# Financial Technology and Small Business Access to Funding in Indonesia: An Exploration Study

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#### **ABSTRACT**

This study aims to explore the growth of financial technology (fintech) and its impact on the ability of small businesses to access funding in Indonesia. It adopted a case study methodology using a semistructured interview and a series of focus group discussions (FGDs) with 10 owners of small businesses and 30 owners or managers of peer-to-peer (P2P) lending companies. The study found that the interviewed small businesses benefited from P2P lending. In addition, it found that banks are the most important investor in P2P lending companies. However, this study has its limitations. First, the sample was too small to generalize to a broader population. Second, there is no national data on credit to small businesses from P2P lending to support the findings of the case. To the authors' knowledge, this is the first study on this topic, specifically in Indonesia. It takes stock of the empirical evidence in the literature through the lens of small business owners.

#### **KEYWORDS**

Banks, Constraints, Fintech, Indonesia, Peer-to-Peer Lending, Small Business

#### INTRODUCTION

## **Background**

It is widely recognized that small businesses in developing economies serve as a main source of employment generation, economic growth, improved income distribution, and poverty reduction (Ayyagari et al., 2014; Pissarides, 1999; Tambunan, 2009, 2018a, b; Wang, 2016). However, these enterprises face constraints related to growth and survival. The most serious constraint is the lack of funding from formal sources like banks and other financial institutions.

To date, the literature on barriers to the growth of small businesses in developing economies has been overwhelming. Studies have found that limited access to funding from formal sources is a significant obstacle. For example, a series of studies on small and microenterprises in Indonesia identified a lack of access to credit as a leading constraint (Tambunan, 2018a, b). Several studies in China (e.g., Ji, 2011; Jiang et al., 2014; Shen et al., 2009; Yin, 2012) found that capital limitation ranked high, which was partly due to the difficulty in funding access from banks. Nguyen's (2017) reviewed literature explored how small businesses face barriers to external financing as compared to medium and large enterprises. This makes it difficult for the small business to grow or sustain itself. Esho and Verhoef's (2018) study provided an integrated review of the literature on the financing of

small businesses. It also showed that, in comparison with larger counterparts, small businesses experienced additional problems, specifically access to finance.

In Indonesia, the government has realized that the main obstacle faced by small businesses, especially rural microenterprises, is limited access to formal sources of funding from banks. Therefore, funding has been the focus of domestic small business development policies (Tambunan, 2018a, b). However, the portion of bank loans received by these enterprises remains small. Both small business owners and the government have welcomed the rapid growth of financial technology (fintech) companies in Indonesia. Small businesses are finding that digital financing is an alternative to bank lending.

Among fintech products, peer-to-peer (P2P) lending is the most important for funding small businesses that have difficulty accessing bank credit without collateral or financial records. Banks often consider these businesses as less profitable. P2P lending platforms provide an online marketplace that matches investors or lenders (i.e., wealthy individuals, multifinance companies, nongovernment organizations, or banks) with small businesses that seek loans. P2P lending removes the need for banks to act as intermediaries. Hence, given the widely discussed failure of banks or other formal sources of funds in providing adequate loans to small businesses, the emergence of P2P fintech-based lending offers significant opportunities.

The rapid growth of fintech in Indonesia and other countries has spawned many journal articles, seminar papers, and reports. However, worldwide, it is hard to find empirical studies (if any) on the role of P2P lending in funding small businesses. In Indonesia, little is known regarding the real impacts of the growth of P2P lending on small businesses and how these P2P lending providers operate. Few papers provide empirical evidence on the importance of P2P lending for small businesses (Hendriyani & Raharja, 2019; Pranata, 2019). Theoretically, given other determinant factors, small business access to P2P lending companies should have a positive effect on performance.

# **Objective**

P2P lending is an important alternative source of funding for small businesses. Yet there has been no empirical evidence on this topic in Indonesia. This is the motivation of this exploration-oriented study. This study aims to address the following questions:

- 1. Has the emergence of P2P lending companies benefited small businesses?
  - a. Do they have more access to formal funding?
  - b. How have their businesses grown?
- 2. How do the P2P companies operate?
  - a. Who are their main investors?
  - b. How do they channel funds to small businesses?

# **Significance**

To the authors' knowledge, this is the first empirical study in Indonesia on the development of P2P lending and its role in funding small businesses. It takes stock of empirical evidence in the literature through the lens of small business owners.

#### LITERATURE REVIEW

# The Impact of P2P Lending Companies on Small Business' Access to Funding

The formal financing ecosystem has significantly changed with the digital era's emergence of fintech. In fact, it has become more complex. Today, there are many nonface-to-face financial transactions. Twenty years ago, players in the financing ecosystem included banks and nonbank financial institutions, consumers, business owners, and credit reporting agencies. There are more players in today's ecosystem, including fintech-based lending providers that offer loans to customers without using data from credit bureaus. The process can be done easily and efficiently through mobile devices.

