

GLOBAL PEER-TO-PEER LENDING MARKET

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Neslihan Turguttopbas¹, Ihsan Erdem Kayral²

¹OSTIM Technical University, International Trade and Finance Department, Ankara, Turkiye.

neslihan.turguttopbas@ostimteknik.edu.tr, ORCID: 0000-0002-5491-8074

²OSTIM Technical University, International Trade and Finance Department, Ankara, Turkiye.

ihsanerdem.kayral@ostimteknik.edu.tr, ORCID: 0000-0002-8335-8619

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ABSTRACT

Purpose- The purpose of this study is to elaborate the current impressive standing of the market in order to pave the way for future academic work.

Methodology- The study employs primary data analysis of the P2P lending market. Also a detailed update literature analysis is realized.

Findings- The analysis reveals that the financial conditions prevailing in global markets also contributed to the growth of P2P lending sector in the past. The low interest rate environment since the global financial crisis of 2007-2008 made P2P lending as a better alternative for small investors looking for higher yields.

Conclusion- It may be concluded that the P2P market lending will be a fruitful area of financial research in the future especially in the field of the credit assessment procedures, default tendency analysis and regulatory strutrings of the regional markets.

Keywords: Fintech, crowd lending, P2P, Peer-to-peer lending, platforms

JEL Codes: G01, G15

1. INTRODUCTION

Financial technology, in short and mostly used saying Fintech, basically means the use of technology for providing financial service. The evolution through Fintech 2.0 as Traditional Digital Financial Services was begun in 1967 by the launching of ATMs, the financial services became digital rather than analogue and those developments pave the way for the financial globalization. The emergence of the Internet and its spread to all over the world since the beginning of 1995 created the second corner stone of Fintech. By late 1990s, all the transactions between financial institutions, financial market participants and customers around the world have been nearly fully digitalized. Beginning from year 2000, the regulatory frameworks have begun to be developed in order to deal with the risks of cross-border financial interconnections achieved by the use of information technology. During Fintech 2.0 period which endured till 2008, Fintech was characterized by traditional regulated financial service provided by the use of information technology and internet capabilities. After 2008, a new era commenced which is represented as Fintech 3.0 whereby start-ups and established technology companies have begun to deliver financial products and services directly to businesses and the general public (Arner et.al, 2016). This Fintech era is known as "Crowd lending" or "FinTech Credit" whereby credit activities are realized online through platforms that match borrowers with lenders (investors). Those kinds of lending activities are named Peer to Peer Lending (P2P).

Under the framework of Fintech 3.0, the first platform of P2P lending Zopa was established in the UK in 2005, and Prosper was established in United States in 2006. The global P2P lending market size reached to the amount of US\$ 83.79 billion in 2021 and it is expected to hit over US\$ 705.81 billion by 2030 with a registered CAGR of 26.7%. In fact, this development has been attributed to the financial burden of traditional lending on customers because of the operational costs of the banks. Those costs consist of personnel costs, other operating expenses and overheads known as 'OPEX' (leases, advertising, water, electricity and gas supplies, IT, among other costs) and depreciation provisions (associated with the impairment or depreciation of physical assets and the amortization of CAPEX). The cost to income ratio (C/I ratio) is an indicator of operating expenses of a bank and it is assumed that the lower the C/I ratio, the more profitable the bank operates. As of the end of 2020, cost to income ratio for European banks is on average 63,3% and it lies in the range of 44%-77% by different countries in the region¹. As of 2021, it is 62.73% in US2. As P2P lending operations are realized via internet, it requires neither infrastructure such as

¹ <https://www.statista.com/statistics/995174/cost-to-income-ratios-for-banks-in-europe/>

² <https://tradingeconomics.com/united-states/bank-cost-to-income-ratio-percent-wb-data.html>

buildings, branches nor workforce unlike banks which keep the operational costs at minimum. In this framework, on the borrower side, P2P platforms do not charge for those costs, so the lending terms are relatively cheaper. On the investor side, the lack of operational costs enables the platforms to transfer the higher proportion of interest applied to the borrowers directly to the lenders without offsetting for the operational expenses. Consequently, the cost to borrowers is relatively lower and the return to investors is relatively higher than the traditional bank saving account deposit (Turguttopbas, 2022).

