The Effect of Financial Literacy, Financial Risk Tolerance, and Financial Socialization Agents on Stock Investment Decision in the Millennial Generation

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Abstract

This study aims to determine financial literacy, financial risk tolerance, and financial socialization agents' effect/influence on stock investment decisions in the millennial generation. The research was conducted by distributing questionnaires to 400 millennial generation stock investors in Indonesia. The data analysis method by Structural Equation Modeling (SEM) using the SmartPLS 3.2.7 program. The results show that financial literacy has a significant effect on investment decisions. Financial risk tolerance has a significant effect on investment decisions; meanwhile, financial socialization agents do not significantly affect investment decisions.

Keywords: Financial Literacy; Financial Risk Tolerance; Financial Socialization Agents; Investment Decision.

1. Introduction

The era of globalization has brought many changes for countries globally, namely positive and negative impacts, especially on one's financial behavior to meet the needs of daily life. The Indonesia Times launched the Indonesia Millennial Report (IMR) 2019 to see patterns of behavior, attitudes, and interests of Indonesian millennials. The result indicated that millennials only allocate 2 percent for investment from regular income, then 51.1 percent is spent on monthly needs, then 8 percent is used for entertainment needs, and the last one is only 6.8 percent to buy insurance products (IDN Times, 2019). In Indonesia, there are three reasons why people do not want to invest. Firstly, negative "views" circulating in society are still quite strong, investment is something that can be bankrupt, investment is only suitable for people who have much money, and investing is something confusing (Warta Ekonomi, 2019). According to the Indonesia Stock Exchange (IDX), the capital market is funding for companies and other institutions (such as the government) and investing activities. The capital market is also a market for various long-term tradable financial instruments, including debt securities (bonds), equities (stocks), mutual funds, derivative instruments, and other instruments (Indonesia Stock Exchange, 2021). Investors are interested in investing in stocks in Indonesia because they can provide returns that are far above deposit and bond interest rates. The rate of return on stock investments ranges from 15-100% per year, bonds 5-14% per year, and deposits 4-5% per

year. Also, investors who invest in stocks can benefit from the distribution of profits that the company receives in dividends. In contrast to bond and time deposit products that provide fixed returns each year, returns on stock investments are strongly influenced by fluctuations in stock price movements as reflected in the JCI price movements. Stocks are an investment instrument that has a high level of risk and uncertainty. Therefore, investment and finance practitioners categorize stock investment as a long-term investment (over five years) so that investors can obtain optimal returns (Hartono, 2018). The level of participation of the Indonesian people in the stock market is still low. These facts can be seen from the number of stock investors in Indonesia who have not reached 1% in 2017.

The development of existing technology was not followed by the development of management regarding investment for the millennial generation. The research results "The Future of Money" conducted by Luno in collaboration with Dalia Research reveal that 69% of the millennial generation in Indonesia does not have an investment strategy. According to Tirto's research in July 2019, 44% of the millennial generation only invest once in a year or two, and 20% of them do not have any investment (Avrist, 2020). From data released by PT Kustodian Sentral Efek Indonesia (KSEI), Indonesia's total capital market investors as of December 27, 2019, reached 2.47 million investors. In terms of stock investors, investor growth only occurred at 29.53% (2019) versus 35.60% (2018) on a year-on-year (YoY) basis. As of December 27, 2019, the number of stock investors was 1.10 million

single investor identification (SID), up from 852,240 SID in 2018 (Wareza, 2019).

Financial literacy is an essential element that shapes a person's financial behavior. From the results of research by van Rooij, Lusardi, dan Alessie (2011), it was found that financial literacy can influence an investment decision. Most individuals who have low financial literacy do not like to invest in stocks. On the other hand, people with high financial literacy ready to participate in the stock market and formal financial markets (Bucher-Koenen, Lusardi, Alessie, & van Rooij, 2017). Financial literacy is one thing that millennials must understand because they will face financial decisions that can have important consequences in the future. Increasing responsibility for the millennial generation requires them to know to make good financial decisions early (Lusardi, 2015).