One fintech feature is P2P lending. This new platform focuses on financial transactions that bypass a series of conventional intermediaries by connecting borrowers with lenders. Almost all interactions between a lender and borrower occur via a Website interface as the borrower submits a loan request and the lender chooses whether to fund that request (Hendriyani & Raharja, 2019; Yum et al., 2012). Table 1 compares the traditional loan financing market and the lending market (Feng et al., 2015).

Tabel 1. The Traditional Loan Financing Market vs Lending Market

Major Aspect	Traditional Loan Provider	P2P Lending	
Interest Rate	Low-Medium	Medium-High	
Amount of loan	High	Low	
Collateral	Yes	No	
Party Involved	Borrower & Bank	Borrower, Lender & Platform	
Regulation/Supervision	Strict	Loose	
Process	Complex & Long	Simple & Fast	
Transaction Cost	High	Low	

Small businesses find it easier to borrow from P2P lenders than banks. However, Klafft (2008) confirmed that the rules in P2P lending are like those in the traditional banking system. Borrowers with a weak credit rating (cannot get funding from a traditional banking system) are unlikely to apply via P2P lending.

There are many studies, seminar papers, and reports on fintech, including Bruton et al. (2015), Government Office for Science (2015), Lin and Viswanathan (2015), Serrano-Cinca et al. (2015), Buckley and Webster (2016), Computer Business Review (2016), Cumming and Schwienbacher (2016), Haddad and Hornuf (2016), BIS and FSB (2017), Iyer et al. (2016), Toronto Center (2017), Han et al. (2018), Jagtiani and Lemieux (2018), Lukonga (2018), Yakoboski et al. (2018), Creehan (2019), Morgan and Trinh (2019), Nemoto and Yoshino (2019), Tang (2019), Frost (2020), and Oh and Rosenkran (2020). One shared conclusion from the literature is that the growth rate of fintech will become more rapid, including in developing countries. First, businesses and the economy will grow, resulting in an increase for funding. Second, it can be difficult to obtain loans from banks, especially for small or start-up businesses.

The literature on fintech or P2P lending is growing. Unfortunately, empirical evidence on the role of P2P lending companies in funding small businesses is limited. Most studies on P2P lending, such as Bruton et al. (2015), Milne and Parboteeah (2016), Jagtiani and Lemieux (2018), Han et al. (2018), Creehan (2019), Nemoto et al. (2019), and Oh and Rosenkranz (2020), do not focus on small businesses. Nemoto et al. (2019), for instance, found that P2P lending was found in the world's biggest markets: People's Republic of China (PRC) and the United States. As shown in their study, in 2015, US\$100 billion and US\$34 billion of new fintech credit was issued in the PRC and U.S., respectively. As a comparison, fintech lending in Asia and the Pacific (excluding the PRC) was only US\$1.1 billion. It was less than US\$1 billion in the Eurozone. However, their study does not provide detailed information about P2P lending to small businesses. This may be because it does not differentiate according to business size in countries where data on fintech lending is available.

Regarding Indonesia, to the authors' knowledge, there has been no empirical research on P2P lending to small businesses. One published paper (Pranata, 2019) was found but it does not cover small businesses. Instead, it focuses on the role of digital payments and fintech in accelerating the development of small businesses in two provinces in Indonesia, Nusa Tenggara Barat (NTB) and Bali. The study concluded that inclusive fintech can benefit small businesses, especially those marginalized in terms of geographical and technological capability\_as long as they haveInternet access

Digitalization and fintech offer many opportunities to address small business constraints by providing better access to finance. Examples include branchless banking technologies like Internet banking, P2P lending, or crowd

funding. These, in turn, can enhance productivity and competitiveness. Nemoto et al. (2019) stressed a need to encourage the growth of P2P lending to support small businesses, especially those with growth potential. With P2P or fintech, several constraints to financing (i.e., lack of credit information, relatively high cost of servicing small business financing needs) could be reduced (IMF, 2019).

However, digitalization's ability to unlock productivity and growth for small businesses in developing countries, including Indonesia, is far from being fully exploited. Therefore, empirical studies, especially on P2P lending, are needed. Findings from such studies may help policymakers create a conducive environment in which fintech could thrive by redesigning regulatory policies to induce further innovation.

