

Examining The Effect of Theory of Planned Behavior on Individual Investment Intention in The Indonesia Stock Exchange, Moderated by Herding Behavior and Risk Propensity

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ABSTRACT

There are several products or instruments traded on the Indonesia Stock Exchange, that is Stocks, Bonds, Mutual Funds, Exchange Traded Funds (ETFs), and Derivatives, with stocks being the most popular instrument right now. The benefits of the existence of the capital market for investors are that it provides an opportunity for the public to have a healthy company that has good prospects in the future, and is an alternative investment beside gold and properties that provides potential profits with calculated risks (Kurniawan, 2019).

Objectives: This study aims to determine the effect of the construct variable of the Theory of Planned Behavior on Investment Intention, and the role of Investment Intention as a mediating variable that connects these variables after being moderated by Risk Propensity and Herding Behavior on Investment Behavior of individual investors in Indonesia

Methodology: This study uses primary data which data was collected by distributing online questionnaires via google form. This research was conducted from January to March 2022, from a sample of individual investors from some big islands in Indonesia (Java, North Sumatra, South Sulawesi, Kalimantan). To determine the sample, this study uses the Slovin formula with probability sampling technique - simple random and a total of 525 respondents were collected, but those who met the predetermined sample criteria were 468 respondents. The data analysis that is used is the path analysis Structural Equation Model (SEM).

Finding: Herding behavior and Risk Propensity do not strengthen Investment Intention among individual investors towards Investment Behavior and can be a subject for further study.

Conclusion: The results of this study is only that Product Involvement of Theory of Planned Behavior variables can positively influence Investment Intention. Furthermore, Investment Intention can mediate this variable on Investment Behavior, although not strengthened by the influence of Risk Propensity and Herding Behavior.

Keywords: Herding Behavior; Investment Behavior; Investment intention; Risk Propensity.

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INTRODUCTION

Actually, there are various investment products available in the Indonesia Stock Exchange, but this does not guarantee investors' interest in making the capital market as their investment destination. Property investments in the form of land and buildings as well as precious metal commodities (gold) are some examples of investments that are still being sought after by Indonesian people in general today. The lack of knowledge about all kinds of financial investment in the capital market by the Indonesian people which can generate higher profits than other investment instruments is the cause of this issue (Merawati & Putra Semara, 2015) and (Wibowo, B., 2016). Investment is expected to be an alternative for saving so that every investor can have a wealth base as a guarantee for the future (Rasheed et al., 2018).

However, during the Covid 19 pandemic from 2020-2021, there has been a drastic increase in investments in the Indonesia Stock Exchange. Looking at the public statistical data of PT. Kustodian Sentral Efek Indonesia (KSEI)¹ in December 2021, it showed a rapid increase in the number of capital market investors. Data from 2019 to 2020 shows an increase in the number of individual investors from 2,484,354 to 3,880,753. This 56.21% increase still continues to rise in the 2020 to 2021 period. At the end of 2021, the number of investors reached 7,489,337 (an increase of 92.99%) although it was still in a pandemic situation. This data shows that investing in the capital market has become the choice of the community in Indonesia, slowly shifting from real business which slumped during the pandemic due to restrictions on activities in the community.

There are several products or instruments traded on the Indonesia Stock Exchange, that is Stocks, Bonds, Mutual Funds, Exchange Traded Funds (ETFs), and Derivatives, with stocks being the most popular instrument right now. The benefits of the existence of the capital market for investors are that it provides an opportunity for the public to have a healthy company that has good prospects in the future, and is an alternative investment beside gold and properties that provides potential profits with calculated risks (Kurniawan, 2019).

From an investment perspective, someone who obtains information about financial instruments on the Stock Exchange and then discusses it with families or friends are investors (Arief, H, 2019). Investors also seek advice on various investment options from financial professionals, analysts, and planners before investing. Various aspects that are involved in investment decisions making could be classified as a complex decision-making behavior (Shanmugham & Ramya, 2012) and (Yuningsih & Taufiq, M, 2019). Many research in economic psychology and behavior finance also examine how subjective perceptions of an investor about a company can influence their decisions to invest in its company stocks (Jahanzeb, 2012), (Birău, 2013), (Aspara, 2013), (Chaudhary, 2013), (Chaffai & Medhioub, 2014), (Alquraan et al., 2016), (Atif Sattar et al., 2020) (Mawardi, M. K., et.al, 2022).

