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Investment Decisions: The Results of Knowledge, Income, and Self-Control

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Abstract

Investment is an economic activity that can be a way for a person to expand or maintain his wealth. However, in investing, the public must be more careful in making decisions so that they are not trapped by fake investments. In investing, there are several factors that influence the decision to invest, namely Financial Knowledge, Income, Self-Control, Financial Behavior, and Financial Attitude towards Investment Decisions. This study aims to examine the influence of the variables of Financial Knowledge, Income, and Self-Control on Investing Decisions mediated by Financial Behavior and Financial Attitudes. This study uses Financial Knowledge, Income, and Self-Control as independent variables, then Investment Decisions as the dependent variable, then Financial Behavior, and Financial Attitudes as intervening variables. The results of this study indicate that financial knowledge has an effect on financial behavior. Financial Knowledge affects Financial Attitudes. Financial knowledge influences investment decisions. Income has an effect on Financial Behavior. Income has an effect on Financial Attitudes. Income does not affect the Investment Decision. Self-control affects financial behavior. Self-Control affects Financial Attitudes. Self-Control has no effect on Investment Decisions. Financial Behavior has no effect on Investment Decisions. Financial Attitudes do not affect the Investment Decision.

Keywords: Financial Attitudes, Financial Behavior, Financial Knowledge, Income, Investment Decisions, Self-Control

1. Introduction

1.1 Introduction

The ongoing global economic crisis has had various uncertain impacts on the economies of various countries. In times of crisis that is currently befalling the world, the Indonesian government is trying hard to stabilize and maintain its economic development. Where one of the financial systems functions to accelerate economic growth, more evenly distribute economic growth by spreading its benefits to all levels of society, reduce poverty and will strengthen Indonesia's status as a developing country with middle income. In this modern era, finance is one of the main search goals for all people, every human being needs property to fulfill all his needs. Every individual basically needs investment, because with investment everyone can maintain and expand his wealth base which can be used as social security in his future, but how to get more funds with smart financial management is still lacking.

There are still many employees of productive age who don't know that personal investment planning is very good for financial well-being for themselves and the future.

The initial stage for employees of productive age to invest is to have knowledge about investing so that they do not lose or even get caught doing 'fake' investments, or even being tricked by irresponsible parties with attractive lures, by knowing in advance the types of investments that are there and the risks of each investments. Experience in managing finances is not only about owning investment products but also utilizing investment products. So that someone must be more careful and pay attention to the risks and returns that will affect the decisions to be taken. There are psychological factors that influence investment decisions and the results to be achieved, namely, there are different beliefs about fate or all events that occur in society which they believe to be bad luck and luck or those who believe that everything they experience depends on their own efforts.

Financial knowledge factors that play an important role in deciding investment planning, with the knowledge they have about how to manage and plan finances that can provide benefits and avoid losses. Likewise, the level of financial knowledge among employees of productive age has not been evenly distributed. Thus, it is the middle and upper economic groups who pay more attention to their financial knowledge. With proper financial management which is certainly supported by good financial knowledge, the standard of living is expected to increase, this applies to every income level, because no matter how high a person's income level, without proper management, financial security will definitely be difficult to achieve. The main focus so that someone can manage their income healthily in this modern era to achieve financial well-being, is to have financial knowledge and other factors that influence investment decisions are income. Where, how much a person's income affects investment planning in accordance with his income.

This research is in line with the program owned by the Indonesian Government, namely to find out how much care the Indonesian people, especially employees of productive age, have on their future finances. The importance of educating, increasing literacy and financial inclusion for the Indonesian people to encourage economic growth. Financial inclusion, based on Presidential Regulation Number 82 of 2016 concerning the National Strategy for Financial Inclusion (NSFI) is a condition in which every member of society has access to various formal financial services that are quality, timely, smooth, and safe at affordable costs according to their needs and abilities. Each financial inclusion basically refers to the number of people who become customers or users of financial services. Financial inclusion and literacy, of course, are related to one another. Inclusion without good literacy will not be significant, especially for the economy. If inclusion relates to the number of users of financial services, financial literacy focuses more on managing the money they have. Someone with good financial literacy generally knows how to make the most money. So that the inclusion was not in vain. There are four levels of financial literacy of the Indonesian population based on a survey by the Financial Services Authority (FSA), namely Well literate where people have knowledge and confidence in various financial service institutions and financial service products, including features, benefits and risks, rights and obligations related to financial products and services, and have skills in using financial products and services. Sufficient literate where the public has knowledge and confidence about financial service institutions and financial products and services, including features, benefits and risks, rights and obligations related to financial products and services. Less literate where people tend to have knowledge about financial service institutions, financial products and services. Not literate where people do not have knowledge and confidence in financial service institutions and financial products and services, and do not have skills in using financial products and services.

