APSKAITOS IR FINANSŲ MOKSLAS IR STUDIJOS: PROBLEMOS IR PERSPEKTYVOS SCIENCE AND STUDIES OF ACCOUNTING AND FINANCE: PROBLEMS AND PERSPECTIVES

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P2P LENDING PLATFORM EVALUATION OF OPERATING PECULIARITIES

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Abstract

Rapidly evolving financial technologies (FinTech) are changing established, time-tested financial services delivery and competition strategies. The growing diversity of financial services is evolving entrepreneurial ecosystems, making it a challenge for all financial market participants. One of the largest Fintech markets in Lithuania is the lending market. This market acts as an alternative to traditional financial institutions' credit and distinguish by its relatively new and developing. Therefore, the research aims to evaluate the activities and peculiarities of operating lending platforms in Lithuania. The analysis uses P2P lending market development indicators, return and risk identified and analyzed in the research. The study revealed that the portfolio of consumer loans provided through operators of P2P lending platforms is growing steadily every year. AB NEO Finance maintains the same tendencies and secures a leading position in the Lithuanian P2P lending market. AB NEO Finance stands out as the only one of all P2P lending platforms, because it is listed on Lithuania's stock exchange. It covers more than half of the P2P lending market regarding the amount and number of disbursed consumer loans. Were found that the remaining loan repayment is proliferating in the P2P lending market. However, AB NEO Finance is experiencing a lower number of overdue payment days than the P2P lending market, which indicates a lower risk.

Keywords: P2P lending platform, AB NEO Finance, P2P lending market.

JEL codes: G2.

Introduction

Relevance and problems of the topic. The 21st century is characterized by rapidly evolving financial technologies (FinTech), and start-ups providing technology-based innovations are changing their well-established and time-tested financial services delivery and competition strategies. There is a hypothesis that FinTech firms may weaken traditional financial services institutions' dominant position if they do not respond appropriately to the changing environment (Li and Spigt, 2016; Shim and Shin, 2016; Williams-Grut, 2017). The increasing diversity of financial services is also driving the entire entrepreneurial ecosystem's change, making it a challenge for all financial market participants (Laeven et al., 2015; Abbasi et al., 2021). The development of financial technology is changing the reach of financial services, entrepreneurial ecosystems, and consumers' needs that financial services (Berman et al., 2020; Benetytė, 2015). These changes are a clear link between finance and technology, and it changes how financial services are presented in the world and how financial services are used daily. By EBA (2018), this revolution of FinTech is because of easy reach, broader opportunities, more innovative control, and speed of services. Due to the large numbers of the wide range of providers, there are ten and up fields of financial services that FinTech can suggest, such as lending, blockchain, regtech, insurance, etc. (CBINSIGHTS, 2020). Findexable (2020) predicting that because of FinTech industry development until 2022, almost 60 percent of GDP will be digitized. It is believable because of the growing numbers of deals and numbers of investments in the FinTech industry. The most positive field from the FinTech industry is FinTech credit, especially for economics. This new opportunity to lend and borrow through electronic platforms increases consumers' attention (Galland, 2017; Guo, 2020). According to CCAF (2020), three types of P2P lending platforms were identified in research: consumer lending, business lending, and property lending. The most trending is consumer lending because it covers 64 percent of the P2P lending market globally or, in other words, reached \$ 195.3 billion in the 2018 year. Unfortunately, this type of lending has an evaluation as a risky system (Pan and Zhou, 2019; Wu et al., 2021). According to Claessens et al. (2018), FinTech credit problems could be related to regulations that pursue appropriate consumers and investors' protection. Already was identified more than 800 bankruptcy of P2P lending platforms because of cheating and mismanagement (Guo, 2020). However, Claessens et al. (2018), P2P lending platforms already use risk management types: risk allocation between different investors, artificial intelligence rating, guarantee fund, trade on the secondary market, etc. Nevertheless, behind risk, P2P lending platforms have become increasingly attractive for lenders and borrowers in the world (CCAF, 2020; CBINSIGHTS, 2020). Whereas the FinTech industry is expanding globally and FinTech credit sectors' P2P lending platforms already cover some risks, it is necessary to know how it affects the Lithuanian market, and which the P2P lending platform could be the best choice for investment. For this reason, the research object is P2P lending platforms, and the research aims to evaluate the activities and peculiarities of operating lending platforms in Lithuania. To achieve this paper's aim, it is necessary to reveal the peculiarities of financial services transformation in Fintech's development and the state's importance of P2P lending platforms in the financial sector of Lithuania and to accomplish an evaluation by comparison of three years.

