PERCEIVED RISK AND INVESTORS' TRUST IN USING ONLINE INVESTMENT PLATFORMS DURING THE COVID-19 PANDEMIC

Annisa Hakim Zamzami

ABSTRACT

The COVID-19 pandemic has affected global economic growth, causing investors' sentiments to below which ultimately tends to lead the market to be a negative direction. On the other hand, some investors take advantage of this condition by obtaining discounted prices. The activity carried out online optimizes business transactions, which resulted in more online investment platforms develop. However, many of them are registered without permission from the Financial Services Authority. This will certainly have an impact on investors' intensity when choosing a safe platform. Therefore, this research aims to examine the usage intensity of online investment platforms in terms of perceived trust and risk. With that, the careful behaviors of the investors when they make their choices using online investment platforms can be seen. The method used in this research is the clause method. This research uses online surveys by sending online google form links through various investors' communities on social media located in Java Island. The survey results were checked for reliability and validity before covariance-based SEM analysis using SmartPLS. The result of this research indicates that investors have low perceived risk and high perceived trust towards investment platforms. This result explains that low perceived risk will increase perceived trust towards the platforms. Thus, the low perceived risk and high perceived trust towards the platforms will increase investors' intentions to use investment platforms.

Keywords: Intention to use, Investment, Perceived Risk, Perceived Trust, TPB.

INTRODUCTION

The COVID-19 pandemic has affected global economic growth, including Indonesia, in various sectors. This causes low investor sentiments towards the market due to the unclear supply chain which ultimately tends to lead the market to be in a negative direction (Aditia et al., 2020; Kickbusch et al., 2020). Thus, investors need available real-time information to make decisions in a short period (L. Zhang et al., 2017). Digital practice by business people in Indonesia had existed for a long time before, but since the pandemic started, digital transformation in the business sector has become much more faster and optimal (Firdaus, n.d.).

Consequently, investors tend to invest their money using online investment platforms (Barber & Odean, 2011). Online investment platform has many compensations, such the rapidity in investing, more transparent information, and lower operating costs (Maziriri et al., 2019; Z. Wang & Yang, 2019). Hence, it can provide benefits to investors in making quick and appropriate decisions. Meanwhile, from the company side, they can increase their cash flow investment.

However, Bauer (1960) in a risk theory explains that benefits are often accompanied by risks. The temporal and spatial separation of customers and stockbroking firms as well as the unpredictable internet infrastructure generates implicit uncertainty around online transactions. These include monetary losses due to transaction errors or misuse of stock accounts, the risk of privacy loss due to fraud or hacker interference, and the uncertainty of online transactions (Maziriri et al., 2019). Information from the Financial Services Authority (FSA) as the institution that oversees the financial services industry in Indonesia states that 868 online investment platforms do not have permissions and are not registered under FSA. This will have an impact on investors' security from fraud because many online investment platforms do not have permission (OJK, 2020).

This concern had also become one of the discussions at the G20 meeting that was held in Saudi Arabia on 22th and 23th of February in 2020 with the theme of "Realizing the Opportunity of the 21st Century", which is strengthening the financial regulations and supervision as well as the development of the domestic capital markets by implementing financial sector reforms and utilizing technology (Aditia et al., 2020).

(Maziriri et al., 2019; Z. Wang & Yang, 2019; Yousafzai et al., 2003) explain that trust and risk are important elements in electronic transactions. Perceived trust and risk tend to be important factors in predicting investors' intentions to invest using online investment platforms, especially during the COVID-19 pandemic. This is due to the problems faced by individuals when using online platforms, such as insecure transactions, lack of insurance, password hacking, user privacy, technology intellectual infrastructure transmission delays, and other issues that affect the trust and the usage of online platforms (Bhatti et al., 2018; Z. Wang & Yang, 2019).

The research from (Durmus et al., 2017; Indiani et al., 2015; Mahliza, 2020) states that perceived risk is negatively related to trust. This is due to the tendency of users to trust the privacy and security risks of personal information. Meanwhile, what is stated by (Z. Wang & Yang, 2019) state that the relationship between perceived risk and perceived trust is related to the complexity of investment platforms. Furthermore, the research from (Featherman & Pavlou, 2003; Hanafizadeh & Khedmatgozar, 2012; Indiani et al., 2015; Mahliza, 2020; Maziriri et al., 2019; Pavlou, 2003) state that perceived risk has effects on the intention of adopting information technology. However, (Damghanian et al., 2016; Marza et al., 2019; X. Zhang & Yu, 2020) found the opposite. This is because individuals have positive perceptions and experiences of internet usage, be using it for online transactions or as a means of payment. With a low level of a perceived risk that does not affect their trust and acceptance of the usage of online platforms.