There is a paradigm shift in the concept of financial literacy in various global financial literacy strategies. The changes were made as a form of alignment with the concept of financial well-being. Financial well-being is a condition in which a person has been able to fulfill current and future financial obligations, has preparation to meet future financial needs, and is able to make choices that can be enjoyed in his life. Barclays (2014) explains that financial well-being is the condition and feelings of a person who feels safe and financially healthy for now and in the future. Joo (2008) defines personal financial wellness as a desired financial health status, and as a comprehensive and multidimensional concept, which includes financial satisfaction, financial condition objectives, financial attitudes and behaviors, and behavior that cannot be assessed from a single measurement. Kim *et al* (2003) found that credit consulting programs and debt management can directly overcome events that

complicate one's finances and indirectly affect the financial well-being they feel. Vlaev & Elliott (2014) states that financial well-being is influenced by individual financial management where the person has control over their financial aspects so that they can manage finances well. In addition, Zemtsov & Osipova (2016) stated that financial well-being depends on financial behavior and the flow of income generated by assets owned. Thus, the ability to develop assets is important to improve one's financial well-being. From these studies, it can be concluded that in order for a person to be a financial well-being, financial management skills and the ability to invest and have financial resilience are required.

It cannot be denied that the income level of productive age employees greatly influences one's investment planning decisions. So the income level of productive age employees has an effect on their interest in investing part of their income. For example, saving money for uncertain future expenses and other reasons. However, the goals to be achieved by each individual worker must be different as well as in the process of achieving them. There are individuals who plan for the future in a detailed, directed and mature manner, but there are also those without any planning at all (Henager & Cude 2016). Workers who know and apply financial management are wiser in using funds and they are aware of how to manage financial management to be healthier. Previous studies have revealed that young age is a transitional period from children to adults, so it is important for them to learn to adjust between needs and wants, and to understand about future investment (Hastings & Mitchell, 2020). From this, it is hoped that employees of productive age will be able to manage finances well and have an investment for the future so that they have a prosperous life.

Many types of investments exist and each has its own risks. Currently savings, deposits are no longer the only attractive investment for people who understand financial developments because of the small returns on investment, but some investors still choose deposits and savings as the main choice. There are many alternatives available for people of various kinds, from low-risk to high-risk, some with fixed income to varied incomes. Indonesian society has a variety of investment instruments. Starting from savings or deposits, property, gold/jewelry to stocks or mutual funds. Of the various options, savings/time deposits are still the people's choice in recent years. Then the increasing property value has become an attraction for Indonesian consumers. Currently, Indonesians are starting to buy property as an instrument of choice for investing. Property is now not only for living, but a form of investment in the short and long term. Those who have more income are able to expand their education about financial knowledge and also expand their wealth by doing investment activities by taking advantage of their more income. Conversely, those with low economic levels will find it difficult to obtain wealth due to limitations in access to information.

