

The Determinants of Potential Failure of Islamic Peer-to-Peer Lending: Perceptions of Stakeholders in Indonesia*

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Abstract

This study identifies the determinants of potential failure of Islamic Peer-to-Peer (P2P) lending in Indonesia, and the mediating effect of Islamic ethics on reducing the potential for failure of Islamic P2P lending. This study uses primary data retrieved through questionnaires from the perspective of 152 stakeholders in Islamic P2P lending. Using a structural equation model (SEM), the study found that indebtedness, financing size, and governance have positive and significant relationships with the potential failure of Islamic P2P lending. This study provides evidence that the customer's internal conditions and the governance structure applied can increase the potential failure of Islamic P2P lending. Further, Islamic ethics is evidently able to partially reduce the potential failure of Islamic P2P lending by lessening risk management exposure, but it fails to address failure through Ponzi scheme exposure. As an implication, this study suggests that Islamic P2P lending must implement Islamic ethics more comprehensively by optimizing the advisory and supervisory role of the shariah board within their overall boards of directors also in their operational activities. Finally, it also adds to the existing knowledge on financial technology literature, particularly on the determinants of potential failure of financial technology from the perspective of stakeholders.

Keywords: Financial Technology, Islamic Finance Industry, Potential Failure, P2P Lending

JEL Classification Code: G2, G3, L1

1. Introduction

The development of technology allows people to carry out transactions without face-to-face interactions. One result of technological advancements is the development of financial technology (also known as FinTech). Chuen and Teo

(2015) define FinTech as the revolution in financial services and products brought about by new consumer expectations in the form of technology such as the Internet and mobile phones and other devices. Minerva, Asaba, Aiba, and Hirano (2016) attempts to sharpen the definition of FinTech as the collaboration of financial services and technology sectors that concentrates on start-ups and small- and medium-sized enterprises (SMEs), and other products and services that are traditionally provided by conventional service industries. Nguyen, Dinh, and Nguyen. (2020) elaborated the six business models of FinTech such as wealth management, payment online system, peer-to-peer (P2P) lending, crowdfunding, insurance services, and capital market. P2P lending is one of popular FinTech as online platforms that allow one party to lend to other parties with the objective to fulfilling financial needs (Gomber, Kauffman, Parker, & Weber, 2018). These platforms are mainly used by single individuals and SMEs that require financing or investment opportunities.

P2P lending is a modern innovation in the financial service industry that allows interactions between capital providers and users and the management of such interactions via the Internet or other online platforms (Barasinska & Schafer, 2014). As the most populous Muslim country in the world, Indonesia provides an opportunity for P2P lending

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in the financial development of a Muslim society. This is indicated by the massive penetration of digital banking use through mobile devices in Indonesia, especially the number of mobile users, which is 133% greater than the total population of Indonesia, which is around 268.2 million people in 2019 (Mufarikh, Jayadi, & Sugandi, 2020). Unlike conventional versions, Islamic P2P lending has its own rules in place, which promote Islamic values. Faiq (2014) explains that the Islamic values do not allow the creditor to generate return from the debtor by charging interest as this is against the Islamic teaching known as *riba* (usury), gambling, and trading in some forbidden (*haram*) products or industries.

According to the Indonesian Financial Service Authority (2020), P2P lending in Indonesia has exhibited a generally upward trend in growth, even though there was a fluctuation in asset growth during 2019. In terms of assets lent, the share of total P2P lending in Indonesia provided by Islamic finance remains small, at only 1.8% of total assets lent and the growth is promising (Indonesian Financial Service Authority, 2020). This massive growth indicates the extensive interest of Islamic society in Indonesia in engaging in Islamic P2P lending as a new financial platform.

This significant P2P lending development in Indonesia does not, however, mean that P2P lending companies will be free from risk. Such companies will face similar types of risk as conventional financial companies, including default risk (Scardovi, 2017). Suryono, Purwandari, and Budi (2019) explain that the default risk faced by P2P lending companies may result from misconduct by P2P borrowers. In dealing with this, the effectiveness of regulation is a concern in keeping P2P lending companies safe from default risk through the application of good governance.

Moreover, the rate of return determined by P2P lending, which usually utilizes interest rates as a benchmark, is believed to be one of the default risk determinants (Dietrich & Wernli, 2016).

Yusgiantoro (2018) studied the determinants of interest rate and default risk in FinTech companies such as P2P lenders providing online direct lending. The findings of the research reveal that the characteristics of borrowers and their loan objectives are major factors determining interest rate and default risk in Indonesian FinTech. In addition, Yusgiantoro (2018) also highlights that an increase in borrower numbers in Indonesia significantly contributes to rising interest rates. As a consequence, when the interest rate as the cost of borrowing increases, the likelihood of default risk by borrowers will increase as well. This default risk may endanger the survival of P2P lending companies in the financial industry. Interest rate is also influenced by several other factors, such as macroeconomic conditions, borrower profile and credit risk (Dietrich & Wernli, 2016).

