



E-integrated corporate governance model at the peer to peer lending fintech corporation for sustainability performance

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Abstract

The peer to peer lending financial technology corporation as a digital-based intermediary has two types of agency relationships: (1) Between financial technology corporation as an agent with investors as a principal; (2) Between financial technology corporation as an agent and the small-medium enterprises as a third party (debtors). Both of these agency relationships currently run independently and are separate from other agency relationships, so they are not effective in improving performance. Therefore, the purpose of this article is to develop a conceptual framework of the e-integrated corporate governance model at the peer to peer lending financial technology corporation to improve sustainability performance. The research method in this article was reviewing articles related to corporate governance, finding gaps and limitations. The results of this study are that because business processes in financial technology corporations are interconnected systems, both corporate governances must be integrated with information technology, in order to improve sustainability performance. With this model, asymmetric information between the three parties (depositors/investors, financial technology corporation, and small-medium enterprises) and all stakeholders can be eliminated, risks can be reduced, business processes and financial and non-financial information of the three parties is more transparent and accessible for all stakeholders.

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Introduction

In the current era of information technology, financial technology (fintech) corporation, especially in the form of peer to peer lending, is growing rapidly. Until April 2019, the number of financial technology corporations registered and obtaining licenses from the Financial Services Authority in Indonesia was 106 companies (Otoritas Jasa Keuangan [OJK], 2019). Some examples of the peer to peer lending financial technology corporations in Indonesia are Modalku, Amartha, Crowdlo, InvesTree, Mekar, and KoinWorks. On the other hand, small-medium enterprises (SMEs) experience difficulties in obtaining loan funds and this become an obstacle to the development and sustainability of the small-medium enterprises itself (Wang, 2016).

Financial technology has become one of the alternative solutions in overcoming the constraints of financial access for

small-medium enterprises (Arner et al., 2015). Lee and Teo (2015) stated that fintech is an innovation of financial products and services that use technology. One form of financial technology services are peer to peer lending. Peer to peer lending is a transaction with debt-based digital technology between individuals, fintech corporations which provide the peer to peer lending, and business people such as small-medium enterprises (Bank Indonesia [BI], 2018).

In contrast, the rapid number of financial technology corporations cannot be separated from the risks faced by fintech corporations such as cybercrime risk ranging from fraud, misuse of client data, customer data security, digital signatures that can be falsified, risk of default, and other moral hazards. Furthermore, according to Namvar (2013), Peer to Peer is not guaranteed by tangible assets, so the risk of failure is higher. Based on the Financial Services Authority in Indonesia (OJK, 2019), the number of non-performing loans at fintech corporation in March 2019 reached 3.18 percent and the current loan ratio is 3.17 percent.

Peer to peer lending fintech corporation as an intermediary institution that bridges between parties who have excess funds and those who need funds, involves 3 parties, namely: (1) SMEs as debtors, (2) Customers as creditors, and (3) Fintech corporation

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as intermediary institutions that bridge between debtors and creditors. The agency relationship in fintech corporation is divided into two kinds, namely: First, between fintech corporation as an agent with customers as principals in fund collection. Second, it is the relationship between Fintech corporation as principal and SMEs as debtors in fund distribution. The agency relationship has the potential for conflict so that corporate governance is required so that the manager's behavior as an agent can be monitored and controlled properly by the principal (Bonazzi & Islam, 2007).

Fund collection and fund distribution both need corporate governance, which have been run independently, ignoring the other one and not integrated using information technology. Thus it is not effective in increasing sustainability performance. Some results of studies show there is no consistency regarding the effect of corporate governance on sustainability performance. Some studies found that corporate governance can improve sustainability performance (Aras & Crowther, 2008; Handriani & Robiyanto, 2018, 2019; Jaimes-Valdez & Jacobo-Hernandez, 2016; Shrivastava & Addas, 2014). However, in contrast, some others found that corporate governance does not affect sustainability performance (Hussain et al., 2016; Janggu, et al., 2014). In addition, Arena, Bozzolan, and Michelon (2015) found a positive influence between the CEO's dual role as corporate governance structure toward environmental performance. Although Buniamin, Alrazi, Johari, and Rahman (2011); Liao, Luo, and Tang (2015); Michelon and Parbonetti (2010) observed that there was no significant influence between CEO duality as corporate governance structure toward sustainability performance.