1.2 Prior Studies

There are several prior studies, one of which is the research of Sumtoto & Anastasia (2015), where this study uses questionnaire data with 100 respondents. The sampling technique in this study is non-probability sampling. The validity and reliability test is aimed at testing each variable, using the KMO and Bartlett's Test, Total Variance Explained, and Rotated Component Matrix. This study shows that investors have a relationship with psychological factors in the prospect theory consisting of mental accounting, regret aversion, loss aversion. Regret aversion is the most considered factor in making the decision to invest in residential property types of houses and apartments in Surabaya. Then research on the effect of financial literacy, financial behavior and income on investment decisions (Fitrianti, 2018), which results in financial literacy has no significant effect on investment decisions, while financial behavior and income have a significant effect on investment decisions. In addition, there is also research by Damayanti & Fauzi (2020), which shows that the value of health can strengthen the direction of the relationship (moderate) the influence of financial knowledge and financial attitudes on investment decisions. In addition, there is research by Munawar et al (2020) which results that financial literacy has a significant effect on investment decision making, or has an important role in shaping investment decision making, and motivation has a significant effect on investment decision making or has a role. on making decisions on investment. Then research on the effect of the framing effect on investment decision making with locus of control as a moderating variable (Wardani, 2014), which shows that decision makers who are in Positive Framing conditions will invest because they are not affected by the risks to be borne. The decision maker in the Negative Framing condition will make an investment, the same decision is also made by the decision maker in the no framing condition. This indicates that

there is no influence of Locus of Control on investment decision making because decision makers with internal locus of control or external locus of control make the same decisions, namely making investments. Then research by Musdalifah (2016) shows a significant influence where locus of control, financial knowledge and income have a positive effect on investment decisions in the people of Makassar City. Furthermore, there is research on the Effect of Financial Knowledge on Financial Behavior and Financial Position through the Behavioral Approach of Financial Management for Young Workers (Arlinawati, 2020), where this research results in financial behavior not always determining the financial position of young workers. Many other things are able to determine the financial position directly, namely the income and ethnicity of young workers. Meanwhile, financial behavior can actually be created with the support of self-control, financial knowledge and financial attitudes. As a finding, it is known that the vulnerability of young workers' financial behavior in financial positions.

1.3 Hypothesis Development

Silvy & Yulianti (2013) revealed that financial knowledge is everything about finance that is experienced or that happens in everyday life. Meanwhile, according to Humaira & Sagoro (2018) financial knowledge is everything about finance that is experienced or what happens in everyday life. Financial knowledge can also be defined as a person's mastery of various things about the world of finance, which consists of financial tools and financial skills. (Arianti, 2018; Moreland, 2018; Smith *et al.*, 2019) concluded that financial knowledge has an effect on financial behavior.

H₁: Financial knowledge affects Financial Behavior.

Financial Attitudes explain that the control possessed by individuals leads individuals to have a better attitude. Financial experience will lead individuals to use financial management principles as a control on their financial condition. High financial knowledge will give birth to complex financial views, thus encouraging individuals to be more active in evaluating their financial condition. Evaluation of financial conditions encourages individuals to have a good financial attitude which is formed by a belief based on their financial knowledge. Productive age employees are individuals with learning related to very complex financial aspects, so that with this knowledge, employees are expected to be able to form a positive attitude towards finance based on their financial knowledge. The positive attitude of employees regarding the financial aspects is the result of the evaluation process - evaluation of their financial condition. Evaluations of employees' financial conditions are based on their financial knowledge, so that the evaluation process is based on the correct financial management concept. Research by Tang & Baker (2016) and Garber & Koyama (2016) states that financial knowledge has a positive effect on individual financial attitudes. In his research stated that good financial knowledge in individuals will encourage the formation of individual positive attitudes towards financial attitudes. This attitude is formed from the conceptualization of ideas related to the knowledge they have.

H₂: Financial knowledge affects Financial Attitudes.

To have financial knowledge, it is necessary to develop financial capabilities (financial tools). Financial tools are a form of financial behavior in decision making (Aminatuzzahra, 2014). A person who has financial knowledge tends to behave financially in ways that are financially responsible (Hilgert *et al.*, 2003). This research shows that financial knowledge and financial behavior have a positive effect. These results support behavioral financial theory that uses cognitive processes (human mental skills in understanding and recognizing things around) in management and problem solving in decision making. The more mentally skilled a person (one's knowledge of finances is high), the better the management and problem solving in making investment decisions. This study argues that the higher a person's knowledge in managing finances, the better the level of planning and decision making in investing.

H₃: Financial Knowledge affects Investment Decision.