To extend previous studies, this paper aims to examine the determinants of potential failure of Islamic P2P lending in Indonesia through an exploratory study approach. The factors that are potentially resulting in failure, among others rate of return, financing purpose, level of indebtedness, size of the financing, financing history, corporate governance, Ponzi schemes, and risk management. This paper also used Islamic ethics as the factor that could reduce the failure of Islamic P2P lending. The contribution of this paper is to extend the studies conducted by Yusgiantoro (2018) and Suryono et al. (2019) and to enrich findings with the new perspective of Islamic P2P lending from the stakeholders point of view.

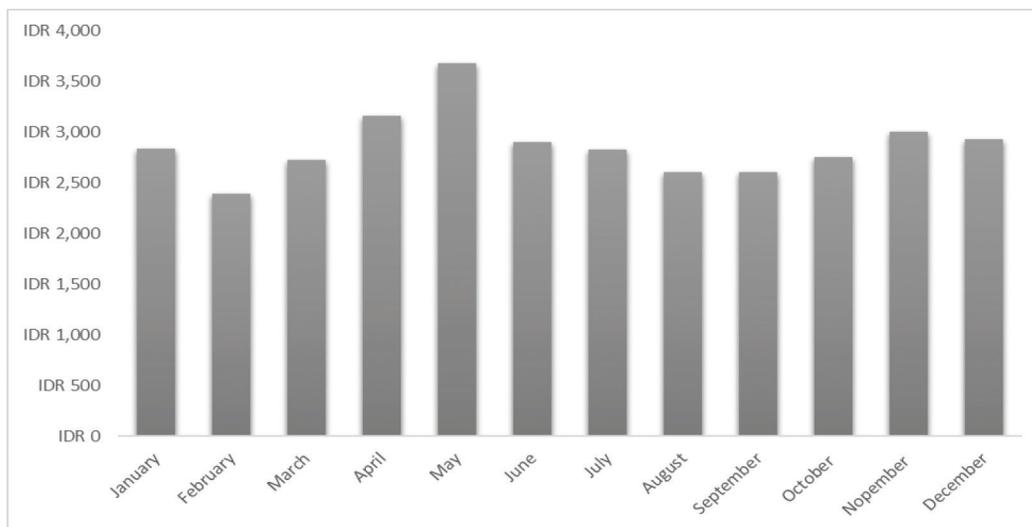


Figure 1: Indonesian P2P Lending Development in 2019 (in IDR billion)

Source: Indonesian Financial Service Authority (2020)

2. Literature Review

2.1. Islamic P2P Lending

P2P lending is a business model that combines finance and the internet by collecting funds from a number of sources and lending these funds to those who need them (Gomber, Kauffman, Parker, & Weber, 2018). All processes are carried out online through platforms provided on the Internet. P2P is different from crowdfunding where P2P emphasizes the relationship between a funder and a fundraiser individually through a platform while crowdfunding involves many funders in financing a particular project, both commercial and social (Ban & Lee, 2020; Hasnan, 2019). However, operationally the basic transaction process remains the same as the traditional lending processes carried out by conventional financial institutions (Suryono et al., 2019). P2P lending is also described as intermediation through the internet between investors with money to place and project managers requiring funds (Milne & Parboteeah, 2016). Unlike conventional financial services activities, P2P lending takes place via an online platform on which individual borrowers can make loan requests to potential investors supported by social networking tools (Liu, Brass, Lu & Chen, 2015).

Alongside the development of conventional FinTech, Islamic FinTech has also emerged. The term 'Islamic FinTech' refers to technology-based businesses providing advanced financial services or products based on Islamic shariah-compliant schemes (Wiryanto, 2018). Islamic FinTech is also a tool used to promote and expand the wider development of Islamic banking products and services (Bakar & Rosbi, 2018). Islamic FinTech uses shariah-compliant processes in which practices should not violate or contradict shariah principles such as the prohibition of interest (*riba*), speculation or gambling (*qimar*), unearned income (*maysir*), excessive risk (*gharar*) and trading in forbidden (*haram*) products or industries (Todorof, 2018). The development of Islamic FinTech could be commercially and economically advantageous because of the large global Muslim population (Bakar & Rosbi, 2018; Wiryanto, 2018).

2.2. Rate of Return

Rate of return is a tool used to evaluate the performance of a firm or organization (Feenstra & Wang, 2000). It can be defined as the result of an investment – gain or loss – over a period of time and is usually stated in percentage form. Before making an investment, commonly, the investor will make an estimation of the earning that he or she will get from the investment. In shariah contracts, there is no such a thing as an interest rate (Drissi & Angade, 2019).

