Gender Diversity Towards Investment Decision For Retirement Preparation

Agus Zainul Arifin
Faculty of Economics, Tarumanagara University, Jakarta, Indonesia
agusz@fe.untar.ac.id

Abstract: The aim of this paper is to examine influence of the relationship between Financial Behavior on Investment decision that moderated Retirement variable of employees who live in DKI Jakarta area in 2018. This study approach is survey research by distributing questionnaires online and manually. Data analysis was carried out using path analysis, namely by testing the outer and inner models. Results indicate that Financial behavior affects Retirement planning and investment decisions. Second, Retirement preparation does not affect investment decisions. Third, Retirement planning is not a moderation variable of the relationship between financial behavior and investment decisions, both for male, female, and overall gender. Gender factor does not have different effect relationship between Financial Behavior on Investment decision and retirement preparation.

Keywords: Financial Behaviour, Investment Decision, Retirement, Gender.

INTRODUCTION

Income is used for consumption and savings. Consumption is used for current needs. Whereas savings is income that is set aside for future needs. Future needs include setting aside the funds to face retirement so that when the retirement period of life is guaranteed. So that when retirement life can be guaranteed, the funds must be invested in the selection of the right assets. The reason for choosing the right investment assets is because of the risk of investment failure. Investment decisions that are used for retirement planning need to be supported by financial planning for good retirement preparation and proper financial behavior.

The discourse that is being developed by the Indonesian Government on retirement allowance for a civil servant, i.e. change of plan of retirement payments. Heretofore retirement allowance is paid per month until he/she and their couple (husband or wife) pass away. This method will be changed by being paid all at once when he/she entered their retirement. There are positive or negative views on this discourse. Some people show their objection because they mostly feel that they cannot manage the money, and they worry that their income will decrease in their retirement. This is a reason when the life of retirement can be guaranteed, the funds must be invested in the right asset selection. Not everyone is capable of managing money for this matter.
Research in the USA shows that there is an increase of retired employees so that the amount of the retired people is higher than active employees. The increasing of this thing is caused by a lot of people who expect that they can get social security funds to take advantage of this matter for overcoming financial problems in retirement period in the future. Research shows that the individual does not save their money adequately for retirement period. It is because of the lack of retirement readiness by American, and the increasing of the retired people become more important for studying pension funds and investment (Lusardi 1999).

Asabri data reveals that 90 percent of Indonesian employees are not ready financially to enter retirement. Indonesian Financial Services Authority (Otoritas Jasa Keuangan or OJK) state that 93 percent of formal employees in Indonesia has no preparation when they enter retirement period (Anonymous, 2017a). OJK also states that until the end of 2016, only 27% of the total 50 million population in a productive age that join a pension fund program. An employee who joins the BPJS Ketenagakerjaan program (National Social Security Program) is 13 million people and those who join the Employee pension fund program are 4.3 million people (Anonymous, 2017b).

Retirement preparation is aim to diminish financial risk when entering retirement age. Good retirement preparation will motivate the person to make well-planning by making the right investment decisions. To make the right investment decisions, it is necessary to have a high-quality information so that retirement planning is able to make good and right decisions (Davis and Chen, 2014).

(Aiken, 2002) state that preparation, in addition, is a new chapter for the life of a certain person, because he/she does not work anymore, that means he/she has no income, however, financial needs remain. Hence, the individual must have considerable control i.e. having the ability to make many decisions on retirement. Retirement planning refers to a realistic expectation about retirement period and financial preparation levels and a better attitude.

Well-retirement preparation starts with good financial planning. From employees who made retirement planning until 2005, The result proves that 63% of them, give a positive impact in the form of needs that can be met after retirement period (Employee Benefits Research Institute, 2007). Theoretically, they will put aside the fund if their income is sufficient to meet the needs of daily life. In 2004, there were still around 45% of households not having retirement preparations due to insufficient income (Munnell et al., 2006).

Retirement that encourages individual to do Investment decision, relates to behavior in managing the income (behavioral finance). Individual awareness of the importance of making good investment decisions, but not supported by good financial behavior, then it will make wrong or harmful decisions (Davis and Chen, 2014).