Despite this impressive increase in market size, the related academic literature seems not adequate to provide detailed insight about the market developments. However, many of the professional research centers have analyzed the attributes of this market dispersed globally. In this framework, the purpose of this study is to elaborate the current impressive standing of the market in order to pave the way for future academic work.

P2P Lending Process and Models - The P2P platforms intermediate between lenders and borrowers via their websites, bypassing the financial institutions, especially banks while benefiting from fees on successful transactions (Bachmann et al. 2011). This structure is very similar to other specific purpose internet platforms that operate to match the buyers and sellers of homogenous or heterogeneous goods and services. Any lender can make an investment, even the minimum investment amounts are very low, enabling everyone to be a lender. Depending on the peculiarities of each platform, the lenders may have the opportunity to select amongst the borrower alternatives. Generally, there does not exist a pool of funds approach as it is in the banking business. On the borrower side, there exist mainly two types of borrowers; the individuals who are in need of funding for personal use and businesses, generally Small and Medium sized enterprises (SME) that have trouble to access to bank lending opportunities. In relation with the management of funds, there exist two different approaches of operations; as it is applied in US the platform gives a security to the investor in the amount and with a maturity as demanded by the investor, the proceedings are used to provide funds to the borrowers. Second approach is originated in China, under current regulation, the brokerage type contract is issued by the platform and the parties and the funds provided by the investor are kept in bank accounts that serve as custody (Turguttopbas, 2022).

2. LITERATURE REVIEW

Bascha and friends (2021) realized a detailed analysis of limited academic literature on P2P lending issues. They reviewed the literature of online peer-to-peer (P2P) lending from 2008 until 2020 by using a methodological classification. They categorized the existing literature under three headings which are financial, demographic and social determinants. New studies other than they reported will be covered hereby.

Until recently, the great majority of the studies have been mainly focused on the borrower and loan characteristics especially by using the data of existing platforms. Katsamakos and Sánchez-Cartas (2022) find that large platforms help increase diversity and lead to a more evenly distributed power among peers and they concluded that digital platforms increase financial inclusion, helping to foster investment and achieve a more egalitarian allocation of resources. Wang et al. (2021) proved that P2P loans are unsecured personal loans, so credit rating of loans is vital in order to control default risk and improve profit for lenders and platforms as well. Tang and friends (2022) analyzed the financial risk of a leading Chinese online Peer-to-Peer (P2P) lending platform (i.e., Renrendai platform). As the result of Probit model, they reported that 1% increase in the percentage of high-risk investors in a loan, the likelihood of loan default would increase by 0.79% and the loan's interest rate would increase by 4% Yeo and Yun (2020). P2P stipulated that lending platforms operate only in the low-credit market segment and banks operate in both low- and high-credit segments. For the segmented market case compared with the benchmark one, they found that, while banks' insolvency risk increases, their illiquidity risk decreases such that their overall risk also decreases. They also proposed that sustainable P2P lending requires an appropriate differentiation of roles between banks and P2P lending platforms

Few studies have investigated the determinants of default risks of P2P loans from the perspective of lenders. Chen and friends (2021) addressed the information asymmetry involved in P2P lending as the lenders only determine whether or not to fund the loan by the information provided by the borrowers. By using a dataset from Lending Club, they proposed a scheme that effectively raise the prediction accuracy for default risk. Xu and friends (2021) used 54,477 observations and 28 features (including credit score, borrower certification level and whether the borrower has a car) and applied 4 models on the dataset, namely, the gradient boosting model (GBM), NN, extreme gradient boosting tree (XGBT) and random forest (RF) models. They reported that the establishment of an effective scoring mechanism for evaluating borrower credit can effectively help to identify the defaulter in P2P lending. They used these four models to analyze the specific default further influencing factors of randomly selected individuals and found that individuals who are willing to provide personal information (unverified) tend to have a greater probability of default. In contrast, real asset information can significantly reduce the probability of default, and the amount of borrowing will affect the probability of default in P2P lending.