Income is the amount of real income from all household members that is donated to meet the needs of both the individual and the household (Erwin & Karmini, 2012). Income is income that comes from a main or a side job,

in the form of salary, rent or in other forms to meet the needs or desires that make you happier (Vera-Toscano et al., 2006).

H4: Income affects Financial Behavior.

By having a good income, individuals will be able to manage finances well too. Without implementing a good financial attitude, it is felt that it will be difficult for individuals to have a surplus of money allocated for future savings, let alone have the capital to invest. Attitudes are usually measured by individual responses to their opinions on money, while financial management behavior refers to how individuals behave in relation to personal finances as measured by the individual's actions. Previous research that discussed the effect of the influence of financial attitudes on financial management behavior has been studied by several researchers including Herdjiono & Damanik (2016) and Bhushan & Medury (2013).

H5: Income affects Financial Attitudes.

According to the investment dictionary personal income is the total annual gross income of an individual that comes from wages, business enterprises as your "profit before tax" are used in the calculation of individual adjusted gross profit for income tax purposes. The components derived from total income are wages and salaries. In this study, income is used to determine whether there is an influence on investment decisions. Based on the results of research conducted by the author, data on people's income is obtained by examining the total income from wages and salaries of respondents according to the opinion of Ida & Dwinta (2010). In other words, the higher the income, the better the person's investment decision. So it can be said that individuals who have higher incomes will have the opportunity to invest better than those who have lower incomes. Likewise, a higher income can provide an opportunity to invest because there may still be a surplus of income. A person's income has an influence on the management of their personal finances, the more their income, the greater their consideration for making investment decisions.

H6: Income affects Investment Decisions.

According to Robbins & Judge (2007), self-control is defined as the degree to which individuals believe that they are determinants of their own destiny. Internal are individuals who believe that they are in control of whatever happens to them, while external are individuals who believe that whatever happens to them is controlled by outside forces such as luck and opportunity. Ajzen (1991) argues that there are external factors that indirectly influence attitudes toward behavior, subjective norms, perceived behavioral control against behavioral intentions. These factors are personality characteristics and situational factors. Research conducted by (Arianti, 2017; Moreland, 2018; Smith *et al.*, 2019) found evidence that locus of control has a positive effect on financial behavior.

H7: Self-control affects Financial Behavior.

Financial Attitudes lead to individual thinking, income and individual judgment about financial practices. Individuals who are rational and confident in financial matters will affect their self-control. Because basically, locus of control refers to the extent to which an individual is able to believe that he can control events that affect his life. This is supported by research conducted by Hayhoe *et al* (1999) which states that there is a positive relationship between financial attitudes and financial levels. Thus, it can be said that a person's financial attitude is also a factor that affects how a person controls himself.

H8: Self-control affects Financial Attitudes.

The Influence of Self-Control on Investment Decisions. According to Robbins & Judge (2007) Self-control is related to a person's level of confidence about events, fate, luck and destiny that occur to him. Self-control in this study is used to determine its effect on investment decisions. In measuring the level of influence of Self-Control on investment decisions, the concept of Rotter is used which has four basic concepts, namely potential behavior, expectations and reinforcing value.

H₉: Self-control affects Investment Decision.

Investment is an activity to invest in order to get a profit. Byrne (2007) in Sari (2017) also found that low financial knowledge will lead to low financial behavior and will have an impact on making wrong financial plans, and cause bias in the achievement of welfare when they are no longer productive. In this case, financial behavior has an important influence on a person's decision to invest. In addition, broad knowledge skills will make it easier for someone to make decisions to invest and financial literacy is important in managing finances well. Someone who decides to invest will certainly have a better effect in terms of financial management. This research is in line with research by Putri & Rahyuda (2017) which states that the effect of financial behavior on individual investment decision behavior means that the higher one's financial behavior, the better the behavior of individual investment decisions.

H₁₀: Financial Behavior affects Investment Decisions.

Financial attitudes are defined as states of mind, opinions and judgments about personal finances that are applied to attitudes. Financial attitude is also defined as the application of financial principles to create and maintain value through appropriate decision making and resource management. Therefore, financial attitudes affect investment decisions (Humaira & Sagoro, 2018). This study argues that the better the application of financial principles in managing one's finances, the better the level of planning and decision making in investing.