From previous research, factors like investor demography profiles, Subjective Norm factors, Perceived Behavior Control, and Product Involvement factors have been stated as potential factors influencing the investment intention of individuals through these financial instruments (Ali, 2011); (Aspara, 2013); (Grinblatt et al., 2011); (Cole et al., 2011); (Li, 2013); (Akhtar & Das, 2019); (Abduh et al., 2018). In opposite, Mahastanti & Hariady (2014) stated that attitude (Product Involvement) and Subjective norm have a negative impact on investment Intention. Also (Ibrahim & Arshad, 2017) stated that Perceived Behavior Control has a negative impact

¹ [PowerPoint Presentation \(ksei.co.id\)](https://www.ksei.co.id)

on investment intention. Research from Pascual-Ezama et al. (2014) stated that Subjective Norm has a negative impact on investment intention. However, there has been no study of the Stock Exchange development in Indonesia with a broader demographic profile of investors where the Product Involvement, Subjective Norm, Perceived behavior control factors can increase investment intention where the Herding Behavior and Risk Propensity factor might influence the investment intention into an investment decision (Behavior) of individual investors (retail) that have been studied previously. Research on the impact of Theory of Planned Behavior (TPB) factors on the investment behavior of individual investors has been carried out by (Pascual-Ezama et al., 2014) and (Cuong & Jian, 2014). However, because evidence-based findings are very limited, this study tries to link the gap by implementing TPB which is influenced by Herding Behavior and Risk Propensity in the context of the Stock Exchange in Indonesia.

The implementation of The Theory of Planned Behavior (TPB) in discourses of financial instruments. It was assumed that the general eagerness and intention to invest in financial instruments drive the purchase of these financial instruments. In addition, there is also the possibility of someone being more willing to buy financial instruments if Product Involvement, Subjective Norm, Perceived behavior control, Herding Behavior, and Risk Propensity are positive. There is a possibility that many consumer behavior constructs that were found to influence complex investment decisions could be applied to study investment intention.

It is very important to examine whether factors of consumer behavior (Product Involvement) and factors of psychological (Perceived Behavior Control and Subjective Norm) can develop investment intentions significantly among individuals in Indonesia. This is a gap in research on financial products that is yet to be explored. The objectives of this study is to evaluate the impact of Herding Behavior and Risk Propensity as moderating variables of investment intention which are built by the Theory of Planned Behavior (TPB) towards investment behavior among individual investors in the Indonesia Stock Exchange.

LITERATURE REVIEW

Behavior Finance

The investment tendencies of individual investors are based on behavioral finance theory. The literature on Behavioral Finance is a theory about the existence of psychological factors that also influence a person in making investment decisions (Nugroho, A. C., et.al., 2018). Shefrin & Statman (2000) and Manurung (2012) also Arifin, A. Z., Kevin, & Siswanto, H. P. (2017) state that behavior finance is a study that explores how these psychological factors influence a person's financial behavior. This factor is considered to cause an investor to do things that are irrational or predictable. So that this theory can be interpreted as the application of psychology in the discipline of finance, which explains how humans make investments or activities related to finance.

Theory of Planned Behavior (TPB)

Theory of Planned Behavior (TPB) is an expansion of The Theory of Reasoned Action (TRA); (Fishbein & Ajzen, 2011). Based on the guideline of TRA, behavior is predicted based on attitude towards certain behaviors (Product Involvement) and Subjective Norms to form behavioral intentions that determine real behaviors (Behavior). Ajzen (1991) modified TRA so

that it became TPB by adding a Perceived Behavior Control (PBC) factor to overcome the problem of personal control that was less than the original model, so this model was called the Theory of Planned Behavior (TPB).

The product involvement construct is seen as a vocal variable that is very important to understand the decision-making behavior of consumers (Chakravarti & Janiszewski, 2003). Involvement starts when a person is involved in an object according to their inherent interests, values, and needs (Zaichkowsky, 1985). Thus, interest, involvement, motivation, or interest towards an object is engagement. A person's degree of involvement to the product is proportional to the degree to which the consumer depends on procedural fairness (Shehryar, 2005). A person's perception of an object (product) that is important or relevant to them personally, is a reflection of their identity and personal values (Aspara, 2013).

Subjective Norm is the result of the perception of the closest friends in a group who think about certain behavior and their motivation to adhere to this view (Ham et al., 2015). From the perspective of investment decisions, East (1993) states that the opinions of family and friends influence a person's investment intention significantly. Besides, a subjective norm is a combination of the perceived expectation of relevant individuals and the intention to fulfill those individuals' expectations. Knowing an individual's beliefs can be important in understanding an individual's attitude (Pohja, 2009). Another study by Shanmugham & Ramya (2012) and Alleyne & Tracey (2011) also examined investment intentions using the Theory of Planned Behavior.

Hamid (2013) states that a person's judgment is reflected by perceived behavior control, which is about the ability to make an independent assessment of the decision to carry out the behavior. Ajzen (2002) states that PBC can affect in two ways as confirmed by the Theory of Planned Behavior: PBC can influence the intention to perform the behavior, also PBC can directly influence the behavior. The investor's decision-making process and its behavior can be involved by two control factors: internal and external, where external factors are financial resources, time, or partner cooperation, while internal factors are individual knowledge, experiences, and skills (Ajzen, 2005). In addition, people with perceived behavior control have more willingness to perform or not perform certain behaviors, because it has a direct influence on individual behavior (Ajzen, 2006) and leads to performing certain behaviors (Armitage & Conner, 2001), especially if a behavior is not under volitional control and is an accurate reflection of actual behavioral control (Ajzen, 2002).

