



## Interaction between Perceived Usefulness and Self-Efficacy towards Sustainability of Sharia P2PL investment

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### abstract

*This study aims to analyze whether there is influence of financial and technological self-efficacy in determining investment sustainability. To add complexity, perceived usefulness moderating variables are used to sharpen the influence on investment sustainability. Respondents are investors who invest through the sharia P2PL application with a total of 171 investors. The collected data were then analyzed using the Moderation Regression Analysis Technique or MRA. - The results of the study prove that financial and technological self-efficacy have an effect on investment sustainability, as well as perceived usefulness having a mediating role that strengthens the interaction of financial and technological self-efficacy on investment sustainability. - Islamic Commercial Banks in Indonesia suggest to improve the financial performance in accordance with sharia principles.*

**Keywords:** fintech, P2PL , continuance to invest

### 1. INTRODUCTION

Sharia-based FinTech companies are growing in several countries. Based on the Salaam Gateway report, in 2021 globally there are 375 FinTechs and Indonesia occupies the first position with the highest number of sharia FinTechs in the world with 61 FinTechs or around 16.27 percent of the total global sharia FinTechs. Next are the UK and the United Arab Emirates with 45 and 42 Islamic FinTechs respectively. One of the sharia FinTech services that is showing positive growth in Indonesia is Peer to Peer Lending or P2PL with a total of seven (7) platforms registered with the Financial Services Authority or OJK and obtaining Halal MUI (AFPI, 2022).

Data published by the OJK in September 2022, the accumulation of sharia P2PL loans reached 4 percent or IDR 9.45tn of the total industry loan disbursement of IDR 236.4tn, an increase of 2.99% compared to September 2021 loan disbursement of 1.01 percent or IDR 102.08b of the total loan disbursement and the majority are channeled to MSMEs because as is known one of the

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problems of MSMEs is funding. Increasing the distribution of financing to business actors is expected to increase investor interest in continuing to invest in P2PL, and can attract new investors to invest their funds in one of the sharia P2PL platforms because it has the potential to get a return of  $\pm 20$  percent (OJK Fintech Directory, 2022).

The development of FinTech services with technological innovation is certainly a challenge for conventional-based financial services (Kuo-Chuen & Teo, 2015) because FinTech makes the parties involved directly connected without intermediaries, can minimize costs, there is transparency and information can be accessed easily. and fast (Lee & Shin, 2018; Zavolokina et al., 2016).

A part from the huge growth potential of FinTech, there are important factors that must be considered, namely related to the successful adoption of a particular system to make it easier for individuals, in this case investors to invest sustainably (Zhou, 2013; Zhou et al., 2018), because it can secure returns FinTech investment (Bitner et al., 2002). This study aims to investigate the continuation of investors investing in one of the sharia FinTech P2PL applications in order to increase the ability to manage wealth based on the theory of confirmation of expectations and continuation of information systems (ECT-IS). The ECT-IS theory argues that there are three variables that can influence individuals to be willing to continue purchasing, namely satisfaction, user expectations and user perceived usefulness (Bhattacharjee, 2001a).

Most empiricists add other variables to integrate ECT-IS theory with other theories in order to strengthen the basis of the research model. For example, Yuan et al (2016) added the variables risk, perceived ease of use and perceived task-technology suitability to analyze a customer's intention to continue using mobile banking. Kumaret al (2018) integrates ECT-IS with TAM and TPB to measure the sustainability of using M-Wallet. Next, Shiau et al (2020) integrate ECT-IS with self-efficacy in using fintech for wealth management

This research is still based on the ECT-IS theory but only adopts one variable, namely perceived usefulness with the consideration that this variable is able to explain the true feelings of investors for having used certain sharia P2PL applications and integrates ECT-IS theory with self-efficacy theory to consider internal factors. investors to continue investing in sharia P2PL. Self-efficacy is one of the factors that can influence a user's intention to continue using financial services (Choi, 2018; Kim et al., 2016). Next, this study places the perceived usefulness variable as a moderating variable to increase the complexity of the research model and sharpen the influence of the dependent variable (Kumar & Goyal, 2016).

## 2. LITERATURE REVIEW

The ECT-IS theory argues that perceived usefulness is one of the variables that influence consumer intentions to continue making purchases. In its development the ECT-IS concept has been





adapted in various fields (Chiu et al., 2005; Oghuma et al., 2016). Nascimento et al., (2018) found that perceived usefulness can increase consumers' intention to buy a smartwatch. Yuan et al.'s research (2016) found that the variables of perceived task-technology compatibility and usability could affect the sustainability of customers using mobile banking. Next Zhou et al., (2018) examined E-finance reputation, web quality and user perceived usability and found that together they were positively related to satisfaction and continued use of E-finance.