Based on the results of researches that are not consistent between corporate governance and sustainability performance and also because business processes in the peer to peer lending financial technology corporation are in interconnected systems, corporate governance must be integrated digitally. With this model, asymmetric information can be eliminated, information on business processes of financial technology corporation and SMEs are more transparent, no party is harmed and sustainability performance can be realized. Consequently, it is really urgent to compile an e-integrated corporate governance model in the peer to peer lending financial technology corporation to realize sustainability performance. This conceptual framework is the "novelty" in this article.

The contribution of this article is to develop agency theory and corporate governance models by reviewing the phenomenon of the peer to peer lending financial technology corporation in Indonesia, agency problem and corporate governance at the peer to peer lending financial technology corporation, and then compile the e-integrated corporate governance model on the peer to peer lending financial technology corporation. Hopefully, by doing so, this article can give support to the development of financial technology especially in the form of peer to peer lending, small-medium enterprises, and all stakeholders so that their performance can be sustained in the long term. In addition, this article is expected to provide input for the government in perfecting regulations related to corporate governance in information technology-based transactions.

Methodology

The research method used in this article was reviewing articles and phenomena related to corporate governance, finding gaps and limitations. Then the conceptual framework of the e-integrated corporate governance model at the peer to peer lending financial technology corporation for sustainability performance was compiled. To find a conceptual framework of e-integrated corporate

governance model at the peer to peer lending financial technology corporation for sustainability performance, the steps to review were the phenomenon of the peer to peer lending financial technology corporation in Indonesia, agency problem and corporate governance at the peer to peer lending financial technology corporation, and then the e-integrated corporate governance model on the peer to peer lending financial technology corporation was compiled. The e-integrated corporate governance model was divided: mechanism of e-Integrated corporate governance model, principles of e-integrated corporate governance, and how to implement e-integrated corporate governance for peer to peer lending fintech corporation.

Financial Technology Corporation in Indonesia

Financial technology in Indonesia is experiencing rapid development. Until April 2019, the number of financial technology corporations registered and have obtained licenses from the Financial Services Authority in Indonesia was 106 companies. There are 4 Financial technology classifications according to Bank Indonesia [BI] (2018) namely: (1). Peer to Peer Lending, where Fintech mediates between investors and business people who need capital. This type of fintech is discussed in this article. (2). Market Aggregator, Fintech will act as a comparison of financial products, where Fintech will collect financial data to be used as a reference by users, also called comparison site or financial aggregator. (3). Risk and Investment Management. Fintech in this group is like a digital financial planner. Users will be helped to get investment products according to the user. (4). Payment, Settlement, and Clearing that facilitate payments such as payment gateways and e-wallets.

Agency Problem and Corporate Governance at the Peer to Peer Lending Financial Technology Corporation

The peer to peer lending fintech corporation is an information technology-based intermediary institution that bridges between customers who have excess funds and SMEs as those who need funds. In this phenomenon, there are 3 parties, namely customers as creditors or principals, the peer to peer lending fintech corporation as agents and SMEs as debtors (Figure 1). The existence of the peer to peer lending fintech corporation in addition to bringing benefits also has risks. The risks include cybercrime, data ownership, misuse of customer data. These risks can arise because of the vulnerabilities of the computer-based system and processes that are interrelated and can be exploited by hackers for pleasure or criminal intentions (Wellisz, 2016). Furthermore, according to Namvar (2013), Peer to Peer is not guaranteed by tangible assets, so the risk of default is high. The risks faced by customers greatly hamper the business processes of Fintech companies and related stakeholders. If these risks are not managed properly, it will

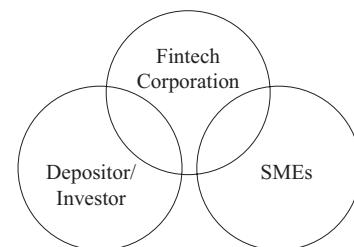


Figure 1 Corporate governance at the peer to peer lending financial technology (Existing Phenomena)

harm various parties, such as the peer to peer lending fintech corporation, customers and other stakeholders.