(Shefrin, 2001) states that behavioral finance is a study that studies how psychological phenomena influence a person's financial behavior and is the science of combining psychology and economics that form a new behavior for decision making. In the case of making decisions to make pension funds, this is influenced by behavior. When people who have enough money are not necessarily going to do a pension fund program, whereas people who lack enough money can participate in a retirement planning program.
Based on the explanation in the background, hence can be concluded that *investment decision* is influenced by variables i.e. *retirement* and *financial behavior*. This research model is based on previous research, such as research that carried out by (Acland, 1976) and (Oppean, 2014) by using a *behavioral factor* as an independent variable and *financial decision* dependent variable. (Baq Fitirianti, 2017) used financial literature, financial behavior, and income as an independent variable, and investment decision as a dependent variable. (Clark, 2013) used *retirement savings* as an independent variable and *investment decision* as the dependent variable. (Mckenzie and Liensch, 2011) used retirement preparation as an independent variable and investment decision as the dependent variable. (Alquraan et al., 2016) used financial behavior factor and demographic as an independent variable, and investment decision in individual shares as the dependent variable. (Clark, 2013) used retirement savings as an independent variable and investment decision as the dependent variable. (Kragie et al., 1989) used gender factor which is associated with role division, position, and assignments between men and women that are determined and considered appropriate according to norms, customs, beliefs and habits of the community. This role division has a big influence on the culture of the society in Indonesia which is paternalistic.

According to the background and the results of previous researches that relate to the Financial Behavior and Retirement towards Investment Decision, this research model is to see influence of the relationship between Financial Behavior on Investment decision that moderated Retirement variable. This research will also see differences in gender factors in investment decisions. This novelty is, first, putting a Retirement Variable as a moderating variable from the relationship between Financial Behavior Variables and Investment Decision. Second, this model differentiates by gender. Another renewal of this research is the use of Smart PLS to process statistical data.

**THEORETICAL REVIEW**

The theoretical basis used is the *Theory of Reasoned Action (TRA)* proposed by Ajzen and Fishbein in 1975. TRA was later extended to *Theory of Planned Behavior (TPB)* by (Ajzen and Fishbein, 1985). TPB was developed because there are limitations in TRA in predicting someone's behavior (Ajzen, 1991).

*Theory Reasoned Action* states that one's intention to perform certain behaviors is influenced by two basic determinants, namely those related to attitude (*Attitude Toward Behavior*) and the influence of social norms (*Subjective Norms*). Attitudes are specific to something. Subjective norms relate to what he can and cannot do by social values. Attitude and subjective norms simultaneously form an intention to behave in a certain way (Ajzen, 1980).

*Theory Reasoned Action* relates to social-psychological issues. The theory connects between belief, attitude, will (*intention*), and behavior. Will is determined by subjective attitudes and norms. This attitude is the result of consideration of the advantages and disadvantages of the behavior (*outcome of behavior*), namely the considerations of the consequences that will occur to the individual (*evaluation regarding the outcome*). Subjective norm components refer to personal belief in what others think and are considered
important by the person (referent person) then motivate that person to follow the other person's mind in question (Ajzen, 1980).

TRA applies to behavior under individual control. In 1988, Ajzen developed the TRA by adding individual trust and individual perceptions of behavioral control. TPB is a development of TRA by adding perception of control over behavior. Behavioral control as a level of perception of behavioral control as a guideline for behavior in reflecting past experience as experience or anticipation of obstacles. There are three types of trust in theory planned behavioral, namely behavioral belief, normative belief, and control belief. Control belief is how the views of individual beliefs have done or have never done certain behaviors, individuals have the facilities and time to do these behaviors, and then estimate whether the individual has the ability or not to carry out certain behaviors (Ajzen and Fishbein, 1975).

Investment decisions related to life planning when entering retirement age are forms of awareness that arise from within yourself through social processes, educational processes, cultures that produce value acculturation in the form of awareness and actions to make investment decisions that aim to meet financial needs when entering retirement age. The purpose of rational investment decisions is a commitment to a number of funds or resources that are carried out today with the aim to gain profits in the future. The investment decision motive is return and risk (Lutfi, 2010). According to the Decision Theory, rational investors will make investment decisions with investment rationality with reasonable reasoning by selling and buying on asset portfolios (Alquraan, 2016)

Investment behavior decision is influenced by three factors, namely: (1) Financial Literacy is namely the basis for the formation of decisions to be taken appropriately. This decision relates to uncertainty market risk (Shadnan, 2016). (2) Financial Knowledge namely relates to financial knowledge through the education process and influencing effective investment decisions (Peterson, 2007). (3) Profitability is the end result of a number of policies and investment decisions in the form of profits or losses (Brigham and Gapenski, 2006)