Prospect Theory

Prospect theory states that risk-taking is asymmetric from the reference point, and people will avoid risk if they perceive themselves in the profit domain, and seek risk in the loss domain (Kahneman & Tversky, 1981). Prospect theory has prompted much research on risk preference and risk-taking. This theory states that individual risk-taking level is relatively inconsistent across situations, where a person will take risks in some situations, and avoid risks in others. The impetus for behavior change can be as simple as presenting semantic data, for example, whether the outcome of a choice is a loss or an advantage.

Investment Intention

Motivational factor which influences a behavior are assumed as intention; that is, an indication of how strongly a person is willing to try, or how much their efforts to perform a behavior (Ajzen, 1991). As a general rule, the stronger the intention to engage in a behavior, the more likely the performance. Thus, the intention could be interpreted as a predictor of behavior. Several research involving financial instruments had used investment intention as the dependent variable to measure the intention to invest (Dey et al., 2015); (Kozup et al., 2008); (Lim et al., 2016); (Sivaramakrishnan et al., 2017). Over the past few years, research on financial behavior have illustrated that investors' financial decision-making depends on external and internal behavioral factors (Mohammad Reza Tavakoli Baghdadabad, 2011); (Rzeczynski, 2000). Investor behavior is considered a complex financial market procedure and remains the focus of current and past capital market research (Iqbal et al., 2013).

Risk Propensity

Risk propensity is a person's assessment of a risky situation. The assessment depends on the psychological condition and characteristics of the person (Lestari, 2013). Then according to Ayu Wulandari & Iramani (2014), risk perception is the investor's perspective on risky situations that will be obtained when making investment decisions. The other side of risk propensity is considering individual difference factors which can influence risk-taking. Risk-taking can be linked to factors such as personality and thus it is more of an individual characteristic than a situational one. Zuckerman et al. (1964) have confirmed the importance of risk propensity as a highly consistent predictor of various types of risk-taking, including compulsive gambling and participation in high-risk activities (Zuckerman et al., 1974), (Zuckerman & Kuhlman, 2000).

Herding Behavior

Theory of Herding behavior defined by Keynes focuses on the motivation to copy and follow people in an uncertain world (Keynes, 1933). Keynes understood herding is the response to uncertainty and individuals' perception of their own ignorance: people may follow a group of people thinking that others are more informed. This can lead to instability and in financial markets, herding becomes a key factor that results in speculative decisions. Herding is also the phenomenon of an individual's decision to follow others or imitate groups rather than deciding independently based on personal information they have. From an investment and financial perspective, its means following the investment actions of others without doing thorough testing. Economic theory says that investors tend to be rational and they will evaluate all information before making a decision. But unfortunately, it is not possible in real life due to the amount of information there, and not possible for investors to evaluate all information. Therefore, investors choose shortcuts to make decisions. When investors make decisions, they need a large amount of information and the right information. Individual investors do not have access to sufficient resources and do not receive such information.

Investment Behavior

According to Cuong & Jian (2014), the concept of individual investment behavior uses the Theory of Planned Behavior, where the behavior will occur when someone already has an interest in investment. Fishbein & Ajzen (2011) state that individual behavior that causes a decision is influenced by three main factors, that is Attitude towards the behavior (Product Involvement), Subjective Norms, and Perceived Behavioral Control. Ajzen (2006) states that the behavior that is formed is not always the same as the attitude of the individual that appears,

so spontaneous behavioral thinking will complicate the conditions for making investments. Conditions that support or oppose individuals will greatly impact their investment behavior patterns. Individual investment behavior can be measured using 5 indicators: 1) Investment confidence; 2) Social environment motivation; 3) Individual consumption level; 4) Availability or adequacy of funds; 5) Ability to manage funds.

Relationship between Product Involvement and Investment Intention

The individual's affective assessment of the brand will positively affect his optimism about the financial returns of the investment choice. In addition, a person's knowledge on the image of a company does not reduce the thought he gives to the choice of investment targets, nor is it related to the expected financial return of the investment choice (Aspara, 2013). In addition, Li (2013) examines factors that influence investment decision-making and states that product engagement has a significant effect on investment decisions. Harrison (2016); Wibowo (2016), (Mawardi et al., 2022) researched that product involvement also has a significant impact on individual investors' investment intentions. Also, Arifin et al. (2017) stated that financial confidence and financial knowledge have a positive influence on financial behavior. Highly engaged investors may have more investment intentions than those with low involvement because they already invest not only money but also time to learn about the product. This study also proposes that product involvement will have a significant impact on individual investors' investment intentions. Based on the above discussion and the previous research, this study formulates the following hypothesis:

H1: There is an effect of Product Involvement on Investment Intention

Relationship between Subjective Norm and Investment Intention

Pascual-Ezama et al. (2014) stated that subjective norm has a negative impact on investors' investment intentions. Besides that, Mahastanti & Hariady (2014) also researched the intention of investors to buy financial instruments, and research results that investment intention is not influenced by subjective norms. This study based on the discussion above proposes that the opinion of friends and family will not significantly impact the investment intention of individual investors in Indonesia. Based on the previous literature and the discussion above, this study formulate the following hypothesis:

H2: There is no effect of Subjective Norm on Investment Intention

Relationship between Perceived Behavior Control and Investment Intention

In this context, Ibrahim & Arshad (2017) who study the theory of planned behavior on investment intention of Individual investors in Pakistan state that there is no significant relationship between perceived behavior control and investment intentions. Therefore, this study also proposes that perceived Behavior Control has no significant impact on individual investors' investment intentions. Based on the above discussion and the previous research, this study formulates the following hypothesis:

H3: There is no effect of Perceived Behavior Control on Investment Intention

Investment Intention's mediating role

According to Ajzen (2002), Theory of Reasoned Action (TRA), and Theory of Planned Behavior (TPB), the intention is the main predictor of an action (behavior) and is assumed to be a precursor of behavior. Therefore, Product Involvement, Subjective Norm, and Perceived

Behavior Control are assumed to have an indirect effect on certain actions but depend on their effect on intentions. Based on this explanation and the above hypothesis regarding their effect on intentions, the hypothesis that can be proposed is that intention is a predictor that mediates Product Involvement on Investment Behavior. Meanwhile, the intention isn't a predictor that mediates Subjective Norm and Perceived Behavior Control on Investment Behavior.

H4a: Investment intention mediates the relationship between Product-Involvement on Investment-Behavior.

H4b: Investment intention mediates the relationship between Subjective Norm on Investment-Behavior.

H4c: Investment intention mediates the relationship between Perceived Behavior Control on Investment-Behavior.

Effect of Herding Behavior in Moderating Investment Intention on Investment Behavior

Herding behavior has a moderate impact on investment decisions because today's investors have more knowledge and skills to utilize different information from various sources before making investment decisions. However, for an undeveloped and mature stock market, the presence of herding at a moderate level is a must (Ngoc, 2013). Investor herding behavior will depend on the market situation if the market is prone to herding (Chiang et al., 2013). These results are supported by (Malmendier & Tate, 2005) and (Ullah et al., 2020). Based on the previous research and the above discussion, this study formulates the following hypothesis:

H5: Herding Behavior strengthens the effect of Investment Intention on Investment Behavior

Effect of Risk Propensity in moderating Investment Intention on Investment Behavior

Previous research has shown that attitudes toward risk can be an important predictor of investment behavior (Kuhn & Budescu, 1996). Investors are likely to be faced with investment opportunities that are likely to have unpredictable probabilities, results, and returns (Du & Budescu, 2005). Ganzach et al. (2008) argue that in terms of perspective, risky situations such as investments involve opportunities and threats, potential gain and loss, negative and positive elements, and the likelihood of success or failure. Loss aversion has a significant influence on investment decisions in a positive direction, which illustrates that investors who are increasingly losing aversion are even more willing to take risks in making investment decisions (Yuniningsih & Taufiq, 2019). Based on the description above, this study proposes that risk propensity will significantly influence investment intention toward Investment-Behavior.

H6: Risk Propensity strengthen the effect of Investment-Intention toward Investment-Behavior

From all the hypotheses above, here is the hypothetical framework:

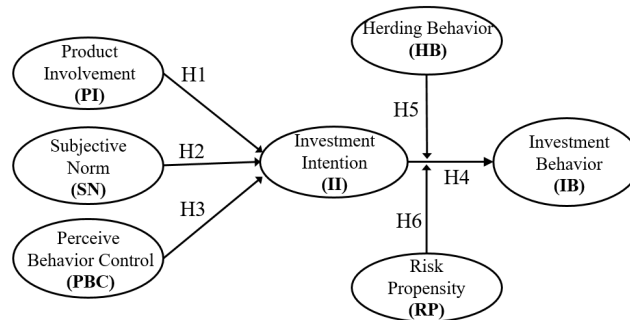


Image 1. Hypothetical framework

METHOD

This study is causative in nature and uses primary data where data collection is achieved by distributing online questionnaires via google form from a sample of individual investors in several big cities in Indonesia and is carried out systematically but also randomly. Respondents are those who have a fixed or regular income either as employees of a company, professionals, consultants, or entrepreneurs as well as those who have sufficient savings funds for investment activities. Respondents are also those who have been or are still active in investing (stocks, mutual funds, bonds, ETFs, derivatives) on the Indonesia Stock Exchange. The questionnaire was developed as a research instrument which consists of two parts, questions about the demographic profile of respondents in the first part and questions regarding information about product involvement, subjective norms, perceived behavior control, investment intention, herding behavior, and risk propensity from each investor in the second part. The survey in this study uses a standardized Likert scale that is appropriate from one to four, one being 'Strongly Disagree' and four being 'Strongly Agree'.