Caglayan and friends (2020) examined the presence of mispricing on Bondora, a leading European peer-to-peer lending platform, over the 2016–2019 period. They reported that asset mispricing exists in peer to peer loan secondary markets sourced by investor disagreement and inattention. It is also determined that the sellers re-price their assets after learning buyers' beliefs about the value of the assets. From a broader perspective, Cumming and Hornuf (2020) used a data by the platform Zencap and which includes 414 SME marketplace loans and 2,196 lenders. The reported strong support for the importance of simple platform ratings in influencing investor behavior, while the effect of more detailed financial information is less pronounced, controlling for relevant variables. They indicated that higher interest rates appear more profitable to investors without any serious concern about non-repayment.

Chen, Q. and friends (2020) used a large sample of loan application data over a five-year period from a Chinese P2P lending platform Renrendai, and found strong evidence that both prior successes and prior failures can motivate borrowers to take subsequent borrowing behaviors again. As contrary to organizational learning approach that proposes that people learn more effectively in failure than in success,

they found only successes can lead to desirable success whereas failures can't, which indicates that borrowers with failure experience are willing to repeat borrowing but unable to learn from their failures. Chen, S. and friends (2020) examined the effects of the demographic characteristics and behaviors on the P2P related decisions of the borrowers by using the data of the Renrendai online platform from 2013 to 2015. They reported that the P2P market correctly uses the education level of borrowers (but not age, gender, and marital status) to evaluate their creditworthiness and anticipated loan performance. Additionally, they determined that younger female borrowers are less likely to be funded, even though they have a lower probability of default and also some borrowers may use more positive emotional appeals to persuade lenders to extend funding; however, lenders respond adversely to such appeals. Chen S. (2020) analyzed daily data of 749 active online P2P lending platforms in Chinese market to explore the key factors affecting the net cash inflow rate of the platform. They reported that there exists a positive U-shaped relationship between the platform duration and its net cash inflow rate which proves the role of reputation in the long-term development of P2P lending platforms. In addition, they demonstrated that both capital and operational structure design of the platform (e.g. shareholders background, credit assignment, trusteeship and guarantee) have a significant impact on the platform's net cash inflow rate.

Hang and friends (2020) proposed a Fuzzy Cognitive Map (FCM) that is used to establish a credit risk assessment model for the P2P network lending platform. They used Lu Jinfu to evaluate its credit risk and selects two other platforms to rank its credit risk and the results show that the fuzzy cognitive map considers the mutual influence and feedback between the indicators. They concluded with the advantage and effectiveness the proposed method.

3. DATA AND METHODOLOGY

Table-1 shows the developments in the P2P lending market in the period 2013-2018. It should be noted that as the P2P platforms generally operate in the country they established, the collective global market volume data is not available. The professional reports and the studies of some specific institutions perform their own analysis. The data in the Table 1 is reported by Cambridge Centre for Alternative Finance.

On November 27, 2020, the China Banking and Insurance Regulatory Commission (CBIRC) announced that the number of P2P platforms had fallen to zero.

Table 1: Total Amount of P2P Lending (million USD)

	2013	2014	2015	2016	2017	2018
China	5.520	23.820	97.580	201.310	327.800	207.590
USA	3.176	8.742	21.282	23.420	17.340	27.420
UK	751	2.135	3.667	4.810	6.005	6.359
Japan	79	108	326	171	236	873
Germany	48	116	205	227	448	813
France	57	227	181	277	431	494
Australia	2	16	70	165	365	321
New Zealand		14	245	178	242	222
Total	9.633	35.178	123.556	230.558	352.867	244.092
Rate of Growth		265%	251%	87%	53%	-31%

Sources: Cambridge Centre for Alternative Finance.