The discussion leads this study to theorize that P2P lending companies offer a financial opportunity to small businesses that experience funding difficulties from conventional banks. These businesses can receive better access to financing, which can increase productivity and enhance competitiveness. This proposition is based on two assumptions. First, development of small businesses is determined directly and indirectly by many factors. However, lack of financing is the most important growth constraint. Second, the supply of investor funds to P2P lending companies does not stop or decrease. In addition, micro-, small, and medium enterprises (MSMEs) have Wifi and Internet access.

## **Collaboration Between Banks and Fintech-Based Companies**

Banks are expected to be the main investor of funds for fintech companies. Initially, banks felt that fintech was a threat to their business. According to a report from EYGM Limited (2017), the growth of fintech strengthened the general belief that it would disrupt the banking sector. Yet, as the report emphasized, collaboration rather than competition will eliminate the disruption. The report further confirms that the biggest short-term threat to most banks comes from fellow banks rather than fintech because fellow banks may be better at utilizing fintech. The results of a study of 45 major global banks that underlie this report showed that these banks were involved with fintech. However, only a quarter of the banks were extensively involved due to obstacles in collaborating with fintech companies. Obstacles included navigating procurement, vendor risk management, technical implementation, and the handling of this issue by banks and fintech companies. On the other hand, fintech did not intend to cooperate with formal financial institutions. Fintech companies had better skills and agility, as well as third-party funding. However, they realized that it would be difficult to break the dominance of incumbent banks. Therefore, the banking sector and fintech companies began to see that their futures existed in their collaboration.

Many reports and media coverage have shown increased cooperation between banks and fintech. According to Ghanem (2018), a growing number of traditional banks are collaborating with fintech companies, with 91% of bank executives wanting to work with fintech firms. Eighty-six percent voiced concerns that a lack of collaboration could damage businesses in the fast-growing digital ecosystem. Additionally, 42% of bank executives said that a collaboration between banks and fintech companies would help banks lower their cost base. Regulations involving the sharing of customer data, such as the European Revised Payment Services Directive (PSD2) Europe and Open Banking Standards in the UK, also encourage bank and fintech partnerships.

Oleg Boyko, chair and founder of Finstar Financial Group (a private equity company operating in Europe, U.S., Asia, Latin America, and the Commonwealth of Independent States [CIS]), believes that changes in consumer behavior, advancements in cloud-based technology, increased power and availability of mobile devices, and the emergence of data science are challenging the business models of traditional financial institutions. Boyko also believes that the partnership between fintech companies and banks will bring strategic value, insight, and management capability to both parties (Mathews, 2018).

The main findings from research by Deloitte Development LLC (2018) showed that financial institutions are more likely to collaborate than compete with fintech companies. However, traditional banks find it difficult to interact effectively with fintech companies because they move faster and are less structured. The banking sector lacks a clear path to developing a cooperative relationship with fintech companies. It is also difficult to set benchmarks

to measure success. According to this study, consolidation can occur as fintech companies seek to be more attractive in an increasingly competitive market and financial institutions seek more sophisticated partners.

Mathews (2018) stated that partnering with fintech companies gives banks an opportunity to increase their revenue and enhance services or customer experience while taking fewer risks or adding staff. Fintech companies, on the other hand, gain access to a loyal customer base and have opportunities to take advantage of the bank's extensive financial service experiences while navigating the regulatory environment. According to Mathews (2018), there are three ways to partner:

- 1. **Software-as-a-Service:** In this common approach, a fintech company licenses or sells the technology that underlies its activities to the bank. This may be an offering where banks place their branding on products to promote end-to-end solutions. The bank does not have to invest in infrastructure or development costs for internal solutions as they begin to offer a variety of modern and innovative products under their brand while maintaining control over the customer relationship cycle. On the other hand, fintech companies, especially new ones (startups), get access to low-cost funding through trusted partnerships while knowing that regulatory requirements will be addressed through the bank infrastructure.
- 2. **Referrals:** In this approach, banks refer clients to a relevant fintech to eliminate gaps in their service offerings. This process provides financial service offerings to individuals without bank accounts. This process, which usually happens in the lending sector, allows fintechs to offer faster customer onboarding, processing, and approval times, cheaper loans, and alternative methods of funding and credit lines.
- 3. **Outright Purchase:** In this approach, the bank buys the rights to technology or buys the company. This model is not common. Banks gain exclusive rights to technology, which gives them a competitive advantage, rapid expansion into new markets, and a new customer base. Fintech companies join an established bank ecosystem. This offers additional funding for product development and direct financial market expertise to guide a product launch. This can also be a profitable choice for founders who want to get out of the market while ensuring existing customers still benefit from products and services.