Individuals invest with the aim of maximizing returns in the future (Smart et al., 2017), including investment in the financial sector, especially FinTech. Bandura (1986) revealed that individual behavior is influenced by self-confidence in one's abilities. Therein lies the importance of the individual needing to believe he has the ability to use a particular system to improve his performance, otherwise known as self-efficacy (Bandura, 1991). Self-efficacy focuses on assessing what individuals can do in the future (Compeau & Higgins, 1995), as well as the ability to complete work on time (Chen et al., 2011). So that self-efficacy is considered one of the factors that influence a person's sustainable use of financial services (Choi, 2018; Kim et al., 2016). Therefore, self-efficacy in the context of FinTech applications involves two main domains, namely financial self-efficacy and technological self-efficacy.

In this study, perceived usefulness was used as a moderating variable with the aim of sharpening the influence of the independent variables studied (Morsy, 2020). The hypothesis being tested is whether there is influence and interaction between financial self-efficacy, technological (smartphone) self-efficacy, and perceived usefulness on the sustainability of investing in sharia P2PL.

### 3. RESEARCH METHOD

Respondents are investors in the city of Malang who have invested in one of the Sharia P2PL FinTechs through an application. There are seven sharia P2PL organizers that have received official permits from OJK and Halal MUI namely Ammana, Dana Syariah, ALAMI, ETHIS, Duha Syariah, qazwa, and PAPITUPI, but in this study only investors have invested in Ammana, ALAMI, ETHIS, and qazwa because the four sharia P2PL platforms focus on MSME financing. The questionnaire contains several questions that have been adapted to the conditions of the respondents. Questions for financial self-efficacy variables consist of five (5) items and technological self-efficacy consists of four (4) items. While each of the five (5) items represents the variable perceived usefulness and continuance intention to invest. All respondents' answers used a Likert scale with numbers 1 to 5.

Then the questionnaire was sent to the respondent via the WhatsApp group and personal connection. Data collection technique using random sampling. Respondents who filled out the questionnaire properly amounted to 171 respondents. All collected data were analyzed using Moderating Regression Analysis (MRA). The MRA method is used because it can show whether





there is interaction between the independent variables and moderation of the dependent variable (Hayes, 2018).

The independent variable's multiple regression equation for the dependent variable is as follows:

$$Y = a + b_1X_1 + b_2X_2 \dots \dots \dots (1)$$

Notes:

Y = Continuance intention to invest

X1 = Financial self-efficacy

X2 = Technological (smartphone) self-efficacy

Regression equation of the independent variable with the moderating variable on the dependent variable:

$$Y = a + b_1X_1 + b_3X_1W_1 \dots \dots \dots (1)$$

$$Y = a + b_2X_2 + b_5X_1W_1 \dots \dots \dots (2)$$

Notes :

Y = Continuance intention to invest

X1 = Financial self-efficacy

X2 = Technological (smartphone) self-efficacy

W1 = Perceived usefulness

The hypothesis proposed is to determine the effect and interaction between financial self-efficacy (X1) and technological (smartphone) self-efficacy (X2), with the moderating variable perceived usefulness (W) in determining continuance intention to invest (Y). Test the interaction between financial self-efficacy and technological (smartphone) self-efficacy variables with perceived usefulness using SPSS process v 3.5 (Hayes, 2018). The research model is according to Figure 1 below:



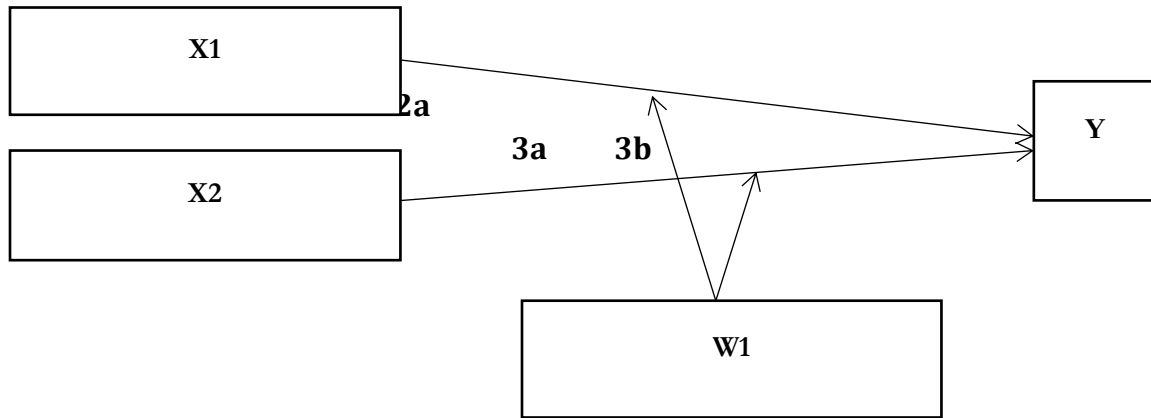


Figure 1. Research Model

#### 4. RESULT

The first step is to test the data normality and classic assumptions as shown in table 1 below:

**Table 1. Normality Test and Classical Assumption**

Test	Criteria	Result	Notes
Normality	< 95 %	16,5%	Good
Multicorrelation	>1,76	2,471	Good
Autocorrelation	>5 %	0,110 and 0,670	Good
Heteroscedasticity	>5 %	0,171 and 0,094	Good

Based on Table 1, both the normality test and the classical assumption test have met the requirements so that the next test can be continued, namely the hypothesis test.

The hypothesis proposed is to determine the effect and interaction between financial self-efficacy (X1) and technological (smartphone) self-efficacy (X2) with perceived usefulness (W1) moderating variables to determine continuance intention to invest (Y). The results of the moderation regression analysis are according to Table 2 below:

**Tabel 2. Moderating Regression Analysis**

Fit Model and Quality	Indeks	Criteria	Result	Notes
R kuadrat	>20%		51,5%	Good
Annova		<5%	0,000	Good
Financial self-efficacy (X1)		<5%	0,007	Sign

Technological self-efficaci (X2)			<5%	0,000	Sign
Interaksi X1.W1	0,802		<5%	0,0042	Sign
Interaksi X2.W2	0,362		<5%	0,024	Sign

Based on Table 2, it is known that the financial self-efficacy and technological self-efficacy variables are able to explain the variability of continuance intention to invest by 51.5 percent, the rest can be explained by other independent variables outside the model studied. Next, the regression model has a value of 0.000 less than a p-value of 5 percent, which means that the variables financial self-efficacy and technological self-efficacy have an effect on continuance intention to invest, and this effect is supported by a probability value, so that hypotheses 1a and 2a are answered.

The coefficient of the interaction results of the variable X1.W1 has a value of 0.802, then the interaction test of the moderating variable with the independent variable, namely the financial self-efficacy variable with perceived usefulness produces a probability value of 0.0044 <5% which means there is an interaction between financial self-efficacy and perceived usefulness. Perceived usefulness is able to sharpen the influence of financial self-efficacy in determining continuance intention to invest. The effect of perceived usefulness strengthens financial self-efficacy behavior which influences continuance intention so that it answers hypothesis 3a.

The coefficient of the interaction results of variable X2.W1 is 0.362 with a probability value of 0.024 <5%, which means that there is an interaction between technological (smartphone) self-efficacy and perceived usefulness in this case perceived usefulness is able to sharpen the influence of technological (smartphone) self-efficacy on continuance intention to invest, so that hypothesis 3b is answered.

## 5. DISCUSSION

Self-efficacy is a self-evaluation regarding an individual's ability to perform certain behaviors to achieve goals (Jin et al., 2013). In general, investors with good financial self-efficacy have the ability to manage finances, so they have more focused planning, including repeated investment planning. Continuity of investment in fintech is urgently needed both from the investor side because it promises a higher profit sharing rate, as well as from the borrower's side, in this case SMEs can also guarantee the sustainability of the business being managed. Likewise, the ability of investors to utilize technology, in this case smartphones, to facilitate investment activities through one of the P2PL fintech applications, positively has a good impact on investment sustainability. So that the higher the investor's sense of technology self-efficacy, the more likely the investor is to continue investing because he feels the efficiency and effectiveness of using fintech, in other words, the greater the investor's sense of technology self-efficacy, the more useful the investor perceives technology





(Chen et al. , 2011). Finally, perceived usefulness mediates financial and technological self-efficacy which will result in positive behavior, namely continuing to invest in Islamic P2PL applications. This means that investors are aware of the perceived usefulness of fintech benefits.

## 6. CONCLUSION

Investor behavior describing irrational investors occurs because of cognitive factors, because even though data and information are available, in reality cognitive factors, namely perceived usefulness, play a role in influencing the sustainability of fintech investments. The results of the study prove that financial and technological self-efficacy have an impact on the decision to continue or not to invest in one of the fintech applications, namely Islamic P2PL. Next is the influence of perceived usefulness in determining investment sustainability.

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