The shariah contract instead uses a concept of rate of return expressed in terms of profitability and loss sharing (PLS) which is varied and is offered to the investor/capital provider (Anwar & Mikami, 2011). PLS can be defined as an agreed contract between the parties involved in the contract that allows them to unite their capital resources to be invested in a project (Meutia, 2017). The rate of return in the investment must be based on the PLS ratio and is agreed by the capital provider and project managers borrowing the funds. In P2P lending there is a potential for failure due to the level of profit sharing and the following hypothesis can therefore be formulated:

H1: Rate of return has a significant relationship to the potential failure of Islamic P2P lending.

2.3. Financing Purpose

Financing purpose refers to the underlying reasons for which managers require large amounts of money from investors or capital providers to finance a project. It is also in line with the spirit of Islamic finance that such contracts should be based on transactions that have a specific purpose, with the guarantee of a tangible asset being a legal part of the transaction (Drissi & Angade, 2019).

In addition, one of the considerations in the likelihood of default in lending is financing purpose (Serrano-Cinca, Gutiérrez-Nieto, & López-Palacios, 2015). Therefore, the investor must clearly and accurately understand the purpose of financing so that the failure of P2P lending can be avoided. The following hypothesis can be formulated:

H2: Financing purpose is significant to the potential failure of Islamic P2P lending.

2.4. Indebtedness

Level of indebtedness is related to the inability of the project management to repay the investor. Indebtedness is affiliated with income in relation to the repayment to the investor and its relationship with solvency has been found to be relevant in studies of both corporate and consumer finance (Serrano-Cinca et al., 2015). Level of indebtedness will be problematic when the project managers experience difficulty in repaying the investor. Islamic P2P lending has the potential for failure because customers experience difficulties in returning funds to investors due a number of factors, in a similar way to customers in conventional P2P lending. These factors can arise as a result of the lack of validity of customer credit ratings carried out by third parties, customer moral hazard, investment decision errors, and policies that do not benefit customers (Suryono et al., 2019).

As a means of financial intermediation, Islamic P2P lending will certainly experience the same potential risks as conventional forms when customers face financial problems of this type. Therefore, indebtedness can also be a factor in the failure of peer-to-peer lending, as formulated in the following hypothesis:

H3: *Indebtedness has a significant relationship to the potential failure of Islamic P2P lending.*

2.5. Size of Financing

Size of the financing is influenced by the profile and background of the customer using the funds (Lin, Li, & Zheng, 2017). For individual customers, their profile as borrowers can be indicated by gender, employment status, marital status, education level, and the business scale of their enterprise. For institutional customers, size of financing is considered as risk factor of the financing related to the extent of the project management and investor relationship, and the age profile and size of the management group (Jiménez & Saurina, 2002). The greater the size of the financing, of course, the risk to be faced will be higher, and vice versa. On the other hand, the scale of the customer's business can also affect the quality of the lending opportunity (Ahmed, 2011).

Werner (2014) suggests that in exercising its function as an intermediary, an institution's investors need to obtain sufficient information related to the object to be funded so that they know the level of risk. Islamic P2P lending, like other Islamic financial institutions, is characterized by risk sharing between the investors and the customers who use funds (Iqbal, 2013). Therefore, Islamic P2P lending will face the potential risk of failure if the investor does not have sufficient information about the customer's business scale that will directly affect the size of the financing, and so the following hypothesis can be proposed:

H4: *Size of financing has a significant relationship to the potential failure of Islamic P2P lending.*

2.6. Financing History

Financing history is a record of the financial journey taken by a customer at one or several financial institutions (Lin et al., 2017) and includes payment history information for specific types of account (Serrano-Cinca et al., 2015). It is very important both for the project management looking for funding and the investor to understand the quality of financing of a customer in order to predict potential default in the future (Kim, 2020). It is very important both for the project management looking

for funding and the investor to understand the quality of financing of a customer in order to predict potential default in the future (Serrano-Cinca et al., 2015). If the investor does not know all of this information before making the contract, information asymmetry will occur (Suryono et al., 2019).

In the Islamic P2P lending, the data related to the history of customer financing are sometimes of poor quality compared to the data held by banks, because banks' relationships with customers are generally longer term in nature (Frost, Gambacorta, Huang, Shin, & Zbinden, 2020). The use of social media is not only for promotion, but can also be used to monitor and evaluate the character of potential customers as an alternative to validating relevant personal information (Hooda & Ankur, 2018). Therefore, the history of customer lending will affect the potential failure of Islamic P2P lending as hypothesized below:

H5: *Financing history has a significant relationship to the potential failure of Islamic P2P lending.*

2.7. Corporate Governance

Corporate governance is an issue that emerged at the beginning of the development of P2P lending because such businesses perform financial intermediary activities with infrastructure that is not as complex as used in traditional banking. Lenz (2016) suggests that these platforms face potential risk of failure because regulations in the financial sector have not fully keep pace with their development and still use the perspective of corporate governance prevailing in the banking sector that focuses on prudential banking aspects. On the other hand, P2P lending places more emphasis on corporate governance that prioritizes customer data security in web-based financial intermediation.