The agency relationship between the agent and the principal occurs on three parties that influence and interrelate with one another, namely: investors, peer to peer lending financial technology corporations and SMEs. This is because business processes in the peer to peer lending financial technology corporation are in interconnected systems, meaning that the peer to peer lending financial technology corporation is an intermediary institution that collects funds from investors/depositors, which are then channeled to SMEs that need capital. Thus the agency relationship that occurs is between investors/depositors and the peer to peer lending financial technology corporation, and also the agency relationship between the peer to peer lending financial technology corporation and SMEs. Each agency contract has a high potential for agency conflict, both between investors/depositors and the peer to peer lending financial technology corporation, as well as between the peer to peer lending financial technology corporation and SMEs. The three parties in this agency relationship cannot be separated from one another, so they must be integrated with information technology.

Agency problems arise when there is an agency relationship between investors/depositors and the peer to peer lending financial technology corporation, and between the peer to peer lending financial technology corporation and SMEs. This means that asymmetric information and self-interest encourage managers of the peer to peer lending financial technology corporation to take moral hazard actions and opportunistic actions that violate the rules, for example, using funds collected from investors/depositors with unclear allocations, thus harming investors/depositors or other stakeholders. Asymmetric information also occurs between managers of the peer to peer lending financial technology corporation and SMEs, thus encouraging SMEs to misuse the use of debt borrowed from the peer to peer lending financial technology corporation. As a result, SMEs cannot pay debts on time and even cause credit risk, which also harms SMEs, the peer to peer lending financial technology corporation and investors/depositors. With integrated e-corporate governance where the agency relationships of the three parties are integrated digitally, it will be very difficult for those parties to hide information about managing funds and financial and non-financial information because all business activities of all parties are easily monitored and monitored digitally and thus opportunistic behavior of agents can be avoided.

So far, corporate governance in the peer to peer lending financial technology has only been regulated in the agency relationship between depositors/investors as principals and the financial technology corporation as an agent reflected in the Financial Services Authority Regulation Number 15/SEOJK. 05/2016 concerning the Report on the Implementation of Good Corporate Governance. The weaknesses include: the model only explains the relationship between agent-principal, as explained by shareholder theory, whereas, in practice, the success of an organization is very much determined by the relationship between various parties that influence each other or are influenced by other parties including employees, suppliers and other parties related to the organization. The existence of corporate governance can benefit the stakeholders involved directly or indirectly.

Candida, Marisa, and Maria Bruna (2015) find that the correlation between corporate governance and bank performance is still not clear and that the impact of corporate governance on bank financial performance in developing countries is still

relatively limited. The relationship between the numbers of committees as corporate governance has a negative relationship with performance. The presence of a negative relationship between the number of committees and bank performance suggests limiting and managing the complexity of governance in banks operating in the cooperative credit system. Then the model was criticized and refined by Mutamimah (2019) proposing the importance of e-corporate governance on the agency relationship between financial technology corporation as a principal with small-medium enterprises as agents. An assessment based on intangible components in small medium enterprises to obtain credit from the financial technology corporation, such as personality, intelligence and integrity, social media use, use of online shopping applications, and mobile use is not enough (Mutamimah, 2019), especially as SMEs are “high-risk borrower” (Zairani & Zaimah, 2013) and non-performing financing for SMEs is higher than non-SMEs (Mutamimah & Hendar, 2017). This has led to the need for e-corporate governance for small-medium enterprises. There is no universal definition of e-corporate governance that can be applied to all situations, corporations or countries.

Various definitions exist today and depend on the institution, author or country. E-corporate governance on small-medium enterprises is a structure, system and regulation to monitor and control the behavior of information technology-based agents so that no party is harmed and the performance of small-medium enterprises increases (Mutamimah, 2019). There are two e-corporate governance mechanisms for peer to peer lending financial technology, which are internal and external mechanisms. The internal mechanism of e-corporate governance includes system, structures, and regulations that prevent an agent or manager from doing moral hazard digitally. The external mechanism of e-corporate governance is supervision and monitoring by external parties digitally, in this case by the peer to peer lending financial technology corporation as creditors or the agent.