The constructs underlying this study were carefully selected from the previous literature. Measures for product involvement were adapted from (Li, 2013); (Schmidt, 2010), while the measure for subjective norm was adapted from (Schmidt, 2010), (Tai & Ku, 2013). Measurements for perceived behavior control were adapted from (Mahastanti & Hariady, 2014), (Pascual-Ezama et al., 2014), (Schmidt, 2010), (East, 1993). The measurement of herding behavior is adapted from (Luong & Ha, 2011). Measurement of risk propensity was adapted from (Alleyne & Tracey, 2011). Furthermore, the measurement for investment intention was adopted from the study (Li, 2013), (Allen et al., 2008)). A total of 28 statements with 4 statements on the product involvement variable, 4 statements on the subjective norm variable, 3 statements on the perceived behavior control variable, 4 statements on the investment intention variable, 4 statements on the herding behavior variable, 4 statements on risk propensity and 5 statement on investment behavior variable.

Based on public statistical data, PT. Kustodian Sentral Efek Indonesia (KSEI) in December 2021, where the population of investors is known to be 7,489,337 investors, then the probability sampling technique can be used - simple random for homogeneous respondents (investors of financial instruments in the Stock Exchange). The sample size required in this study uses the Slovin formula, $[n = N / (1 + N\alpha^2)]$. When using a significance level of $\alpha = 0.05$ (5%) and a population of $N = 7,489,337$, then the minimum number of samples required is 400 samples.

Furthermore, to test the proposed hypothesis, the Lisrel Structural Equation Model (SEM) analysis method is used, by looking at the t-value on the t-value path diagram.

RESULTS AND DISCUSSION

Results

Based on the distribution of questionnaires conducted online via google form, a total of 525 respondents were collected, but those who met the predetermined sample criteria were 468 respondents. From the data obtained, the number of female respondents were 45% and male respondents were 55%. Furthermore, based on the investment value as much as 67% were worth under 50 million, and 23% were worth 50 million ~ 250 million. Complete demographic data can be seen in table 1.

Demographic Factors	Component	Frequency	Percentage
Gender	Male	258	55%
	Female	210	45%
Age	< 25 Years	66	14%
	25 - 55 Years	384	82%
	> 55 Years	18	4%
Education	High School	36	8%
	Associate	12	3%
	Bachelor	312	67%
	Master	108	23%
Marital Status	Married	138	29%
	Unmarried	330	71%
Average Investment	< Rp. 50.000.000	312	67%
	Rp. 50.000.000 - 250.000.000	108	23%
	Rp. 250.000.001 - 500.000.000	6	1%
	> Rp. 500.000.000	42	9%
Investment Instrument	Stock	300	64%
	Mutual Funds	72	15%
	Bonds & Mutual Funds	6	1%
	Stock & Mutual Funds	60	13%
	Stock, Mutual Funds & Bonds	30	6%
Securities	Mirae Asset Sekuritas	119	25%
	Indo Premier	84	18%
	Philips Sekuritas	60	13%
	Mandiri Sekuritas	36	8%
	BCA Sekuritas	30	6%
	RHB Sekuritas	24	5%
	Bibit	18	4%
	Sinarmas Sekuritas	18	4%
Others	79	17%	

Tabel 1. Demographic data

One statement of the Investment Behavior variable is declared invalid because it has a loading factor value below 0.50. Furthermore, the results of the reliability test with a minimum limit of 0.70 construct reliability value and 0.50 extracted variance value (Hair et al., 2010).