Furthermore, Liu, Zou, Yang, and Tang (2019) reveal that conducive regulations that support the development of P2P lending, especially aspects that target the governance of internal institutions and accountability to stakeholders, can increase the survival rate for P2P lending. In corporate governance, the board of directors has vital role to play in monitoring the apparatus of managerial behaviour and protecting stakeholders. Good corporate governance will result in better financial performance because it monitors and controls the company to protect shareholder profit Alam et al., (2020). In consequence, good corporate governance of the platform is needed in order to support success and protect investors from the possibility of failure.

H6: *Corporate governance has a significant relationship to the potential failure of Islamic P2P lending.*

2.8. Ponzi Schemes

Ponzi schemes are situations in which financial managers commit financial fraud. Frauds of this type deceive new investors by promising them high yields from their investments, while using these investors' capital to pay off old investors. Bartoletti, Carta, Cimoli, and Saia (2020) explain that Ponzi schemes are a case of financial fraud in which the scammer assures the new investor of high profits while their capital is used to repay previous investments, thus enabling the continuation of the business. Ponzi schemes can only exist while new investors can be found (Deason, Rajgopal, & Waymire, 2015). Ponzi schemes can exist in P2P lending projects and can cause the failure of such lending. When management cannot recruit new investor to the project, they will lack investment funds and thus be unable to pay existing investors. The P2P lending contract is ended if there is no remaining funding available to run the business, and thus the P2P lending will fail. Based on the theory of financial intermediation, the P2P lending platform evaluates and determines whether the loan proposed should be approved or not (Serrano-Cinca et al., 2015). This means that Ponzi schemes can be prevented if P2P lenders effectively perform their roles as intermediaries.

H7: Ponzi schemes have a significant relationship to the potential failure of Islamic P2P lending.

2.9. Risk Management

Risk is a condition of uncertainty that is likely to be faced by all financial institutions, including those based on Islamic financial requirements (Al-Rahahleh, Bhatti, & Misman, 2019). Financial institutions face both systematic and unsystematic risks, both of which will certainly bring negative consequences if they are not managed properly. Risks in Islamic financial institutions are more complex than in conventional financial institutions because they have characteristics that have consequences for different operational activities.

A good risk management can anticipate the likelihood of project failure because risk has already been identified from the outset (Liu et al., 2019). In P2P lending, management must have risk identification in place for the project being financed by the investor. Based on the theory of financial intermediation, the P2P lending platform should be able to evaluate the management of projects to be financed and collect information about the project management and the capital provider (Scholtens & Wensveen, 2000) to enable the identification of possible risk. If there is risk management in place, the possibility of failure in peer-to-peer lending can be avoided.

H8: Risk management has a significant relationship to the potential failure of Islamic P2P lending.

2.10. The Role of Islamic Ethics in Reducing the Potential for Failure of Islamic P2P Lending

The term 'ethics' refers to the morals, etiquette, norms, rules of conscience, courtesy, manners and principles which govern the behavior of individuals and organizations (Maksum, 2015). Ethics is also the branch of philosophy that deals with moral behavior (Abuznaid, 2009). On the hand, Islam also has its own definitions which took shape in the early years of Islam and were the product of a number of factors, including stage of economic development, religious factors, and openness (Ali & Al-Aali, 2015). In other words, the sources of Islamic ethics are based on the Muslim holy book, Al-Qur'an, and also on the *hadiths*, which contain the sayings of the Prophet Muhammad (Baber and Zaruova, 2018). Muslims derive their ethical system from the teaching of the Qur'an (which Muslims believe is a book revealed by God to Muhammad in seventh-century Arabia), and from the *sunnah* (the recorded sayings and behavior of Muhammad) (Rice, 1999).

As a shariah financial entity, P2P lending has two main stakeholders, namely customers who have excess funds (investors) and customers who have the potential to utilize funds for both consumptive and productive needs. Islamic P2P lending investors are motivated not only to receive profit but also to expect investments to meet the provisions of Islamic ethical values as is practiced in Islamic financial entities for example Islamic banks (Rahmi et al., 2020).

