

# The Development of MSMEs and the Growth of Peer-to-Peer (P2P) Lending in Indonesia

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The aim of this research is to examine recent development of micro, small and medium enterprises (MSMEs), their main constraints and access to financing, and the growth of online-based Peer-to-Peer (P2P) lending in Indonesia. This is a descriptive study which analyses secondary and primary data. Primary data were collected from: (i) a survey of 60 respondents, i.e. 30 owners of MSMEs and 30 managers/directors of P2P lending companies, of which a total of 40 were deemed usable (i.e. 10 MSMEs and 30 P2P), and (ii) a series of focus group discussions (FGD) with some of the selected P2P companies. This study's results show the number of MSMEs continue to grow even though they face a number of obstacles with limited access to funding as the most serious. Although commercial banks are required by the government to extend credit to MSMEs, the percentage of total commercial credit to these enterprises is still very small. Therefore, as the survey's finding suggested, the emergence of P2P is important as an alternative source of funding for MSEs. and bank is the main investor in P2P lending companies. To the authors' knowledge, this is the first study ever done, at least in Indonesia. It takes stock of the empirical evidence in the literature through the lens of MSMEs' owners.

**Keywords:** MSMEs, MSEs, main constraints, P2P lending, financing gap, MSMEs funding ecosystem

JEL Classification: B 26, D25, L16,

## 1. Introduction

### *Background*

It is widely recognized that micro, small and medium enterprises (MSMEs) play a vital role in economic development in Indonesia. Moreover, because they are very labor intensive and account for about 99 percent of the total number of companies and 97 percent of the total employment, while large enterprises (LEs) are only, respectively, one and three percent (Table 1), MSMEs are very important for job creation, poverty reduction and reduction of inequality in income and economic development between regions. However, MSMEs face many obstacles that make them difficult to expand or even to survive, and limited access to funding from formal sources is the most serious.

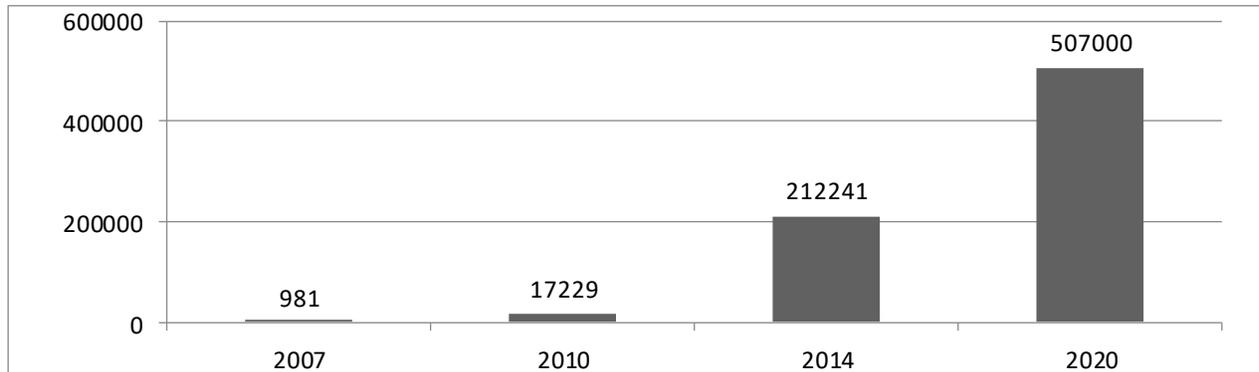
**Table 1 Number of MSMEs and Their Workers by Sub-category, 2016-2018**

Description	unit of measure	2016		2018	
		Total	Share (%)	Total	Share (%)
MSMEs	Unit	61,651,177	99.99	64,194,057	99.99
LEs		5,370	0.01	5,550	0.01
Total companies		61,656,547	100.00	64,199,607	100,00
MSMEs	People	112,828,610	97.04	116,978,631	97.00
UB		3,444,746	2.96	3,619,507	3.00
Total workers		116,273,356	100.00	120,598.138	100.00

Source: Menekop & UKM (<http://www.depkop.go.id/>)

The Indonesian government has long been aware of this problem, and therefore since the ‘New Order’ era (1970) until now the emphasis of MSMEs policy is on MSME funding. The first time the government launched a specially designed credit scheme for MSMEs was in 1971, followed by many other credit schemes in the 1980s and 1990s (Tambunan, 2018a,b). In 2007, the government launched a public guarantee credit scheme, known as People's Business Credit (or KUR), specifically for micro and small enterprises (MSEs) that do not have access to commercial banks due to lack of valuable assets as collateral (Figure 1).

**Figure 1 Total Accumulated KUR Distribution, 2007-2020 (Rp billion)**



Source: Bank Indonesia (BI) (<http://www.bi.go.id/id/umkm/kredit/data/Default.aspx>).

However, data from Bank Indonesia (BI) shows that the portion of bank credit received by MSMEs is still small. Therefore, the existence of financial technology (fintech) companies that have been grown rapidly in Indonesia since the last few years is very welcome, as this new way of financing via online is considered a good alternative source of funding for MSMEs, especially MSEs. Fintech is an innovation in the financial services industry that utilizes the use of technology. Among many fintech-based products, peer-to-peer (P2P) lending is the most important for MSEs. It provides an online marketplace that matches investors, which can be individuals, multifinance companies or even banks, that want to invest and MSEs that want to borrow. Thus, given the failure of many banks to provide adequate loans to MSMEs, the emergence of P2P loans offers a significant opportunity.