Financial Risk Tolerance is the ability of investors to accept negative changes/returns in the investment value or the results obtained are different than expected (Kannadhasan, Aramvalarthan, Mitra, & Goyal, 2016). A good understanding of financial risk tolerance can make a sound investment decision (Awais, Laber, Rasheed, & Khursheed, 2016), an asset portfolio with a complement to risky financial products (Nguyen, Gallery, & Newton, 2019), and receive opportunities for investment more desirable (Ansari & Phatak, 2017). High-risk assets are associated with stock investing and derivatives trading, while low-risk assets are associated with deposits and money market mutual funds. Investors who tend to be more concerned with investment returns (return) than the security of the principal value of an investment will choose to invest in stocks (Bodie, Kane, & Marcus, 2014, p. 170).

Financial socialization agents are agents who can provide financial information. These agents can consist of parents, school, friends, and the mass media (Hilgert, Hogarth, & Beverly, 2003). The more someone gets financial outreach from parents, school, friends, or the media, the more confident someone will make an investment decision. This is because financial information obtained from various sources (parents, school, friends, or the media) can assist investors in making an investment decision. The process of making such investment decisions can be obtained either internally or externally. Financial socialization is a process when individuals obtain something from the environment regarding the skills, knowledge, or attitudes needed to maximize one's role in the financial market (Sohn, Joo, Grable, Lee, & Kim, 2012).

Millennials were born from 1981 to early 2000, and this generation is generally characterized by increased use and familiarity of communication,

media, and digital technology (Gursoy, Chi, & Karadag, 2013). In the future, it is predicted that this generation will become the generation with the most significant demographic number in Indonesia. Research that discusses the effects of financial literacy, financial risk tolerance, and financial socialization agents on investment decisions, especially for stock investors in Indonesia, is rarely carried out in the millennial generation. The study conducted by Kishori and Kumar (2016) stated that there are only a few studies that focus research on stock investment decisions that are caused explicitly by financial literacy, financial risk tolerance, or financial socialization agents, including research (Kadariya, 2012; Nagy & Obenberger, 1994). This study seeks to fill this research gap to update research on the effects of financial literacy, financial risk tolerance, and financial socialization agents on investment decisions. It encourages the need to do this research to see the effect of these three factors when used to make an investment decision. This study is to review the theory of existing research and evaluation materials for further research.

2.   Literature Review

Investment is a commitment to save money now for a certain period to obtain future payments, including anything that investors can receive in the form of the period when the funds can be recovered, the expected inflation rate during this period, and the uncertainty of the future payments. Investors can consist of individuals, governments, pension funds, or corporations. The form of investment can be divided into two types. Firstly, financial assets, such as deposits, stocks, and bonds. Secondly, real assets such as land, gold, and buildings (Reilly & Brown, 2012, p.71−72).

In practice, an investor will save the amount currently held in some investment instrument for future payments to be obtained in an amount greater than the amount currently held (Damodaran, 2012; Khan, Afrin, & Rahman, 2015). This seems to appeal to many people because, through investment, decision-making becomes more tangible. In addition, individuals can practice decision-making and thus can assess their own ability to make correct decisions by analyzing the results of decisions that have been taken (Gill, Khurshid, Mahmood, & Ali, 2018).

2.1. Financial Literacy

Financial literacy is defined as a knowledge and understanding of financial concepts and the skills, motivation, and confidence to apply this knowledge and understanding to make effective decisions in

various financial contexts, to improve the financial well-being of individuals and communities, and to enable participation in economic life (OECD, 2013). Financial literacy is the knowledge that is used to manage finances (Chen & Volpe, 1998). Financial literacy will positively influence a person's financial behavior, like managing or allocating their finances appropriately (Robb & Woodyard, 2011). Also, financial literacy can improve the ability to deal with daily financial problems and, at the same time, reduce the negative consequences of bad financial decisions that may take years to overcome (Delafrooz & Paim, 2011). Financial literacy has become increasingly complex over the last few years by introducing many new financial products. In order to understand the risks and benefits associated with financial products, financial literacy is a must-have. In addition, financial literacy helps improve the quality of financial services and contributes to the country's economic growth and development. With the increasing diversity of problems related to the economy, one's needs, and financial products, people must have the financial literacy to help manage their finances (Bhusnan & Medury, 2013). For measuring the level of financial literacy, a percentage level is used based on Chen and Volpe (1998), namely

Table 1. Financial literacy the average respondents' answers category

Rating Category	Meaning
Under 60%	Individuals have low levels of financial literacy.
Between 60−79%	Individuals have intermediate levels of financial literacy.
Above 79%	Individuals have high levels of financial literacy.