Transformation of Financial Services in the Context of FinTech Development

Financial technology has become an integral part of financial services. It has become a term that describes the innovative use of financial technology (FinTech) to design and implement financial products and services effectively. According to Gai et al. (2018), the introduction of such innovative financial services promotes technological development, growth of business and customer innovation expectations, and perceived cost-saving opportunities. Kuzmina-Merlino and Saksonova (2018) argue that it is precisely the rapid growth of FinTech that has changed the banking business environment and increased the demand for more innovative solutions. Although banks and other financial services companies have always been active in introducing new technologies, today, FinTech companies use the internet, cloud computing, and big data to develop innovative financial solutions. That transforms into a new business model or product that changes the delivery, use, and availability of services (Lee and Shin, 2018; Beaird, 2017). However, Zhang (2019) observes that while FinTech increases productivity and increases competition by enhancing financial development and efficiency, it can pose a threat to both consumers and investors and financial stability. Therefore, promoting innovation in markets must ensure that new technologies do not become the basis for fraud, money laundering, and terrorist profiteering (Lagarde, 2017). However, FinTech companies' creation is driven by both a favorable regulatory environment and technology developers who set new standards for financial services and help provide innovative financial services much faster than traditional financial institutions, making FinTech companies a potential threat to traditional financial companies. According to Beaird (2017), by 2025. Start-ups of FinTech companies will reduce traditional banks' income from 10 to 40 percent of these do not respond to ongoing market changes. Therefore, increasing competition in the market encourages traditional financial institutions to take appropriate action to maintain customer demand and ensure profitability by increasing the degree of automation and digitization of financial transactions. Customers' changing socioeconomic needs show that consumers are starting to seek as many mobile services as possible. The financial services provided by FinTech companies are closely related to the areas of traditional services offered by the financial sector: lending, payment, insurance, and other services widely used in the financial industry. There are also new areas of financial services related to regtech's regulatory network or the ability to perform financial services without third-party approval with blockchain technology. Ten areas of financial services covering FinTech are distinguished (Figure 1).

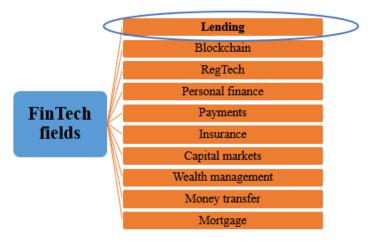
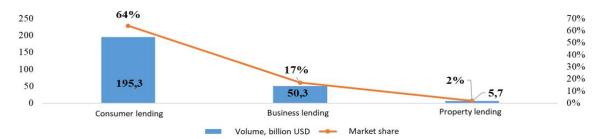


Figure 1. FinTech Areas and Their Characteristics

(Source: compiled by the authors according to CBINSIGHTS (2020))