The rapid growth of fintech in many countries has led to many journal articles, seminar papers and reports on this new phenomenon, including from Bruton et al. (2015), Government Office for Science (2015), Lin and Viswanathan (2015), Serrano-Cinca et al. (2015), Computer Business Review (2016), Cumming and Schwienbacher (2016), Haddad and Hornuf (2016), BIS and FSB (2017), Iyer et al. (2016), Han et al. (2018), Jagtiani and Lemieux (2018), Yakoboski et al. (2018), Morgan and Trinh. (2019), and Yoshino (2019), Tang (2019), and Oh and Rosenkran (2020)

However, worldwide, it is hard to find empirical studies (if any) on the role of P2P in funding MSMEs. In Indonesia, the actual impact of the growing P2P loans on MSMEs and how these companies operate are still very little known. At least, theoretically, without discounting other factors, MSMEs' access to P2P loans should be a strong determinant of their growth. Therefore, there is a need for empirical research on this new way of funding for MSMEs. Even, field research that only produces some data is already very helpful as an initial step.

### ***Research Problem***

With the aforementioned background, the focus of this research is on MSMEs and fintech-based P2P lending companies in Indonesia. It has two research questions:

- i) How is the development of MSMEs and what are their main constraints?
- ii) How important is fintech-based P2P lending for MSMEs?

### ***Research Objective***

The objective of this research is twofold: (i) to examine the development of MSMEs, and their main constraints and access to funding, and (ii) to explore the importance of online-based P2P lending as an alternative source of funding for MSMEs in Indonesia. More specifically, this research addresses the above given two research questions.

### ***Significance of the research***

Although literature on fintech is growing, there are no empirical studies that can show how important P2P is for MSMEs in Indonesia. To the authors' knowledge, this is the first empirical study in Indonesia on the development of P2P lending companies and their role in funding MSMEs. It takes stock of the empirical evidence in the literature through the lens of MSMEs' owners.

## **Literature Review**

### ***Development of MSMEs and Their Constraints***

The literature on MSMEs continue to grow which shows that MSMEs play a vital role in economic development in all countries in the world (e.g. Pissarides, 1999; Tambunan, 2009, 2018a,b; Ayyagari et al, 2011, 2014; Wang, 2016; World Bank, 2017). The World Bank (2017) estimates that MSMEs in emerging economies employ on average about 50 percent of the total workforce and contribute more than 35 percent of national income. In many Asian developing countries, the contribution of these enterprises to the formation of gross domestic product (GDP) can reach as much as 60 percent and in some of these countries MSMEs also play an important role in export development of manufactured goods (Tambunan, 2009).

However, MSMEs, especially in developing countries, face many obstacles including difficulties in marketing and procurement of raw materials, limited access to funding, shortage of skilled workers, high energy prices, lack of technology and information, unfair market competition, difficult and expensive to get a business permit, and many others. All these problems make them difficult to expand or even to survive. (e.g. Zhu, 2011; Rahaman, 2011; Tambunan, 2009).

### ***MSMEs Financing Gap***

All studies on MSMEs have identified that limited access to funding from formal sources is the biggest obstacle faced by many MSMEs. It hinders them from achieving a higher level of productivity and competitiveness because limited access to financial sources would normally lead to lack of resources for hiring well-trained employees, business/market expansion, innovation and upgrading technologies (Minetti and Zhu, 2011; Rahaman, 2011; Ayyagari et al., 2016; Jinjarak and Wignaraja, 2016; Kumar, 2017; Tambunan, 2009, 2018a,b). The World Bank supports this view by providing evidence from its enterprise survey that about 55 to 68 percent of MSMEs in developing countries experience credit constraints. (IFC, 2017).

Beck's (2007), Nguyen's (2017), Esho and Verhoef's (2018), and Choudhury and Goswami's (2019) reviews of the literature on the financing of MSMEs show that these enterprises are more constrained by financing and other institutional obstacles than LEs (large enterprises). Besides the lack of collateral by many MSMEs, there are several other driving factors that include high transaction costs, asymmetric information between the borrower and lender, and the failure of government owned or managed financial institutions to support MSMEs. Others such as Shen et al. (2009), Ji (2011), Yin (2012), and Jiang et al. (2014) found that lack of working capital experienced by many MSMEs in the People's Republic of China (PRC) is due, partly, to the difficulty in getting access to funding from banks and non-bank financial institutions. Their studies show that MSMEs, especially those located in rural areas, face bigger barriers to external financing than their larger counterparts.

From Bangladesh, Aziz and Siddique (2016), Hoque et al. (2016), Singh et al. (2016), and Islam and Hossain (2018) also found the lack of funding is a serious growth constraint for many MSMEs, especially MSEs which are mainly traditional enterprises with modern technologies and skilled workers limitations. Therefore, they depend heavily on their own money or loans from informal sources.

ADB (2015) has identified the constraints faced by MSMEs in Asia and the Pacific. It also shows a lack of access to credit as their main obstacle, and only a small proportion of MSMEs have access to banks. The absence of collateral, proposals are rejected because they are deemed not business feasible or not bankable, they have no financial records/financial statements, complicated credit application procedures, bank lending conditions not meeting their needs, and high loan interest rates are some of the reasons behind the difficulty in getting funds from banks.

Based on several papers from e.g. Asian Development Bank (ADB, 2014), Di Caprio et al., (2017) and Creehan (2019), limited funding is a common reason MSMEs in Asia refrain from trade in the global supply chain. It is estimated that firms in this region face an annual trade



financing gap of US\$600 billion, with roughly one-quarter, or US\$150 billion, of the gap faced by MSMEs. Different than their larger counterparts, most MSMEs, especially MSEs, are rejected for trade finance or did not proceed with the trade because of their lack of finance.

A study by the International Monetary Fund in the Middle East and Central Asia (MENAP and CCA) regions shows that MSMEs represent an important share of firms, but the regions lag like most others in terms of MSME access to financing. The average share of MSMEs in total bank lending in MENAP and CCA countries is only about 7 percent, the lowest in the world (IMF, 2019).