The behavior of investment decisions can be measured by three indicators (Marsis, 2013). These three indicators are used by (Alquraan et al., 2016) and (Vuthalova, 2015) to measure investment decisions. The three indicators are: (1) The rate of return, namely the expected rate of return which is compensation for opportunity costs and the risk of decreasing purchasing power. (2) Risk level, namely the risk of possible return that will be obtained. The higher the risk, the greater the expected return on investment. (3) Investment period, which is the desired time of an investment. The longer the time needed, the greater the risk, the greater the expected return.

(Aiken, 2002) states that retirement is a stage of life that not only marks a new beginning, but an individual has considerable control, namely having the ability to make many decisions about retirement. Retirement planning leads to realistic expectations about retirement and a level of financial preparation and a better attitude. (Glass and Fylnn, 2000) define that retirement planning is very useful to reduce anxiety and fear about changes at retirement that will be faced. So the investment decision intended for retirement preparation is a long-term investment decision.
(Shonhadji, 2012) states that there are four factors that influence retirement readiness, namely: (1) Competence, namely the behavior of a person's skill and ability to do work and carry out their duties according to their position. Someone who has the competence means being able to achieve the desired results for the performance given in the work. Competence concerns beliefs about humans and their behavior that must be in accordance with the norms and rules that apply (Logemann, 1955). (2) Skills, namely the ability of a person to operate a job more easily and precisely. Skills lead to activities that have psychomotor properties to use reason or ideas in doing and making things creatively and becoming more meaningful and producing value from the results of their work (Gordon, 1994). (3) Work Experience, namely the process of forming knowledge or skills about a work method because of the employee's involvement in carrying out the work (Manulang, 1984). (4) Educational Background. Education is a very important human need because it has a role to prepare a quality workforce and form the characteristics, mentality, knowledge in developing the potential skills and insights that have been taken during the education process (Syah, 2004).

(Cooksey, 1996) measures retirement preparation using six indicators, namely: (1) Age, as a measure of one's maturity or adult level (Kitty and Behling, 1985). (2) Gender, associated with the division of roles, positions, and duties between men and women that are determined and deemed appropriate according to the norms, customs, beliefs and habits of the community (Kragie et al., 1989). (3) Marital Status, namely, a relationship that describes a person's relationship with another significant person such as single, married, divorced, widowed or widowed (Lusardi, 1999). (4) Presence of dependent. This relates to the level of dependence of children with information on the presence or absence of children (Talaga and Beehr, 1995). (5) Income, namely, the amount of money received after deducting expenditure which is also called income from profits (Richardson and Kilty, 1989). (6) Health. The level of health influences decisions in retirement planning such as early insurance which is expected to benefit in the future. The category in health is whether there are health problems in an individual such as serious illness, some health problems, no health problems and very healthy (Beehr et al., 2000).

Investment decisions for retirement preparation is not only the existence of individual rational behavior but also related to irrational behavior. Individual ability does not mean he will make an investment decision because it must be supported by a strong awareness to set aside the income in retirement preparation. (Shefrin, 2001) states that financial behavior is a study that studies how psychological phenomena affect a person's financial behavior. Where behavioral finance is the science of combining psychology and economics that forms a new behavior for decision making.

(Hilgert et al., 2003) states that financial behavior of person will be seen from how well a person manages his savings and expenses. (Arkelof and Shiller, 2009) explain the behavior of investors by using the Keynes theory, the volatility of market profits and expand on animal spirit as a spontaneous impulse to act rather than inaction which was developed by Keynes in 1936. The extension of Keynes's definition of animal spirit refers to investor irrational behavior which includes optimism, pessimism and spontaneous reactions as anxiety and inconsistency in the current economy.
(Dhaoui, 2011) has shown in his study that economics is a behavior that is driven by an *animal spirit* which considers that volatility or price changes that indicate market fluctuations in a certain period that are excessive occur due to the existence of optimistic, pessimistic and spontaneous investors. (Horne and Wachowicz, 2002) state that the determination, acquisition, allocation, and utilization of financial resources as behaviors that determine financial management. (Joo and Grable, 2004) state that financial behavior can be explained by several factors. The first factor is the individual's own behavior and the attitude of the individual to his finances. And the second factor is someone's attitude and behavior in the financial sector.