As mentioned by Ascarya (2016) and Sakti, Syahid, Tareq, and Mohd Mahdzir (2016), the pursuance of Islamic ethics is expected to reduce the risk of failure when it is practiced in the implementation of Islamic P2P lending in a number of ways: first, the Islamic ethical values understood by stakeholders will provide confidence that the funds mandated will be used in accordance with the agreement and are expected to provide optimal results; second, Islamic ethics will provide stakeholders with guidance on what should be done based on religious and social norms; and third, Islamic ethics is expected to be able to prevent stakeholders from malicious intentions to violate agreements in the interests of individuals which would simultaneously harm other parties. The use of Islamic financial services by customers is also influenced by the emotional factors of Muslim customers who have good religious values so that Islamic ethics is expected to be a factor that can reduce the potential for financing failure (Usman, 2015).

H9: Islamic ethics as a moderating variable can reduce the potential for failure of Islamic P2P lending.

3. Methodology

3.1. Data and Description

This study adopts an exploratory research approach, which attempts to understand the relationships among selected independent and dependent variables. Using a purposive sampling process, this study analyzes primary data relating to Indonesia collected from Islamic finance academics that teach Islamic finance at university level and practitioners including shariah advisory boards members in Islamic finance institutions, bankers, Islamic microfinance officers, and Islamic finance regulators.

Sample demography is presented in Table 1, which details the gender, age, educational background and working experience of the sample. According to the table, 64.3% of the sample is male and 35.7% female and in terms of age, most of the sample (57.4%) is aged between 20 and 39 years. In addition, 78.3% of the sample holds master’s degrees. Of the respondents, 44.3% have been working in the Islamic finance industry for less than five years and the remainder has been working in the industry for more five years or more.

Table 1: Demographic Characteristics of Respondents

| | Number | Percentage |
|---------------------------|--------|------------|
| Gender | | |
| Male | 93 | 61.2% |
| Female | 59 | 38.8% |
| Age | | |
| 20–29 years | 36 | 23.7% |
| 30–39 years | 79 | 52% |
| 40–49 years | 30 | 19.7% |
| 50–60 years | 7 | 4.6% |
| Education | | |
| Diploma | 5 | 3.3% |
| Graduate | 30 | 19.7% |
| Master’s | 93 | 61.2% |
| Doctorate | 21 | 13.8% |
| Others | 3 | 2% |
| Working Experience | | |
| <5 years | 51 | 33.6% |
| 5–10 years | 70 | 46.1% |
| >10 years | 31 | 20.3% |

3.2. Model and Measurement

The model for this study (Figure 2) demonstrates that the aim is to explain the influence of independent variables such as rate of return (ROR), financial objective (FOBJ), indebtedness (DEBT), financial size (FSIZ), financial history (FHIS), governance (GOV), Ponzi scheme (SPON) and risk management (RMAN) on the potential failure of Islamic P2P lending (PFAIL). First, the influence of these independent variables will be analyzed using direct effects to examine the effect of each independent variable on the dependent variable PFAIL. Second, a moderating variable is applied in the form of Islamic ethics (ISET) to assess its influence on the potential failure of Islamic FinTech. This measurement will test whether Islamic ethics is able to lower or raise the potential for failure of Islamic P2P lending.

To analyze the model, partial least squares structural model analysis (PLS-SEM) is adopted, based on variance-based measurements. Hair, Risher, and Ringle (2018) suggest that PLS-SEM is currently widely used in social science research because it offers several benefits. These include the method being able to estimate complex constructs, indicators, structural paths and not requiring distributional assumption for the data, and it being designed to predict causal explanations in terms of statistical modeling. PLS-SEM also allows the researcher to have small sample sizes with many constructs, as well as it tending to provide better statistical results in assessing less-developed or still-developing theories, thus making it suitable for exploratory study.

Hair et al. (2018), Hair, Hult, Ringle, and Sarstedt (2017) and Sholihin, Pike, Mangena, and Li (2011) explain that to identify a good model, several measurement steps must be carried out. The first of these is to measure the reliability of the construct in fulfilling certain rules of thumbs, as follows:

1. The permissible value of factor loading is ≥ 0.5
2. The value of Cronbach’s alpha is recommended to be between 0.70 and 0.90 but is allowed to have a minimum score of 0.60 and a maximum of 0.95 for exploratory study.

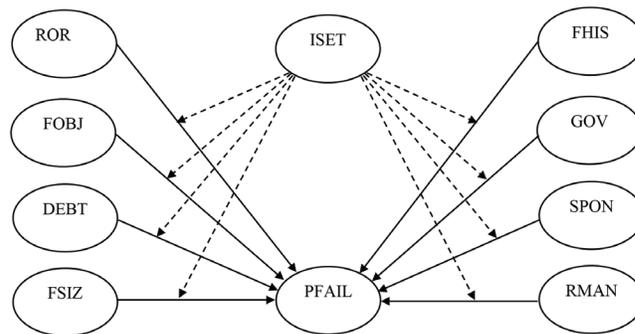


Figure 2: Research Model

In the second step, convergent and discriminant validities are checked by using the value of the average variance extracted (AVE), which is required to be ≥ 0.50 , and assessing the discriminant validity by comparing the value of AVE to other variable values in which the value of AVE must be larger than the others. Several researchers, represented by Huang, Wang, Wu, and Wang, (2013) and Fornell and Larcker (1981), state that the value of AVE is acceptable at ≥ 0.40 as long as the value of composite reliability of the construct is ≥ 0.60 . Finally, to examine the collinearity issue, the tolerable value of variance inflation factors (VIF) is < 3 . After fulfilling these requirements, the model can be used to measure the relationships among the variables.