2.2. Financial Risk Tolerance

Financial Risk Tolerance is investors' ability to accept negative consequences on the investment value or the results obtained are different than expected (Kannadhasan et al., 2016). Financial risk tolerance is the fundamental issue that underlies several financial decisions (Grable & Lytton, 1999). Initially, Grable and Lytton used 20 question items to measure in eight dimensions of risk, including 1) gambling with guaranteed and uncertain returns, 2) general risk choices, 3) a choice between a definite loss and a definite gain, 4) the associated risk with existing experience and knowledge, 5) risk as a comfort level, 6) speculative risk, 7) prospects theory and 8) investment risk. Furthermore, several question items were not strong enough to support the internal consistency of the existing factors, so the question items were

eliminated into only 13 question items. The 13 instrument items measure the tolerance risk in tolerance constructs: 1) investment risk, 2) risk appetite & experience, and 3) speculative risk.

Table 2. Financial risk tolerance score

Question items	Number of answer choices	Score for each available choice			
		Option A	Option B	Option C	Option D
1	4	4	3	2	1
2	4	1	2	3	4
3	4	1	2	3	4
4	4	1	2	3	4
5	4	1	2	3	4
6	3	1	2	3	
7	3	1	2	3	
8	4	1	2	3	4
9	4	1	2	3	4
10	3	1	2	3	
11	4	1	2	3	4
12	3	1	2	3	
13	3	1	2	3	

To measure the classification of financial risk tolerance, the methods used are as follows:

Financial risk tolerance

$$= \frac{\text{Maximum score} - \text{Minimum score}}{\text{Number of categories}}$$
$$= \frac{47 - 13}{3} = 11.33$$

Category:

For overall results 13-24.33: classified as risk averter investors (risk-averse investors).

For overall results, 24.34−35.67: classified as risk-neutral investors (risk-neutral investors).

For overall results 35.68−47: classified as risk lover/seeker investor (risk lover investor).

2.3. Financial Socialization Agents

Financial socialization is a process when individuals obtain from the environment the skills, knowledge, and attitudes needed to maximize the role consumers in' role markets (Sohn et al., 2012). Socialization agents can be defined as people who interact in a social environment, and these agents can influence someone's shopping and management behavior (Albeerdy & Gharleghi, 2015). Financial socialization agents are divided into primary and secondary agents (Falahati, Sabri, & Paim, 2012). The primary agent consists of parents and siblings, while the secondary agent consists of schools, social media, the internet, and peers. The financial socialization process begins in childhood, and it involves life experiences, interactions with friends and family members, schools that develop

financial skills, attitudes, and knowledge (Wang, Benner, & Kim, 2015).

The financial socialization agents in this indicator can be explained as follows (Sundarasen et al., 2016):
1. Family
2. School
3. Peers
4. Media

2.4. Investment Decision

When making investment decisions, investors will try to achieve their goals while taking their circumstances into account (which may be seen as the obstacles they face). The main objective is to obtain a high rate of return on their investment and avoid significant risks (Redhead, 2008, p.13). Practically, several things must be considered in an investment, such as the security of liquidity, the value of significant growth, the value of an investment that can beat the value of inflation growth, and various risk and return options. Therefore, investors must properly evaluate investment products before deciding (Kishori & Kumar, 2016). Stock instruments are investment assets that have an uncertain rate of return because this instrument can provide a rate of return that is much better or far worse than what is expected. Common stock is proof of ownership of a person in a company whose shares are purchased. Owners of the common stock of a company can get success and problems that occur from the company's shares purchased (Reilly & Brown, 2012, p. 76). Stock instruments are investment assets that have an uncertain rate of return because these instruments can provide returns that are much better or far worse than what is expected. Common stock is proof of ownership of a person in a company whose shares are purchased. Owners of common stock of a company can have success and problems arising from the company's shares purchased.