According to Hatami (2018), there are four groups/models of collaboration between fintech companies and banks:

- 1. **Channel:** Banks use fintech companies as a channel to sell their products to bank customers. Benefits for banks include offering new products or services to customers while expending little time, effort, or capital. The bank also gains valuable insight about whether customers like propositions. This, in turn, assists in creating strategic plans. On the other hand, fintech companies benefit from access to new customers and sales, improvement of their brand through relationships with banks, and market insight to perfect their products. Customers receive new, attractive offers from their banks. They also get guarantees from banks that fintech can be trusted with their money.
- 2. **Supplier:** In this collaboration, the bank acts as a supplier to the fintech company. A proposition is made by integrating the capabilities of fintech companies in bank offerings. For customers, the offer looks like a bank that provides services (even if there are statements about a fintech's contributions to the terms and conditions of the offer).
- 3. **Satellite:** This collaboration is a further development of the supplier model. Although the bank acquires a fintech company, the fintech remains relatively independent. The fintech company receives capital injections, implicit validation of its business models through the bank, and access to bank customers. Banks see this investment as a means of experimenting in specific business areas without affecting their existing operations. With this approach, the bank gains market intelligence and ensures exclusivity and control of new propositions.
- 4. **Merger:** In this traditional acquisition model, a fintech company is integrated and renamed in the bank. This benefits the bank by bringing innovation to its brand. This also increases customer goodwill and rigidity.

#### **METHOD**

This research adopted a descriptive approach that analyzes secondary and primary data. It utilized a survey method by using a semistructured questionnaire to collect the primary data from two groups of respondents (30 owners of small businesses who received P2P loans and 30 managers/heads of registered P2P lending companies). Of these respondents, a total of 40 were deemed usable (10 small businesses and 30 P2P lending companies). The survey was conducted from October 2019 to November 2019 in Jakarta. The majority of registered fintech companies with the Financial Services Authority (OJK) are in this area.

By September 30, 2019, 127 fintech companies were registered with the OJK. Initially, all registered fintech companies were included in the research sample. However, not all were P2P lending companies that provided microfinance needed by small businesses. Many provided other types of financing, such as supply chain finance, invoice finance, cofinancing, inventory financing, and payday loan. From the P2P category, most did not distinguish their customers between individuals or households (e.g., home renovations, buying a new car, paying school fees) and entrepreneurs or owners of small businesses to expand their businesses. At that time, 30 P2P companies recorded their customers according to these two categories. Therefore, only they were included in the sample.

Most of the 30 companies refused to provide data about their small business customers. Thus, for the survey, information was received from 50 small businesses. Of this number, 30 completed the questionnaire. Ten were deemed usable. Most were not open to providing information, especially regarding financial figures like income, revenue, and the amount of P2P credit received. A series of focus group discussions (FGD) were conducted with selected respondents from the 30 fintech-based P2P lending companies.

Secondary data was collected from three sources: (1) data on small business credit from Bank Indonesia (BI); (2) data on small businesses in the manufacturing industry from the Central Statistics Agency (BPS); and (3) data on registered fintech companies from the OJK.

Findings from a survey with few respondents will not provide a general picture of the importance of P2P lending for small businesses in Indonesia. However, as the first exploratory study conducted in Indonesia, the findings can serve as preliminary information for studies with a larger sample.

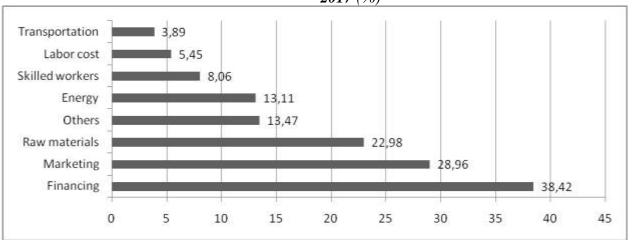
## **RESEARCH FINDINGS AND DISCUSSONS**

## **Constraints Facing Small Businesses**

Based on 2017 data, Indonesia has around 62 million small businesses (or about 99% of total companies). Therefore, small businesses play an important role in Indonesia's economic development. They are the main drivers of national economic activities with their contribution to the formation of Indonesia's gross domestic product (GDP) above 50%. Small businesses provide the largest contribution to the employment generation, especially for low-skilled workers. They also provide business opportunities for married women from poor households in rural areas (Tambunan, 2018a).

As in other developing countries, small businesses in Indonesia face many problems that negatively impact development and sustainability. National data on small businesses in the manufacturing industry in 2017 shows that almost 66% of the 4.46 million enterprises experienced serious difficulties when increasing their production volume or expanding their production capacities to meet market demands or stay in business. As shown in Figure 1, around 38% said that their main constraint is finding external sources of funding.

Figure 1. Types of Difficulties faced by Small Businesses in the Manufacturing Industry in Indonesia, 2017 (%)



Source: (BPS, 2018).