However, the two types of corporate governance in its implementation run on their own separated from other corporate governance implementations (Figure 1). It means that in the corporate governance model at the “A” slice, only corporate governance that regulates the agency relationship between the peer to peer lending financial technology corporation as agent and depositor and/or investor as principal is explained by the shareholder’s theory of corporate governance, so as to improve the performance of principals and agents. The implementation of corporate governance on the “A” slice shows that information about business processes, financial information and non-financial information cannot be accessed by other stakeholders, so asymmetric information still occurs, deviations are very likely to occur. In fact, there are still other parties who have been harmed. Likewise, for the second corporate governance model on the “B” slice (Figure 1), only corporate governance regulates the agency relationship between financial technology corporations and small-medium enterprises. Even the information is closed to depositors/investors and also to other stakeholders. The corporate governance model only benefits both parties, namely the peer to peer lending financial corporation, and small-medium enterprises, and ignores the interests of other stakeholders. However, financial technology business processes are connected systems so that the implementation of corporate governance at A or B affects each other, and if both do not go well, it will harm other stakeholders. The implementation of corporate governance is also not effective in improving the financial performance of small-medium enterprises. Both of these

corporate governances, in their implementation, are separated from one another. This shows that corporate governance that uses shareholder theory is not able to be a solution in reducing agency conflict in the peer to peer lending financial technology corporation.

The Proposed Conceptual Framework of E-Integrated Corporate Governance Model at the Peer to Peer Lending Financial Technology Corporation

The peer to peer lending fintech corporation is an information technology-based intermediary institution that bridges between customers who have excess funds and SMEs as those who need funds. In this phenomenon, there are 3 parties involved, namely: creditors, Fintech corporation, and SMEs, in the hope that all parties get to benefit from the relationship. The relationship is an interconnected system so that the implementation of corporate governance must also be well integrated. It means that if the Fintech corporation wants to realize sustainability performance, then the two types of corporate governance must be integrated with information technology.

Figure 2 shows the e-integrated corporate governance of the peer to peer lending fintech corporation, namely: (1) First, Corporate governance which is a structure, mechanism, and system that regulates agency relations between depositors and the peer to peer lending fintech corporation, in fund-collecting. (2) Second, Corporate governance is a structure, mechanism, and system that regulates agency relations between the peer to peer lending financial technology corporation and small-medium enterprises, in fund distribution. It is very interesting that depositor/investor knows the funding needs will be channeled by small medium enterprises to what field, for example, culinary development, fashion, creative industry and others (See Figure 2, letter C). This is reflected in the disclosure of information (transparency) between depositors/investors and small-medium enterprises. So, the depositors/investors are confident and have trust in the conditions and prospects of small-medium enterprises. This will encourage depositors/investors to be willing to finance optimally.

Both of these implementations of corporate governance are not separated from one another but integrated by technology information (Figure 2: letter D). At letter D, the peer to peer lending fintech corporation, depositors/investors and small-medium enterprises know each other's conditions and business prospects in the future. Thus, asymmetric information can be eliminated, cybercrime and other risks can be reduced, all agent activities can be monitored and accessed

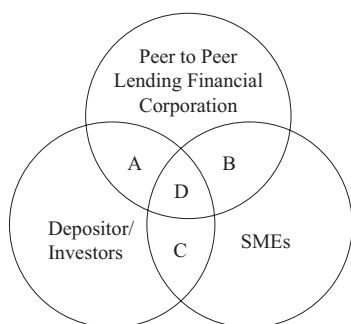


Figure 2 E-integrated corporate governance at the peer to peer lending fintech corporation (Conceptual Framework)

quickly and completely, and opportunistic behavior of agents can be avoided. With this model, the implementation of corporate governance will be more effective and efficient because it is integrated technology-based. Thus, it will provide "value" to all stakeholders. So, the e-integrated corporate governance model will be able to improve performance sustainability.

Mechanism and Principles of E-Integrated Corporate Governance Model

Corporate governance mechanisms can be divided into internal and external mechanisms (Gillan, 2006). Internal mechanisms include structures, systems, and regulations to prevent moral hazard behavior digitally, including business processes, and managing risks. External mechanism includes monitoring and supervision carried out by customers, investors, government and community. Both mechanisms are interconnected by systems. This means that if the internal mechanism runs well, it will encourage the external mechanism to run well too.