In this study, investment decisions will be measured using the following indicators (Hamza & Arif, 2019):
1. Neutral information
2. Personal financial needs

2.5. Relationship between Concepts and Research Hypotheses

Financial literacy can be defined as the level of a person's ability to answer basic level knowledge and advanced financial knowledge (van Rooij et al., 2011). People with high financial literacy ready to participate in the stock market and formal financial markets (Bucher-Koenen et al., 2017; Sabri, 2016). Financial literacy improves investors' financial information and financial knowledge, thereby making them well informed and confident in making investment decisions. From the results of previous research conducted by Kalsum, Sarita, and Wawo (2018), someone who has high financial literacy skills can be better at making investment decisions. This is because increased financial understanding can make a person able to make good investment decisions (Aren & Zengin, 2016; Awais et al., 2016). In addition, Jariwala (2015) researched data collected from 385 individual retail investors in Gujarat. It found that the level of financial literacy of investors has a statistically significant influence on their investment decisions. One reason is that the millennial generation often makes investment decisions without being based on strong financial knowledge. The increase in millennial financial literacy is expected to increase the ability to make stock investment decisions, for example, knowledge of interest rates, investment strategies.

H1: Financial literacy influences stock investment decisions.

Financial Risk Tolerance is the level of ability that investors can accept in taking investment risks (Lestari & Iramani, 2013). The risk-taking attitude taken by an investor towards their decisions to invest in low-risk, medium-risk, and high-risk assets is relatively different (Pak & Mahmood, 2015). Someone who is brave enough to face risks will tend to make bolder decisions in investing in financial assets such as equity (stocks). Meanwhile, some who dislike risk or tend to avoid risk will make investment decisions in real assets such as land, gold, and buildings (Putra, Ananingtiyas, Sari, Dewi, & Silvy, 2016). These studies prove that a person's investment decisions are more determined by one's courage in taking a risk. Millennials willing to accept risk will tend to make bolder decisions in investing in high-risk assets associated with stock investing and derivative trading than low-risk assets related to deposits and money market mutual funds.

H2: Financial risk-tolerance influences stock investment decisions.

Financial socialization can also be defined as the process of acquiring and developing values, attitudes, standards, norms, knowledge, and behavior that contribute to financial viability and individual welfare (Gudmunson & Danes, 2011). Financial socialization agents influence investment decisions in stocks. The socialization process refers to the relationship between individuals and agents of socialization and the learning process. They learn how individuals obtain behavior

and values from specific agents of socialization, primarily through observation and social interaction (Moschis & Moore, 1982). To get good financial socialization, someone needs the help of others who will act as a socialization agent. Most previous research suggests that individuals acquire financial knowledge and shape financial behavior through interaction with socialization agents such as parents and peers during their childhood (Churchill & Moschis, 1979; Moore & Moschis, 1981). Millennials often form communities and use technology to be the right direction when they want to decide to make investment decisions in financial matters.

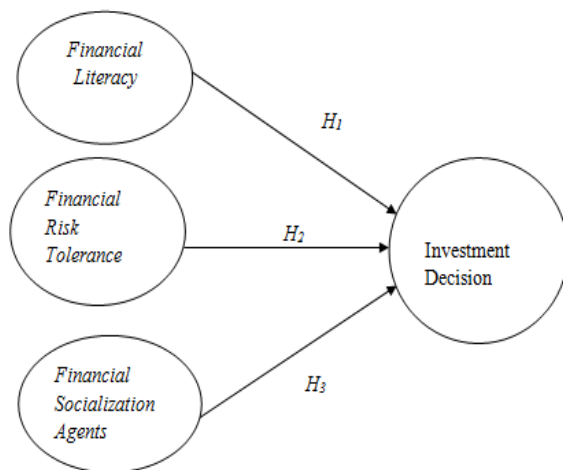H3: Financial socialization agents influence a stock investment decision.

Figure 1. Research Model

3. Methods

This study uses a causal quantitative research method. The causal quantitative research method is used because it wants to examine the effect of the independent variable on the dependent variable. This study has financial literacy, financial risk tolerance, and financial socialization agents as exogenous variables (independent variables) and investment decisions as endogenous variables (dependent variables). The population is a generalization of objects or subjects with specific qualities and characteristics determined by researchers to be studied (Sugiyono, 2017). The population used in this study is the millennial generation who live in all regions of Indonesia. The criteria that respondents must meet are having a Single Investor Identification (SID) number and conducting stock transactions within a minimum period of the last six months (March to September 2020). Using the Slovin method with an estimated error rate of 5% of the total population of 1 million investors, the minimum number of samples taken is 400 respondents. The questionnaire was distributed through the WhatsApp group, Line group, and the Stockbit application.