Overall, the literature reviewed suggests two things: (i) among MSMEs, MSEs are more likely to face credit constraints from formal sources than medium enterprise (MEs). From the banking side, the important factors that influence lending towards these enterprises are competitiveness, legal framework, credit policies and lack of information about MSE borrowers, characteristics and size of the firm. From the MSE borrower side, they do not have financial records and valuable assets for collateral, their proposal is rejected, the type of their business is considered not promising, and they run their businesses in the traditional way, not well organized and managed. Therefore, MSEs rely more heavily on their savings or credit from informal sources; and (ii) for the majority of MSEs financial constraint is a major hindrance to grow or even to sustain.

### ***The Role of P2P Lending Companies***

Now in the digital area, banks are making more non-face-to-face banking transactions. An example, twenty years ago, the organizations in the business ecosystem were banks and/or lenders, consumers and/or MSMEs, e-commerce merchants, or credit reporting agencies; and the ecosystem was not complex. But today, the ecosystem is changing. There are more organizations involved in the ecosystem and information from social media becomes more important. Lenders such as P2P lending companies can offer loans to their customers without using data from credit bureaus; and every process can be done easily and quickly through mobile devices.

According to many studies, the development of fintech has accelerated in recent years in many countries. These studies include Bruton et al. (2015), Government Office for Science (2015), Lin and Viswanathan (2015), Serrano-Cinca et al. (2015), Computer Business Review (2016), Cumming and Schwienbacher (2016), Haddad and Hornuf (2016), BIS and FSB (2017), Iyer et al. (2016), Han et al. (2018), Jagtiani and Lemieux (2018), Yakoboski et al. (2018), Morgan and Trinh. (2019), and Yoshino (2019), Tang (2019), and Oh and Rosenkran (2020).



However, empirical evidence on the role of P2P lending in funding MSMEs is hard to find. To mention some, Claessens et al. (2018) found that the P2P lending market has grown significantly in the People's Republic of China (PRC), the United States (US) and the United Kingdom (UK). While, in many other developing countries, it is only starting to emerge. Nemoto et al. (2019) added that for P2P lending, the PRC and the US are the world's biggest markets. In 2015, US\$100 billion of new fintech credit was issued in the PRC and US\$34 billion in the US. While other markets are mostly still in a nascent stage: fintech credit volume was US\$1.1 billion in Asia and the Pacific (excluding the PRC), and less than US\$1 billion in the Eurozone. Oh and Rosenkranz (2020) had explored the determinants of P2P lending expansion by examining factors that impact P2P lending using a sample of 62 economies over the period 2015–2017. They also investigated the effect of financial development and financial literacy on the expansion of P2P lending. They found that financial institutions' efficiency, financial literacy, and lower branch and ATM penetration are positively related to the expansion of P2P lending.

But all these aforementioned studies do not provide empirical evidence on P2P lending to MSMEs. There are at least two reasons why research on the role of P2P lending in funding MSMEs is still rare. First, despite developing rapidly, P2P loans to businesses in percentage is still relatively small compared to non-businesses such as households or individual customers. Second, data on total P2P loans to businesses does not differentiate according to the business scale of the borrowers.

In the case of Indonesia, to the authors' knowledge, until now there is still little investigation on P2P lending. To date, there is only one research which was based on a field survey by Pranata (2019). It focuses on the role of digital payments (not specifically P2P loans) in accelerating the development of MSMEs in Indonesia by using evidence from some villages in two provinces, i.e. Nusa Tenggara Barat (NTB) and Bali. The paper concludes that fintech can be inclusive and beneficial to MSMEs. Based on their observations in 62 countries, including Indonesia, Oh and Rosenkranz (2020) also concluded that P2P lending has the potential not only to promote financial inclusion in general but also to benefit MSMEs in particular by providing them better access to credit. But they also do not have data on P2P loans to MSMEs in their observed countries.

No doubt that digitalization and fintech can offer many opportunities to address MSMEs' financial constraint by allowing them to have better access to finance by, for example, using branchless banking technologies such as internet banking, as well as P2P lending or crowd funding, which in turn can enhance their competitiveness. IMF (2019) and Nemoto et al. (2019) emphasize a need to encourage the growth of P2P lending to support MSMEs, especially those which have great market opportunities. With P2P or fintech in general, several constraints to

MSMEs access to financing such as lack of credit information and high cost of servicing MSMEs' financing needs could be reduced.

Overall, the literature reviewed shows that the development of fintech has accelerated in recent years in many countries, including Indonesia. Although it has not been proven yet worldwide, as a theoretical proposition, P2P lending companies offer a great opportunity for MSMEs to have better access to funding. This theoretical proposition is based on two assumptions. First, without discounting other factors, MSMEs' access to P2P loans should be a strong determinant of their growth. Second, the flow of funds from investors to P2P lending companies should be uninterrupted; and MSMEs have access to the internet or Wi-fi.

### **Data and Method**

This research adopts a descriptive approach that analyzes secondary and primary data. It utilized a survey method by using a semi-structured questionnaire as the main instrument to collect the primary data from the two groups of respondents that are namely, i.e. 30 owners of MSMEs who received P2P loans, and 30 managers/heads of registered P2P lending companies, in which a total of 40 were deemed usable, i.e. 10 MSMEs and 30 P2P lending companies. The main objective of the survey was to find out how important P2P lending for MSMEs, from MSMEs' own as well as P2P lending companies' own perspectives.

By 30<sup>th</sup> September 2019, there were 127 fintech companies registered with the Financial Services Authority (OJK). Initially, as the first step of the sampling method of this study, all registered fintech companies were included in the research sample. But not all are P2P lending companies providing microfinance that is most needed by MSEs. Many others provide other types of financing such as supply chain finance, invoice finance, co-financing, inventory financing and payday loan. So, as the second step, only P2P companies were included in the sample. But, most sampled P2P companies did not distinguish their customers between individuals or households (who borrowed money to e.g. renovate a house or to buy a new car or to pay school fees) and entrepreneurs or owners of MSMEs who borrowed money to expand their businesses. At that time only 30 companies recorded their customers according to these two categories, and therefore, as the final step, only them were included in the sample.