Var	Indikator	Statement	Std Loading	Error	ΣStd Loading	(ΣStd Loading) ²	Σ Error	CR	Σ(Std Loading) ²	VE
PI	PI1	Making a decision to invest in the Stock Exchange is something that is important to me.	0.73	0.46	2.74	7.51	2.09	0.78	2.12	0.50
	PI2	Making the decision to invest in the Stock Exchange financially is something significant for me.	0.56	0.69						
	PI3	Making a decision to invest in the Stock Exchange is driven by the desire to make a profit.	0.71	0.49						
	PI4	Making the decision to invest in the Stock Exchange encourages me to find and manage information better.	0.74	0.45						
SN	SN1	People close to me think that investing in the stock market is a wise idea.	0.78	0.39	2.76	7.62	1.92	0.80	1.93	0.50
	SN2	People close to me think that I should invest in the stock market.	0.6	0.56						
	SN3	My family thinks that investing in the stock market is a wise idea.	0.62	0.55						
	SN4	My family thought that I should invest in the stock market.	0.76	0.42						
PBC	PBC1	I am confident with the knowledge I have to invest in the Stock Exchange.	0.87	0.25	2.43	5.90	1.03	0.85	1.97	0.66
	PBC2	I am confident with the experience or expertise I have to invest in the Stock Exchange.	0.78	0.39						
	PBC3	I believe that I have sufficient capital or funds to invest in the Stock Exchange.	0.78	0.39						
II	II1	I expect an adequate return on the investment I make.	0.76	0.42	2.98	8.88	1.78	0.83	2.23	0.56
	II2	I plan to invest in the Stock Exchange soon.	0.83	0.32						
	II3	I always adjust the selection of investment products according to my financial future plans	0.7	0.51						
	II4	If I have the opportunity I will invest in the Stock Exchange in the future.	0.69	0.53						
RI	RI1	The decision to invest in the Stock Exchange follows the decisions of others.	1.05	0.1	3.83	14.67	0.72	0.95	3.70	0.84
	RI2	My investment type in the Stock Exchange follows other people's investment types	1.05	0.11						
	RI3	The value of my investment in the Stock Exchange will follow the value of other people's investments	0.86	0.27						
	RI4	I tend to react quickly to changes in other investors' decisions when market conditions	0.87	0.24						
HI	HI1	I may choose another investment alternative that is more risky or less risky based on the judgment of the people I rely on.	1.04	0.08	3.94	15.52	0.50	0.97	3.90	0.89
	HI2	I always respond to changes in market prices for the investment assets that I do.	1.06	0.11						
	HI3	The value of my investment in the Stock Exchange will follow the value of other people's investments.	0.95	0.1						
	HI4	I tend to react quickly to changes in other investors' decisions when market conditions	0.89	0.21						
IB	IB1	My recent return on investment met my expectations	0.81	0.35	3.20	10.24	1.46	0.88	2.56	0.64
	IB2	I always respond to changes in market prices for the investment assets that I do	0.8	0.36						
	IB3	My recent return on investment is equal to or higher than the market average rate of return.	0.78	0.4						
	IB4	I will revise the performance of my investment assets when I have available funds to invest	0.81	0.35						

Table 2. Construct Reliability (CR) and Variance Extracted (VE)

Based on the results of the structural test by looking at the R² value in each equation, the following results are obtained: the first result, the Investment Intention (II) variable is influenced by Product Involvement (PI), Subjective Norm (SN), Perceived Behavior Control (PBC). The second result, the Investment Intention (II) variable can mediate the three variables from the planned behavior theory into Investment Behavior (IB) which is strengthened by the influence of the Risk Propensity (RP) variable with an R² value of 0.26. Thus, it can be interpreted that 26% of the Investment Behavior (IB) variables can be explained by the Investment Intention (II), Risk Propensity (RP), and Herding Behavior (HB) variables, the remaining 74% are influenced by other variables not in this study.

In the model suitability test, the analysis results show that have a good fit level on Chi-Square, ECVI, AIC and CAIC, Fit Index, and RMSEA which can be seen in table 4.

1	Degree of Freedom	246	Good Fit
	Chi-Square	787.33	
	NCP	541.33	
	Confidence Interval	460.31 : 629.96	
2	RMSEA	0.069	Good Fit
	Confidence Interval	0,063 : 0,074	
	P Value	0,63	
3	ECVI Model	2.25	Good Fit
	ECVI Saturated	1.62	
	ECVI Independence	58.69	
	Confidence Interval	2.08 : 2.44	
4	AIC Model	1051.33	Good Fit
	AIC Saturated	756.00	
	AIC Independence	27408.06	
	CAIC Model	1730.93	
	CAIC Saturated	2702.12	

5	CAIC Independence	27547.07	Good Fit
	NFI	0,97	
	CFI	0,98	
	NNFI	0,97	
	IFI	0,98	
	RFI	0,96	
	PNFI	0,68	

Table 3. Goodness of Fit

The results of this study prove that Investment Intention (II) can completely mediate the relationship between Product Involvement (PI), Subjective Norm (SN), and Perceived Behavior Control (PBC) on Investment Behavior (IB) with a t-value of 8.63. This is because the Product Involvement (PI) variable has a strong effect on Investment Intention (II) with a t-value of 12.01, Subjective Norm (SN) with a t-value of 4.63 and Perceived Behavior Control (PBC) with a t-value of 3.68. The following are the results of the study which are depicted in the T-Value diagram:

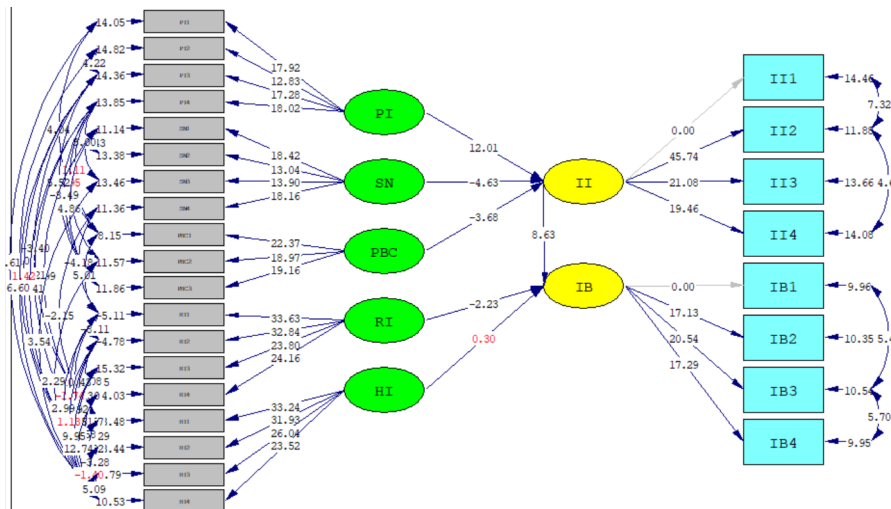


Image 2. Path Diagram T-Value

This study also proves that Risk Propensity (RP) can moderate Investment Intention (II) on Investment Behavior (IB) with a t-value of 2.23, while Herding Behavior (HB) fails to moderate Investment Intention (II) on Investment Behavior (IB). because the t-value is 0.30 < 1.96.

Hypothesis	Hypothesis Statement	T-Value Score	Coefficient Value	Description
H1	There is an effect of Product Involvement (PI) on Investment Intention (II).	12,01	1,80	Significant
H2	There is no effect of Subjective Norm (SN) on Investment Intention (II).	-4,63	-0,70	Not Significant
H3	There is no influence of Perceived Behavior Control (PBC) on Investment Intention (II).	-3,68	-0,39	Not Significant
H4	H4a: Investment Intention (II) mediates Product Involvement (PI) on Investment Behavior (IB) H4b: Investment Intention can not mediate Subjective Norm (SN) on Investment Behavior (IB) H4c: Investment Intention can not mediate Perceived Behavior Control (PBC) on Investment Behavior	8,63	0,56	Significant

	(IB)			
H5	Herding Behavior (HB) strengthens the influence of Investment Intention (II) on Investment Behavior (IB).	0,3	0,012	Not Significant
H6	Risk Propensity (RP) strengthens the influence of Investment Intention (II) on Investment Behavior (IB).	-2,23	-0,094	Not Significant

Table 4. Research Model Hypothesis Test Results

Discussion

This study aims to determine the effect of Product Involvement (PI), Subjective Norm (SN), Perceived Behavior Control (PBC) on Investment Intention (II), and the role of Risk Propensity (RP) and Herding Behavior (HB) which moderates Investment Intention (II) on Investment Behavior (IB). The relationships of these variables will be adjusted to the theory of planned behavior which has been proposed by (Fishbein & Ajzen, 2011).

In examining the first hypothesis (H1), it shows that there is an effect of Product Involvement (PI) on Investment Intention (II). These results support the theory of planned behavior (TPB) through a significant positive relationship between Product Involvement (PI) and Investment Intention. This study proves that the Product Involvement of individual investors in Indonesia has a very strong influence in determining their intention to invest in the stock exchange. This is in accordance with previous research which states that there is a role for Product Involvement in influencing the level of Investment Intention of individual investors in Pakistan (Ibrahim & Arshad, 2017). Anjum & Khan (2021) also discuss if Product Involvement is able to motivate individuals in forming their self-confidence and confidence to make the right decisions about their finances. Akhtar & Das (2019) stated that Product Involvement has the most significant influence on Investment Intention compared to other variables in the theory of planned behavior (TPB). The construct that supports this relationship is that the decision to invest in the Stock Exchange is important because most investors are of the productive age (25-55 years) who generally have a steady and regular income. Another construct that also provides this significant relationship is that in deciding to invest in the Stock Exchange, investors will seek and manage information better because 67% of the respondents who are respondents have undergraduate education where the interest in data and information is something important.

In examining the second hypothesis (H2), there is no effect of the Subjective Norm (SN) on Investment Intention (II). Subjective Norms such as influence and views from family or close friends do not encourage individual investment intentions in investing their funds in the stock exchange. These results are in line with previous research from (Mahastanti & Hariady, 2014) which states that there is a negative influence from the Subjective Norm that influences female individual investment behavior in Indonesia. Likewise, research conducted by Pascual-Ezama et al. (2014) states that there is no influence of the Subjective Norm on the Investment Intention of individual investors in Spain. This explains that most individual investors in Indonesia take decisions independently based on their knowledge or expertise and are not influenced by close people and family. In their view, investing in this model still has a high risk.

The third thing that is proven in this study is that there is no effect of Perceived Behavior Control on Investment Intention (H3). Even though most investors have high confidence in their knowledge and previous experience in continuing to invest in the stock exchange, or even though they already have sufficient capital allocated to carry out investment activities in financial instruments on this stock exchange, but during a pandemic, individual investors have many considerations to make a financial investment. They pay attention to any possible risks that will be accepted if they do not take into account the investments they make wisely. Previously, Ibrahim & Arshad (2017) in their research explained that individual investor in Pakistan was not influenced by Perceived Behavior Control. The construct that makes this an insignificant relationship is the consideration of the economic situation during the pandemic and hold to invest in the Stock Exchange.