The data collection methods used in this study are questionnaires. The questionnaire is made in the form of Google Forms to be easily accessed and reach a wider range of respondents. Also, Google Forms can make arrangements to answer all mandatory questions on the questionnaire to minimize filling in incomplete questionnaires. The questionnaire in this study consisted of 4 parts. The first part measures the financial literacy of the respondents, which contains 16 multiple-choice questions. The questions to measure financial literacy consist of questions related to general knowledge, savings and loans (saving and borrowing), insurance (insurance), and investment (investment). The second part measures the respondent's Financial Risk Tolerance (FRT), which contains 13 multiple-choice questions. The third part measures the respondent's Financial Socialization Agents, which includes two items measured using a Likert scale. The last part measures the investment decision of the respondents, which contains nine statements that are measured using a Likert scale.

The data source used is primary data. Primary data used is the answer to a questionnaire given to respondents. These answers include the respondents' data and answers related to the research variables, namely financial literacy, financial risk tolerance, financial socialization agents, and investment decisions. The average (mean) of the respondents' answers was between 3.07 and 3.935. These results indicate that the role of financial socialization agents is high enough in helping someone when they want to make an investment decision. The average (mean) of the respondents' answers was between 3.625 and 3.647. These results indicate that the interest in making stock investment decisions is quite high.

This study's data analysis uses the Partial Least Square (PLS) technique by utilizing smarts PLS software version 3.0. PLS is a multivariate analysis technique for testing the relationship of complex variables. The complicated relationship can be interpreted as a series of relationships in-between one or several dependent variables (endogenous) with one or several independent variables (exogenous). The PLS examines the direct and indirect effects between variables (Hair et al., 2012). It is variance-based structural equation analysis that simultaneously tests measurement models and structural models.

Table 3. A descriptive table of the average respondents' answers for each variable

Variable	Indicator	Category/Mean
Financial Literacy	FL1	Under 60%: 191 Between 60−79%: 158 Above 79%: 51
Financial Risk Tolerance	FRT1	Risk Averse: 30 respondent
	FRT2	Risk Neutral: 335 respondent
	FRT3	Risk Seeker: 65 respondent
Financial Socialization Agents	FSA1	3,070
	FSA2	3,260
	FSA3	3,870
	FSA4	3,935
Investment Decision	ID1	3,647
	ID2	3,625

It is also a multivariate statistical technique that creates comparisons between multiple dependent variables and multiple independent variables. The measurement model is used to examine causality (with predictive models for hypothesis testing). The evaluation of the PLS model is done by evaluating the outer model and the inner model.

Table 4. The Operational Definition of a Variable

No	Variable	Operational Definition	Empirical Indicator
1	Financial Literacy	Ability to understand basic concepts from economics and finance, to how to apply them appropriately	Measure financial literacy related to General Knowledge, Savings and Loans, Insurance, and Investment.
2	Financial Risk Tolerance	The level of risk an investor can accept when taking an investment.	Measure financial risk tolerance related to Investment Risk, Comfort and Experience Risk, Speculative Risk.
3	Financial Socialization Agents	The process by which individuals acquire the skills, information, and attitudes necessary to maximize their abilities in financial markets	Measures the financial socialization agent is providing financial socialization to the respondent.
4	Investment Decision	The rational decision-making process carried out by an investor to maximize their desires before making certain decisions	Measure investment decisions related to neutral information and personal financial needs.

4. Results

In this study, the number of questionnaires collected was 410. Of these 410 questionnaires, 10 questionnaires could not be processed because some respondents could not pass the initial screening question, where for filling it was stipulated that the respondent must have a Single Investor Identification number (SID) and conduct stock transactions for a minimum period of six months (March to September 2020). Thus, 400 questionnaires can be processed.

From the data obtained, it can be seen that men dominate the respondents (83.75%), aged 24−28 years (30.75%), latest education D3 / S1 (64%), private employees (44.25 %), average net income (take-home pay) between IDR 2−7 million (36%). Besides, the percentage of funds allocated for investment greater than 20% (46.75%), the stock investment period is 6 months−2 years (58.5%), equity investment funds > 4.5 million (48.5%), and making transactions 1-3 times (41.5%) a month.