Users' trust towards the platform regarding the data they provided, will increase the intentions to use the online platform (Bhatti et al., 2018). Several previous studies such as (Damghanian et al., 2016; Durmus et al., 2017; Indiani et al., 2015; Mahliza, 2020; Maziriri et al., 2019; Pavlou, 2003) found that perceived trust had a significant effect on usage intentions. With the trust in a device, the possibility of individuals using it will be higher, because they tend to feel greater benefits from the existence of the platform.

As explained in the "Theory of Planned Behavior", the individual intention is a proximal behavior, which is a measure of the possibility that an individual will adopt online investment platforms specifically in investment, seen from their attitudes, behavioral norms, and behavioral control (Xie et al., 2017). If the individual feels the benefits from the platform, has encouragement from the surroundings to use it, and the belief that the individual can control the behaviors will increase the individual's intention to use online investment platforms. Conversely, if the individual does not feel the benefits and does not have the belief that he can control the behaviors, they tend to decide not to use it. As (Z. Wang & Yang, 2019) explained that the level of investor decision-making in using an online platform compared to offline is a good level of cognitive and financial literacy. This can provide attitude and behavioral control to choose an investment structure with minimal costs.

Even though the previous research has found causal connections of trust and risk towards technology acceptance, (Yoon & Barker Steege, 2013) argues that investigating causal connections in influential information technology may not accurately reflect the overall decision-making of the users. For this reason, this research examines the connections of trust and risk towards the acceptance of investment platforms. It is close to the research from (Maziriri et al., 2019; Z. Wang & Yang, 2019) because similar research is still rarely investigated in the cases of online investment transactions, especially the investments in Indonesia. Comparatively different (Maziriri et al., 2019) is not testing the direct connections of perceived risk to use online investment platforms. At the same time, perceived risk can reduce investors' intentions to use online investment platforms, especially in Indonesia 868 online investment platforms are not registered under FSA. Moreover, the conditions of the COVID-19 pandemic which have impacts on the declining rate in stock market activity are used by several investors to get discounted prices. This also affected the growth numbers of local investors, which is 17.8 percent until the end of August 2020 (Wareza, 2020). Therefore, the researcher aims to re-examine the relationships between perceived trust and intention to adopt online investment platforms, perceived risk on perceived trust, and intention to adopt online investment platforms.

LITERATURE REVIEW

INTENTION AND THEORY OF PLANNED BEHAVIOR

The intention is one of the functions of the three direct determinants described in the "Theory of Planned Behavior" (Maziriri et al., 2019). The theory of planned behavior is a development of the theory of reasoned action, consisting of attitudes, subjective norms, and behavioral control that affect behavioral intentions and actual behavior (Ajzen, 1991). Attitude refers to the strength regarding the outcome beliefs of behavioral and evaluation of potential outcomes. If the individual believes that using online investment platforms provides benefits, then the individual tends to have a positive attitude towards the intention to use online investment platforms. On the contrary, if it does not bring benefits following the expectations, then the individual tends to have a negative attitude. Subjective norms are related to an individual's environment towards the usage of online investment platforms. If the environment believes that online investment platforms provide benefits to them, it will affect the behavioral intentions of an individual in that environment. While behavioral control refers to two dimensions, namely self-efficacy and the ability to control. Self-efficacy refers to the belief in an individual's ability to the outcome of their behavior. Control refers to an individual's belief that they have control over the behavior (Ajzen, 1991, 2006). At the same time, intention can be used as a proximal behavior, which is a measure of the possibility that an individual will adopt the application. The role of behavioral control can be an antecedent to intention as an individual's perception of the simplicity in doing certain behaviors (Ali, 2011; Maziriri et al., 2019; Shanmugam et al., 2014).

The connection between perceived trust and investors' intentions to invest using online investment platforms