Unfortunately, from these 30 companies, most refused to provide data about their MSME customers for various reasons. So, for the survey, it only managed to collect information from 50 MSMEs provided by some of these 30 companies. Of these 50 MSMEs only 30 filled out the questionnaire, but, unfortunately, only 10 of them were deemed usable. The majority of them were not very open in providing information. Especially with regard to their financial figures such as income or revenue and the amount of P2P credit received.

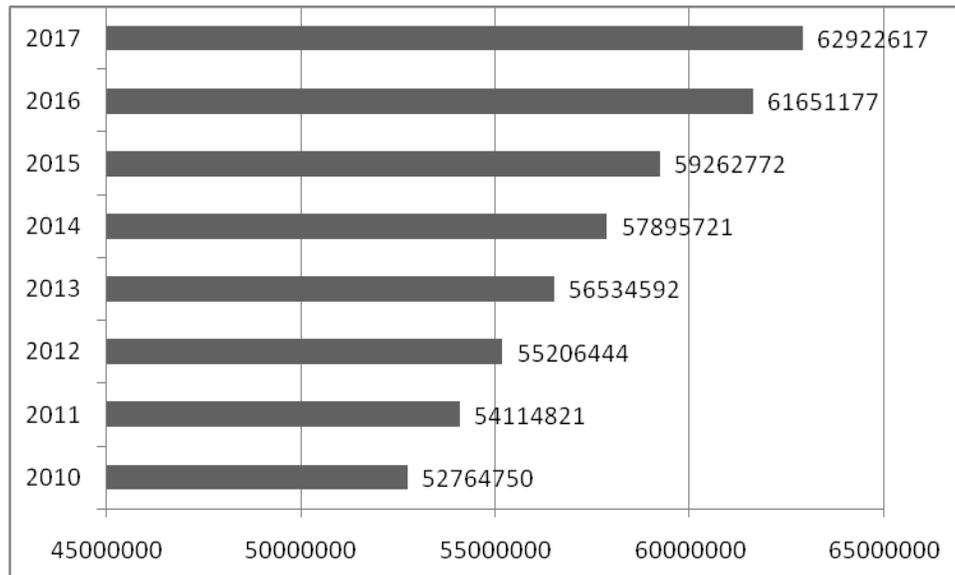
Secondary data was collected from five (5) sources: (i) online data on MSMEs from the Ministry of Cooperatives and SMEs; (ii) data on MSMEs' credit from Bank Indonesia (BI); (iii) data on MSEs in the manufacturing industry and MSMEs in all sectors from the Central Statistics Agency (BPS); and (iv) data on registered fintech companies from the OJK.

## Results and Discussion

### *Development of MSMEs and Their Constraints*

MSMEs play a very important role in economic development in Indonesia. These enterprises are the main drivers of national economic activities with their contribution to the country's GDP being above 50 percent. The number of MSMEs continues to grow. The latest data available shows that in 2017 there were 62,922,617 MSMEs in all sectors, and this increased from 61,651,177 in 2016 (Figure 2). As they are very numerous, reaching 99 percent of all companies, MSMEs have the largest contribution to the employment generation, and especially MSEs are the main source of employment opportunities for low skilled workers and business opportunities for married women from poor households in rural areas (Tambunan, 2018a).

**Figure 2.** Number of MSMEs in Indonesia, 2010-2017 (thousand unit)

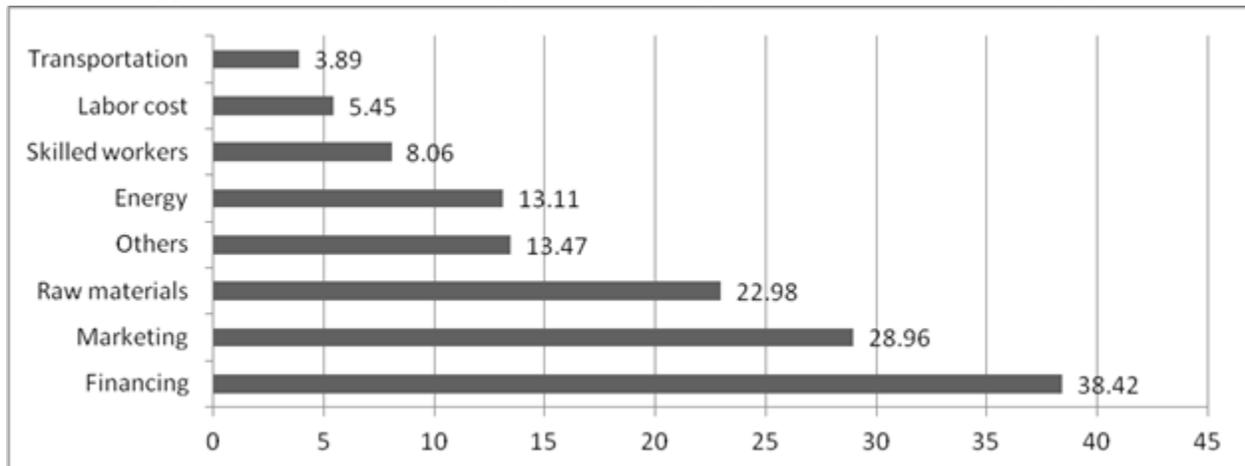


Source: Ministry of Cooperative and SME (<http://www.depkop.go.id/berita-informasi/data-informasi/data-umkm/>) ; <http://www.lisubisnis.com/2016/12/perkembangan-jumlah-umkm-di-indonesia.html>.

