phenomenon of regulatory arbitrage (Houston et al., 2012) as an instrument to increase the efficiency of business operations and, as a result, to reduce fees for clients.

Conclusions

Revolut has been used as the case to analyze the challenger banking as a new digital form of providing financial services to retail customers in the EU Internal Market. The study has explored product innovations introduced

by the company to make the capital market and alternative investments available for small investors. The analysis has included: the mechanisms of new services, the market strategy and the Revolut's offer compared to traditional financial institutions and other challenger banks. Moreover, it has explained the legal formula enabling the operations of Revolut.

Over the past years, challenger banks around the world have introduced significant financial innovations. Their innovative approach refers not only to the business offer or a technological side of products but also to the legal layer of operations. Thus, the Revolut's investment offer is an innovation, which increases financial inclusion and brings socio-economic benefits. What is more, it becomes a real challenge for traditional players in financial markets, both banks and mutual funds. Extreme decrease in the amount of money needed to start investments and providing the investors with the rights to online voting contribute to democratization of the financial market and sets new standards, the traditional players will be forced to respond to. The fact that other challenger banks and FinTech companies follow this innovation and introduce similar investment products indicates that the financial market is under permanent transformation triggered by the innovations presented in the study. Moreover, the study shows that the EU passporting system, in connection with the optimization of jurisdiction for authorization and friendly supervision authority combined with the right choice of authorization regime (electronic money institution, specialized bank), have a significant impact on the dynamic development of the company.

Discussing the findings of the study, the limitations of the research process should be explained. First of all, the study does not analyze the changes and risks for Revolut associated with Brexit, as it takes into account the legal status as of December 31, 2020. Secondly, we are aware of inherent weaknesses of the case study methodology, which is often criticized for insufficient scientific rigor. Therefore, although we have made all the efforts to ensure quality of the study and its validity, we refrain from attempts to make generalizations based on this single case and we rather use its exploratory potential to formulate propositions to be tested in further studies (cf. Flyvbjerg, 2006). Thus, replicating this study as well as conducting a multiple case study analysis and/or a survey among the other challenger banks seems to be a natural line of future research. Thirdly, limitations in data collection processes should be mentioned. In spite of efforts to have a balanced view of the Revolut's operations by combining the perspective of external stakeholders (FinTech experts and users of Revolut's services) and the company itself, only one representative of the company participated in the interview survey.

This exploratory study contributes both to the development of management studies and business practice. From the perspective of management theory, it identifies the mechanisms of developing and implementing financial innovations considering the opportunities resulting from advancement

of ICTs, and changes in law. Regarding business practice, studying the case of Revolut may bring some observations, insights, lessons and best practices to be useful for other challenger banks. Whereas the issue of the impact of the challenger bank business model on financial inclusiveness will require further, thorough studies.

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Note

 In line with art. 33 of Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/ EC (CRDIV).

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