Trust is the willingness to use new services with a sense of comfort, security, and acceptance of risk (Kim et al., 2008; Maziriri et al., 2019). Trust is an individual's willingness to take risks with the desire to have their needs to be met (Maziriri et al., 2019; S. W. Wang et al., 2015). The construct of trust includes aspects of a sense of security and credibility such as honesty, reliability, and integrity. The point is that fundamentally trust leads to certain parties such as online platform providers and implicitly includes trust in the integrity of the media that is used (Pavlou, 2003). (Bhattacherjee, 2001) found that customer trust is an important factor in the success of mobile banking in a context where transactions are carried out on a more susceptive and uncertain telephone network than traditional payment transactions. Trust in online investment platforms will help to reduce the need to understand, control, and monitor the activities, thereby enabling investors to use the services more easily and efficiently without much effort (Gia-Shie Liu & Pham Tan Tai, 2016). Customers who have a high level of trust in online investment platform services will feel the integrity and reliability of the service provider. This makes investors increase their intentions to use the service (Gefen et al., 2003). When using the services of an online investment platform, investors pay for the services that they want. During the process, they expect their personal information to be safe and not to be shared with inappropriate parties (Gia-Shie Liu & Pham Tan Tai, 2016; Maziriri et al., 2019; Oliveira et al., 2017; Zhou, 2011). Previous research stated that several studies have shown that trust affects investors' intentions to invest (Bashir et al., 2018; Durmus et al., 2017; Maziriri et al., 2019).

H1: Perceived trust affects the intention to invest using online investment platforms.

The connection between perceived risk and investors' intentions to invest using online investment platforms

Risk is a situation faced by decision-makers who have prior knowledge about the consequences of alternatives and the possibility of it happening (Dowling, 1986). Bauer 1960 describes the types of risks, specifically social, financial, physical, performance, time, and psychological risks (Dowling, 1986). Social risk is the risk that will be affected by the selection of the service providers negatively towards other's perceptions about the buyer; financial risk is the risk that the purchased service will not achieve the best monetary benefits for the consumers; physical risk is the risk that the service performance will result in damage to consumers' health; performance risk is the risk that the purchased service will not be completed in a way that will give customers their satisfactions; time risk the risk that consumers will waste time, lose comfort, or waste their energy to improve services; while psychological risk is the risk that the selection or performance of producers will hurt the peace of mind or self-perception of the consumers (Mitchell, 1992). When an online platform has low security and financial risks, it will reduce user interest in using the

platform. It's the same with the risk of time and convenience, when the risk faced is small, the greater the user's desire to use the online platform. Meanwhile, Zhang's psychological risk linked it to the experience of using the internet network.

In the context of mobile technology, the risk is to be expected and acceptable; that is what the customers must take at a certain level of danger when trying a new. Investment platforms are forms of application systems that facilitate online investment transactions. Online investment platforms include transactions that occur between individuals and system developers who are not known to each other that increases the risk of financial loss and uncertainty about the identity. Without proper actions, the possibility of transaction errors can result in an unintended loss for customers and potentially higher costs for providers. This can reduce users' trust (Damghanian et al., 2016) and will reduce investors' interest in using online investment platforms (X. Zhang & Yu, 2020). Previous research such as (Durmus et al., 2017; Indiani et al., 2015; Mahliza, 2020; Maziriri et al., 2019) state that perceived risk is negatively related to trust. Furthermore (Featherman & Pavlou, 2003; Hanafizadeh & Khedmatgozar, 2012; Indiani et al., 2015; Mahliza, 2020; Maziriri et al., 2019) stated that perceived risk affects the intention to adopt the technology information.

H2: Perceived risk affects the perceived trust

H3: Perceived risk affects the intention to invest using online investment platforms.

Based on the research framework adopted from (Maziriri et al., 2019; Z. Wang & Yang, 2019), the research model is as shown in Imagess 1.
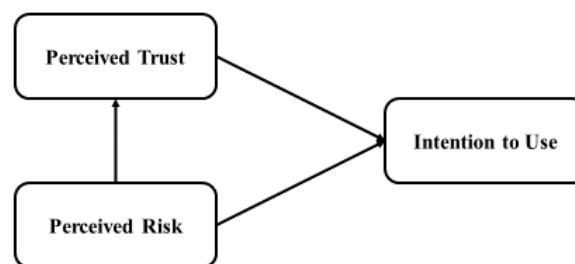

Image 1 Research Framework

METHODOLOGY

This research is included in causal research related to the causal relationship of independent variables towards variables, which is the influence of perceived risk on perceived trust, the effect of perceived trust, and perceived risk on the intention to use the investment platforms. This research uses survey samples to test the model.

The Measurement

The questionnaire used to collect data consists of two parts, the first one is the demographic information and the second one is the questions related to the research. The question was adopted from several English-language sources using the Likert scale, that is the scale from 1 stating "strongly disagree" to 5 stating "strongly agree". Furthermore, the questionnaire was translated into Indonesian and was adjusted according to the research's context. The variables used are explained in table 1.