As in other developing countries, MSMEs in Indonesia also face a variety of problems. Data on MSEs in the manufacturing industry shows that 65.67 percent of the total 4.46 million enterprises experienced serious difficulties to expand or even to maintain their businesses and,

around 38 percent of them said that their main serious constraint is to find external sources of funding (Figure 3).

**Figure 3.** Types of Difficulties faced by Manufacturing MSEs in Indonesia, 2017 (%)



Source: (BPS, 2018).

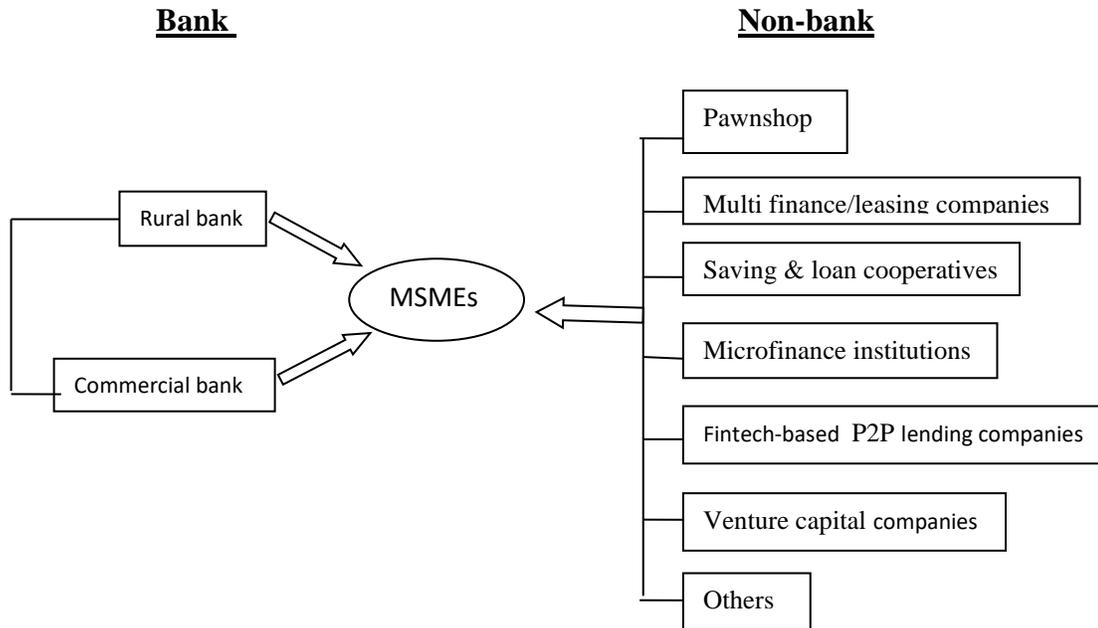
### ***MSMEs' Access to Bank Funding***

It is not easy to know exactly how many of the approximately 62 million MSMEs in Indonesia need funds from outside sources, or who have ever applied for loans to banks or other formal financial institutions. However, the 2017 national survey of manufacturing MSEs may provide a clue. Regarding the source of capital, it reveals three categories of MSEs, namely (a) fully financed by own money (i.e. 3,679,592 respondents or 82.42% of the total MSEs surveyed); (b) partially funded by external sources (i.e. 608,352 respondents or 13.63%); and (c) the rest (i.e. 176,744 respondents or 3.99%) who are wholly dependent on capital from external sources. Those who wholly or partly used money from external sources, only a small percentage of them fully used bank loans. More respondents used funds from non-bank such as savings and loan cooperatives (credit unions), pawnshops, multi finance/leasing companies, microfinance institutions, or from informal sources such as friends, relatives, money lenders, payments in advance from consumers, or debt to the suppliers of raw materials (i.e. payment of raw materials after goods had been sold). Many MSEs' owners prefer informal sources of funding because they can get the money immediately with no administration costs; although interest rate that they pay is often much higher than commercial banks' rates (BPS, 2018).

Further, Figure 4 describes the MSME funding ecosystem in Indonesia. The financial service providers can be grouped into two categories, namely banks and non-banks. The bank category can be divided further into two sub-categories, namely rural banks (i.e. Bank Perkreditan Rakyat or BPR) and commercial banks. Then, each sub-category can be distinguished between Islamic

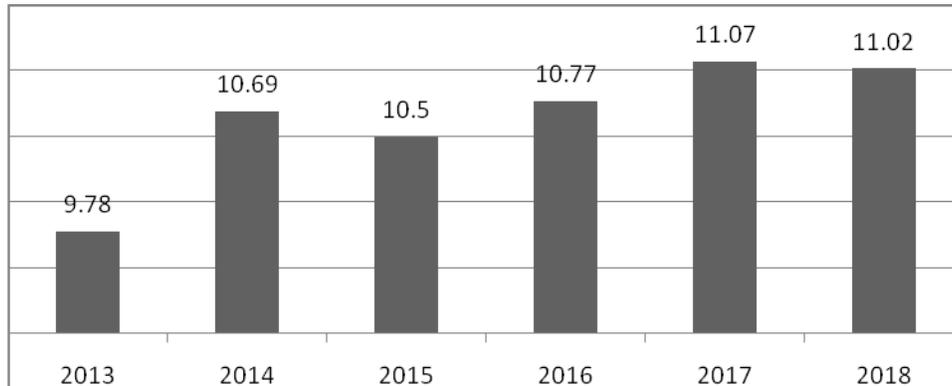
or Sharia banks and conventional banks. A Sharia bank is a banking system based on the principles of Islamic or Sharia law and guided by Islamic economics. Islamic law prohibits collecting interest or "riba". That is why sharia banking is also known as non-interest banking. Whereas, non-banks include microfinance institutions, venture capital companies, saving and loan cooperatives, pawnshop, and also recently fintech-based P2P lending companies.