All the distinguished areas of FinTech lead to the development of new business models, reorganization of existing ones, and growing competition in the financial sector. Upcoming innovations with Fintech are changing the financial services infrastructure, reducing customer service costs and streamlining service, strengthening the business ecosystem, fostering start-ups, and increasing businesses' sustainability and efficiency (Berman et al., 2020; Abbasi et al., 2021). It is projected that due to the FinTech industry's development by 2022, 60 percent of the world's GDP will be digitized (Findexable, 2020). These trends will likely continue to be driven by the growing value of FinTech's investments and the growing number of transactions in the global context. However, not all countries in the world have the same development level of the FinTech industry due to the different economic development of countries and technological opportunities or regulatory conditions. However, it is possible to single out the Lithuanian market, which is growing in FinTech. It can state that Lithuania promotes the development of FinTech and contributes to the growth indicators in the global FinTech industry (Siaulyte, 2019; Lakstutiene et al., 2016). In this context of the development of financial technologies, the Bank of Lithuania occupies an important place, attracting investors and investments, creating favorable conditions for FinTech companies' establishment. The favorable regulatory environment, easy market access, infrastructure, government support, competitive prices, the supply of talents, and opportunities to implement innovations conditioned that the Lithuanian market located 55 FinTech companies in 2014. Due to such factors as proper world-class information and communication technology infrastructures, convenient access to the European market, low investment costs, and relatively cheap labor force, Lithuania is becoming an attractive country to become a FinTech center in Europe. That shows by the growing number of FinTech companies every year, which in 2020 reached 250 (Invest Lithuania, 2020; Rockit, 2020). The Bank of Lithuania¹ seeks to create an attractive environment for developing this segment in Lithuania and anticipates that as its strategic direction. Various programs and FinTech centers developed by the Bank of Lithuania lead the fourth position in FinTech worldwide. This market's leading roles are attributed to the following three FinTech providers: NEO finance, Coingate, and Stockinvest us (Findexable, 2020). All these aspects open up opportunities for a wider choice of financial services and increase the diversity of financial services and the range of service providers in the market, leading to competition in the market.

One of the largest FinTech markets in Lithuania is the lending market. This market acts as an alternative to credit provided by traditional financial institutions and distinguishes it by facilitating access to this financial service. The basis of operation is electronic platforms that connect borrowers with lenders (investors) t. y. allows you to lend and borrow money without a financial institution (Galland, 2017; Guo, 2020). Such electronic platforms are known as peer-to-peer (P2P) platforms or market borrowing. According to the CCAF (2020) study, three models of mutual lending platforms have been identified: Consumer lending, Business lending, property lending (Figure 2).



Figure~2.~Volume~(Billion~and~%)~of~Peer-to-Peer~Lending~(P2P)~Business~Models~in~2018,~Worldwide

(Source: compiled by the authors according to CCAF (2020))

Such electronic platforms often have different designs and functions, but the credit platform acts as an intermediary for investors, servicing the loan for current fees in all business models. The platform manages records, collects repayments from borrowers, distributes cash flows to investors, and handles the recovery of defaults. In terms of volume, P2P consumer credit is \$ 195.3 billion, or 64 percent in the global alternative lending market in 2018. It is the largest alternative financing model of the sixteen available online financing alternatives. As a result, it can conclude that the CCAF (2020) would evaluate the most popular peer-to-peer lending platforms with a business model of alternative financing business models – the consumer loan.

Peer-to-peer lending platform operators compete with traditional financial services institutions providing credit services. Claessens et al. (2018) argue that the FinTech lending market improves credit access for businesses and individuals while providing additional opportunities for investors. FinTech's systems are systematically redesigning, making them much more flexible in technology and innovative solutions and more comfortable adapting to changing consumer needs. Utilizing technology and high connectivity data, the peer-to-peer lending platform has been the fastest and cheapest to connect borrowers with investors than any traditional financial institution (Galland, 2017). In this case, FinTech's credit environment meets the needs of many modern consumers unrelated to businessto-business models on an online platform that provides low-cost, standardized loan application solutions and facilitates direct borrower and investor matching and online transactions. Researchers (Guo, 2020; Pan and Zhou, 2019; Wu et al., 2021) point out that electronic platforms, which commercial banks never run, facilitate lending activities because they are evaluated multi-data set rather than so done by other lenders, including non-traditional sources such as social media, digital footprints, etc. (Claessens et al., 2018). Peer-to-peer lending platforms address the shortcomings of traditional financial institutions and promote mutually beneficial links between borrowers and investors (Guo, 2020). This means that borrowers can be provided with better financing conditions, while investors are expected to have higher interest rates. This makes the P2P lending platform attractive to both the borrower and the investor. Especially when faced with a combination of low-interest by a bank (Klein, 2015). Thus, the P2P lending platform becomes a new source of fixed income for investors and, compared to equities, has less volatility and offers higher returns (Galland, 2017). Nevertheless, it is possible the risk of losing funds in the absence of a peer-to-peer lending platform assurance that the investor, rather than the platform operator, immediately assumes the risk when the transaction is executed (Claessens et al., 2018). It is also important to note that compared to the traditional credit assessment of bank borrowers, P2P lending to online creditors is not mature, and P2P lending platforms do not have a recognized assessment method (Wu et al., 2021). In most cases, investors cannot liquidate their investments before their expiration date. Though, if an investor needs to withdraw money ahead of time, they can sell it in the P2P lending platform operator's secondary market, but the investment can be sold both profitably and at a loss.