Table 1. Operational Definition			
Variable	**Definition**	**Item**	**Adoption**
Perceived Risk	The situation faced by investors having prior knowledge of the consequences of alternatives and the possibilities involved in adopting online investment platforms	3	(Damghanian et al., 2016; Dowling, 1986; Durmus et al., 2017; Gia-Shie Liu & Pham Tan Tai, 2016)
Perceived Trust	The willingness to use new services with a sense of comfort, security, and acceptance of risk in using online investment platforms	7	(Damghanian et al., 2016; Durmus et al., 2017; Gia-Shie Liu & Pham Tan Tai, 2016; Pavlou, 2003)
Behavioral Intention to Use	The possibility of investors adopting online investment platforms	3	(Ali, 2011; Maziriri et al., 2019; Shanmugam et al., 2014)

Sample and Descriptive Analysis

The samples in this research are the investors in Java who have investments in various online investment platforms. As the information to (Wareza, 2020) that 73% of investors in Indonesia lived on the island of Java. Using a three-week online survey technique.

There are 156 respondents' responses via the google form link. However, not all of them can be analyzed because of the outliers, which are not following the criteria and incomplete answers. This is why the data that can be analyzed is only 113. Based on gender, there are 58 percent of women and 42 percent of men. The majority of the last education for senior high school and equivalent is 46 percent. Then, for bachelor education is 25 percent. The percentage is single. Working in private companies is 47 percent. The details of the data are shown in table 2.

Table 2 Respondents' Characteristics			
Information		**General**	
		Total	**Percentage**
Age	under 20 years old	10	8,77
	20-30 years old	80	70,18
	31-40 years old	17	14,91
	41-50 years old	4	3,51
	above 50 years old	3	2,63
Gender	male	48	42,11
	female	66	57,89
Last Education	middle high school	0	0,00
	high school and equivalent	53	46,49
	associate degree	12	10,53
	bachelor's degree	28	24,56
	master's degree	17	14,91
	doctoral degree	4	3,51
Marital Status	single	86	75,44
	married	28	24,56
	divorce	0	0,00

Source: data procession using Excel

Method

The data is analyzed using the Structural Equation Model (SEM) based on components with the PLS program. Component-based SEM can analyze latent variables, indicators, and measurement errors directly. The steps of research analysis using SmartPLS are: 1) descriptive statistics; 2) outer model to ensure that the measurements used are suitable for measurement, namely validity test: convergent and discriminant validity, reliability test: Cronbach's alpha and composite reliability; 3) Inner Model to describe the connection between latent variables based on substantive theory. The inner model was evaluated using R-square for the dependent construct, and the t-test for the significance of the coefficients of structural path parameters.

Descriptive Statistic

The average of behavioral intentions from the respondents to the usage of online investment platforms ranges from 3.310 to 3.646 with a standard deviation of 1.073 to 1.153. This shows that respondents' intentions to use online investment platforms are not too high. The average respondent's perception of risk in using online investment platforms ranges from 2.8323 to 3.257 with a standard deviation ranging from 1.145 to 1.196. This shows that respondents consider that investing using online platforms is not so risky, which can be seen from the median value of respondents' perceptions is 3. This can also be seen from the average value of respondents' perceptions of trust in online investment platforms ranging from 3.584 to 3.726 with a standard deviation ranging from 1.017 to 1.110, the median value is 4. This can be interpreted that the respondents have enough confidence in investment platforms.

Table 3 Descriptive Statistic					
	Mean	Median	Min	Max	Standard Deviation
BI1	3.646	4.000	1.000	5.000	1.128
BI2	3.478	3.000	1.000	5.000	1.073
BI3	3.310	3.000	1.000	5.000	1.153
PR1	3.124	3.000	1.000	5.000	1.145
PR2	2.823	3.000	1.000	5.000	1.184
PR3	3.257	3.000	1.000	5.000	1.196
T1	3.584	4.000	1.000	5.000	1.095
T2	3.593	4.000	1.000	5.000	1.110
T3	3.664	4.000	1.000	5.000	1.094
T4	3.717	4.000	1.000	5.000	1.017
T5	3.690	4.000	1.000	5.000	1.073

T6	3.611	4.000	1.000	5.000	1.017
T7	3.726	4.000	1.000	5.000	1.015

Source: data proccession using SmartPLS 3.0

DATA ANALYSIS AND RESULT

Outer Model Test

The outer model test aims to ensure that the measurements used are reasonable to be used as measurements. This test consists of two tests, which are the validity test and the reliability test. The validity test consists of internal and external validity. External validity indicates that the results can be generalized to all different objects, situations, and times. While internal validity shows the instrument's research ability to measure what should be measured from a concept (Jogianto, 2011).

