

Antecedents of Information Technology-Based Risky Investment

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Paper type

Research paper

Abstract

Purpose- This study examines the effect of emotional intelligence, the locus of control, and risk aversion on intention to risky investment with financial literacy as moderating effect.

Methods- This study uses 98 investors distributed by online questionnaire. Data examined using Partial Least Square (PLS) technique.

Finding- The results show that the emotional intelligence, the locus of control have a positive effect and risk aversion and financial literacy have a negative effect on intention to a risky investment. However, there is no moderating effect of financial literacy on those direct effects.

Implication- The implication for stakeholder and further research are discussed

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INTRODUCTION

Investments always include risk factors. A paradigm mentions that the higher the risk, the higher the potential also profit. This "law" is particularly applicable in emerging market economies, including Indonesia. Investing in Indonesia can be very profitable but also implies more risks than investing in developed countries because Indonesia has certain dynamics and characteristics that can thwart investment and its climate.

From the data announced by OJK, at the beginning of 2017 there are 200 more illegal investment companies at high risk and harm the public. In the first quarter of 2018, OJK has announced 74 entities suspected of undertaking unlicensed business activities and potentially harming the public. Even among them are companies that have licenses from the government. These entities offer different types of investment products ranging from doubling money, chain-breaking, savings with big prizes, multi-level marketing or MLM, savings and credit cooperatives to online trading, both offline or online platform. In this context, there are still many Indonesians, especially in suburban areas trapped by this illegal investment. Therefore, it is an interesting issue to examine individual financial behavior thoroughly.

Previous studies have attempted to explain individual financial behavior by emphasizing the role of demographic factors (age, gender, income, marital status and education level), or socio-economic (Bajtelsmit and Bernasek 1996 Larkin et al., 2013), personal characteristic factors (eg characteristics, values, emotions, tolerance to risk). Other factors are the market (such as expected risk, rate of return, transaction costs, market environment, etc.) and other related factors. It could be said that those studies refer to the classical finance paradigm.

However, this research refers to the financial behavior that is a science that studies how humans respond and react to existing information and then used to take decisions that can optimize the return on investment decisions by considering the risks that embedded in it (elements of human attitudes and actions are the deciding factor in investing).

To understand the issues related to individual's financial behavior, one must manage his personal finances in one way or another. For example, some people tend to store a lot of information, some want to collect information before doing each purchase, and some people want to follow their instincts. Funfgeld (2009) classifies investors according to their financial attitudes and behaviors. According to him private investors are individuals with a variety of financial practices combined with various levels of experience, anxiety levels and the intention of investing. By doing the classification, then the needs of the individual in a group in terms of financial affairs can be studied well according to segment.

There are number of factors that influence the financial decisions of individuals at risk, e.g., personality traits (narcissism, sensation search, or locus of control, and attitudes toward money). However, there are still many individual characteristics to investigate, such as emotional intelligence (Emotional Intelligence, hereinafter abbreviated as EI). Previously, EI factors were used in risk-taking arrangements in the context of learning, entrepreneurship and health risk-taking (Kamalian, et al., 2011; Yip and Cote, 2013), but not in risk management settings in the context of risk-based IT investments. Therefore, EI still has an opportunity to be studied further in this research.

In addition to EI, the locus of control (LOC) has also been extensively discussed by scientists, particularly in the context of entrepreneurship. LOC and risky decision making are considered as entrepreneurial traits. There are many studies linking the LOC with risky behavior in entrepreneurship and health risk management settings. In addition, in terms of financial behavior, it is known that the LOC moderates the relationship between the financial literacy ability

and the behavior of financial management accountants (Perry and Morris, 2005). In addition, the LOC has a positive influence on financial risk tolerance (Grable and Joo, 2000). Therefore, the LOC is relevant for review in the context of IT-based investment behavior.

This study also examines risk-aversion (RA) as a predictor of risk-based IT investment behavior. RA is implicitly sourced from Theory of Reasoned Action (Ajzen and Fishbein, 1977) and Theory of Planned Behavior (Ajzen, 1991) which suggests that RA has the potential to encourage behavior through intention to behave. Several studies have revealed that risk-taking by a person may be different from that observed due to several factors, such as the problem-solving process in information processing and belief (Schoemaker, 1993). Sitkin and Weingart (1995) has explained that the problem of risk perception framing affects risky decision making. Therefore, RA becomes relevant to be studied as a determinant of IT risk-based investment behavior.