H₁₁: Financial attitudes affect Investment Decisions.

2. Method

The type of research used in this research is quantitative research. According to Sugiyono (2017), quantitative research methods are research methods based on the philosophy of positivism, used to research on certain populations or samples, data collection using research instruments, quantitative or statistical data analysis, with the aim of testing predetermined hypotheses. While the data used in this study consisted of two, namely primary and secondary data. In this study, the population that will be used is employees of productive age in Jakarta aged 25-55 years. The number of samples taken in this study amounted to 100 respondents and calculated using the Lameshow formula, this is because the population is unknown or infinite. Collecting data in this study through distributing questionnaires to productive age employees in Jakarta through online surveys. The questionnaire distributed is closed, that is, respondents are only given the opportunity to choose the answers that have been provided according to their opinion. The questions in the questionnaire and their answers using a Likert scale. This study uses Financial Knowledge, Income, and Self-Control as independent variables, then Investment Decisions as the dependent variable, then Financial Behavior, and Financial Attitudes as intervening variables.

2.1 Research Design

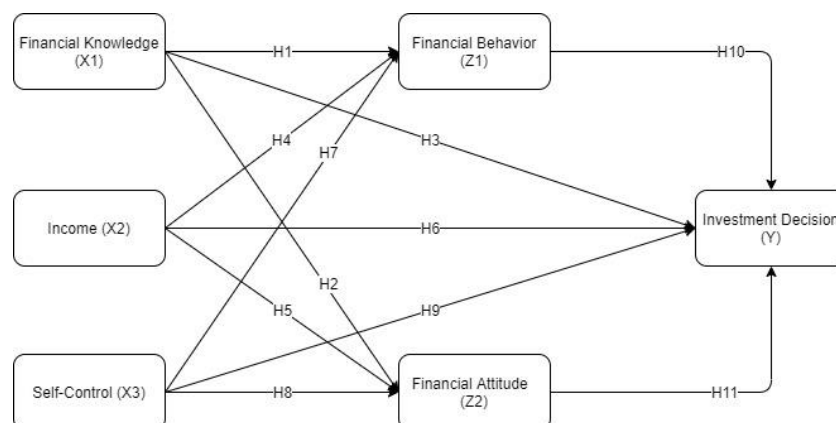


Figure 1: Research Framework

2.2 Structural Equation Modelling (SEM) Analysis

In this research, data processing and analysis uses the Partial Least Square (PLS) approach. PLS is a component or variant based Structural Equation Modeling (SEM) equation model. According to Ghazali (2006), PLS is an alternative approach that shifts from covariance-based to variant-based SEM approaches. Covariance-based SEM generally tests causality and theory while PLS is more of a predictive model. PLS is a powerful analytical method, because it is not based on many assumptions. For example, the data must be normally distributed, the sample does not have to be large. Data analysis in this research is Outer Model Analysis, Inner Model, and Hypothesis Test.

3. Results

3.1 Outer Model Analysis

3.1.1 Convergent Validity

Table 1: Outer Loading Table

Indicators of Variabel	Outer Loading	Validity	Indicator Evaluation
ID1	0,767	0,700	Valid
ID2	0,852	0,700	Valid
ID3	0,870	0,700	Valid
ID4	0,857	0,700	Valid
SC1	0,724	0,700	Valid
SC2	0,847	0,700	Valid
SC3	0,856	0,700	Valid
IN1	0,938	0,700	Valid
IN2	0,917	0,700	Valid
IN3	0,885	0,700	Valid
FK1	0,827	0,700	Valid
FK2	0,867	0,700	Valid
FK3	0,740	0,700	Valid
FK4	0,869	0,700	Valid
FK5	0,806	0,700	Valid
FK6	0,777	0,700	Valid
FB2	0,858	0,700	Valid
FB3	0,750	0,700	Valid
FB8	0,863	0,700	Valid
FA1	0,831	0,700	Valid
FA2	0,822	0,700	Valid
FA3	0,722	0,700	Valid
FA4	0,740	0,700	Valid
FA5	0,804	0,700	Valid

The Outer Model measurement model for individual reflective indicator blocks is said to be high if it correlates more than 0.70 with the construct to be measured. However, for research in the early stages of developing a measurement scale the loading value of 0.50 to 0.60 is considered sufficient (Ghozali, 2013). So it can be said that the outer loading above has met Convergent Validity. Table 1 above shown that each indicators for every variable has outer loading value above 0.7, so it can be said that all of the indicators within each variables is valid for further analysis.