Internal validity consists of qualitative and constructs validity. Qualitative validity consists of the face and content validity. This validity can be based on opinions and evaluations from experts' panels or by others. This instrument has gone through a peer panel discussion process on grammar, translation from the adoption of the original instrument which is based on the English language.

Whereas construct validity shows how well the results obtained from the use of measurement are following the theories used to define a construct. Construct validity can be measured by convergent validity and discriminant validity (Jogianto, 2011). Convergent validity is connected to the principle that the measures of a construct should be highly correlated (Jogianto, 2011). Hair (in Jogianto, 2011) states that loading > 0.50 is considered practically significant. However, the higher the loading factor value, the more important the role of loading in representing the factor matrix. Because of that, the rule of thumb used in convergent validity is outer loading > 0.70.

Based on table 4, it can be seen that the outer loading for behavioral intention, perceived risk, and perceived trust variables has values above 0.70. Thus, the indicator variable can be declared valid.

Table 4 Outer Model Result					
Variable	Indicator	Outer loading	Cronbach's Alpha	Composite Reliability	AVE
Behavioral Intention to Use	BI1	0.911	0.922	0.951	0.865
	BI2	0.938			
	BI3	0.941			
Perceived Risk	PR1	0.885	0.854	0.911	0.774
	PR2	0.885			
	PR3	0.868			
Perceived Trust	T1	0.940	0.980	0.983	0.893
	T2	0.961			
	T3	0.950			
	T4	0.941			
	T5	0.949			
	T6	0.921			
	T7	0.950			

Source: data proccession using SmartPLS 3.0

Discriminant validity relates to the principle that the measures of different constructs should not be highly correlated. Discriminant validity occurs when two different instruments measuring two or more predictable uncorrelated constructs resulted in uncorrelated scores. The discriminant validity test can be seen from the AVE values. Table 4 shows that the AVE values are above 0.7.

Reliability Test

Reliability test to measure the internal consistency of measuring instruments. Reliability shows the accuracy, consistency, and accuracy of measuring instruments when making measurements. Reliability is measured by two methods, which are Cronbach's alpha, and composite reliability. Cronbach's alpha measures the lower limit of the reliability value of a construct. Composite reliability measures the real value of construct reliability (Jogianto, 2011). Hair (in Jogianto, 2011) states that Cronbach's alpha's rule of thumb and composite reliability must be above 0.7. Table 4 shows that both Cronbach's alpha and composite reliability have values of more than 0.7. Thus, the measuring instrument used in this study has good accuracy, consistency, and accuracy in making measurements.

Inner Model Test

The structural model was evaluated using R2 to measure the changes of the various level of the independent variable towards the dependent variable and t-value to test the significance between constructs in the structural model (Jogianto, 2011).

Table 5 shows the R-value of the research model. The first model of the relationship between perceived risk and perceived trust in using the investment platform is 0.054. This means that the variability of perceived trust that can be explained by perceived risk is 5.4 percent. While the rest is explained by variables outside the proposed model. The next model is the relationship between perceived risk and perceived trust on behavioral intention to use an investment platform with an R Square value of 0.662. This means that the variability of behavioral intention to use investment platforms that can be explained by perceived risk and perceived trust is 66.2 percent. While the rest is explained by variables outside the proposed model.

Table 5 R Square	
	R Square
B Intention	0.662
P Trust	0.054

Source: data procession using SmartPLS 3.0

Goodness of Fit

Tandenhau (2005) in Jogianto (2011) states that goodness of fit can be measured by AVExR2. The results of the calculation of the goodness of fit in this study are as follows:

$$\sqrt{0,844 \times 0,662} = 0,5587$$

This shows that the model used in this research has significant goodness of fit. Thus the model used is reasonably proper.

Path Coefficient

The size of the parameter coefficient of the connections between perceived risk and perceived trust is 0.231, meaning that there is a positive influence between perceived risk and perceived trust. The higher the perceived risk of an individual, the greater the individual's perceived trust in using the investment platforms. The t statistic value is 2.020 which is greater than 1.96, therefore hypothesis 1 is accepted.

The parameter coefficient of the relationship between perceived trust and behavioral intention is 0.335, which means that there is a positive influence between perceived risk and behavioral intention. The higher the individual's perceived risk of the investment platform, the greater the behavioral intention to use the investment platform. The value of the t statistic is 3.390 which is greater than 1.96, therefore hypothesis 2 is accepted.