On the other hand, financial literacy is found to have a positive impact on various financial behaviors (Aren and Aydemir, 2014). However, other factors that may have effect on financial behavior have been substantially ignored in most studies of financial finance. Therefore, by studying the effects of moderation of financial literacy allegedly can change the relationship between individual factors and risky investment behavior. Therefore, this study aims to examine how emotional factors and attitudes interact with financial knowledge (cognitive factors) that attract the attention of IT-based investments

LITERATURE REVIEW

Literature Review and Hypothesis Development

The results of Sibel Dinc Aydemir and Selim Aren (2017) studies show that EI and LOC have a positive impact on financial decision making, while RA is generally negative. Although financial literacy has no direct effect on risky financial behavior, it has an important role as a moderator variable, interacting with the LOC.

Risky investments are used to define financial instruments other than investments that have nominal returns. With this kind of investment, investors do not know how much they should earn and may also lose the money invested. Therefore, risk-based IT investment intentions are a concept to illustrate how many individuals want to invest in alternative investments.

Schoemaker (1993) suggests that intrinsic risk can cause people's attitudes to differ from the observed risk-taking behavior. This risk-taking attitude can be influenced by genetic factors Kuhnen and Chia (2009).

On the other hand, Wang et al. (2011) found that individuals perceived more known instruments, considered familiar and more easily understood, as less risky instruments. Similarly, Vlaev et al. (2009) states that the level of financial knowledge has an influence on the assessment of the nature of the investment, risky or not. In general, the link between risk taking and risk behavior has a long history based on the references of the research group (Weber and Milliman, 1997; Keil et al., 2000; Cooper and Faseruk, 2011).

The Influence of Emotional Intelligence (EI) on IT-based Risky Investment Intention IT

Salovey and Mayer (1990) define EI as the ability to self-monitor with the feelings of others and emotions. This model is approaching the concept as a series of emotional abilities. In this context, the EI is in four dimensions, namely understanding emotions, managing oneself and the emotions of others, and using them in action.

Although emotions and rationality have been considered as oxymoronic concepts in the

context of decision-making, recent research has confirmed that emotions can increase output and decision processes (Hess and Bacigalupo, 2011). As an integral part of the rational process, decision making will flourish at a higher EI (Humphrey et al., 2007). Especially in uncertain conditions, risk-taking is necessary for decision makers. Under these circumstances, what will happen, is predicted through the possibility of anxiety that can arise. These negative effects can lead to poor decision making. For that, EI can direct people who were previously part of decision making by skillfully managing mood (Chapman, 2006).

The study also discusses that the introduction and understanding of emotions will influence the behavior of risk choices by reducing avoidable errors. As a result, emotional ability is considered important in risk-making decisions. Indeed, studies in other risk settings, such as leadership (Batool, 2013), entrepreneurship (Kamalianetal, 2011, Foo, 2011), learning (Humphreyetal, 2007) and organizational change (Vakola et al., 2004), have uncovered EI as an important factor in decision making.

There are currently many economic and financial studies that have important differences in the research model (Trinidad et al., 2004; Kidwell). Sjöberg and Engelberg, 2009; Yip and Cote, 2013). However, there are no studies that explicitly examine financial behavior. Therefore, it is necessary to review the EI model on risk-based IT investment decisions.

Demaree et al. (2008) has emphasized that emotional reactions can affect self-control behavior. In addition, Olson (2006) argues that an assessment strongly related to the classical financial paradigm can have an impact on financial behavior. In addition, Satterfield (1998) has discussed that individual cognitive and affective states may be associated with deviant behavior. Ameriksetal (2009) has shown that higher financial performance is associated with higher intellectual acumen. Precisely, individuals who have emotional intelligence, able to overcome the negative impacts arising from risky decisions well. That is, EI encourages individuals to make risky investments easily by generating optimism and confidence. These optimistic and confident individuals are more likely to invest in risky alternatives because their emotions can shape their risk perceptions of risky alternative investments (Foo, 2011). Thus, the hypothesis tested in this study is as follows.

H1: Emotional intelligence affects IT-based risky investment intention.