Table 2: Average Variance Extracted (AVE)

Variables	AVE Value	AVE Evaluation
Investment Decision	0,702	Valid
Self-Control	0,658	Valid
Income	0,835	Valid
Financial Knowledge	0,666	Valid
Financial Behavior	0,681	Valid
Financial Attitude	0,616	Valid

The indicator is considered valid if it has an AVE value above 0.5 or shows that all outer loading dimensions of the variable have a loading value above 0.5 so that it can be concluded that the measurement meets the convergent validity criteria (Chin, 1995). Through measurement (outer loading), it states that all variables and indicators meet the criteria so that they are declared valid with a critical value above 0.5.

3.1.2 Discriminant Validity

Table 3: Cross-Loading Table

Indicators of Variabel	Investment Decision	Self-Control	Income	Financial Knowledge	Financial Behavior	Financial Attitude
ID1	0,767	0,227	0,160	0,367	0,294	0,345
ID2	0,852	0,205	0,102	0,507	0,232	0,356
ID3	0,870	0,274	0,120	0,489	0,304	0,456
ID4	0,857	0,287	0,177	0,534	0,353	0,419
SC1	0,166	0,724	0,293	0,218	0,484	0,338
SC2	0,334	0,847	0,221	0,382	0,467	0,346
SC3	0,227	0,856	0,379	0,429	0,593	0,572
IN1	0,182	0,286	0,938	0,304	0,374	0,377
IN2	0,120	0,305	0,917	0,284	0,398	0,364
IN3	0,150	0,431	0,885	0,276	0,410	0,371
FK1	0,422	0,420	0,380	0,827	0,413	0,500
FK2	0,522	0,382	0,281	0,867	0,443	0,413
FK3	0,418	0,247	0,189	0,740	0,346	0,409
FK4	0,576	0,425	0,302	0,869	0,496	0,437
FK5	0,386	0,275	0,287	0,806	0,428	0,375
FK6	0,455	0,348	0,082	0,777	0,399	0,366
FB2	0,357	0,519	0,342	0,455	0,858	0,539
FB3	0,184	0,518	0,385	0,341	0,750	0,421
FB8	0,319	0,552	0,350	0,478	0,863	0,534
FA1	0,470	0,459	0,350	0,445	0,518	0,831
FA2	0,507	0,456	0,383	0,444	0,450	0,822
FA3	0,258	0,335	0,166	0,338	0,445	0,722
FA4	0,236	0,400	0,272	0,287	0,450	0,740
FA5	0,299	0,421	0,369	0,455	0,526	0,804

From the table data above, it can be seen that the comparison, the outer loadings of the indicator in the associated construct must be greater than any cross-loadings of the other constructs. So that latent variables can be said to predict their indicators better than other latent variables.

Table 4: Formell-Larcker Criterion

Variables	Investment Decision	Income	Financial Knowledge	Financial Behavior	Financial Attitude	Self-Control
Investment Decision	0,838					
Income	0,298	0,811				
Financial Knowledge	0,165	0,374	0,914			
Financial Behavior	0,573	0,434	0,315	0,816		
Financial Attitude	0,353	0,641	0,432	0,519	0,825	
Self-Control	0,473	0,533	0,406	0,512	0,607	0,785

The Fornell-Larcker criterion is a second approach to assessing discriminant validity. It compares the square root of the AVE value with the latent variable correlation. In particular, the square root of each AVE construct must be greater than the highest correlation with the other constructs. An alternative approach to evaluating the Fornell-Larcker criterion results is to determine whether the AVE is greater than the squared correlation with other constructs. The logic of the Fornell-Larcker method is based on the idea that constructs share more variance with related indicators than with other constructs. Based on the table above, it can be seen that the AVE value is greater than the quadratic correlation with other constructs. This shows that all the constructs in the estimated model meet the criteria for discriminant validity.