The parameter coefficient of the connections between perceived trust and behavioral intention is 0.762, meaning that there is a positive influence between perceived trust and behavioral intention. The higher the individual's perceived trust in the investment platform, the greater the behavioral intention to use the investment platform. The value of the t statistic is 17.169 which is greater than 1.96, therefore hypothesis 3 is accepted.

Table 6 Path Coefficients					
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
P Risk -> B Intention	0.335	0.341	0.099	3.390	0.001
P Risk -> P Trust	0.231	0.234	0.115	2.020	0.044
P Trust -> B Intention	0.762	0.763	0.044	17.169	0.000

Source: data procession using SmartPLS 3.0

Discussion

Risk is a situation faced by decision-makers who have prior knowledge about the consequences of alternatives and the possibility of it happening (Dowling, 1986). Bauer 1960 describes the types of risks, specifically social, financial, physical, performance, time, and psychological risks (Dowling, 1986). This will reduce the individual's confidence towards the conditions that are believed to have high risks. But it will be different if the individual accepts the risk. As stated by (Maziriri et al., 2019; S. W. Wang et al., 2015) that trust is an individual's willingness to take risks with the desire to have their needs to be met. The research shows that the average value of perceived risk tends to be below. This means that when the risk is accepted and perceived as less threatening, it will increase the individual's trust. As found in this research, the individuals do not feel threatened by the risks of the investment platforms used, thus increasing their confidence in using the platforms. Likewise, the intention to use the investment platforms will increase. These findings are supported by the research of (D'Alessandro et al., 2012; Rouibah et al., 2016) which states that declining individual perceived risk of using cashless payment platforms will increase trust and usage intentions.

Just like perceived trust, the individuals have confidence that by using the investment platforms the data they provide will be safe and the platform provides benefits to them. This will increase the intention to use the investment platforms. The results of this research are supported by (Bashir et al., 2018; Durmus et al., 2017; Maziriri et al., 2019; Noprisson & Ani, 2018).

The result of this research is supported by the "Theory of Behavioral Planning", which states that when an individual's attitude believes that the investment platforms provide benefits, have the environment and behavioral controls over their decision over the usage of the investment platforms, it will increase the individual's intention to use the investment platforms (Yoon & Barker Steege, 2013).

This research implies that trust and risk are the most important things for investors in using online investment platforms. When the perceived risk perception by investors is low, it will have a positive impact on trust and the usage of the investment platforms. Therefore, investment platform business developers must be able to convince potential investors that the platforms offered can protect personal data, which may have an impact on their social, financial, physical, performance, time, and psychological lives. An example is to register the legality of the platform under the official Financial Services Authority. Thus, the perceived risk of potential investors will be lower and the confidence of potential investors to use the platform will be even greater. Meanwhile, from the government's side, it is necessary to improve the policies for investment platform developers so that potential investors can use them more safely.

Conclusion

The COVID-19 pandemic has affected global economic growth, causing investors' sentiments to below which ultimately tends to lead the market to be the negative direction. On the other hand, some investors take advantage of this condition by obtaining discounted prices. The activity carried out online optimizes business transactions, which resulted in more online investment platforms develop. However, many of them are registered without permission from the Financial Services Authority. This will certainly have an impact on investors' intensity when choosing a safe platform. Therefore, this research aims to examine the usage intensity of online investment platforms in terms of perceived trust and risk. With that, the careful behaviors of the investors when they make their choices using online investment platforms can be seen. The result of this research indicates that investors have low perceived risk and high perceived trust towards investment platforms. This result explains that low perceived risk will increase perceived trust towards the platforms. Thus, the low perceived risk and high perceived trust towards the platforms will increase investors' intentions to use investment platforms. The results of this study have implications that the level of trust in a platform is high enough to be an opportunity for system developers. That a trustworthy system will increase usage. In addition, the government should also review the existing investment platforms whether they are already under government supervision.

Limitation and Suggestion

This research has weaknesses, such as the responses from the respondents, which resulted in limited generalizations. It is recommended for further research to collaborate with the growing communities of the young investors in Indonesia. This research does not explore the characteristics of age, gender, experience, and demographic factors that might influence investors' decision-making in choosing a platform. Thus, it will provide an opportunity for future research to compare the demographic factors of respondents who intend to use the investment platform and those who do not. For example, the age factor is due to the close relationship between millennials and technology.