The Effect of Risk Aversion on IT-based Risky Investment Intention

The Risk aversion effect was first presented by Kahneman and Tversky (1979) as part of the prospect theory, in the domain of behavioral economics. The reflection effect is a pattern identified from the opposite preference between a negative outlook compared to a positive outlook. According to this effect, people tend to avoid risks under the profit domain, and to seek risk under the domain of loss. That is, no risk aversion is expected to occur under the domain of loss. For example, in the profit domain, most people prefer a certain profit of 3000, rather than a 4000 profit with 80 percent risk. When posing the same problem under the domain loss, most people prefer a loss of 4000 with a probability of 80 percent, during the loss of 3000.

In the field of economy and finance, risk aversion is human behavior (especially consumers and investors), when exposed to uncertainty, regarding to reduce the uncertainty. This indicates a person's doubt to approve a situation with unknown results than other situations with more predictable results but may decrease expected payoff. For example, a risk-averse investor may choose to put his money into a low-interest but guaranteed bank account instead of a stock that may have a high expected rate of return, but also involve the possibility of a loss of value.

RA in the context of risky investments can generally be recognized as an attitude that

reflects a level when an individual avoids taking risks in general. This attitude, along with subjective norms, creates the possibility of risky behavior (Fishbein and Ajzen, 1975; Ajzen, 1991).

McCarty (2000) posits two types of risk taking, namely intrinsic risk taking and self-preservation behavior. The personal mindset first thought of by others, will make people think about the circumstances that change according to changing conditions. However, Peterson (2007) mentions the weak relationship of genetic characteristics with risk taking. Weber et al. (2002) have demonstrated that risk taking applies certain domains. That is, individuals do not consistently seek risk aversion. Thus, the hypothesis tested in this study is as follows.

H2: Risk Aversion affects on IT-based risky investment intention.

The Effect of Locus of Control (LOC) on IT-based Risky Investment Intention

LOC is the individual's control of the job and the belief in self-efficacy. LOC is divided into two, namely the internal control locus that characterizes a person having confidence to answer for work behavior in the organization. External control characterizes individuals who believe that work behavior and task success are more due to factors outside the self, such as an organization.

The concept of LOC was first proposed by Rotter (1966), a social learning theorist. LOC is one of the personality variables defined as individual beliefs in self-control. Meanwhile, Robbins and Judge (2007) define LOC as the level of individual confidence in self-determination. The internal LOC is the control over whatever happens to yourself, while the external is controlled by forces from outside the self, such as luck and opportunity.

Ajzen (2002) states that people feel different advantages or disadvantages due to factors outside of action or control. In fact, Rotter (1966) has first proposed that the effect of reinforcement on behavior may indicate different levels of inter-individual rewards derived from behavior. Thus, if the individual finds reinforcement as a result of the action, then the individual has an internal LOC. On the contrary, if the individual finds a reinforcement as a result of an act that can not be controlled on its own, then the individual has an external LOC. This construct when tested shows a consistent difference between individuals. Thus, the internal-external LOC as a personality variable has been used in many studies.

Particularly in the entrepreneurial literature, researchers have linked the internal LOC and risk-taking as an entrepreneurial characteristic (Schjoedt and Shaver, (2012.) Similarly, previous studies have found strong links between LOC and risk behavior (Crisp and Barber 1995; Carpentier et al., 2014).

These earlier studies were also examined in the context of financial behavior. Duxbury et al. (1996) have found that informal investors in Canada have higher scores in internal assessments. In addition to financial and gender literacy, Grable and Joo (2000) found that LOC is one of the determinants of financial risk tolerance. Perry and Morris (2005) have found direct and indirect LOC effects on responsible financial behavior. In addition, Brounen et al. (2016) found a positive relationship between LOC, financial literacy, and behavior in financial decision-making. This finding has also been supported by the Cobb-Clarka et al. (2016) and McNair et al. (2016) that finds an external LOC behavioral relationship with the decision to borrow.

This study argues that the LOC directly affects the intentions of IT-based risky investment decisions. Therefore, the hypothesis tested in this study is as follows.

H3: Locus of control affects IT-based risky investments intention.