The principles of e-integrated corporate governance in order to improve sustainability performance is measured by 5 components, namely: transparency, accountability, responsibility, independence and fairness (Kurniawati, Sari, & Kartika, 2018). Transparency means that agents provide information openly to principals and stakeholders, both financial and non-financial information that is digitally integrated. Information technology can also ensure better and faster transparency to the principal and other stakeholders. Accountability means that Fintech corporations and SMEs have clear functions, authority, and accountability to the principal and other stakeholders. Responsibility is the compliance of the peer to peer lending fintech corporations and SMEs toward the digitally integrated financing rules and ethical values, standards, principles, and financial health practices. Independence means that the peer to peer lending fintech corporation and SMEs are managed independently, professionally, and free from conflict of interest or from the pressure of other parties. Fairness means that the peer to peer lending fintech corporation and SMEs have the same rights, balance both towards the principal and other stakeholders.

Examples of e-integrated corporate governance mechanisms in all pieces: A, B, C, D. First (A), at fund collection. Investors A invested IDR 100,000,000 in i.e. Indonesian Amartha fintech corporation as a peer to peer lending fintech corporation. Through the implementation of the e-integrated corporate governance mechanism, the peer to peer lending fintech corporation can carry out activities well, while investor A as an external party can monitor and prevent opportunistic behavior and self-interest behavior from the manager of Amartha fintech corporation.

The second (B), Corporate governance which is a structure, mechanism, and system that regulates agency relations between the peer to peer lending financial technology corporation and Small Medium Enterprises (SME's), in fund distribution. Example: Amartha fintech corporation as a peer to peer lending fintech corporation gives a loan of IDR 50,000,000 to Batik SME and IDR 50,000,000 to culinary SME. SMEs as agents must implement the e-integrated corporate governance mechanism in order to manage their business well, as well as a form of accountability for the use of funds to Amartha fintech corporation. With this mechanism, Amartha fintech corporation as an external party finds it easier and faster in supervising and monitoring the behavior of batik and culinary SMEs, so that moral hazard can be eliminated.

It is very interesting that depositor/investor knows the funding needs will be channeled by small medium enterprises to what field, for example, culinary development, fashion, creative industry and others (See Figure 2, letter C). This means that investor A, who invests funds through Amarta fintech corporation as the peer to peer lending financial technology corporation, can also monitor and supervise business activities directly carried out by batik SMEs, and culinary SMEs. Thus investors/depositors can more easily detect irregularities carried out by SMEs so that losses can be minimized. Example: Fourth (D) implementation of integrated E-corporate governance between investor A, Amarta fintech corporation, and batik SME. The three components in implementing corporate governance are not separate from one another but are integrated based on information technology. With this integration the three components are mutually transparent, making it easier to prevent moral hazard behavior so that risks that will harm the three parties can be reduced.

Implementation of E-Integrated Corporate Governance for the Peer to Peer Lending Fintech Corporation

To implement the e-integrated corporate governance for the peer to peer lending fintech corporation, several conditions are needed, including (1) Improving the competence of human resources, (2) Increasing financial literacy, educating the public about Fintech, so that people understand the Fintech industry in terms of regulation, ease of access, code of ethics for Fintech business people, including awareness of the risks of using the peer to peer lending fintech lending services. All of this then leads to creating a healthy peer to peer lending fintech industry and protecting customers, (3) Leadership; leadership must be committed and can be an example in corporate governance implementation, (4) Culture; culture that is conducive to supporting the implementation of e-integrated corporate governance is needed, (5) Regulation; regulation is very important in controlling the opportunistic behavior of managers and other stakeholders, as well as providing sanctions for those who violate the code of ethics in implementing the e-integrated corporate governance.

