

Integrated Financial Technology Model on Financing Decision for Small Medium Enterprises Development

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ABSTRACT: Access to capital is one of the biggest obstacles for Small Medium Enterprises (SMEs) in Indonesia because SMEs do not have adequate collateral, high-interest costs, and complicated procedures. In this digital era, one form of financing is Peer to Peer Lending, where financial technology (fintech) corporation mediates between investors and SMEs that need capital. This form is more comfortable, faster, and cheaper so that it can be the solution for SMEs to access capital without tangible collateral. However, with information asymmetric, fintech has high potential risks for investors, fintech corporations, and other stakeholders. The research method is reviewing articles related to fintech and SMEs, then determining the research gap, and its limitations. The results showed that integrated fintech between investors, fintech corporation, and SMEs, asymmetric information can be eliminated, more transparent, fairer, and no party is harmed. The integration will also encourage SMEs to develop their businesses better. Thus, asymmetric information can be eliminated, more transparent, fairer, risks can be reduced, and no party is harmed. The integration will also encourage SMEs to develop their businesses better.

Keywords: Integrated financial technology, financing decision, peer to peer lending.

1 INTRODUCTION

SMEs have a strategic role in driving the real sector, creating new jobs, and even contributing to Gross Domestic Product (GDP) because the majority of business units in Indonesia are engaged in SMEs (Czarniewski, 2016). Data from Bank Indonesia in 2018 showed that the number of SMEs was 99.9 percent of the total 57.89 million business units with total employment of 96.9 percent, and contribution to GDP was 57.56 percent. However, SMEs cannot optimally advance due to limited financial access (Haider, 2018; Martinez et al., 2018; Yoshino & Taghizadeh-Hesary 2016). The number of SMEs in Indonesia is more than 50 million, and 70% of them cannot access finance from banks (Sarjito, 2018). The limited access to non-digital financial institutions is because SMEs do not have adequate collateral and high loan interest rates (Shinozaki, 2012). These results indicate that the financing gap exists between the capital requirements for SMEs (demand side) and the availability of SMEs' capital in financial institutions (supply-side).

Financing is an essential element that affects the success of SME businesses. The phenomenon is that SMEs prefer to use their own capital, and only 6%

use financing sources from banks (Minerva, 2016). This is in accordance with the Pecking Order Theory of Capital Structure, which states that with asymmetric information, the company prefers internal financing taken from retained earnings; if the funds are inadequate, then they will consider borrowing (Myers & Majluf, 1984). On the other hand, limited financial access will reduce the growth of SME businesses (Shinozaki, 2012).

Therefore, in the current digital era, fintech is a solution for SMEs in overcoming financial constraints (Arner et al., 2015). Fintech is also a digital technology application related to financial intermediation (Aaron et al., 2017). This innovation is supported by the Financial Services Authority Regulation (OJK) No. 77/Pjok.01/2016 concerning information technology-based lending and borrowing services and the Republic of Indonesia Financial Services Authority Regulation No. 13/Pjok.02/2018 concerning digital financial innovation in the financial services sector. One form of fintech is Peer to Peer Lending (P2P), which is a debt-based transaction between individuals as investors, fintech corporations and businesses such as SMEs. Based on the data from OJK, up to 30 September 2019, there were 127 fintech lending in the form of P2P registered

and obtained permission from OJK, such as Dana-mas, Investree, Amarth, and Quick Wallet. This is an opportunity for SMEs to access capital through P2P so that the performance of SMEs can increase.

This model of fintech is suitable for SMEs in gaining access to capital, because according to Czarniewski (2016), fintech has several advantages, such as a) Fintech can expand the reach of SME locations spread across various regions in Indonesia; b) To get loans through fintech, SMEs do not need to provide collateral, such as collateral for movable or immovable property; in fact, fulfilling the requirement of the collateral has been an obstacle for SMEs to get capital from non-digital financial institutions; and c) Procedures for obtaining capital through fintech are more practical, faster and cheaper (Minerva, 2016).

So far, fintech only regulates the relations between investors and fintech corporations, as indicated by OJK Regulation No. 77 / POJK.01 / 2016 concerning information technology-based lending and borrowing services. The regulation only regulates the protection of consumer/investor, including transparency, fair, reliable, data security, and disputes. However, it does not regulate the relationship between fintech corporations and SMEs nor among all relevant stakeholders in an integrated manner. Also, in its implementation, a fintech corporation is an intermediary institution that connects investors with fintech corporations and fintech corporations and SMEs as debtors. Fintech must be digitally integrated with the aim of a) Eliminating asymmetric information between stakeholders, so that risk can be reduced such as credit risk, cyber risk, data risk and operational risk; b) Increasing transparency between investors, fintech corporations, SMEs and other stakeholders; c) Increasing trust between investors in fintech corporations and between SMEs and fintech corporations; and d) Facilitating the government (OJK and BI) in conducting surveillance and control of technology-based business activities. By this mechanism, fintech corporations are developing well in order to encourage the development of SMEs' performance to the fullest. Therefore, the purpose of this article is to develop a framework of integrated financial technology model at financing decisions for SMEs development.