Although a classical P2P lending platform serves as only an information intermediary that provides information about borrowers without taking liability for borrower default, by time especially after 2012, the role of P2P platforms in China started to change as the competition among platforms became increasingly intense. They began to promise to repay the principal to lenders even if borrowers defaulted. Although each professional center different but comparable numbers global Peer to Peer (P2P) Lending Market: is valued at USD 83.8 Billion in 2021 and is expected to reach USD 705 Billion by 2030 with a CAGR of 27.4% over the forecast period. The Figure 1 stipulates the forecasted market development during 2021-2030 period.

Figure 1: Global P2P Lending Market Size (2021-2030)

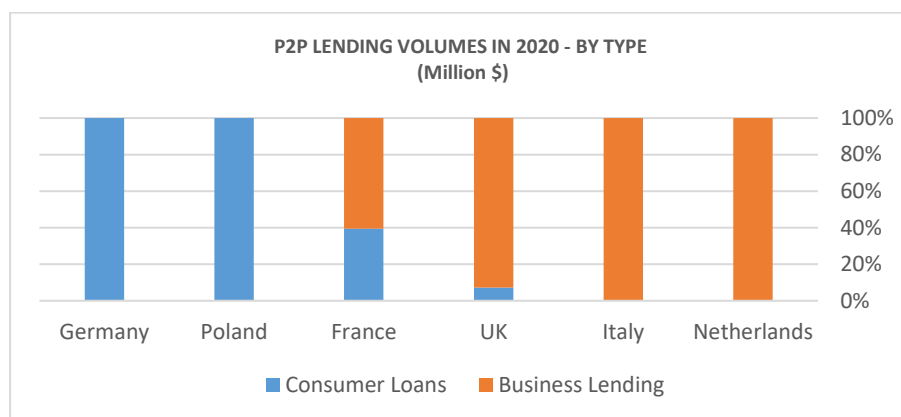


The forecasted growth of the P2P market has attributed to many characteristics of such lending as well as the changing patterns of funding needs of the individuals and businesses. First of all, the application and approval of funding takes place through online applications or website and it takes shorter time to conclude as compared to bank borrowing. Additionally, P2P lending services which are accepted to be unsecured form of financial service are quite inexpensive in nature. The operating fees of P2P lending platforms are quite less as compared to traditional financial services.

P2P Lending by Type - It is a fact that P2P market is immature and dominated by retail investors with no specific qualification to price consumer (personal) loans. The asymmetry of information is potentially larger than in traditional lending schemes, as verified information on the borrower is scarce and personal interaction impossible. P2P loans started out as personal unsecured loans and they may be used for any reason such as debt consolidation, a new car, home improvements, or starting a business. In the last decades, the changing consumption patterns of individuals has resulted with small and medium sized funding needs for individuals for purchasing especially IT equipment such as mobile phones, laptops etc.

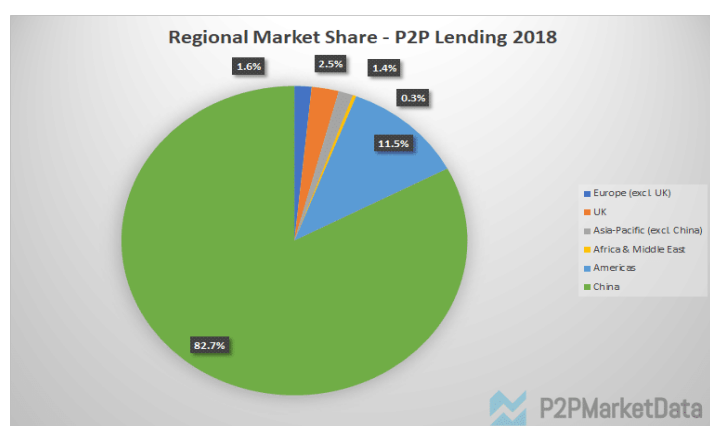
Germany leads in consumer lending among other European countries referring to the conservatism of the banking sector for such loans. A similar situation is observed in France, where loan approval can take about a month. Another reason for the steady growth in the popularity of the P2P lending is online access to finance. In Germany, the Internet penetration reaches 96%, which allows the majority of the population to use online services and significantly save time. The UK is the leader in business lending. The priority here is still the speed of service provision, reduced requirements and carrying out processes online. This is important, since the main clients of P2P lending are small and medium-sized businesses that develop innovative projects and new products. Such processes require significant funding and implementation in a short time³.