4. Results

4.1. Reliability and Validity

To measure the reliability and validity of the construct, several tests must be conducted to discover the value of factor loading and construct reliability. The results of the tests represent the fulfillment of the requirement mentioned above by Hair et al. (2018), Hair et al. (2017) and Sholihin et al. (2011). All factor loading values are ≥ 0.5 , which indicates that at the least the construct represents more than 50% of the indicator's variance. In addition, all of the construct reliability values are between 0.60 and 0.95 for this exploratory study. The values obtained from Cronbach's alpha indicate that internal consistency and reliability exists.

To examine convergent and discriminant validities, the value of AVE must be more than ≥ 0.50 . For this study, the results shown in Table 2 show that all values are ≥ 0.50 except the AVE value of PFAL, which is 0.471. According to Huang et al. (2013) and Fornell and Larcker (1981), even though the value is less than 0.50, this value is still acceptable because the value of construct reliability is greater than 0.6. Based on these results, the construct can be deemed able to explain at least 50% of its elements.

In addition, Table 3 presents the results of the discriminant validity test. The table shows that the square root of AVE value is higher than the correlation between constructs in all variables. This result indicates that the construct is distinct from other constructs in the model used and also confirms the validity of the variables used in the model.

To address the issue of collinearity, a tolerable value of VIF is less than 3. Based on the test results, in this model the value of VIF is 2.507 and this indicates there is no collinearity issue. All of the results suggest that the research model is reliable and valid.

4.2. Structural Model Analysis

Table 4 exhibits the structural model analysis results to examine the influence of independent variables on

the dependent variable with and without the moderating variable. From these statistical results, it can be seen that in the relationships without the moderating variable, DEBT, FSIZ and GOV have positive and significant relationships to PFAIL. For the other independent variables, there are no significant effects on the independent variables.

By using ISET as the moderating variable in relationship with moderating variable statistical results, it can be seen that only SPON has a positive and significant effect while RMAN has negative and significant influence on PFAIL. According to these results, there are different influences of independent variables by using and not using ISET as the moderating variable of independent variables to the dependent variable.

5. Discussion

According to the statistical results, the research model fulfills the requirement to be considered as a fit model based on the aforementioned statistical indications. The findings conclude that hypotheses 3, 4, 6 and 9 are accepted, highlighting the existence of positive and significant relationships for indebtedness, financial size and good governance as determinants of potential failure of Islamic P2P lending in situations in which the moderating variable of Islamic ethics is not present. In addition, when Islamic ethics are applied, they evidently moderate the Ponzi scheme and risk management variables via a significant relationship to the potential failure of Islamic P2P lending. Hypothesis 9 is partially accepted in that in terms of risk management, the application of Islamic ethics is able to reduce the potential for failure of Islamic P2P lending.

To discuss the reasons of the conclusion, firstly a positive and significant relationship between indebtedness and the potential failure of Islamic P2P lending explains that higher levels of debt in Islamic P2P lending will increase potential failure. It is in line with Werner (2014), who states that a company with debt may be at higher risk of default due to being unable to pay back the money borrowed to the lender. Furthermore, Serrano-Cinca et al. (2015) state that a company must have sufficient income to return the debt or it will fall into default. The finding also implies that Islamic P2P lending must consider high debt from the lender to the borrowing business because this has a positive and significant relationship to potential failure. It is understood that in the practice of Islamic financial contracts, the customer does not have a guarantee that the funds invested will definitely generate profits, as explained by Drissi and Angade (2019). However, customers will of course favor investment models with relatively low risk of failure by choosing an Islamic P2P lending platform that offers the lowest-risk contract model together with the best potential returns.