References

Aditia, D., Nasution, D., Sains, F. S., Pembangunan, U., Budi, P., & Utara, U. S. (2020). DAMPAK PANDEMI COVID-19 TERHADAP PEREKONOMIAN INDONESIA. *Jurnal Benefita*, *5*(2), 212–224.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*, 179–211. https://doi.org/10.15288/jsad.2011.72.322

Ajzen, I. (2006). Constructing a theory of planned behavior questionnaire. *Available at People. Umass. Edu/Aizen/Pdf/Tpb. Measurement. Pdf*. http://people.umass.edu/~aizen/pdf/tpb.measurement.pdf

Ali, A. (2011). Predicting individual investors' intention to invest: An experimental analysis of attitude as a mediator. *World Academy of Science, Engineering and Technology*, *50*(2), 994–1001.

Barber, B. M., & Odean, T. (2011). The Behavior of Individual Investors. *Handbook of the Economics of Finance*, *1*(2), 1533–1570.

Bashir, S., Anwar, S., Awan, Z., Qureshi, T. W., & Memon, A. B. (2018). A holistic understanding of the prospects of financial loss to enhance shopper's trust to search, recommend, speak positive and frequently visit an online shop. *Journal of Retailing and Consumer Services*, *42*(August 2017), 169–174. https://doi.org/10.1016/j.jretconser.2018.02.004

Bhattacherjee, A. (2001). Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS Quarterly*, *25*(3), 351–370.

Bhatti, A., Saad, S., & Gbadebo, S. M. (2018). *The Effect of Financial Risk and Convenience Risk on Online Shopping Behavior with the Moderating Role of Trust*. *2*(8), 38–42.

D'Alessandro, S., Girardi, A., & Tiangsoongnern, L. (2012). Perceived risk and trust as antecedents of online purchasing behavior in the USA gemstone industry. *Asia Pacific Journal of Marketing and Logistics*, *24*(3), 433–460. https://doi.org/10.1108/13555851211237902

Damghanian, H., Zarei, A., & Siahsarani Kojuri, M. A. (2016). Impact of Perceived Security on Trust, Perceived Risk, and Acceptance of Online Banking in Iran. *Journal of Internet Commerce*, *15*(3), 214–238. https://doi.org/10.1080/15332861.2016.1191052

Dowling, G. R. (1986). Perceived Risk: The Concept and Its Measurement. *Psychology & Marketing*, *3*, 193–210. https://doi.org/10.1002/mar.4220030307

Durmus, B., Ulusu, Y., & Akgun, S. (2017). the Effect of Perceived Risk on Online Shopping Through Trust and Wom. *International Journal of Management and Applied Science*, *3*(9), 2394–7926. http://iraj.in

Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: A perceived risk facets perspective. *International Journal of Human Computer Studies*, *59*(4), 451–474. https://doi.org/10.1016/S1071-5819(03)00111-3

Firdaus, F. (n.d.). Tumbuh 26%, Jumlah Investor di Pasar Modal Tembus 3,1 Juta. *Investor.Id*. Retrieved November 30, 2020, from https://investor.id/market-and-corporate/tumbuh-26-jumlah-investor-di-pasar-modal-tembus-31-juta

Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in Online Shopping: An Integrated Model. *MIS Quarterly*, *27*(1), 51–90.

Gia-Shie Liu, & Pham Tan Tai. (2016). A Study of Factors Affecting the Intention to Use Mobile Payment Services in Vietnam.

Economics World, *4*(6), 249–273. https://doi.org/10.17265/2328-7144/2016.06.001

Hanafizadeh, P., & Khedmatgozar, H. R. (2012). The mediating role of the dimensions of the perceived risk in the effect of customers' awareness on the adoption of Internet banking in Iran. *Electronic Commerce Research*, *12*(2), 151–175. https://doi.org/10.1007/s10660-012-9090-z

Indiani, N. L. P., Rahyuda, I. K., Kerti Yasa, N. N., & Sukaatmadja, I. P. G. (2015). Perceived Risk and Trust as Major Determinants of Actual Purchase, Transcending The Influence of Intention. *ASEAN Marketing Journal*, *7*(1), 1–13. https://doi.org/10.21002/amj.v7i1.4601

Kickbusch, I., Leung, G. M., Bhutta, Z. A., Matsoso, M. P., Ihekweazu, C., & Abbasi, K. (2020). Covid-19: How a virus is turning the world upside down. *The BMJ*, *369*(April), 10–12. https://doi.org/10.1136/bmj.m1336

Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision Support Systems*, *44*(2), 544–564. https://doi.org/10.1016/j.dss.2007.07.001

Mahliza, F. (2020). *Exploring Trust in Purchase Intention: An Empirical Research on Agricultural Application*. *120*(Icmeb 2019), 72–76. https://doi.org/10.2991/aebmr.k.200205.015

Marza, S., Idris, I., & Abror, A. (2019). *The Influence of Convenience, Enjoyment, Perceived Risk, And Trust On The Attitude Toward Online Shopping*. *64*(2001), 588–597. https://doi.org/10.2991/piceeba2-18.2019.40

Maziriri, E. T., Mapuranga, M., & Madinga, N. W. (2019). Navigating selected perceived risk elements on investor trust and intention to invest in online trading platforms. *Journal of Economic and Financial Sciences*, *12*(1), 1–14. https://doi.org/10.4102/jef.v12i1.434

Mitchell, V. (1992). Consumers' Behaviour : Can Perceived Risk. *Management Decision*, *30*(3), 26–31.