Figure 2: P2P Lending Volumes in European Countries in 2021



P2P Lending by Region - Despite the massive drop in 2018 caused by deterioration in financial position of P2P market, China maintains its dominant position globally with a market share of 82.7%⁴.

Figure 3: P2P Lending Market by Region

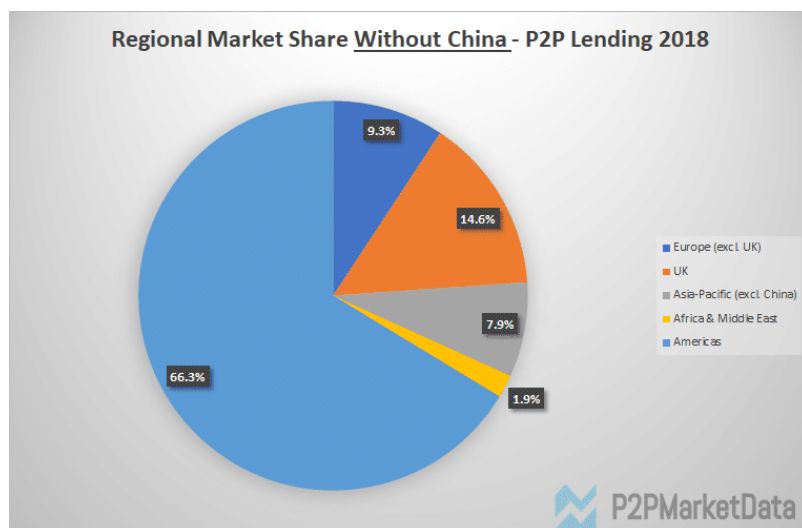


³ P2P loans increase competition with traditional banking - Business Money (business-money.com)

⁴ As the Cambridge Center for Alternative Finance (CCAF) collects data by using surveys, there is a time lag in the collection and publication of data. Although 2018 numbers are given the report was published in April 2020,.

Since 2015, China has tried to regulate the P2P lending market by establishing an innovative central-local co-regulatory regime. Nevertheless, it seems that the central-local cooperative regulation has failed to achieve its purpose considering the dramatic fall of 2018. In 2020, the market value of the Chinese peer-to-peer lending industry reached 2,250 billion Yuan and after reports of scams and bad lending practices in the P2P lending industry, the Chinese government started to implement strict regulations on the platform operators. As a result, the number of platforms had decreased significantly over the past years. Figure 3 gives the regional distribution of the global P2P lending market. Because of uncertainty and validity of the Chinese data, it makes sense to investigate how the global P2P lending market is distributed after removing China from the data set.

Figure 4: P2P Lending Market by Region- Excluding China



As can be seen from Figure 4, North America, mainly US dominate the P2P lending market in and this holds in 2021 as well. The growth can be attributed to gradually increasing number of lending platforms operating in the region as well as to the quick adoption of innovative technologies. Additionally, as P2P lending platforms normally do not participate in lending decisions or collect deposits as in traditional bank lending, their intermediation and transaction costs are kept low⁵. This will contribute to the dispersion of the use P2P platforms especially in North America where the operating costs are higher and generally borne by the borrowers. Asia-Pacific, on the other hand, is expected to develop at the fastest rate until 2030 due to the growing number of small and medium sized enterprises. Furthermore, the government of emerging nations such as China and India are constantly taking efforts for the promotion of cashless technologies.

4. CONCLUSION

For the last two decades, one of the most popular means of Fintech has been P2P lending. Thanks to development in information technology that enables the investor utilize her available funds by lending through P2P platform by selecting the attributes of the borrower and accepting the resulting risk and return on front of their own PCs. On the other side of the mirror the individuals and businesses that are in need funding for any purpose can reach the funding sources with less cost as the P2P lending platform applies a limited amount of fee for their intermediation unlike banks.

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⁵ <https://p2pmarketdata.com/articles/p2p-lending-explained/>

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