Table 2: Reliability Results

| Question | Code | Factor Loading | Composite Reliability | AVE |
|--|--------|----------------|-----------------------|-------|
| Potential failure of Islamic P2P lending | PFAIL | | 0.715 | 0.471 |
| Sharing the return money in the pre-determined period | PFAIL1 | 0.55 | | |
| The use of funds by management | PFAIL2 | 0.671 | | |
| Shortage of funds | PFAIL3 | 0.737 | | |
| Contract fulfilment | PFAIL4 | 0.702 | | |
| Business performance | PFAIL5 | 0.754 | | |
| Rate of return | ROR | | 0.744 | 0.666 |
| Promised rate of return | ROR1 | 0.731 | | |
| The extent of rate of return | ROR2 | 0.793 | | |
| Burdensomeness of rate of return for the Islamic FinTech company | ROR3 | 0.913 | | |
| Financial objective | FOBJ | | 0.77 | 0.689 |
| Financial objective and Islamic FinTech's liquidity | FOBJ1 | 0.892 | | |
| Alignment of financial objectives | FOBJ2 | 0.875 | | |
| Insufficient capital | FOBJ3 | 0.712 | | |
| Indebtedness | DEBT | | 0.806 | 0.721 |
| Customer income | DEBT1 | 0.83 | | |
| Customer's potential to default | DEBT2 | 0.901 | | |
| Cash flow management | DEBT3 | 0.815 | | |
| Financing size | FSIZ | | 0.746 | 0.668 |
| Source of fund management | FSIZ1 | 0.898 | | |
| Financial size and management capacity | FSIZ2 | 0.845 | | |
| Limited sources of funds | FSIZ3 | 0.696 | | |
| Financing history | FHIS | | 0.916 | 0.857 |
| Customer's financing history | FHIS1 | 0.92 | | |
| Information about financing history | FHIS2 | 0.955 | | |
| Customers having default notes | FHIS3 | 0.902 | | |
| Governance | GOV | | 0.863 | 0.789 |
| Bad governance | GOV1 | 0.884 | | |
| Management failure | GOV2 | 0.897 | | |
| Control and supervision | GOV3 | 0.876 | | |
| Ponzi scheme | SPON | | 0.75 | 0.667 |
| Determining risk and return | SPON1 | 0.805 | | |
| Financial fraud | SPON2 | 0.856 | | |
| Investor perception | SPON3 | 0.788 | | |
| Risk management | RMAN | | 0.952 | 0.954 |
| Investment risk and failure | RMAN1 | 0.977 | | |
| Mismanagement of risk | RMAN2 | 0.977 | | |
| Islamic ethics | ISET | | 0.937 | 0.8 |
| Implementation of Islamic ethics | ISET1 | 0.879 | | |
| Following the commands of God and the Prophet | ISET2 | 0.862 | | |
| Performing business in permissible and good ways | ISET3 | 0.909 | | |
| Fairness and honesty | ISET4 | 0.916 | | |
| Using Islamic contracts | ISET5 | 0.906 | | |

Table 3: Discriminant Validity Result

| | ROR | FOBJ | DEBT | FSIZ | FHIS | GOV | SPON | RMAN | PFAIL | ISET |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|--------|-------|
| ROR | 0.816 | | | | | | | | | |
| FOBJ | 0.717*** | 0.83 | | | | | | | | |
| DEBT | 0.62*** | 0.703*** | 0.849 | | | | | | | |
| FSIZ | 0.64*** | 0.758*** | 0.767*** | 0.818 | | | | | | |
| FHIS | 0.424*** | 0.392*** | 0.432*** | 0.445*** | 0.926 | | | | | |
| GOV | 0.323*** | 0.305*** | 0.321*** | 0.352*** | 0.237*** | 0.886 | | | | |
| SPON | 0.248** | 0.302*** | 0.24*** | 0.246*** | 0.038 | 0.66*** | 0.817 | | | |
| RMAN | 0.157* | 0.204** | 0.278*** | 0.226*** | 0.235*** | 0.539*** | 0.484*** | 0.977 | | |
| PFAIL | 0.216*** | 0.194** | 0.166** | 0.295*** | 0.1 | 0.473*** | 0.374*** | 0.256*** | 0.686 | |
| ISET | 0.231*** | 0.227*** | 0.257*** | 0.302*** | 0.243*** | 0.531*** | 0.313*** | 0.411*** | 0.25** | 0.895 |

Diagonal element: Square root of AVE; off-diagonal: correlation between constructs.
 ***, ** and * are symbols for *p*-value significant at 1%, 5% and 10%, respectively

Table 4: Structural Model Analysis Results

| | Relationship without moderating variable | | Relationship with moderating variable | |
|--------------------|--|-----------|---------------------------------------|----------|
| | Coefficient | P-Value | Coefficient | P-Value |
| ROR | 0.115 | 0.074 | 0.064 | 0.213 |
| FOBJ | -0.078 | 0.166 | 0.044 | 0.294 |
| DEBT | 0.134 | 0.046** | -0.009 | 0.457 |
| FSIZ | 0.206 | 0.004*** | 0.09 | 0.129 |
| FHIS | -0.04 | 0.309 | 0.098 | 0.109 |
| GOV | 0.379 | <0.001*** | 0.031 | 0.352 |
| SPON | 0.077 | 0.167 | 0.179 | 0.012** |
| RMAN | 0.039 | 0.315 | -0.213 | 0.003*** |
| R square | 0.839 | | | |
| No of observations | 151 respondents | | | |