**Figure 4.** The MSME Funding Ecosystem in Indonesia



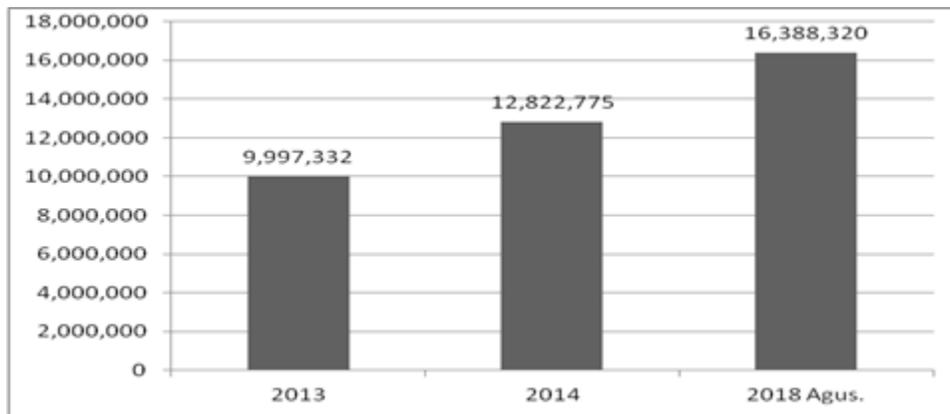
To expand MSMEs' access to bank funding, in 2018, the Indonesian central bank, Bank Indonesia required all banks to allocate at least 20 percent of their total credits to MSMEs. Since then, banking attention to MSMEs has been getting better each year. Based on the credit balance value, the total MSME outstanding loans from commercial banks increased annually, from almost 640 trillion IDR in 2013 to 1,024.9 trillion IDR in August 2018. Likewise, the number of bank accounts owned by MSMEs also increased to more than 16 million in August 2018 from below 10 million in 2013. However, as shown in Figure 5, the percentage of total loans of these enterprises in total commercial bank loans is still very low. Likewise, the number of bank accounts owned by MSMEs (Figure 6). Although the number continues to increase, compared to the number of MSMEs in Indonesia which reached nearly 63 million units, it is obvious that most MSMEs still do not have access to banks.

**Figure 5.** MSMEs' Outstanding Commercial Loans of MSMEs in Indonesia, 2013-2018  
(% of total commercial loans)



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

**Figure 6** Total Number of MSME Bank Credit Accounts 2013-2018



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

From findings of the survey and FGDs, as also supported by national data 2017 on manufacturing MSEs (BPS, 2018), it reveals several reasons why most MSEs find it difficult to get funds from banks. Among them are lack of valuable assets for collateral, no financial records, the proposal is rejected, the type of business is considered not promising, and the business is operated traditionally without a good management system.

### ***Fintech-based P2P Lending***

In Indonesia, the existence of fintech companies is regulated by the government or Financial Services Authority (OJK) through two regulations, namely Regulation No. 77, 2016 Concerning Loan Service to Loan Money Based on Information Technology, and Regulation No. 13, 2018

Concerning Digital Financial Innovations in the Financial Services Sector. All fintech companies must be registered and licensed by OJK. Unregistered fintech companies are considered illegal.

Based on the most recent data as on 30th September 2019, there are 127 registered fintech companies, which consist of 119 conventional and 8 Sharia. Of this total, 122 companies are located in the great Jakarta, and the rest in other cities in Java; only one company is in Lampung, Sumatera. Regarding status, 88 companies are local and 39 are with foreign capital. Many of them have borrowers from outside Java. So far, only 13 companies have been licensed. Even though they do not have permission yet, as long as they are already registered they are allowed by the OJK to operate. But after operating for a year they must apply for permission. Also, according to OJK, as on 30th 30 September 2019, there are 277 potential fintech companies, with many of them still being in the registration stage; while others have only just established contacts with the OJK and stated their plans to become fintech companies.

Based on its main activity, there are three (3) types of fintech companies in this country, namely P2P lending, credit scoring, and aggregator, and among these, P2P lending is the most popular one. The profile of all 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 have various types of financing, which include invoice financing, supply chain financing, merchant financing, micro\_financing, 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
<b>Number of Accumulated Lender Accounts (Entity Unit)</b>		
Java	155,230	441,508
Outside Java	50,281	85,528
Abroad	1,996	3,349
Total	207,507	530,385
<b>Number of Accumulated Borrower Accounts (Entity Unit)</b>		
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. 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. of Accounts) *		
Java	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)		
The lowest average loan value	5,044,117,760,986	8,500,692,797,178
Average value of loans disbursed <sup>6</sup>	17,755,363	16,198,066
	5,811,668	71,805,959

Note: \* for 2019 the data are from June

Source: OJK (2019).

Initially, banks, especially large banks felt the presence of fintech-based P2P lending as a threat to their business. On the other hand, fintech-based P2P lending also did not initially intend to cooperate with other formal financial institutions. At the same time, fintech companies realized that although they have better skills, they are more agile and are increasingly funded by third parties, since breaking the dominance of incumbent banks is difficult. So finally, the banking and fintech sectors began to realize that the future of both of them lay in collaboration between them.

Table 3 shows the profiles of randomly selected 10 MSE owners as respondents, who had received P2P loans. They are from different types of businesses such as small shop owners who sell various kinds of cellphones, cat food, toys for children, and camping equipments, producers who make shoes and furniture; and laundry business owners. In terms of sources of capital, although they also use their own money or borrow money from their suppliers or other informal sources, they also rely on loans from formal sources including fintech-based P2P lending. What is interesting from this sample is that some of them have also previously received loans from microfinance institutions (MFI) or a government specially designed credit scheme with very low



interest rates for MSEs, called People Business Credit (or KUR). Most of them have never borrowed from the bank because they do not have collateral assets.