Investor behavior can be explained using five theoretical approaches, namely:

**Regret Theory.** This theory is related to the reaction of one's experience after realizing they have made a mistake in the assessment. Circumstances that are faced for example by selling shares, investors become emotionally influenced by prices when buying shares. Doing a way to avoid regret by not selling shares because it has made a bad investment and is embarrassed when reporting losses (Fogel dan Berry, 2006).

**Theory of Mental Accounting.** The theory states that humans have a tendency to put certain events into return to that time for the effects that have been produced. This theory is illustrated by the previous situation where stock prices have jumped sharply with large profits and now these benefits cannot be as high as in the past. Where there is a feeling of hesitation in reselling shares because there is a behavior waiting for the return of a favorable period (Thaler, 2001).

**Loss Aversion Theory.** The theory shows that each individual expresses a different level of emotion towards the advantages of the direction of loss. Individuals are more emphasized by potential loss than feeling happy from the same benefits (Kahneman dan Tversky, 1979).

**Over/Under Reacting Theory.** The theory states that investors are optimistic when market prices rise and become pessimistic when market prices fall. The consequence of anchoring is placing a lot of attention on new facts or events rather than historical data (Hong da Stein, 1999).

**Theory Of Overconfidence.** The theory shows that people generally judge themselves by their abilities and exaggerate their knowledge to others. Many investors believe that they can consistently market time when going up or down but in reality there are those who prove the opposite (Tapia dan Termo, 2007).

(Ritter, 2003) states that financial behavior is influenced by five factors, namely: (1) Heuristic is a standard rule made to simplify decision making because of many choices. The shortcut method is done to facilitate or speed up the final decision process with a random process. (2) Overconfidence, which is a feeling of excessive self-confidence. Overconfidence cause investors to be overestimate or underestimate. Overestimate is to overestimate something based on knowledge. Underestimate is ignoring risk because it feels
that its knowledge is enough to control something (Ritter, 2003). (3) Framing, namely the ability to manipulate risk tendencies towards decision making. (Belsky and Gilovich, 1999) state that decision-makers are often very confident in looking at their own abilities in completing a difficult task successfully (overconfidence). Self-confidence that is too high is tantamount to an ego trapping. (4) Relation (Representativeness). That is, investors tend to underestimate the long-term average and give more attention to the short term because investors tend to overreact in the short term. (5) Conservative (Conservatism), namely the behavior of investors who are too slow about the development of what has happened and become underreact because it is contrary to representativeness (Bodie et al., 2009).

(Wood and Zaichkowsky, 2004) measure financial behavior with five indicators: (1) Attitudes toward risk, namely attitude that shows the attitude which is received by the investor he/she will face when making a decision. (2) Confidence. This is related to the level of confidence of an investor that influences his behavior in investing. (3) Personalization of losses, namely the attitude of investor behavior to the risks that will be faced in the loss of investment. (4) Investment horizon, which is related to investor behavior in taking investment types that are seen from the period of investment. (5) Control is the control or control of decisions in life, especially investment decisions that are the behavior of the investment itself.

(Xiao and Dew, 2011) measured financial behavior of person with using five indicators, namely: (1) Consumption is behavior that organize individual expenses on the income. (2) Cash Flow Management is a statement that shows statement that shows how a person's behavior or actions respond to cash flow activities. (3) Savings and Investment, namely how a person’s behavior in n an effort to allocate funds to make savings or invest in investment. (4) Insurance, namely allocation on current individual funding for future needs with the aim of being able to provide benefits in the future.

Wood dan Zaichkowsky (2004) states that financial behavior can be measured by five indicators, namely: (1) Attitude to risk. The attitude that shows the attitude that is accepted for the investor that he will face when making decisions. (2) Self Confidence. Related to the level of confidence of an investor who influences his behavior in investing. (3) Personalization of losses. The attitude of investor behavior towards the risks it will face in investing losses. (4) Time horizon for investing. This is related to investor behavior in taking the type of investment seen from the investment period. (5) Control. Control or control of decisions in life, especially investment decisions that become the behavior of the investment itself.