In summary, the research emphasizes the FinTech market's development, the increase in funding, and the competition of traditional financial institutions with FinTech companies. The rapid development prospects of the FinTech credit sector singled out, where the prominent uniqueness of this sector is the P2P lending platforms, where consumer loans play the largest share.

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¹ Bank of Lithuania. 2020. Vartojimo kredito rinkos ketvirčių statistika. Available at https://www.lb.lt/lt/vkd-veiklos-rodikliai.

Methodology

The study analyzes one of the latest opened markets of the FinTech Industry in Lithuania - the consumer credit market of P2P lending platforms (P2P lending market). This market occupies a small but significant part of FinTech Industries in Lithuania - Internet investment and peer-to-peer lending consists of 8 percent services among all 210 FinTech companies (Invest Lithuania, 2020; Rockit, 2020). Existing P2P lending platforms according to Rockit (2020) FinTech map distinguish six: UAB SAVY, UAB Lenndy, UAB FinBee, UAB Profitus, UAB Nordstreet, and AB NEO Finance, which hold the position of FinTech industry leaders in Lithuania according to Findaxable companies FinTech index in 2020 (Findexable, 2020), but it is also a leader in the Lithuanian P2P market consumer credit market. Therefore, AB NEO Finance, which administers the Loan Club Platform, and AB NEO Finance trademarks intended for foreign investors wishing to invest in the Lithuanian population's consumer loans, are selected for the research. AB NEO Finance activities are supervising by the Bank of Lithuania. The company operates based on a Bank of Lithuania license for electronic money institutions, permitting operations in the P2P lending and consumer credit markets throughout the European Union, and has a subdivision in the Netherlands. AB NEO Finance also provides electronic payment services for online stores under the Neopay brand. The company is included in the public list of consumer credit providers and payment initiation service providers, committed to a list of good practice principles and is the first platform to be included in P2P lending platform operators' general list and listed on the Nasdaq Baltic First North Stock Exchange.

The research uses 2017-2019 data from the Bank of Lithuania database and AB NEO Finance financial statements. Research requires researchers (Guo, 2020; Klein, 2015; Berman et al., 2020; Claessens et al., 2018; Gai et al., 2018; Lee and Shin, 2018; Beaird, 2017; Zhang, 2019; Lagarde, 2017; Galland, 2017; Li and Spigt, 2016; Williams-Grut, 2017; Laeven et.al., 2015; Lakstutiene at al., 2016; Abbasi et al., 2021) analyses of P2P lending market development, repayment and risk indicators:

- 1) AB NEO Finance and P2P lending market lenders number and AB NEO Finance market share;
- 2) The number of consumer loans of AB NEO Finance and P2P market and the percentage of NEO Finance in the market;
 - 3) AB NEO Finance and P2P lending market average duration of granting credit in months;
 - 4) AB NEO Finance and P2P lending market average consumer credit interest rate, percent;
- 5) Number of AB NEO Finance and P2P lending market consumer credit recipients and AB NEO Finance market share in the market;
- 6) In AB NEO Finance and P2P lending market, the remaining number of consumer loans for repay and AB NEO Finance market share;
 - 7) AB NEO Finance and P2P lending market average annual rate of consumer credit prices, percent;
 - 8) AB NEO Finance amount of overdue consumer loans in market share.