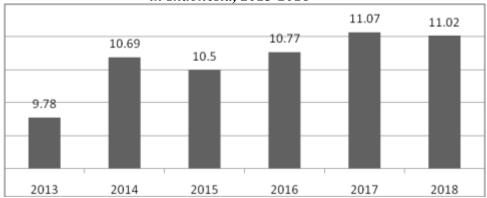
## **Small Businesses and Access to Bank Credit**

It is difficult to know how many of the approximately 62 million small businesses in Indonesia need funds from outside sources or who applied for loans from banks or other formal nonbank financial institutions. However, the 2017 national survey of small businesses in the manufacturing industry may provide a clue. Regarding the source of capital, the survey reveals three categories of small businesses: (1) fully financed by own money (i.e., 3,679,592 respondents or 82.42% of the total enterprises surveyed); (2) partially funded by external sources (i.e., 608,352 respondents or 13.63%); and (3) the rest (i.e., 176,744 respondents or 3.99%), who are wholly dependent on funds from external sources.

Of those who are wholly or partly funded from external sources, only a small percentage fully used bank loans. There are more respondents who used nonbank funds (i.e., savings and loan cooperatives [credit unions], pawn shops, multifinance/leasing companies, microfinance institutions) or informal sources (i.e., friends, relatives, money lenders, payments in advance from consumers, or debt to the suppliers of raw materials [payment of raw materials after goods have been sold]). Many small business owners prefer informal sources of funding because they can immediately get money without administration costs. However, their interest rates are significantly higher than commercial bank rates (BPS, 2018).

Based on annual data from Bank Indonesia (central bank of Indonesia) on credit from commercial banks, small business loans increased every year. However, Figure 2 may suggest that, despite the growing attention of banks to finance small businesses, the share of loans granted to these enterprises is still small. Likewise, the number of bank accounts owned by small businesses increases annually. Data from Bank Indonesia shows that by August 2018, 16.4 million small businesses had bank credit accounts. This increased from 10 million in 2013. Compared to total small businesses in Indonesia (62 million units), it is obvious that most small businesses in Indonesia still do not have access to banks.

Figure 2. Percentage Share of Small Businesses in Total Credit Outstanding from Commercial Banks in Indonesia, 2013-2018



Source: Bank Indonesia (https://www.bi.go.id/id/pencarian/Default.aspx?k= kredit%20UMKM

In general, the loans most needed by small businesses are for working capital to purchase raw materials and pay wages/salaries, electricity, and/or rent, and to cover other deficiencies when monthly income is not proportional to production costs. For example, Bank Indonesia data shows that in the first quarter of 2018, the amount of bank credit received by small businesses for working capital reached around IDR 651 billion, while for investment capital it was only about IDR 228 billion (Kompas, 2018).

## **P2P Lending Companies**

In Indonesia, the existence of fintech-based companies is regulated by the government or the OJK through the following regulations:

- Regulation No. 77, 2016 Concerning Loan Service to Loan Money Based on Information Technology
- Regulation No. 13, 2018 Concerning Digital Financial Innovations in the Financial Services Sector

All fintech companies must be registered and licensed by the OJK. Unregistered fintech companies are considered illegal.

Based on the most recent data from the OJK, as of October 31, 2019, there were 144 registered fintech companies. This consisted of 132 conventional and 12 Syariah. Regarding status, most were local. Others were financed with foreign capital. Many had borrowers from outside Java. Thirteen were licensed. They were still allowed to operate in they were registered in the OJK (fulfilled the OJK requirements) but had not been granted licenses. However, within one year since they started operation, they must apply for a license and attach their annual financial statements.

Of this total, 122 companies were in the great Jakarta (i.e., Depok, Bogor, Bekasi, and South Tangerang). The rest were in other cities, namely Bandung in West Java Province, Lampung in Lampung Province (Sumatera), Surabaya in East Java Province, Makassar in South Sulawesi Province, and Bali in Province Bali.

The profile of registered fintech-based P2P lending companies in Indonesia between December 2018 and August 2019 is shown in Table 2. Fintech-based P2P lending companies in Indonesia receive various types of financing, including invoice financing, supply chain financing, merchant financing, microfinancing, property financing, house renovation financing, and bailouts for rent. Financing targets of fintech-based P2P lending companies also vary from financing MSMEs, financial inclusion, village development/improvement, and women empowerment.