The Effect of Financial Literacy (LK) on IT Risk Based Investment Decisions

According to Pak & Mahmood (2015) the level of financial literacy plays a very important role in influencing the willingness to accept risks in relation to certain financial investments. Generally, investors are less interested in doing a less understood transactions (Anbar, et al., 2010). The results showed that respondents with higher levels of financial knowledge showed higher risk tolerance as well (Grable, 2000).

Conversely, there is research that finds the negative effects of financial literacy on risky investment intentions. The cause of financial literacy has an inhibit or inhibiting effect, ie when individuals have high literacy rates, it can prevent a person's intentions for risky investments. It also indicates that higher knowledge can make the decision-making process more complicated so that the probability of investment decision decision is lower risk.

Based on the results of discussion showing the causal relationship between the level of financial literacy with the level of financial risk tolerance that the result of conflict, the hypothesis proposed in this study are:

H4: Financial Literacy (LK) affects the IT Risk Based Investment Risk Decision

Moderating Effect of Financial Literacy on the Effect of Emotional Intelligence (EI), Risk Aversion (RA) and Locus of Control (LC) on IT-Based Risky Investment Intention

Although previous literature is limited in explaining financial literacy, Huston (2010) and Servon and Kaestner (2008) describe LK as a person's ability to understand and utilize financial concepts. LK is different from the level of formal education. Individuals who have knowledge of financial concepts, such as calculating the value of money, stocks, bonds, and special policies are considered to have LK, even though the individual has no formal education.

Meanwhile, Kaly, Hudson and Vush (2008) define LK as the ability to understand financial conditions, financial concepts and alter that knowledge appropriately into behavior. Akerlof and Shiller (2010) illustrate the unconsciousness of people about basic finance topics, such as compound interest causing people to think saving will result in considerable returns. Conversely, individuals who have LK can explicitly distinguish various aspects of finance and economics. LK encourages individuals actively and responsibly for financial planning, especially when there is a global financial crisis, Robb and Woodyard (2011).

Furthermore, previous studies have also found LK influencing differences in risk perceptions (Diacon, 2004), ie individuals who have LK prefer riskier alternatives than ordinary individuals. LK is also found to have a positive impact on portfolio diversification (Guiso and Jappelli, 2008), higher stock participation (Van Rooij et al., 2007), and readiness for early retirement (Lusardi and Mitchell, 2007). Thus, the hypothesis tested in this study is as follows.

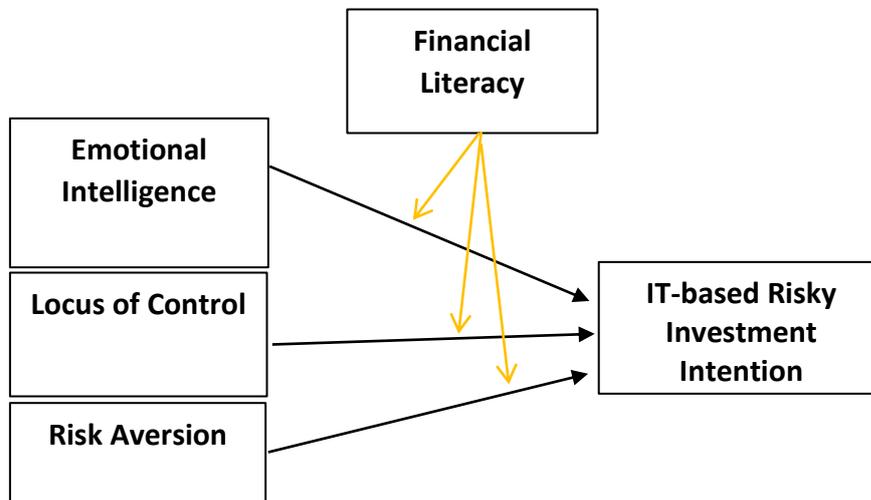
H5: The impact of IE on IT-based risky investments is weaker for higher financial literacy groups.

H6: The impact of LOC on IT-based risky investments is weaker for higher financial literacy groups.

H7: The impact of RA on IT-based risky investments is weaker for higher financial literacy groups.

The proposed research models tested in this study are as follows.

Figure 1. Research Model



RESEARCH METHOD

This research uses a quantitative approach with survey as a research design. The variables tested in this research are independent variable, dependent variable and moderation variable.