Results

In the middle of 2016, AB NEO Finance set a goal within three years from June 2016 to occupy at least 50 percent consumer loan market, assessing the volume of issues among the operators of P2P lending platforms operating in Lithuania. Therefore, the aim is to evaluate the company's development by determining the changes in lenders in the P2P lending market in Lithuania in the period 2017-2019 (Figure 3).

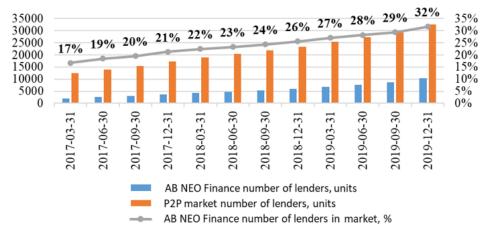


Figure 3. Changes in the Number of Lenders at the End of the Analyzed Periods

(Source: compiled by authors)

The number of lenders is consistently growing both in AB NEO Finance and in the P2P lending market. Although NEO Finance's market share increased about two times during the analyzed period, more and more investors from European countries discovered the opportunity to invest in Lithuania loans through the AB NEO Finance P2P platform. Registrations of foreign investors are mostly received from Latvia, Poland, the Netherlands, Spain, Portugal, and Germany.

It is important to note that AB NEO Finance operates as an operator of a mutual lending platform and a consumer credit provider. This means that, in some cases, the company itself lends funds to consumer credit recipients who apply for consumer credit through the platform. To avoid conflicts of interest and ensure lenders' rights, the company lends its funds on terms disclosed to investors. Also, it was noticed that investors prefer to invest in consumer credit. The portfolio of consumer loans provided through P2P lending platforms is growing steadily every year. Analyzing the amounts of loans disbursed every quarter, notice that number of consumer loans disbursed by NEO Finance in the entire market of lending platform operators during the whole analyzed period ranged from 46 to 59 percent of all consumer credit markets paid (Figure 4). Moreover, all loans were disbursed with the average duration of credit exceeding the market maximum of 37 months and reached averaging 40 months.

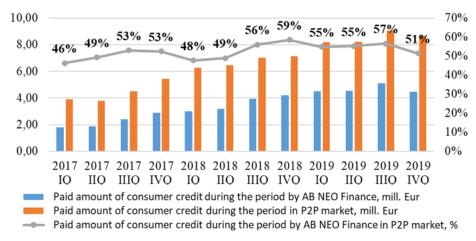


Figure 4. Amount of Consumer Loans Disbursed in AB NEO Finance and P2P Market (Source: compiled by authors)

It is necessary to know that AB NEO Finance, by investing in consumers' credit, how consumer credit lender is pursuing two goals: earn a satisfactory investment return for shareholders and ensure a liquid loan exchange for investors and borrowers. The annual interest rates applied by mutual lending platforms are often set by investors who compete with each other by offering the lowest possible interest rates. However, it was found that the market of mutual lending platform operators provides a higher return than AB NEO Finance (16.15-19.41 percent), and AB NEO Finance from 14.80 to 16.05 percent, which leads to an increasing volume of investors in the market in the period of 2017-2018. Besides, investors are encouraged to manage lending risk by diversifying, i.e., when many lenders invest in one loan, reducing the potential loss if the borrower becomes insolvent. Also, AB NEO Finance still offers the Guarantee Fund service, which allows investors to reduce their investment risk. If the loan is not repaid, the company guarantees the investor a return, bailing out all his property. The company forms provisions for indemnity guarantees to cover liabilities under indemnity agreements.

P2P lending platforms are also attractive to borrowers because the P2P lending platform's technological capabilities have made it possible to obtain consumer credit simply and conveniently directly from investors through the mutual lending operator's platform. The number of borrowers was found to grow steadily over the analyzed period (Figure 5).