**Table 2. Profile of Registered Fintech-based P2P Lending Companies in Indonesia**, Dec. 2018 & August 2019.

Description	December 2018	August 2019
Number of Accumulated Lender Accounts (Entity	y Unit)	
Java	155,230	441,508
Outside Java	50,281	85,528
Abroad	1,996	3,349
Total	207,507	530,385
Number of Accumulated Borrower Accounts (En	tity Unit)	
Java	3,664,645	10,641,601
Outside Java	694,803	2,190,670
Total	4,359,448	12,832,271
Total Accumulated Transaction of Lenders (No. o	of Accounts) *	
Java	5,744,372	15,419,836
Outside Java	499,159	803,495
Abroad	2,547,785	7,764,957
Total	8,791,316	23,988,288
Total Accumulated Transaction of Borrowers (No	o. of Accounts) *	
Java1	2,169,789	27,771,654
Outside Java	2,161,652	5,347,448
Total	14,331,441	33,119,102
Accumulated total credits (Rp)		
Java	19,617,459,171,363	38,489,439,121,864
Outside Java	3,048,610,328,925	6,316,394,805,313
Total	22,666,069,500,288	44,805,833,927,177
Outstanding Loan (Rp)	5,044,117,760,986	8,500,692,797,178
Characteristics of loan (Rp)		
The lowest average loan value	17,755,363	16,198,066
Average value of loans disbursed6	5,811,668	71,805,959

Note: \* for 2019 the data are from June

Source: OJK (2019).

According to the OJK, as of September 30, 2019, there were 277 potential fintech companies, with many in the registration process. Others had just contacted the OJK to state their plans to become fintech companies.

Based on main activities, there are three types of fintech companies in Indonesia: (1) P2P lending; (2) credit scoring; and (3) aggregator. P2P lending is the most popular activity. As one of the innovations in the financial services sector, its technology enables lenders and loan recipients to conduct loan lending transactions without meeting in person. The lending and borrowing transactions occur through a system provided by P2P lending companies or organizers (through the application and Website).

P2P loans do not need collateral. In addition, the loan ceiling can reach IDR 200 million. Based on data from the OJK, per October 2018, P2P loans reached IDR 15.6 trillion. Per October 2019, loans reached IDR 68 trillion (see Figure 3). Total borrower accounts reached 15.98 million; lender accounts reached 578,158. In terms of loan quality, the 90-day repayment success rate reached 97.16%. The default rate of 90-day returns was around 2.81%.

80.000.00 Accumulated total loans 70.000,00 67,999.90 ----Total loans 60.000,00 50,000,00 40.000,00 30.000,00 25,921.70 20.000,00 10.000,00 3,002.50 7,592.60 3,255.60 0,00 2017 Sept. 2018 January 2019 January 2019 October

Figure 3. Total Distributed Loans by P2P Lending Companies in Indonesia, 2017-2019 (IDR billions)

Source: OJK (https://www.ojk.go.id/id/kanal/iknb/data-dan-statistik/fintech/Pages/Statistik-Fintech-Lending-Periode-Oktober-2019.aspx).

Small businesses will find that P2P loans have advantages over other financing alternatives, especially in aspects of loan interest rates, conditions, length of the loan disbursement process, and loan size. P2P loan interest rates, as required by the OJK, are small (7%). As noted, P2P loans do not require collateral (depending on the loan size). In addition, the loan application process is short (some having one working day) and completely online (CFI, 2018). Overall, P2P loans have advantages as an alternative financing for small businesses compared to conventional banks (including People's Credit Banks), pawnshops, microfinance institutions, and cooperatives.

Among these P2P lending companies is PT Amartha Mikro Fintek. By the end of 2018, the company had distributed loans of more than IDR 635 billion to 152,000 small businesses (most of those owned by women and agricultural sectors). The companyincreased to IDR 1.7 trillion by the end of 2019. Other P2P lending companies with small businesses as their main target include Drrupiah.com, Cekaya.com, Taralite.com, Credy.co.id, DuitPintar.com, and Modal.co.id.

#### **Benefit for Small Businesses**

Table 3 shows the profiles of 10 randomly selected small business owners who received loans from fintech-based P2P lending companies. The businesses include small shop owners who sell cell phones, cat food, children's toys, and camping equipment, producers of shoes and furniture, and laundry business owners. In terms of sources of capital, they use their own money or borrow from their suppliers or other informal sources. They also rely on loans from formal sources like fintech-based P2P lending. Some of this sample received loans from microfinance institutions or a government-designed credit scheme with low interest rates for small businesses, called People Business Credit (or KUR).

Table 3. Profile of the Surveyed Ten Small Business' Owners

	Profile					
			Sources of fund			
	First				Reason not	
	year of			Non-	borrow from	
Respondents	business	Type of business	Formal	formal	bank	
1	1990	Billboards	3	4	a	
П	2008	Furniture	1,2,3	4,5,6	а	
Ш	2009	Toys	1,2,3	4	а	
IV	2017	Cat food	1,3	4	b	
V	2001	Handphone	1,3	4	b	
VI	2010	Laundry	3	4	а	
VII	2009	Snack	1,3	4	а	
VIII	2010	Camping equip.	1,3	4,7	а	
IX	2009	Fashion	3	4	а	
Х	2013	Footwear	3	4	b	

Note: 1. KUR; 2. MFI; 3. fintech; 4 own money; 5 suppliers; 6 customers;, 7 relatives;a, collateral; b. complicated.