The majority of respondents prefer the financial sector where they invest their money as many as 187 people (46.8%), the consumer goods industry sector is also the second-largest choice with 79 people (19.8%). The mining sector is also chosen by 60 people (15%), followed by the infrastructure, utilities, and transportation sectors with 19 people (4.8%), trade, services & investment sectors 16 people (4%), property, real estate, & building construction sectors as many as 13 people (3.3%), the basic industry sector & chemical as 12 people (3%), the various industry sector as many as 11 people (2.8%). The agricultural sector is a sector that is less attractive to investors because it was only chosen by three people (0.8%), as performed in Table 5.

Table 5. Stock Sector Selected by Investors

Stock sector	Frequency	Percentage
Agriculture	3	0.8%
Mining	60	15%
Basic industry & chemicals	12	3%
Miscellaneous industry	11	2.8%
Property, real estate, and building construction	13	3.3%
Consumer goods industry	79	19.8%
Finance	187	46.8%
Infrastructure, utility, and transportation	19	4.8%
Trade, service, and investment	16	4%
Total	400	100%

Based on testing the validity of each indicator with the PLS program on convergent validity, namely, Financial Literacy is measured by four things in one indicator. The four things are general knowledge, savings and loans, insurance, and investment with a loading factor of 1.000. The loading factor result of the financial literacy indicator shows a correlation between this indicator and the variables that meet the convergent validity because the loading factor number exceeds 0.7.

The second variable is financial risk tolerance, measured by three things in one indicator, and the four things are Investment Risk, Risk Comfort and Experience, and Speculative Risk. The loading factor result of the financial risk tolerance indicator shows the correlation between the indicator and the variable fulfills the convergent validity because the loading factor exceeds 0.7.

The third variable, financial socialization agents, is measured by four indicators, including the first indicator, namely parents (FSA1), with a factor loading of 0.116. The second indicator is a peer (FSA2) with a loading factor of 0.145. The third indicator is school (FSA3), with a loading factor of 0.934. Moreover, the fourth indicator is media (FSA4), with a loading factor of 0.943. The loading factors from 4 indicators of financial socialization agents show that there are indicators that have a relationship between indicators and variables that do not meet convergent validity because the loading factor is below 0.7. The FSA1 and FSA2 indicators with the smallest outer loading value are eliminated, resulting in an outer loading value of more than 0.7 is obtained for all indicators. The third indicator is school (FSA3), with a loading factor of 0.934. The fourth indicator is media (FSA4), with a loading factor of 0.944.

The fourth variable, namely investment decision, is measured by two indicators: the first indicator, which neutral information (KI1) with a factor loading of 0.966. The second indicator is personal financial needs (KI2), with a factor loading of 0.959. The results loading factor from 2 indicators of financial risk tolerance show the correlation results between the indicators and the variables that meet the convergent validity because all loading factors exceed 0.7.

Other ways to measure convergent validity are looking at the Average Variance Extracted (AVE) value, where the AVE value is more than 0.5. AVE value measures the number of variants captured by the construct compared to variations caused by measurement errors. If the value generated by AVE is more significant than 0.5, convergent validity has been fulfilled. The following Table 6 demonstrated the AVE value.

Table 6. Average Variance Extracted (AVE)

Variable	AVE
Financial Literacy	1.000
Financial Risk Tolerance	1.000
Financial Socialization Agents	0.882
Investment Decision	0.927

It is using composite reliability to test indicator reliability. The indicators are reliable if it has a composite reliability value of more than 0.6. The higher the value of composite reliability indicates the better accuracy, consistency, and reliability of these indicators' variables. The composite reliability results are performed in Table 7.

Table 7. Composite Reliability and Cronbach's Alpha

Variable	Cronbach's	Composite
Financial Literacy	1.000	1.000
Financial Risk Tolerance	1.000	1.000
Financial Socialization Agents	0.866	0.937
Investment Decision	0.921	0.962