- Independent variables in this study consisted of emotional intelligence, locus of control, risk aversion and financial literacy.
- Dependent variable is an IT-based risk investment intent.
- Moderate variables are variables that strengthen or weaken the influence of independent variables on the dependent variable. In this study the moderation variable is the level of financial literacy.

Population in this study are investors who have invested in IT-based risky financial instruments, such as forex, bitcoin, and others. The sample size is determined based on the sample adequacy requirements determined by a statistical tool, which is 10 times the number of variables for linear regression. For that, this study used 98 respondents. Sampling technique in this research is purposive sampling with criterion is investor who have invested at least last year, aged 18 years and above, and preferably have income on regular basis.

This study uses primary data. Techniques of collecting data using questionnaires with 7 points likert scale, ranging from strongly disagree to strongly agree. All data were tested using the Partial Least Square (PLS) method. Testing phase consists of evaluation of measurement model for construct validity and reliability, and evaluation of structural model for hypothesis testing.

ANALYSIS AND DISCUSSION

The research data was collected by distributing questionnaires to the respondents by using online questionnaire method. The research data was collected from May 25, 2018 to June 02, 2018. With a total of 98 respondents.

The general characteristics of respondents in this study are illustrated by age, gender, education, never or not investing, investment type and investment duration. The characteristics of respondents in this study are shown in Table 1.

Table 1. Characteristics of respondents

		Age	Sex	Education	Never or not Invest	Invest Type	Invest Duration
N	Valid	98	98	98	98	98	98
Mean		27.82					
Mode		23	1	6	2	4	1

Source: Research Data, 2018

Table 1 shows that by age, the mean age of respondents is 28 years (rounding up). This indicates that the respondents included in the category of adult and productive age. Based on sex, the number of respondents in this study the number of men more than women so this indicates a tendency of male preference to make risky investments. Based on the level of education, most respondents are educated undergraduate level. This indicates that investors in general have had a sufficient level of formal education, although it has not fully reflected the LK. Most of the respondents are investors with long-term investment of less than one year (<1 year) with selected investment type is combination (forex, bitcoin, and others). This indicates the level of investment experience is still quite low, but the investment risk portfolio is quite dispersed.

Evaluation of Measurement Models

Testing the validity and reliability in this study using the PLS measurement model. Convergent validity is assessed by output from outer loading and Average Variance Extracted (AVE). Based on the results of the PLS algorithm test in Table 3 shows that all model indicators with outer loading are greater than 0.50 (unless EI5 and EI15 are maintained because the reliability is still met), so it can be concluded that the indicator meets the validity criteria. Like wise with AVE parameters, it appears that all constructs have met these criteria.

Table 2. Measurement Model Overview

	AVE	Composite Reliability	R Square	Cronbachs Alpha	Communality	Redundancy
EI	0.418736	0.805507		0.752300	0.418737	
LC	0.738717	0.846759		0.721904	0.738716	
LK	0.458342	0.807504		0.721744	0.458341	
NI	0.700601	0.902638	0.300678	0.853339	0.700601	0.061874
RA	0.702796	0.823380		0.607918	0.702795	

Source: Output of Smart PLS, 2018

Discriminant validity tests are based on cross loading measurements with their constructs. The indicator is said to be discriminantly valid if the value of cross loading > 0.70 in one variable (Abdillah and Jogianto, 2015: 196). Based on the cross-loading test results, all indicators in each latent construct meet the criteria of discriminant validity.

Tabel 3. Cross Loadings

	EI	LC	LK	NI	RA
EI13	0.692609	0.002835	0.030644	0.290622	0.110462
EI14	0.672893	-0.056094	-0.061079	0.055892	-0.092918
EI15	0.442958	0.025321	-0.083620	0.043148	-0.083753
EI3	0.835697	-0.084535	-0.071225	0.277337	-0.263554
EI4	0.669607	-0.157469	-0.010103	0.147911	-0.150042
EI5	0.486775	0.107556	-0.019738	0.115152	-0.129859
LC1	0.047819	0.979380	0.138132	0.272868	0.208301
LC6	-0.389589	0.719894	0.117881	0.079423	0.285496
LK4	0.016790	0.029109	0.785402	-0.206192	0.280973
LK6	-0.111335	0.128900	0.637005	-0.093499	0.240027
LK7	-0.154641	0.216208	0.700242	-0.123733	0.178914
LK8	0.065878	0.093373	0.628205	-0.190485	0.102989
LK9	-0.033870	0.081252	0.619758	-0.062724	0.155087
NI1	0.190213	0.140229	-0.183424	0.817521	-0.265940
NI2	0.402909	0.237187	-0.125652	0.705566	-0.164962
NI3	0.240244	0.216747	-0.207359	0.903812	-0.267723
NI4	0.194692	0.225117	-0.246575	0.905189	-0.236966
RA1	-0.136228	0.162073	0.269907	-0.287698	0.932479
RA7	-0.078897	0.304797	0.194733	-0.152575	0.732170