The contribution of this article is to develop capital structure theory based on integrated information technology so that SMEs get easy access to financing to develop their businesses. In addition, this article is expected to be the basis in perfecting the regulations of the Financial Services Authority in an integrated digital-based financial transaction.

2 RESEARCH METHODS

The research method used in this article was reviewing articles about financing decision for SMEs and financial technology for SMEs, then determining the research gap, and its limitations. The results can be used as a basis for developing a framework of integrated financial technology model at financing decisions for SMEs development.

3 RESULTS AND DISCUSSIONS

3.1 *Financing decision for SMEs in Indonesia*

Financing is one of the critical factors that determine the development of SMEs' performance. Financing can come from internal or external company. Pecking Order Theory of Capital Structure states that by the existence of asymmetric information, the company prefers internal financing that comes from retained earnings. If external funding is needed, the company will issue debt first, and then when the use of debt is not sufficient, the company will issue the safest new shares (Myers 1984, Myers & Majluf, 1984). So far, capital requirements for SMEs not only using their own capital but also borrowing from friends, family, neighbors, or financial institutions that are not formal or moneylenders. Based on the results of the study, it is shown that most SMEs' financing uses their own capital (Minerva, 2016). Except when the capital itself is not enough, then they will borrow from an external party. The results show that SMEs' financing, in general, is in accordance with the Pecking order theory of capital structure (Aabi, 2014).

3.2 *Financing gap for SMEs in Indonesia*

If SMEs only rely on internal financing sources, it will be difficult for SMEs to develop optimally. This is reasonable because the source of internal funds owned by SMEs is very limited in number. In addition, if SMEs will borrow from non-digital financial institutions constrained by collateral and high-interest costs, high-cost information collection, the risk of SMEs cannot be measured, so non-digital financial institutions have doubts about providing financing to SMEs (Minerva 2016). This is supported by the results of research that SMEs have a greater level of credit risk than non-SMEs (Mutamimah & Hendar, 2017). The Indonesian Fintech Association shows that 49 million SMEs are not bankable, because they cannot provide collateral to access non-digital loans. It results in the limit of financial access

for SMEs. This is indicated by data that in Indonesia, there are more than 50 million SMEs, and 70% of them cannot access financing from banks (Sarjito 2018). Limited financial access for SMEs is reflected in the Indonesian Banking Statistics data on October 2018, showing that of the total loans provided by the banking industry amounted to 5,168.2 trillion rupiahs, only 951.7 trillion rupiahs or around 19% were accessible to SMEs. Based on IMF Financial Access Survey, it shows that there is a gap of SMEs' financing of 1.320 trillion rupiahs; in other words, there is still a capital requirement for SMEs that has not met by financial institutions (Joseph, 2019). A study from the World Economic Forum (2015) showed that limited access to financial institutions is the biggest obstacle in developing business in developing countries, including in Indonesia. Further consequences, SMEs cannot develop properly (Haider, 2018; Yoshino & Taghizadeh-Hesary, 2016). This shows that there is still a financing gap between the funding needs for SMEs (demand side) and the availability of funds from financial institutions (supply-side).

3.3 *Financial Technology as a solution for SMEs' financing*

In the current digital era, fintech is one solution for SMEs in overcoming financial constraints (Arner et al., 2015). This is supported by the Financial Services Authority Regulation No. 77 / Pojk.01/2016 concerning information technology-based lending and borrowing services and the Republic of Indonesia Financial Services Authority Regulation Number 13/Pojk.02/2018 concerning digital financial innovation in the financial services sector. One form of fintech is P2P lending, which is a debt-based transaction between individuals as investors, fintech corporations, and the business world/business such as SMEs.

The model is a digital-based intermediary institution that connects debtors with creditors, in this case, SMEs. The P2P lending model is acceptable for SMEs because the model is a solution for SMEs that experience capital access constraints, the model does not need collateral, the process of disbursement of funds is fast, the costs are cheaper, the interest rate is competitive, the applications are paperless so it is easier. It does not provide penalties for early repayment (Minerva, 2016). However, this model will run well if SMEs are honest, convey data correctly, have a high commitment, and the level of financial literacy and information technology literacy is high. Based on the data from OJK, on September 30, 2019, there were 127 registered fintechs and re-

ceived permits from OJK, such as Danamas, Investree, Amarta and Quick Wallet.