Table 8 shows Cronbach's alpha value and composite reliability for every variable used in this study. Variable financial literacy has composite reliability of 1.000; composite reliability in information technology can be reliable because the composite reliability value exceeds 0.6. The financial literacy variable has Cronbach's alpha value of 1.000, so it is reliable because it has Cronbach's alpha value that exceeds 0.7. Based on financial risk tolerance with composite reliability worth 1.000, composite reliability in financial risk tolerance can be reliable because the value of composite reliability exceeds 0.6. The variable financial risk tolerance has Cronbach's alpha value of 1.000, so it is reliable because it has Cronbach's alpha value that exceeds 0.7. The financial socialization agents have composite reliability of 0.937; it is reliable because the value of composite reliability exceeds 0.6. The variable financial socialization agents have Cronbach's alpha of 0.866, so it can be reliable because it has Cronbach's alpha value that exceeds 0.7. On the investment decision results with composite reliability worth 0.962, composite reliability on retailer satisfaction is reliable because the value of composite reliability exceeds 0.6. The retailer satisfaction variable has Cronbach's alpha value of 0.921, so it can be reliable because it has Cronbach's alpha value that exceeds 0.7.

The hypothesis testing result is shown in Table 5. The path coefficient value and the T-statistic determine the significance of the hypothesis. As shown in Table 5, all three hypotheses are empirically supported, with a p-value smaller than 0.05 for a significant level of 5%.

Table 8. Hypothesis Testing

Direct effects	Original Sample (O)	t Statistic	P-Value
Financial Literacy → Investment Decision	0.114	2.236	0.003
Financial Risk Tolerance → Investment Decision	0.234	4.596	0.000
Financial Socialization Agents→ Investment Decision	-0.047	0.742	0.401

The coefficient path on financial literacy effect on investment decisions is 0.114 with a t-statistic value of 2.236, which is greater than the standard t-statistic of 1.96 and has a p-value below 0.005. These results can be concluded that financial literacy significantly affects stock investment decisions in the millennial generation.

The coefficient path on the influence of financial risk tolerance on investment decisions is 0.234 with a t-statistic value of 4.596, which is greater than the standard t-statistic of 1.96 and has a p-value below 0.005. These results can be concluded that financial risk tolerance significantly affects stock investment decisions in the millennial generation.

The coefficient path on the effect of financial socialization agents on investment decisions is -0.047 with a t-statistic value of 0.742, which is smaller than the standard t-statistic of 1.96 and has a p-value above 0.005. These results could be concluded that financial socialization agents do not significantly affect stock investment decisions in the millennial generation.
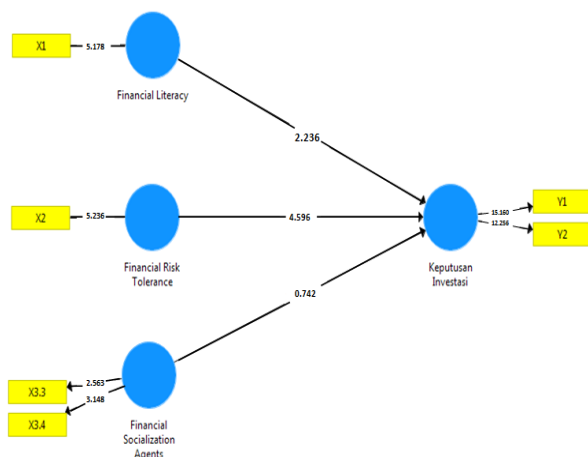

Figure 2. PLS Bootstrapping Results

Predictive Relevance Q-Square Analysis measures how well the model generates the observed value. The value of Q-Square above 0 indicates that the model has a predictive relevance value, while Q-Square lower 0 indicates that the model has less predictive relevance.

$$Q\text{-Square} = 1 - [(1 - r_1^2)]$$
$$= 1 - [(1 - 0.655)]$$
$$= 0.655$$

The Q^2 value based on the calculation for this research model is 0.655. This shows the large variety of research data shown by the research model is 65.5%. The remaining 34.5% is explained by other factors that are outside the research model.

5. Discussion

The results show that there was a significant influence between financial literacy and investment decisions. The coefficient path on the effect of financial literacy on investment decisions is 0.114 with a t-statistic value of 2.236, which is greater than the standard t-statistic of 1.96 and has a p-value below 0.05. Financial literacy can increase investors' information and knowledge about financial products, thereby making them more confident in making investment decisions. A person who has financial literacy can create effective use of financial products and services, thereby helping to manage his finances. The millennial generation needs to understand financial literacy well before making stock investment decisions. This needs to be done to get maximum profit and understand that stock investment instruments have price movements that have high volatility (up and down price movements). This study result supports previous studies that say that financial literacy affects a person's stock investment decisions. From the results of previous research conducted by Kalsum, Sarita, and Wawo (2018), someone who has high financial literacy skills can be better at making investment decisions. This is because improving financial understanding can make a person make good investment decisions (Aren & Zengin, 2016; Awais et al., 2016).