The fourth result shows that Investment Intention mediates the relationship between Product Involvement, Subjective Norm, and Perceived Behavior Control on Investment Behavior (H4). These results support research Yang et al. (2021) which proves that Investment Behavior is significantly influenced by Investment Intention (II). This statement is also in accordance with previous research which said that high investment intentions have the potential to make an individual an investor (Sivaramakrishnan et al., 2017). Yang et al. (2021) revealed that the investment intention that exists in individuals is able to increase their curiosity about investment and participate directly in the investment. Individual investors tend to seek information and learn all the information they have before they plan to make an investment. In accordance with behavioral theory (TPB), individual behavior will be reflected in what underlies the behavior (Fishbein & Ajzen, 2011). Individual investors who have successfully studied the financial information well will have Product Involvement (Sadiq and Khan, 2019). From this Product Involvement, they will dig deeper into information about their finances This is in accordance with the results of this study which shows that Product Involvement is the main factor influencing individual investors to invest.

The fifth result found that Herding Behavior failed to strengthen the influence of Investment Intention on Investment Behavior (H5). This study proves that individual investors do not make their investment decisions based on the decisions of a group. Individual investors tend to study the stock market first before making their decision to invest. Individual investors also read various financial articles and watch various informational videos about current trending financial investments. They are more considerate in terms of the knowledge they have, which generally have a bachelor's degree (67%), compared to the influence of a particular group to build their desire to invest.

The sixth result shows that Risk Propensity also failed to strengthen the influence of Investment Intention on Investment Behavior (H6). If an investor is aware of the risks he may receive when investing, it will support him to make wise decisions about the investment. This is in accordance with the theory Yang et al. (2021) proposed which states that investors' investment intentions can be influenced by their ability to take into account the risks they may receive when making investments. Individual investors in Indonesia consider risk factors deeply before making a decision for investing in the stock market. Even though they are in productive age, but the fund that they use for investment is still limited or even not from their saving account.

In accordance with the theory of planned behavior (TPB), in a desire to invest there must be factors that can shape this behavior. Here, individual investors are not influenced by herding behavior but by other factors such as Product Involvement, Subjective Norm, Perceived Behavior Control, and Risk Propensity. This is in accordance with what was stated by Cuong & Jian (2014); Yang et al. (2021) that Product Involvement, Subjective Norm, and Perceived Behavior Control have a positive role in influencing Investment Intention.

CONCLUSION

The results of this study prove that Product Involvement has an effect on Investment Intention, and Investment Intention has a positive effect on Investment Behavior. Furthermore, Herding Behavior and Risk Propensity do not strengthen the influence of investment intention on Investment Behavior. This research contributes to providing knowledge about several factors that can especially increase the involvement of individual investors in trading financial instruments on the stock exchange. The factor of recognition, understanding and closeness to the product will encourage someone to invest in this instrument and slowly move away from the conventional investment pattern of property like most Indonesians. The government and stock exchange regulators need to introduce these investment products more clearly and more broadly so that their understanding is better and this underlies investment intentions as concluded through this study.

The strongest factor that drives investment intention is Product Involvement compared to Subjective Norm and Perceived Behavior Control. This means that among Indonesian investors, the individual's desire to invest is primarily initiated by the desire from someone to earn profits through investing in the stock exchange. The closeness of someone to investment products on the stock exchange encourages someone to dig up information about these products, thereby increasing the desire to get better returns from this type of investment. This is indeed in line with the conventional investment pattern that is still strong in Indonesia where property and commodities are still dominant among families. When this investment intention already exists and appears in a person, the reinforcing factor is the risk tendency that is owned and already exists in that person. Someone with a high-risk tendency will immediately realize this intention in investment activity. This is reinforced by data on investor respondents of the productive age or working age, where this group already has the sufficient financial capacity to invest in the stock exchange even on a small investment scale. However, this group is not easily influenced by the actions or investment patterns of other people or groups on the stock exchange, especially those related to stock trading. The control behavior they have by developing their own knowledge and experience is more of a strong foothold than following their investment choices and patterns. However, investment patterns that are not easily influenced by the behavior of other investors (herding behavior) can be investigated further, considering that Indonesian people usually like to imitate other people's actions, especially activities in stock trading whose values can change quickly.

This research is inseparable from various shortcomings, including this study focuses on individual investors in general regardless of their job statuses such as employees, entrepreneurs, or those who are full-time stock traders because the psychology behind their investment choices can differ between them. Therefore, for further research, it is recommended to consider the type of work of each investor. Another limitation of this research is to ensure that the respondents are really individual investors on the Indonesia Stock Exchange, so in addition to collecting

data on the securities used, they also include their SID numbers. Thus, the data obtained are actually from individual investors who have implemented Investment Behavior.

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