Source: Output of Smart PLS, 2018

Additionally, this study also tested the reliability. The construct is considered reliable if the rule of thumb cronbach alpha or composite reliability is greater than 0.6 (Abdillah, and Jogianto, 2015: 197). Based on the reliability test in Table 2, all constructs are considered reliable

Evaluation of Structural Model

The structural model evaluation is done by evaluating the value of path coefficients or t-values of each path for significance test between constructs in structural model and R-Square for dependent constructs. The value of path coefficient or inner model shows the level of significance in hypothesis testing (Abdillah and Jogianto, 2015: 197). Table 2 shows that this research model has moderate effect size (Average R Square 0.3) (Chin, 1989).

Hypothesis testing is done to see the relationship between independent variables, namely Emotional Intelligence (EI), Locus of control (LC), Risk Aversion (RA) to dependent variable, ie Intention to Invest (NI), with Financial Literacy level (LK) as moderating variables. Hypothesis testing was done by inner model test with 95% confidence level and error in 5% analysis. The research model in hypothesis testing consists of two research models, namely the direct effect structural model and the moderate effect moderation model. By using Bootstrapping method in SmartPLS 2.0 software, standard error can be obtained, path coefficients (β), and T-Statistics. With this technique, researchers can assess the statistical significance of the research model by testing the hypotheses for each relationship path.

To analyze the relationship of each variable or testing the research hypothesis is done by comparing the T-statistic value. If the value of T-statistic ≥ 1.96 then there is a significant influence between the variables tested. Output of the Bootstrapping method for hypothesis testing of direct and moderate effect structural models is presented in Table 4

Tabel 4. Structural Model Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)
EI -> NI	0.288934	0.324142	0.094504	0.094504	3.057382
LC -> NI	0.360086	0.340874	0.099939	0.099939	3.603040
LK -> NI	-0.194058	-0.235133	0.084833	0.084833	2.287545
RA -> NI	-0.273560	-0.288694	0.092088	0.092088	2.970651
EI * LK - > NI	-0.374905	0.022359	0.478008	0.478008	0.784309
LC * LK - > NI	-0.322690	-0.059379	0.431215	0.431215	0.748329
RA * LK - > NI	-	-0.395503	0.406827	0.406827	1.108539
	0.450984				

Source: Output of Smart PLS, 2018

Based on Table 4, EI and LOC have a positive effect, while RA and LK negatively affect on IT-based risky investment intention. Thus, all direct effect hypotheses are accepted and support risk behavioral investment decision theories. However, moderation effect testing did not find any moderating effect of LK on the effect of EI, LOC, and RA on IT-based risky investment intention. These findings do not support previous LK studies (Diacon, 2004; Guiso and Jappelli, 2008; Van Rooij et al., 2007; Lusardi and Mitchell, 2007).

This result indicates that emotional intelligence affects IT-based risky investment intention. This finding explains that the higher the emotional control within one's personality is increasingly influencing the intention to risk investments based on information technology. Factors causing the influence of emotional intelligence on intentions for information technology-based

investments, due to higher emotional capabilities that allow individuals to feel more confident and courageous thus taking the decision to take risky investments based on information technology. When the individual feels understanding of the emotions that occur in him, will appear confidence and hope that in facing a decision they can solve problems that will arise later. This causes a person who has a high emotional intelligence will be easier to make a decision.

This finding is consistent with Aydemir and Aren (2017) who found that superior emotional skills had a positive effect on risky investment intentions. Ciarrochi et al. (2001) have found a positive relationship between emotional intelligence as measured by self-esteem and anxiety, with investment decisions. Thus, individuals with high emotional intelligence are more likely to have high self-esteem and low anxiety, making it emotionally easy to make risky investments.