**Table 3. Profiles of Ten MSE's Owners**

Aspect	Respondents									
	1	2	3	4	5	6	7	8	9	10
Type of business	Billboards	Furniture	Toys	Cat food	Cellphones	Laundry	Snack	Camping equipments	Fashion	Footwear
Sources of fund	P2P	KUR, MFI, P2P	KUR, MFI, P2P	KUR, P2P	KUR, P2P	P2P	KUR, P2P	KUR, P2P	P2P	P2P
	-Formal	Own	Own, supplier, consumer	Own	Own	Own	Own	Own, relative	Own	Own
-Informal										
Reason not to borrow money from bank	Lack of collateral	Lack of collateral	Lack of collateral	Too complicated	Too complicated	Lack of collateral	Lack of collateral	Lack of collateral	Lack of collateral	Too complicated

Notes: KUR = People's Business Credit, i.e government-initiated subsidized credit scheme for MSEs; MFI = microfinance institutions

Source: survey

Concerning the 30 fintech-based P2P lending companies surveyed, they are all located in Jakarta. But some of them also have customers in many areas outside Jakarta, some even fund MSEs in West Nusa Tenggara and South Sulawesi. As shown in Table 4, types of financing of the sampled companies vary from invoice financing, supply chain financing, merchant financing, micro-financing, to seller financing. The main financing target of most respondents is MSEs with legal status. Some of them also provide loans for women empowerment, education, individual customers, and multifunction. Many of the surveyed companies have more than one type of financing, whereas some others focus only on financing MSMEs.

**Table 4.** Types of Financing of 30 Fintech-based P2P Lending Companies Surveyed

Types of financing	Number of companies	%
Micro finance	20	35.08
Invoice finance	16	28.07
Supply chain finance	6	10.53
Merchant finance	4	7.01
Online seller	1	1.75
Property finance	1	1.75
Productive consumptive	1	1.75
Co-financing	1	1.75
Working captal financing	2	3.51
Installment financing	1	1.75
Pay day loan	1	1.75
Recieveable financing	1	1.75
Inventory financing	1	1.75
Employee financing	1	1.75
		<u>100.00</u>

Source; survey

Thus, the question arises if the presence of P2P lending benefit MSEs should be answered from two different perspectives, namely from the perspective of MSE owners who have received loans from P2P lending, and the perspective of fintech-based P2P lending companies.

From the MSEs' perspective, findings from indepth-interviews with the ten respondents show that although they received loans from P2P lending, and some others also (ever) received from other sources such as KUR and MFI (see Table 2), their own money still plays an important role in financing their businesses. They all considered loans from P2P lending only as an additional

fund when their own money, or KUR they received or loans from MFI are not enough to cover their expenditures. For example, one respondent said that he borrowed from P2P lending to expand their businesses or to purchase new machines or tools because his own money plus KUR he received were just enough working capital need; with no money left for investment. On the average, loans from P2P lending is not more than 30 percent of their total needed capital; only one respondent once borrowed money from P2P lending up to 50 percent of his needed capital. One respondent said that he ever borrowed money from P2P lending when he was experiencing financial difficulty.

All of them said that P2P lending does not require collateral and the application process is not complicated; even though they have to pay interest a little more than banking interest. Based on interviews with them, Table 5 describes the comparison between the traditional loan financing market and the P2P lending market.

**Table 5. The Traditional Loan Financing Market vs P2P 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 & Slow	Simple & Fast
Transaction Cost	High	Low

What's interesting is, when they were asked whether borrowing from P2P lending is beneficial to their business, only five of them said yes, while the other five said no significant changes in their business. To the first five, two respondents said that their business could be expanded from previously very small without employees becoming larger with some employees after borrowing. The other four said that their turnovers had increased, and one of them even said frankly that his revenue had increased from an average of around Rp 400 million per month before to almost 1 billion per month after borrowing.

Their answers, however, need to be looked at critically because that is their personal views which is difficult to prove for two reasons. First, unlikely modern firms. MSEs do not have financial records. Second, it is possible that their turnover increased or business expanded not



entirely because of P2P loans but also because of loans from other sources they have had before (if any) such as KUR or from MFI.

From the perspective of P2P lending companies, some of the 30 companies surveyed focused only on MSEs funding, while others also extended loans to individuals for consumption, education, property, women empowerment, and others. Although all of the companies are located in Jakarta, few of them have also customers outside Jakarta or even outside Java; they channel their funds through their branches outside Java.

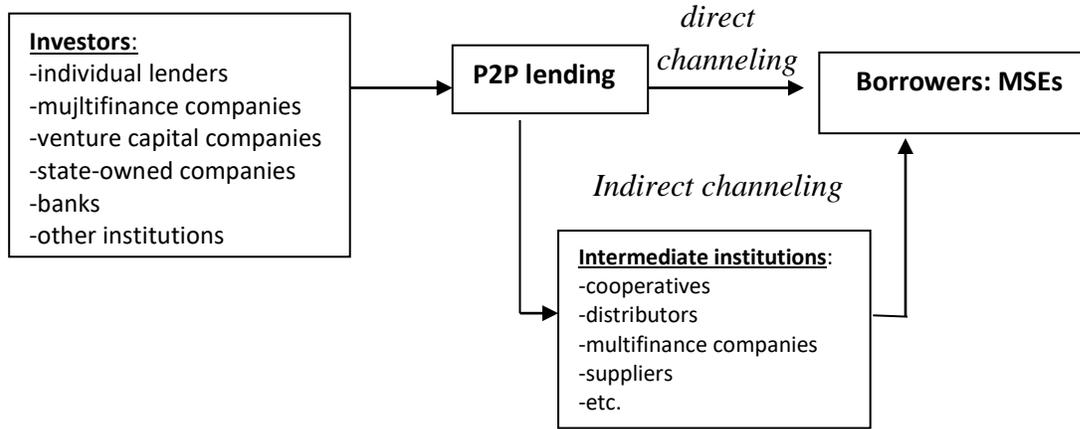
For funds, P2P lending companies are fully dependent on investors, which can be banks, individual investors, multifinance companies, venture capital companies, state-owned companies, and other institutions. For 17 companies in the sample, banks have been their main investors, often called superlenders, and most cooperated with more than one bank. Even, for some, banks are their only funders,