The results show that there was a significant influence between financial risk tolerance and investment decisions. The coefficient path on financial risk tolerance influence on investment decisions is 0.234 with a t-statistic value of 4.596, which is greater than the standard t-statistic of 1.96 and has a p-value below 0.05. Millennial brave enough to face risks will tend to make bolder decisions in investing in financial assets such as equity (stocks), compared to people who do not like risk or tend to avoid risk, who will make more investment decisions in real assets such as land, gold, and buildings. If the millennial generation does not have a sufficiently good financial risk tolerance, then they can also experience significant losses due to a lack of knowledge about ideal timing, yields, and strategies for investing in stocks. This study result support previous studies that state that financial risk tolerance affects stock investment decisions. The millennial who does not like risk or tends to avoid risk will also continue to invest, but the appropriate investment products for this type are cash products and money market mutual funds. From the research results of Putra, Ananingtiyas, Sari, Dewi, and Silvy (2016), the higher the level of risk tolerance that is owned by an individual, the investment decision made by someone will be more directed towards investment

instruments that have a higher risk, in this case on the stock.

The results show that there was no significant influence between financial socialization agents and investment decisions. The coefficient path on the effect of financial socialization agents on investment decisions is -0.047 with a t-statistic value of 0.742, which is smaller than the standard t-statistic of 1.96 and has a p-value above 0.05. This shows that someone who gets information from financial socialization agents does not necessarily influence the stock investment decisions that will be made. This is because the information provided is not necessarily applicable to all income categories. These study results are contrary to previous studies, which state that financial socialization agents influence investment decisions. From the results of data processing, the time range for investing in stocks between 6 months - 2 years makes respondents do not need to make too complicated decisions because the investment period can be classified into short-term investment. From the period of the stock investment, it can also be seen if the respondent only wants to take high investment returns in a fast time. The research conducted by Payne, Yorgason, and Dew (2014) shows that financial socialization agents do not influence investment decisions in stocks. This shows that financial socialization agents are not an influence for making an investment decision.

The results of this study are expected to be helpful, namely that they can be used as input and consideration for investors in understanding the importance of financial literacy, financial risk tolerance, financial socialization agents, and investment decisions on stock investment products for the millennial generation. The public must realize that before deciding to invest in stocks, they must first understand the important role of financial literacy and financial risk tolerance. This is because these two things are the main factors that can determine the success or failure of someone in investing in stocks. In achieving a good understanding of financial literacy and financial risk tolerance, the public is expected to read in-depth sources of information about the world of stocks, either through books or the internet.

Further research can consider financial socialization agents as a moderating variable to examine the effect of financial literacy and financial risk tolerance on investment decisions. They are making financial socialization agents as moderation, the financial literacy, and financial risk tolerance that the millennial generation has completely dependent on financial socialization agents. The more often financial socialization agents communicate with the millennial generation, the better the financial literacy and financial risk tolerance will be so that stock investment decisions are also better. The less often the financial socialization agents communicate with the millennial generation, the worse the financial literacy and financial risk tolerance will be and worse stock investment decisions. Previous research shows that financial socialization agents influence financial literacy, such as financial asset ownership, interest rate, and how to use credit card debts (Kim & Chatterjee, 2013). Previous research shows that financial socialization agents influence financial risk tolerance, such as understanding risks and anticipating risks that occur (Mohammed, 2017). Also, further research can consider personality factors such as extraversion and openness to experience as factors that can influence stock investment decisions.

6. Conclusions

Analysis of the influence of financial literacy, financial risk tolerance, and financial socialization agents on investment decisions is as follows: Financial literacy is proven to have a significant effect on investment decisions. Financial literacy can increase investors' information and knowledge about financial products, thereby making them more confident in making investment decisions. Financial risk tolerance is proven to have a significant effect on investment decisions. A brave enough person to face risks will tend to make bolder decisions in investing in financial assets such as equity (stocks) than in real assets (real assets) such as land, gold, and buildings. Financial socialization agents have no significant effect on investment decisions. The information provided by financial socialization agents is not necessarily applicable to all income categories.

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