In addition, ease of information that offers different types of investments in information technology systems, is also suspected to be the reason investors prefer to invest based on IT. The availability of such information can suppress the emotion in making the decision to choose to invest and take risks that exist.

This study also found that Locus of control has positive effect on IT-based risky investment intention. This finding explains the greater the individual's control over actions or decisions will increase IT-based investment intention. The cause of the Locus of control factor for IT-based risky investment intention is the level of self-control that convinces individuals to be able to profit from information technology-based investments even though it is likely to be controlled by outside forces.

Causes of success and failure Locus of control may be affected by ability and effort (internal LOC) and difficulties and fate (external LOC). Individuals who have control over their ability and effort will have greater motivation and satisfaction of profit generated from IT-based investment. Meanwhile, individuals with external LOC tend to find difficulty and resigned to the fate of the investment. Individuals tend to believe that fate, opportunity, luck, or other people's behavior determine the outcome.

This finding has similarity with Aydemir and Aren (2017) which empirically observe the positive effect of LOC on risky investment intention. However, this study does not examine differences in the effect of internal and external LOCs on IT-based risk investment intention. If Indonesian investors are more likely to have external LOCs, it has the potential to increase risky investment intentions as a result of low levels of confidence and self-control.

The result of the third hypothesis testing, finding Risk Aversion negatively affect on IT-based risky investment intention. It indicates that individual's attitude to avoid risk in a state of uncertainty will make the lower the intention to invest. This is due to the type of IT-based risky investments such as Bitcoin, Forex, Index or others, demanding individuals to have high courage or risk takers.

In an investment, the higher the risk the higher the return. When individuals are risk aversion individuals tend to avoid such investments because individuals perceive better low risk investments even if the returns are also low. This is an explanation of why the number of domestic investors in the capital market society in Indonesia is still low. Although KSEI reported an increase in the number of Indonesian capital market investors throughout 2017, 1,118,913 people as of

December 20, 2017 or increase of 25.24 percent compared to last year's position, this figure is still very small compared to the current Indonesian population (0.4 percent).

Furthermore, the study also found a negative effect of financial literacy on IT-based risky investment intention. This indicates that financial literacy has an inhibitory effect, when individuals have high literacy rates, it can prevent a person's intentions for risky investments based on IT. It also indicates that higher knowledge can make the decision-making process more complicated so that the probability of risky investment intention is lower. However, this study found that financial literacy does not play a role in strengthening or weakening the effect of IE, LOC and AC on risky investments intention. Thus hypothesis 5, hypothesis 6 and hypothesis 7 are rejected.

The cause of the rejection of these three hypotheses is the direct negative effect of inhibitory financial literacy. When individuals have limited information processing capabilities over much of their knowledge, individuals tend to be reluctant to make investment decisions. Therefore, consultants or financial institutions should consider this issue to intensively provide appropriate information according to the needs of investors without incriminating the investment decision-making process from the data and information provided.

CONCLUSION

This study examines determinants of individual intentions for risky investments based on information technology. This research found that emotional intelligence and locus of control have a positive effect on IT-based risky investment intention, but risk aversion and financial literacy have negative effect. However, financial literacy does not moderate the effect of emotional intelligence, locus of control, and risk aversion on IT-based risky investment intention.

The existence of the influence of emotional intelligence, Locus of control and Risk Aversion on IT-based risky investment intention indicates that psychological factors that are relatively neglected by classical finance can explain financial behavior. Microeconomically, financial intermediaries should emphasize individual factors to ensure more investment funds for entry into their systems. For example, consultants or institutions may direct individual investors to alternative investments tailored to their individual differences. Therefore, describing an emotionally-based individual on finance can be something that can be done in the future.

There is no moderation of financial literacy is due to a negative direct impact on financial literacy on IT-based risky investment intention. It indicates that the individual psychological factors are not reinforced or weakened by the level of financial literacy. Therefore, consultants or financial institutions, can take advantage of the role of psychological factors, namely emotional factors to motivate investors because it is more reliable than giving investors more financial information because the more knowledgeable and financial information obtained by investors, will further hamper investors to process complex investment decision making.

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