3.4 *Proposed framework of integrated financial technology model at financing decision for SMEs*

Integrated fintech is an integrated digital financial transaction based on debt between individuals as investors, fintech corporations, and the business world/business, such as SMEs. The model integrates investors, fintech corporations, and SMEs and even links OJK and BI as regulators of complete financial transactions. The data held by the three parties have been stored in an online database or big data as well as using integrated satellite data (Nemoto & Yoshino 2019). This big data can be used as a basis for making decisions in selecting eligibility to obtain capital and monitoring all activities of each party and. The system can use digital footprint as a substitute for physical documents for verification and/or use of third party data. Even OJK and Bank Indonesia can supervise, monitor, and evaluate business processes that all parties do efficiently, quickly, and at a low cost.

The business process model on integrated fintech is the interrelated system between investors, fintech corporations, SMEs, even OJK and BI as regulators with the description:

3.4.1. *Investors – Fintech Corporations*

Investors submit a certain amount of funds to fintech corporations. Completed investors' data have been recorded digitally using satellite data called digital footprint, which will make it easier for fintech corporations to track the origin of investment funds owned by investors, the identity of investors, and investors' activities. By this model, it will eliminate the inclusion of money laundry and illegal funds. In addition, through integrated fintech, investors can more easily and quickly obtain data and information about the quality of fintech corporations, identity, and operational activities. The big data can also trace whether the fintech corporation has obtained permission from OJK or not, so there are no more illegal fintech corporations as feared by the public as potential investors at this time, which is certainly detrimental to investors.

3.4.2. *Fintech Corporations – SMEs*

Integrated fintech will facilitate fintech corporations in selecting SMEs that will be given capital. The big data or integrated data footprint will ease those fintech corporations to monitor SMEs' business ac-

tivities, the number of products sold, the position of SMEs in competition, the financial condition of SMEs, and the commitment of SMEs in paying off installments of loans to fintech corporations. By running this integrated fintech, it is easier for fintech corporations to supervise and monitor the capital borrowed by SMEs, so that credit risk can be eliminated. So far, SMEs are still included in the "high-risk borrower" group (Zairani & Zaimah, 2013), and Non-Performing Financing for SMEs is higher than non-SMEs (Mutamimah & Hendar, 2017).

3.4.3. Investors – SMEs

By integrated fintech, integrated big data and satellite data are available so that investors can access not only data and information from fintech corporations, but investors can also access data and information of SMEs. Investors can easily track the type and number of SMEs that get funds from fintech corporations, the amount of investment funds that will be allocated by fintech corporations to SMEs, the types of businesses owned by SMEs, the status of SMEs and the quality of SMEs, as well as the location of SMEs. In addition, investors and fintech corporations can monitor business processes, use of funds by SMEs, business transactions conducted by SMEs, the condition of SMEs, which is growing or even in distress. Using this model, SMEs cannot avoid or lie in conveying their business performance. Also, it will be able to reduce credit risk for fintech corporations, which will further impact the investors.

3.5 Implementation of Integrated financial technology model at financing decision for SMEs

To implement the model of integrated financial technology, several conditions are needed, including a) Increasing the level of financial literacy and Information and Technology literacy for all SMEs' managers and fintech's managers, and they should be certified. This is very reasonable, because most micro-businesses in Indonesia at this stage are still experiencing difficulties in understanding the basics of financial literacy (Shinozaki, 2012); b) Providing adequate infrastructure for SMEs to implement integrated financial technology, so that SMEs' business activities in Indonesia can develop properly, in order to improve society's welfare; and c) Issuing government regulations related to integrated financial technology. So far, there have been government regulations related to fintech, namely Number 77 /POJK.01/2016 and Number 13 /POJK.02/2018. However, the regulations did not yet regulate the in-

tegrated financial technology model at financing decisions for SMEs.

4. CONCLUSION

To implement the model of integrated financial technology, several conditions are needed, including a) Increasing the level of financial literacy and Information and Technology literacy for all SMEs' managers and fintech's managers, and they should be certified. This is very reasonable, because most micro-businesses in Indonesia at this stage are still experiencing difficulties in understanding the basics of financial literacy (Shinozaki, 2012); b) Providing adequate infrastructure for SMEs to implement integrated financial technology, so that SMEs' business activities in Indonesia can develop properly, in order to improve society's welfare; and c) Issuing government regulations related to integrated financial technology. So far, there have been government regulations related to fintech, namely Number 77 /POJK.01/2016 and Number 13 /POJK.02/2018. However, the regulations did not yet regulate the integrated financial technology model at financing decisions for SMEs.

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