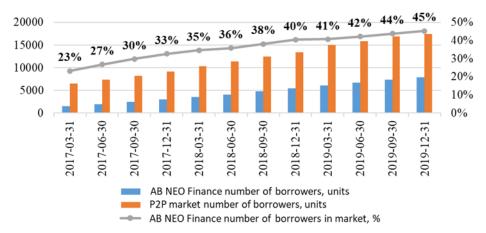


Figure 5. The Number of Consumer Credit Recipients of AB NEO Finance and P2P Market, and the Percentage Share of AB NEO Finance in the Market in 2017-2019

(Source: compiled by authors)

The research found that the number of borrowers' rapid growth trends was determined by the faster-growing number of borrowers of AB NEO Finance than in the market of P2P lending platform operators in general, where the growth of borrowers is almost three times lower. This was due to a significantly lower average annual rate of the total

price of consumer loans, which is lower in AB NEO Finance than in the P2P lending market. Furthermore, it is essential to note that it is necessary to calculate an average annual rate for consumer credit's total cost. This allows comparing different offers when lenders apply different pricing, such as a lower annual interest rate but higher contract administration fees or other conditions. In the market of P2P lending platform operators and AB NEO Finance, the yearly rate of consumer credit prices is decreasing. Nevertheless, the average total cost of consumer loans of AB NEO Finance fluctuates around 24-25 percent, and the average annual rate of total consumer price was 27 percent min and 34 percent max.

As P2P lending platform operators' consumer credit market continues to grow, the remaining amount of consumer credit repayments increases accordingly (Figure 6).

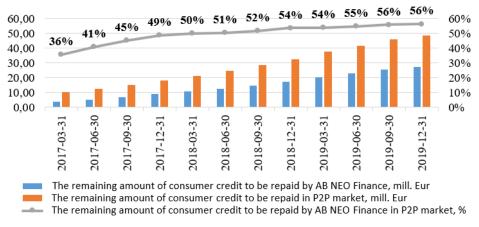


Figure 6. The Remaining Amount of Consumer Loans of AB NEO Finance and P2P Market and Market Share of AB NEO Finance in 2017-2019

(Source: compiled by authors)

The research found that AB NEO Finance occupies a leading position in the market. Half of the amount of disbursed consumer loans directly correlates with AB NEO Finance's disbursed consumer loans indicator in the market varies from 42 to 57 percent size. To manage the risks related to the outstanding amounts of consumer loans, AB NEO Finance pays attention to the repayment of loans and makes many efforts to collect debts. In the case of AB NEO Finance, the consumer credit recipient who is late in paying at least one installment shall be informed by e-mail, letters, and SMS messages. After 32 days of delay, the borrower's debt is registering in UAB Creditinfo Lietuva, and on the 41st day of uncertainty, the loan collection transfer to the debt collection company. However, the overdue amounts of consumer credit in the market when payment has been outstanding for more than 90 consecutive days reaches the lower limit (Figure 7).

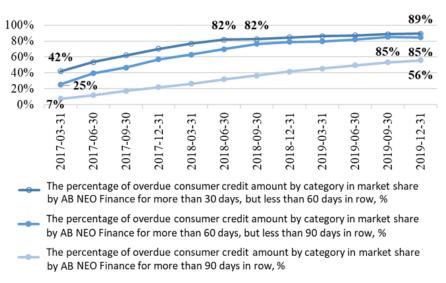


Figure 7. The Percentage of Overdue Consumer Credit Amount of AB NEO Finance by Days Categories at the End of the Analyzed Periods

(Source: compiled by authors)

Assessing the market share of AB NEO Finance overdue consumer loans by categories at the end of the analyzed periods, it was found that the company stands out in the market context with the smallest overdue payment days in the case of borrowers. UAB Legal Balance provides recovery services on a contractual basis to AB NEO Finance. AB NEO Finance announces that it is satisfied with the cooperation results and hopes that this cooperation will significantly exceed non-performing consumer loans' recovery rates. AB NEO Finance, taking into account the growth rates of termination of

credit agreements, offers a Buyback service, the essence of which is to pay compensation to the investor, immediately after the termination of the contract with the borrower, without waiting for recovery, to pay out 50-80 percent from the residual value of the outstanding investment. There is also a secondary market through which investors can buy and sell investments. That allows for investors to manage their risk or sell investments that do not meet expectations. Moreover, it provides liquidity when the investor seeks to cash out and note that no complaints were filed against AB NEO Finance during the analyzed period. Besides, AB NEO Finance in October 2019 started the calculation of the credit rating by using artificial intelligence, making the company stand out in the market and shows technological progress.