***, ** and * are symbols for *p*-values significant at 1%, 5% and 10% respectively

Secondly, the financing amount and governance also have a positive and significant relationship to the potential for failure of Islamic P2P lending. From the perspective of amount of lending, the results indicate that the larger the Islamic P2P lending, the greater the risk of failure. This result is supported by Jiménez and Saurina (2002) who found that the default risk of customers given high amounts of financing impacted on the cash management of the capital provider. Problematic financing may also occur when P2P lenders give larger amounts of funding without implementing prudent procedures and in cases of misconduct by customers (Suryono et al., 2019; Yusgiantoro, 2018).

Islamic P2P lending activities are conducted using online mechanisms and this may reduce the prudence of lending because of the limited amount of information about the customer being available via the financial scoring process. Information asymmetry is also a significant problem, arising because the credit scoring of customers is sometimes left to third parties whose methods of data validation have not been tested (Suryono et al., 2019). Even if the Islamic P2P lending platform decides to develop scoring methods of its own, a large model and resources are needed to ensure the validity of the data and to produce customer data about factors such as the ability to pay and business capacity which are accurate and reliable.

Thirdly, the likelihood of failure of Islamic P2P lending may also be higher if a lack of effective governance exists. It can be seen from the statistical results that that bad governance, management failure and lack of supervision may cause a failure. As mentioned by L'Huillier (2014), insufficient management control may lead to a failure to protect stakeholders' interests. Furthermore, Mokhtar and Mellett (2013) conclude that good corporate governance is needed to address the issue of potential failure as well as to improve company performance. The issue of corporate governance is also closely related to regulation governing operational activities of P2P lending platforms. The failure of P2P lending platforms in China provides evidence that regulation is very effective in disciplining platform managers as well as providing a selection mechanism for those who can adjust their corporate governance structure to the dynamics of local regulation (He & Li, 2020). However, Indonesia currently does not have specific regulations relating to Islamic P2P lending. The absence of regulations that strictly regulate this financial entity will cause risk of practices that have potentially harm to stakeholders (Alam et al., 2020).

Fourthly, as a moderating variable, Islamic ethics evidently moderate the likelihood of some independent variables to be significant to the potential failure of Islamic P2P lending, although only partially reducing the potential for failure. Interestingly, the significant independent variables identified differ from the previous findings mentioned above by including Ponzi schemes and risk management. In terms of Ponzi scheme methods, these have a positive relationship to the potential failure of Islamic P2P lending, meaning that when a Ponzi scheme is utilized as the business model in Islamic P2P lending, the potential for failure will be higher. Hence, Islamic ethics is possibly not able to moderate Ponzi schemes in terms of reducing the potential failure of Islamic P2P lending because such schemes are unlikely to be associated with such ethics.

Moreover, the negative and significant relationship of the risk management variable with the potential failure of Islamic P2P lending as moderated by Islamic ethics implies that when the level of risk management increases, the potential failure of Islamic P2P lending falls. This interpretation uses the risk management measurement as assessed from the perspective of mismanagement of risk. Marcelino-Sádaba, Pérez-Ezcurdia, Echeverría, and Villanueva (2014) explain that the failure to manage risk, including recognizing, examining and evaluating risk, will increase the potential failure of Islamic P2P lending which means the likelihood of default will increase. Providers of Islamic P2P lending platforms must have the ability to assess the risks to be faced in their business and risk mitigation procedures in place to provide a sense of security for investors (Liu et al., 2019). This finding is supported by Ascarya (2016) and Sakti et al. (2016), who state that Islamic ethics tends to feature less excessive risk due to its basic tenets not permitting such risk.

6. Conclusion

According to the findings previously discussed, as a future policy implication, financial authorities should encourage Islamic P2P lending companies to implement Islamic ethics more comprehensively by optimizing the advisory and supervisory role of the shariah board within their overall boards of directors. In addition, from an industry perspective, implementation of Islamic ethics will make Islamic P2P lending more prudent and may increase the trust shown by the industry's stakeholders, including by Islamic investors and customers. Another thing that is important to consider is to build potential cooperation with the banking sector, especially in increasing prudence in channeling financing because the banking sector in general has better regulations than the FinTech sector (Kim Lien, Doan, & Bui, 2020). The study has limitation, which also provide a future direction to improve the current literatures. We acknowledge that our study does not elaborate demography factors of the respondents. It is believed to be important for future research to examine the impact of gender, job experience, education background and other related information to deepen the understanding of potential failure of Islamic P2P lending. In addition, conducting Focus Group Discussion (FGD) with Islamic P2P lending's stakeholders will enrich the information as well as generate more perspective to assess the determinants of Islamic P2P lending potential failure.

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