Results and Discussion

The results of this study indicate that the E-Integrated corporate governance model is appropriate to be applied in the current digital era so that SMEs' financial constraints can be overcome, in order to improve sustainability performance. A further consequence is that SMEs can play a role in providing maximum contribution in increasing employment, reducing poverty and increasing economic growth. The E-Integrated corporate governance model is really suitable to be applied to fintech corporations because the business process in fintech corporations is an interconnected system which involves various parties such as: fintech corporations, investors, customers, SMEs, government and society to achieve sustainability performance. By using E-Integrated corporate governance model, then: (1). Asymmetric information between various parties, namely: depositors/investors as principals, financial technology corporations as intermediary institutions (as agents or principals), and Small Medium Enterprises (SMEs) as agents can be eliminated. This means that with this model, the information held by all stakeholders involved in business activities with fintech is "the same". Information from fintech corporations includes: information on fundraising, fund management, placement/

distribution of funds. Also, information related to financial statements including balance sheets and profit/loss statements, risk management, conditions and prospects for fintech corporations in the future is shared as well. Likewise, information from SMEs including information on loan capital management from fintech corporations, business activities carried out by SMEs, SMEs' financial reports (balance sheet and profit/loss report), risks, constraints for SMEs, conditions and prospects for SMEs businesses in the future. By using this model, all financial and non-financial information will be more easily accessible to all stakeholders (customers, investors, government and society) quickly, easily, cheaply because of the high level of transparency, accountability, responsibility and fairness, and deviation/moral hazard, opportunistic behavior, cybercrime, and adverse selection can be minimized. In addition, it will be easier and faster for the government, as well as the authorities, to provide solutions in the event of irregularities in fintech corporations and SMEs. Thus, it will provide "value" and "trust" to all stakeholders involved in fintech business activities, which in turn, means the E-Integrated corporate governance model can improve sustainability performance.

This model will be implemented properly so that it can achieve sustainability performance, if it meets several requirements, including: (1) The commitment of all parties involved in implementing E-Integrated corporate governance as well as supported by the issuance of government regulations related to E-Integrated corporate governance. This is because so far there is only the Financial Services Authority Regulation Number 15/SEOJK.05 / 2016 which regulates the Implementation of Good Corporate Governance, which describes the agency relationship between fintech corporations and customers and investors only. However, there is no government regulation on E-Integrated corporate governance that regulates agency relationships between stakeholders at large, namely: fintech corporations, customers, investors and SMEs. Government regulations are needed as guidelines to strengthen the implementation of E-Integrated corporate governance. (2) Improved financial literacy and technological competence for SMEs' managers, in the form of knowledge, understanding and skills of SMEs' managers in digital-based financial and business management. This is in accordance with the statement by Hussain and Sajjad (2016) which states that financial literacy can reduce asymmetric information, reduces monitoring costs, and improves capital flows. This means that implementing E-Integrated corporate governance must improve financial literacy and digital competence, especially for SMEs' managers, because the level of financial literacy of SMEs is still poor (Carbo-Valverde, Rodriguez-Fernandez, & Udell, 2016).

Conclusion and Recommendation

This article discusses Fintech corporation as an information technology-based intermediary institution that bridges between customers who have excess funds and SMEs as those who need funds. In this phenomenon, there are 3 parties involved, namely: creditors, the peer to peer lending fintech corporation, and SMEs, in the hope that all parties and other stakeholders get benefit from the relationship. This relationship is an interconnected system so that the implementation of corporate governance must be integrated with information technology. Thus, it is really urgent to compile a conceptual framework for the e-integrated corporate governance model at the peer to peer lending financial technology corporation to realize sustainability performance. Limitation and Future

Research, among others: (1) This article is a conceptual framework so that the model still needs to be further investigated by conducting empirical testing, (2) This article only discusses the agency relationship between customers as creditors and Fintech corporation as managers, and between the peer to peer lending fintech corporations as creditors and SMEs as debtors integrated using digital technology. For future research, it would be better to develop a broader agency relationship, namely between the peer to peer lending fintech corporations and other stakeholders, such as employees, consumers, and society, (3) This article only discusses e-integrated corporate governance in one form, Fintech, which is the peer to peer lending.

Future studies can be developed by integrating more than one form of fintech corporation so that all stakeholder activities are better monitored, all information can be accessed easier and faster by all stakeholders involved in the interconnected system so that no one is harmed and sustainability in the long term can be realized. The theoretical implications are that the findings are not consistent with the shareholder's theory models, however, they are consistent with the stakeholders' theory of corporate governance. The practical implications are the implementation of corporate governance on financial institution must be integrated and the government should perfect regulations related to financial technology.

Conflict of Interest

There is no conflict of interest.

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