3.1.3 Reliability Test

Table 5: Reliability Test Table

Variables	Cronbach's Alpha value	rho_A	Composite Reliability
Investment Decision	0,858	0,870	0,904
Income	0,741	0,766	0,852
Financial Knowledge	0,901	0,901	0,938
Financial Behavior	0,899	0,905	0,922
Financial Attitude	0,764	0,775	0,864
Self-Control	0,846	0,867	0,889

Furthermore, the reliability test can be seen from the Cronbach's Alpha value and the Composite Reliability value. To be able to say that a statement item is reliable, then the Cronbach's alpha value must be above 0.6 and the composite reliability value must be 0.7. So it can be concluded that all constructs meet the reliability value because Cronbach's Alpha and Composite Reliability are above the reliability test standard.

3.1.4 Multicollinearity Test

Table 6: Inner Variance Inflation Factor (VIF) Value

Inner VIF Values	Investment Decision	Income	Financial Knowledge	Financial Behavior	Financial Attitude	Self-Control
Investment Decision						
Income	1,827				1,334	1,334
Financial Knowledge	1,297				1,203	1,203
Financial Behavior	1,511				1,274	1,274
Financial Attitude	2,214					
Self-Control	1,846					

The manifest variables or indicators in a formative block must be tested for their multicollinearity. Testing whether or not multicollinearity occurs between indicators in the formative block uses the VIF value. If the VIF value

above 10, there is collinearity between indicators in one formative block. From the table results, it shows that the data above is free from multicollinearity.

3.2 Inner Model Analysis

Table 7: R-Square Table

Variables	R-Square	Adjusted R-Square
Investment Decision	0,379	0,356
Financial Behavior	0,508	0,497
Financial Attitude	0,410	0,397

The table above shows that the R Square from Investment Decision variable has a moderate value, which is 0.379, which means that the effect of independent variables on investment decisions is 37.9%, the rest is influenced by other variables not explained in the study. Meanwhile, the financial behavior variable reached 0.508 or 50.8% and the financial attitude was 0.410 or 41%.

3.3 Hypothesis Testing

Table 8: Hypothesis Testing Result

Hypothesis	Original Sample	Average Sample	Standard Deviation	T-Statistics	P-Values	Results
Financial Knowledge ---> Financial Behavior	0,263	0,261	0,074	3,566	0,000	H ₁ Accepted
Financial Knowledge ---> Financial Attitude	0,311	0,295	0,098	3,183	0,002	H ₂ Accepted
Financial Knowledge ---> Investment Decision	0,468	0,467	0,083	5,657	0,000	H ₃ Accepted
Income ---> Financial Behavior	0,176	0,175	0,069	2,549	0,011	H ₄ Accepted
Income ---> Financial Attitude	0,185	0,190	0,075	2,481	0,013	H ₅ Accepted
Income ---> Investment Decision	-0,086	-0,083	0,085	1,011	0,312	H ₆ Rejected
Self-Control ---> Financial Behavior	0,460	0,465	0,076	6,095	0,000	H ₇ Accepted
Self-Control ---> Financial Attitude	0,329	0,345	0,086	3,831	0,000	H ₈ Accepted
Self-Control ---> Investment Decision	-0,015	-0,017	0,088	0,174	0,862	H ₉ Rejected
Financial Behavior ---> Investment Decision	-0,017	-0,023	0,099	0,174	0,862	H ₁₀ Rejected
Financial Attitude ---> Investment Decision	0,287	0,296	0,111	2,578	0,010	H ₁₁ Accepted

It can be seen in the table above that a population has a relationship between one variable and another variable. It can be seen in the path coefficient (rho) by looking at the value of the original sample and the statistical T value as a statement of the significance level of the relationship between one variable and other variables. The final diagram model image is based on the results of the hypothesis testing results.