Although there are many potential investors, including those from abroad, P2P lending companies prefer cooperation with banks because more funds can be obtained. Of course, these companies must first submit the names of prospective borrowers and their credit worthiness to the bank and then the bank will make its assessment before approving funding. While the benefit of such cooperation for the bank is that the number of MSEs funded by the bank, although indirectly, can increase at a relatively lower cost, and this is a positive assessment for the bank from the government's perspective related to its policies that require all banks in Indonesia to also extend credit to MSMEs,

Whereas in channeling funds, some companies do it directly to MSE, others channel it through intermediary institutions such as 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. Also, 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

As a general description, Figure 7 shows the ecosystem of MSEs funding by fintech-based P2P lending companies in Indonesia.

**Figure 7 Ecosystem of MSEs Funding by Fintech-based P2P Lending in Indonesia**



Source: FGD

Finally, the 17 P2P lending companies that collaborated with banks were asked about the impact of the cooperation on the number of MSEs they had funded or the total amount of credit that has been given to MSEs. Unfortunately, only eight respondents provided data, while the remaining nine respondents did not have specific data on MSEs because their borrowers are not only MSEs but also individual borrowers, suppliers, activities related to women empowerment and others. So, they had only aggregate data on total borrowers or total loans. But all of them claimed that the number of borrowers had increased. Of these eight respondents, only four claimed there was an increase of MSE borrowers (Table 6). Unfortunately, the respondents were not very cooperative for various reasons so that the increased number of their MSE borrowers cannot be included as respondents in the survey.

**Table 6** The impact on MSEs from P2P lending companies' collaboration with banks

Respondent	Early year of Cooperation	Indicator	Impact of Cooperation		
			Before	After	Change (%)
Fintech 1	2018	No. of MSEs	349	480	37.5
		Total credit (IDR)	51million	81million	58,8
Fintech 2	2017	No. of MSEs	113	113	-
		Total credit (IDR)	111 million	111 million	-
Fintech 3	2018	No. of MSEs	2,428	2,428	-

		Total credit (IDR)	19.64 billion	19.64 billion	-
Fintech 4	2018	No. of MSEs	3321	3472	4.6
		Total credit (IDR)	52.67 billion	114.45 billion	117.3
Fintech 5	2017	No. of MSEs	0	8	100.0
		Total credit (IDR)	0	39,965,551	100.0
Fintech 6	2018	No. of MSEs	2,788	5,180	85.8
		Total credit (IDR)	1.17 trillion	2.94 trillion	151.3
Fintech 7	2017	No. of MSEs	0	1967	100.0
		Total credit (IDR)	0	601.66 billion	100.0
Fintech 8	2016	No. of MSEs	32	11470	357.43
		Total credit (IDR)	6.1 billion	26.1 billion	3.28

Source: survey and FGD

## Conclusion

This study shows that the number of MSME in Indonesia continues to grow even though they face many obstacles, including difficult access to funding from banks. Although commercial banks are required by the government to give MSMEs full access to credit, the percentage of total commercial credit to this group of enterprises, especially MSEs is still very small. There are several reasons why MSEs find it difficult to get loans from banks. The reasons are mainly they do not have valuable assets for collateral and financial records, their proposal is rejected, the type of their business is considered not promising, and they run their business traditionally, not-well organized, and without good management system.

Regarding the role of P2P lending companies as an alternative source of funding, this study is more exploratory than proving a theory or evaluating an activity or program. Not only because the presence of fintech is a new phenomenon but, at least in Indonesia there has never been research before on the role of P2P lending companies in funding MSMEs. Even research in this field is hard to find elsewhere. This study suggests that at least in theory with the presence of P2P lending companies, the number of MSMEs, especially MSEs, in Indonesia, including those located in rural areas (of course, villages that have access to the Internet or Wi-fi) to obtain funds from formal sources will increase. Even though aggregate data are not available yet, the interviews with the ten MSEs may suggest some benefits of P2P loans. Some of them said that their business could be expanded or their turnover increased because of P2P loans.



Finally, many of the P2P lending companies surveyed co-operate with banks as their main investors. This cooperation benefits the banking sector because with this co-operation, banks can expand their coverage of MSMEs to be funded, although indirectly via P2P lending companies.

### **Limitation and Future Research**

As explained before, regarding fintech or P2P lending companies, this research is exploratory, exploring a completely 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 MSEs in terms of funding. Therefore, this research is far from perfect; the conclusions or findings of this study can be considered temporary, mainly because the sample is relatively small, especially MSEs funded by P2P lending companies. Also, not all P2P lending companies surveyed provided data on the number of MSEs funded because they do not distinguish between MSE borrowers and other borrowers in their records.

Therefore, as future potential research, it is necessary to expand the MSEs sample funded by P2P lending companies as well as P2P samples. For MSEs, the critical questions that need to be addressed are. First, does P2P loan give more benefit to MSEs compared to other sources of credit they ever received (if any). Second, when their business is growing well and they have assets that can be used as collateral or when they are already bankable from the bank perspective, do they still consider P2P lending important? Third, do MSEs use of P2P credits for working capital or investment?

For P2P, the critical issues are: (i) non-performing loans of MSEs' credit; and (ii) risks and benefits in lending money to MSEs relative to other borrowers such as individual customers and households, and how they minimized the risks.



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