Although the 10 respondents received P2P lending, findings from the in-depth interviews show that their own money still plays a crucial role in financing their businesses (see Table 2). They all considered P2P loans as an additional fund when their own money and loans from other sources (if any) were not enough to cover their expenditures. On average, P2P loans are between 20% and 30% of total needed capital. Only one respondent borrowed money from P2P lending up to 50% of their needed capital.

The respondents said that P2P lending does not require collateral and the application process is not complicated. Some claimed they could get loans within 24 hours. Funds also arrive quickly provided that the requirements (i.e., identification card, family card of the applicant, business license, financial reports or data about the business) can be fulfilled quickly and the business is considered feasible. However, the P2P loan interest rate is slightly higher than the bank's interest rate. Like most small businesses, especially traders and shop owners who need cash daily or weekly as they deal with suppliers, being able to get a loan at any time without complicated administration and assets as collateral is more important than paying a slightly higher interest rate.

Only five respondents claimed that P2P loans greatly benefited their business. Two said that P2P loans allowed them to expand their business from micro (without workers) to large scale (with several workers). The other respondents said their business scale was relatively the same. However, they noted that the average turnover per month increased because their working capital increased. With respect to the second five respondents, their business volume did not experience a significant increase. However, due to P2P loans, their business could sustain itself.

The above findings do not represent all small businesses in Indonesia that obtained P2P loans. The sample represents 10 customers due to the difficulty of identifying P2P loan-granted SMEs. However, this discovery provides preliminary evidence of the role of fintech-based P2P lending as an alternative source of funding for SMEs.

Regarding channeling loans to small businesses, interviews with 30 P2P lending companies reveal that some channeled indirectly through, for example, cooperatives or suppliers. Their consideration in choosing such a channeling method is to avoid misuse of loans or moral hazard by the borrowers. Through intermediaries, it is more certain or guaranteed that the loans will be paid off along with the interest according to the mutually agreed upon period. In other words, cooperatives serve as "collateral" for P2P lending companies.

## **P2P Lending Operations**

The 30 P2P lending companies are located in Jakarta, with some customers outside of Jakarta. Others are small businesses in distant districts like West Nusa Tenggara and South Sulawesi Provinces. Types of financing for the sampled companies vary from invoice financing, supply chain financing, merchant financing, microfinancing, and seller financing. The main financing target of most companies is small businesses with legal status. Some provide loans to women empowerment in rural areas, education, property, consumption expenditures, and multifunction. Many of the companies have more than one type of financing; others focus on financing small businesses.

Some of the 30 companies surveyed focused on MSE funding. Other companies extended loans to individuals for consumption, education, property, women empowerment, and others. Although the companies are in Jakarta, few have customers outside Jakarta or Java. They channel their funds through branches outside Java.

All of the companies are dependent on outside investors for the provision of funds, such as banks, wealthy people, multifinance companies, venture capital companies, state-owned companies, and other institutions, including from abroad. Of the 30 companies interviewed, 17 admitted that banks are their largest source of funds. For some, banks are the only source of funds. Some companies collaborate with more than one bank. They prefer to collaborate with banks to obtain more funds. Of course, they must submit the names of prospective borrowers and their credit worthiness to the bank. The bank assesses the information before approving the funding. The number of MSEs funded by the bank, although indirectly, can increase at a relatively lower cost. From the government's perspective, this is a positive assessment for the bank as it relates its policies to require all banks in Indonesia to extend credit to MSMEs.

Regarding channeling funds, some companies go directly to MSE. Others channel through intermediary institutions like cooperatives, distributors, suppliers, multifinance companies, and others. The main reason they pass through intermediary institutions is that it is easier or more efficient in reaching many prospective borrowers. In addition, there is more certainty that the loan plus the interest will be paid according to the agreement. In other words, intermediary institutions act as guarantors. Figure 4 describes the ecosystem of MSE funding by fintech-based P2P lending companies in Indonesia.

Fintech is a new phenomenon. Not all banks in Indonesia are familiar with the system and culture of P2P lending companies (cooperation between banks and P2P lending companies). Therefore, both parties may face obstacles. Table 4 discusses the obstacles faced when the surveyed P2P lending companies collaborated with banks.