Noprisson, H., & Ani, N. (2018). Consumer Factors of Purchase Intention Based on Brand Image, Price, Trust and Value. *Ijsrcseit*, *3*(7), 185–191. https://doi.org/10.32628/CSEIT183724

OJK. (2020). *Daftar Investasi yang Tidak Terdaftar dan Tidak di Bawah Pengawasan OJK*. https://sikapiuangmu.ojk.go.id/FrontEnd/AlertPortal/Negative

Oliveira, T., Alhinho, M., Rita, P., & Dhillon, G. (2017). Modelling and testing consumer trust dimensions in e-commerce Part of the Management Information Systems Commons Modelling and testing consumer trust dimensions in e-commerce. *Computers in Human Behavior*, *71*, 153–164. http://scholarscompass.vcu.edu/info_pubshttp://scholarscompass.vcu.edu/info_pubs/3

Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, *7*(3), 101–134. https://doi.org/10.1080/10864415.2003.11044275

Rouibah, K., Lowry, P. B., & Hwang, Y. (2016). The effects of perceived enjoyment and perceived risks on trust formation and intentions to use online payment systems: New perspectives from an Arab country. *Electronic Commerce Research and Applications*, *19*, 33–43. https://doi.org/10.1016/j.elerap.2016.07.001

Shanmugam, A., Savarimuthu, M. T., & Wen, T. C. (2014). Factors affecting Malaysian behavioral intention to use mobile banking with mediating effects of attitude. *Academic Research International*, *5*(2), 236–253.

Wang, S. W., Ngamsiriudom, W., & Hsieh, C. H. (2015). Trust disposition, trust antecedents, trust, and behavioral intention. *Service Industries Journal*, *35*(10), 555–572. https://doi.org/10.1080/02642069.2015.1047827

Wang, Z., & Yang, M. (2019). How does investors' heterogeneous trust affect the complexity of financial products? A look into the development of online finance. *Managerial and Decision Economics*, *40*(4), 425–438. https://doi.org/10.1002/mde.3012

Wareza, M. (2020). 43 Tahun Investor RI Baru 3 Juta, Harus Senang atau Sedih? *CNBC Indonesia*. https://www.cnbcindonesia.com/market/20200810142840-17-178678/43-tahun-investor-ri-baru-3-juta-harus-senang-atau-sedih

Xie, Q., Song, W., Peng, X., & Shabbir, M. (2017). Predictors for e-government adoption: Integrating TAM, TPB, trust and perceived risk. *Electronic Library*, *35*(1), 2–20. https://doi.org/10.1108/EL-08-2015-0141

Yoon, H. S., & Barker Steege, L. M. (2013). Development of a quantitative model of the impact of customers' personality and perceptions on Internet banking use. *Computers in Human Behavior*, *29*(3), 1133–1141. https://doi.org/10.1016/j.chb.2012.10.005

Yousafzai, S. Y., Pallister, J. G., & Foxall, G. R. (2003). A proposed model of e-trust for electronic banking. *Technovation*, *23*(11), 847–860. https://doi.org/10.1016/S0166-4972(03)00130-5

Zhang, L., Pei, D., & Vasarhelyi, M. A. (2017). Toward a new business reporting model. *Journal of Emerging Technologies in Accounting*, *14*(2), 1–15. https://doi.org/10.2308/jeta-10570

Zhang, X., & Yu, X. (2020). The Impact of Perceived Risk on Consumers' Cross-Platform Buying Behavior. *Frontiers in Psychology*, *11*(8), 13–18. https://doi.org/10.3389/fpsyg.2020.592246

Zhou, T. (2011). Understanding mobile internet continuance usage from the perspectives of UTAUT and flow. *Information Development*, *27*(3), 207–218. https://doi.org/10.1177/0266666911414596

Annisa Hakim Zamzami
Faculty of Economics and Business
Universitas Mercu Buana, Jakarta, Indonesia
Email: annisa.hakim@mercubuana.ac.id