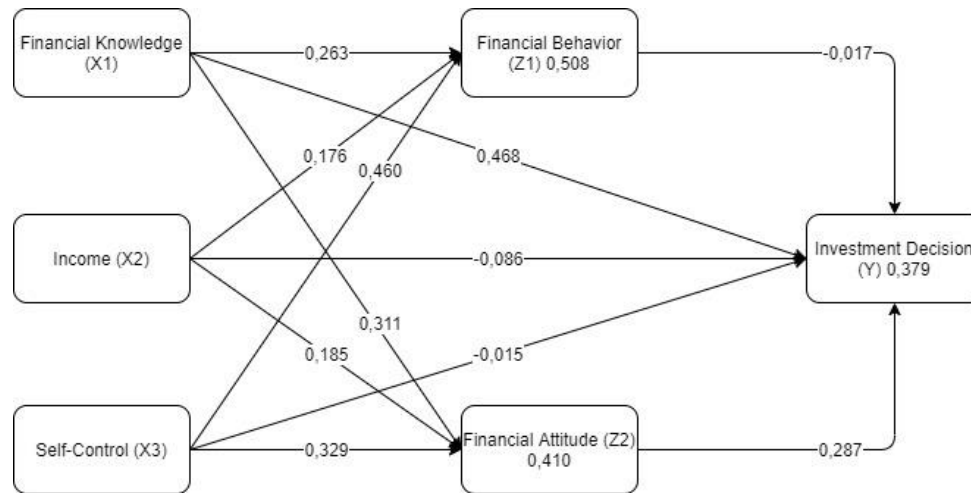


Figure 2: Relationship between variables

4. Discussion

Financial Knowledge influences Financial behavior, this is in line with previous research that has been conducted (Arianti, 2017; Moreland, 2018; Smith *et al.*, 2019). Financial Knowledge influences Financial Attitudes. This is in line with research conducted by Tang & Baker (2016), and Garber & Koyama (2016) which state that good financial knowledge in individuals will encourage the formation of individual positive attitudes towards financial attitudes. This attitude is formed from the conceptualization of ideas related to the knowledge they have. Financial knowledge influences investment decisions, which is in line with research conducted by Silvy & Yulianti (2013) which states that financial knowledge and financial management influence investment decisions. A person who has financial knowledge tends to behave financially in financially responsible ways. These results support behavioral financial theory that uses cognitive processes (human mental skills in understanding and recognizing things around) in management and problem solving in decision making. The more mentally skilled a person (one's knowledge of finances is high), the better the management and problem solving in making investment decisions. This study argues that the higher a person's knowledge in managing finances, the better the level of planning and decision making in investing. Income affects financial behavior, this result is in line with research conducted by Vera-Toscano *et al* (2006). Income affects financial attitudes, this result is in line with research conducted by Herdjiono & Damanik (2016), which explains that there is an influence between financial attitudes and income. Income does not influence investment decisions. Self-control affects financial behavior, this result is in line with research conducted by previous research (Arianti, 2017; Moreland, 2018; Smith *et al.*, 2019). Self-control affects financial attitudes, where this result is in line with research conducted by Hayhoe *et al* (1999). Self-Control does not affect the Investment Decision. Financial Behavior does not influence Investment Decisions. Financial attitudes affect decisions, investment which is in line with research conducted by Humaira & Sagoro (2018) which states that financial attitudes are defined as states of mind, opinions and judgments about personal finances that are applied to attitudes. Financial attitude is also defined as the application of financial principles to create and maintain value through appropriate decision making and resource management. This study argues that the better the application of financial principles in managing one's finances, the better the level of planning and decision making in investing.

5. Conclusion

There is no influence of Self Control on Investment Decisions. There is an effect of Self Control on Financial Behavior. There is an effect of Self Control on Financial Attitudes. There is no effect of income on investment decisions. There is an effect of income on financial behavior. There is an effect of income on financial attitudes. There is an influence of financial knowledge on investment decisions. There is an influence of Financial Knowledge on Financial Behavior. There is an influence of Financial Knowledge on Financial Attitudes. There is no effect of financial behavior on investment decisions. There is an influence of financial attitudes on investment decisions.

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