## Table 4. Constraints faced by P2P lending companies when collaborating with banks

- The bank requires face-to-face customer verification. The fintech system is online.
- The bank lacks real-time transaction technology. Requests for transactions must be made via e-mail and tellers, which takes a long time. There is no connection to send or exchange real-time data between the bank and P2P lending companies.
- There are no restrictions by the authority (OJK). Yet many banks are hesitant to cooperate with P2P lending companies because they are unclear on existing regulations.
- The way the bank calculates loans installments, as well as interest and penalties, is often different from the method applied by the P2P lending company.
- Risk perception in conservative-classified banks can become an obstacle for the distribution of funds to P2P lending companies, especially for the agricultural sector where risk tends to be high. P2P lending companies serve businesses in all sectors if all requirements are met.
- Bureaucracy in the banking sector is often long and complicated. This makes lending from P2P companies take a long time. However, one of the characteristics that is also one of the advantages of fintech compared to banks is that credit is fast and easy.
- Many banks still consider collaboration with P2P lending companies as a high-risk business. This hampers many banks' cooperation in funding and customer references.
- There is a lack of understanding in the banking sector regarding the channeling process with P2P lending companies. This can include new products and/or new channels.

- There are constraints in the banking sector regarding the organization. For example, banks ask which unit and/or department will take control of the initiative if it collaborates with P2P lending companies.
- There is a lack of understanding about regulations used on a legal basis for cooperation between banks and P2P lending companies.
- A lot of coordination must be done through different parties.

Regarding channeling funds, some P2P companies go directly to borrowers. Others channel it through intermediary institutions like cooperatives, distributors, suppliers of materials, multifinance companies, and others. The main reason they pass through intermediaries is that it is easier or more efficient in reaching many prospective borrowers. In addition, there is more certainty that the loan will be repaid plus the interest according to the agreement. In other words, intermediary institutions act as guarantors.

### CONCLUSION, LIMITATION, AND FUTURE RESEARCH

This study explores the development of P2P lending companies as an alternative source of funding for small businesses. This new phenomenon provides an interesting investigation in Indonesia. To the authors' knowledge, research on the role of P2P lending on small businesses in Indonesia does not exist. Such research is also rare elsewhere.

First, the study concluded that the Indonesian government has recognized the important role of small businesses in the national economy. However, the development or growth of small businesses, especially microenterprises, is still constrained by obstacles, particularly limited access to funding from the banking sector. Facts show that a small percentage of microenterprises are financed by banks.

Second, at least in theory, the presence of P2P lending companies will cause an increase in the number of Indonesian small businesses, particularly microenterprises and those in rural areas (villages connected to the Internet), that obtain funds from formal sources. Aggregate data to support this theory is not available regarding an increase in the number of small businesses that received loans from P2P lending companies. The large number of P2P lending companies registered in the OJK tends to increase every year. Data on the number of small businesses funded by P2P lending companies surveyed can be used as a proxy about the positive impact of these online-based funding companies on small business access to formal funding sources.

Third, although aggregate data are not available, the findings of the interview with 10 small business owners may suggest benefits of fintech funds. Some found that their business could expand or see their turnover increase due to fintech loans.

Fourth, the findings show that many of the P2P lending companies surveyed cooperate with banks. For many, the bank acts as their main source of funds. This collaboration benefits the banking sector because banks can expand their coverage of small businesses to be funded (indirectly via P2P lending companies). Indeed, at least from the data provided by the P2P lending companies surveyed, their coverage of small businesses increased due to collaboration. This clearly supports the government's efforts to expand fuding access for small businesses, especially microenterprises. It is also profitable for fintech companies because banks are the main source of capital and facilitate loan repayments. In accordance with the OJK regulations, all fintech companies must open virtual accounts in banks.

As explained, this research is exploratory in nature. It studies a new topic, marked by the absence of papers or empirical research on this topic, namely the benefits of the emergence of P2P lending companies for small businesses in terms of funding. Therefore, this research is far from perfect. The conclusions or findings of the study are temporary because the sample is relatively small, especially those funded by P2P lending companies. In addition, not all P2P lending companies surveyed provided data on the number of small businesses funded because their records do not distinguish between small business borrowers and other borrowers.

Future research should expand the small business sample funded by P2P lending companies and P2P samples. For small businesses, the following critical issues must be addressed:

- 1. What are the benefits of P2P loans to businesses as compared to other sources of credit (if any)?
- 2. When the business grows and assets can be used as collateral (or when they are already bankable from the bank perspective), do they still value P2P lending?
- 3. How are P2P credits used, whether for working capital or investment?

Regarding P2P, critical issues include: (1) nonperforming loans of small business credit; and (2) risks and benefits in lending money to small businesses relative to other borrowers (i.e., individual customers and households) and how they minimized the risks.

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