Economic conditions can powerfully reshape the P2P lending platform operators' market, but AB NEO Finance always purposefully assesses that it may face certain risks. AB NEO Finance exclusive risk areas: operational, virtual data loss, physical danger, liquidity. AB NEO Finance closely monitors these risks and the risk of bankruptcy, prepares a business continuity plan, and identifies a free management scenario in case of an economic downturn. This means that AB NEO Finance can assess its business opportunities at the macroeconomic level. On March 16 in 2020, due to COVID-19, the quarantine introduced in Lithuania distorted the entire P2P lending platform operators' total market because was established many restrictions and some businesses forced to suspend their activities. AB NEO Finance agreed that this pandemic could be damaging for investors. As a result, the lower interest rate cap has been raised includes all ratings, and the maximum loan amounts have been reduced for one loan and the borrower. However, the secondary market's turnover has increased even more due to investors' willingness to cash out and seeking more significant investment opportunities during the recession period.

In the mutual lending platform, loans are not covered by deposit insurance or collateral, nor is there a guarantee that the borrower will adequately meet its financial obligations. Furthermore, AB NEO Finance's sales revenue is divided into three categories: income from P2P lending activities, consumer credit provision, and payment activity (Figure 8).

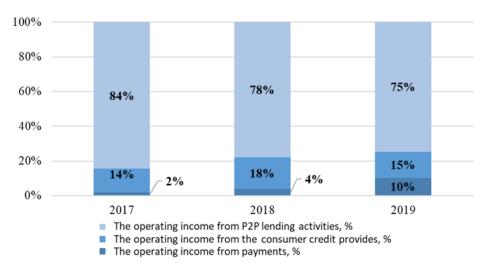


Figure 8. The Percentages of AB NEO Finance Sales Revenue by Categories in 2017-2019

(Source: compiled by authors)

It should be noted that a significant part of the sales revenue is related to peer-to-peer (P2P) lending activities. The largest group of operating income – P2P lending activity income is distributed over the entire loan period and is obtained only by the actual repayment of the monthly installment to the consumer borrower. AB NEO Finance chose this method of income collection due to the Law on Consumer Credit requirement, and that would be not only interest in intermediation in granting a loan but also in repaying the loan itself and its accrued interest to investors.

Conclusions

The theoretical aspects of the development of the financial technology (FinTech) sector were shown that the innovative financial services provided by FinTech are changing the needs of consumers and creating a competitive environment in the financial industry. The development of the FinTech credit highlighted the FinTech industry growth. The uniqueness of this sector is noted due to the operation of P2P lending platforms, and in this field, consumer loans cover the largest share.

The study revealed that the portfolio of consumer loans provided through P2P lending platforms' operators is growing steadily every year. AB NEO Finance maintains the same tendencies and secures a leading position in the Lithuanian P2P lending market. AB NEO Finance stands out as the only one of all P2P lending platforms in Lithuania, because it is listed on the stock exchange. It covers more than half of the P2P lending market regarding the amount and number of disbursed consumer loans. Compared to the P2P lending market in Lithuania has a longer average credit term, which is distinguished by a lower average annual rate of the total consumer credit price and a low consumer credit interest rate. Were found that the remaining loan repayment is proliferating in the P2P lending market. However, AB NEO Finance is experiencing a lower number of overdue payment days than the P2P lending market, which indicates a lower risk. It is

also essential that AB NEO Finance the significant part of sales revenue was related to peer-to-peer (P2P) lending in 2017-2019. It is determined that the income of P2P lending activities is accumulated in future periods. Consequently, it has a significant impact on the company's financial performance evaluation.

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