(Aiken, 2002) states that retirement is a stage of life that not only marks a new beginning, but an individual has considerable control, namely having the ability to make many decisions about retirement. Retirement planning leads to realistic expectations about retirement and a level of financial preparation and a better attitude. (Davis and Chen, 2014) stated that when a person pays attention to his / her present life for the future, the individual will make a decision to invest early, which is expected to meet the retirement needs of investment products that are in line with what he/she planned.
Cooksey (1996) explain about measuring retirement preparation using six parameters: (1) Age. Age is a measure of one's maturity or adult level. Older people usually have a higher level of readiness than younger ones (Kitty dan Behling, 1985). (2) Gender. Division of roles, positions and duties between men and women that are determined and deemed appropriate according to the norms, customs, beliefs, and habits of the community (Kragie et al, 1989). (3) Marital Status. Relationships that describe a person's relationship with other significant people such as single, married, divorced, widowed (Lusardi, 1999). (4) Presence of dependent. This is related to the level of dependence of children with information on the presence or absence of children (Talaga dan Beehr, 1995). (5) Income. The amount of money received after deducting expenses is also called income from profits (Richardson dan Kilty, 1989). (7) Health. The level of health influences decisions in retirement planning such as early insurance which is expected to provide benefits in the future. Categories in health are whether there are individual health problems such as serious illness, some health problems, no health problems and very healthy (Beehr et al., 2000).

(Duflo, 2002) conducted research on retirement preparation with investment decisions. The results of this study state that there is a significant influence between retirement preparation and investment decisions. (Clark, 2013) conducted research on retirement savings towards investment decisions. The results of this study state that there is a significant influence between retirement savings and investment decisions. (Mckenzie, 2011) conducts research on the effect of retirement preparation on investment decision making. The results of this study state that there is a significant influence between retirement preparation plans and investment decision making.

**Hypothesis 1: Retirement preparation affects investment decisions**

(Nofsinger, 2001) defines that financial behavior studies how humans actually behave in determining their finances. Determination of person's finances can be seen in terms of behavior in his life that is accustomed to a frugal lifestyle or spree in using money on the person's living habits. Individuals who have a thrifty lifestyle will set aside their income for long-term needs. (Sumtoro and Anastasia, 2015) stated that investors tend to have good behavior which will be shown by profitable investment decisions, but have bad behavior when making wrong decisions or harm.

(Oprean, 2014) conducted a behavioral factor research on human financial decisions which included confidence, optimism, pessimism, and rational measured by using regression. The results of the study stated that there was an insignificant relationship between behavioral factors and investment decisions in the Romanian capital market and in the Brazilian capital market. (Acland, 1976) conducts research on the influence of behavioral indicators on investor decisions. The sample used was 500 respondents. The results of this study state that there is an insignificant relationship between behavioral indicators and investor decisions.

(Davis and Chen, 2014) conducted a study on the effect of age differences on pension demographic predictors on investment decisions. The sample used was 64 adults who were working. The results of this study state that there is a significant influence between
demographic factors and investment decisions. (Baiq Fitriarianti, 2017) conducts research on the effects of financial literacy, financial behavior and income in making investment decisions. The research is a quantitative research with descriptive method. The sample used was 100 students and the data was processed with SPSS version 2.2. The results of this study state that there is a significant influence between financial behavior and income with investment decision making.

(Kragie et al., 1989) using gender factors is associated with the division of roles, positions and duties between men and women that are determined and deemed appropriate according to the norms, customs, beliefs, and habits of the community. (Alquraan et al., 2016) investigated the influence of investor behavior and demographic factors on investment decisions. The object of research is individual investors in the Saudi Stock Market. The results of this study state that there is a significant relationship between investor behavior and investment decisions and there is no significant influence between demographic factors and investment decisions. (Duflo and Saez, 2002), (Mckenzie and Liersch, 2011), and (Clark Murphy, 2013) find evidence of the effect of retirement preparation on investment decisions.

Hypothesis 2: Financial behavior affects investment decisions

This research model also explains logically, that individuals have retirement preparation, not only influenced by rational factors but also influenced by irrational factors. The preparation behavior of the company is also related to social, cultural, lifestyle and belief factors. So financial behavior affects retirement preparation

Hypothesis 3: Financial behavior affects retirement preparation

Based on theoretical studies and relevant research results that build hypotheses 1, 2 and 3, hypothesis 4 is built.

Hypothesis 4: Retirement preparation moderates the relationship between financial behavior and investment decisions

(Kragie et al., 1989) differentiate gender factors in retirement preparation. Gender factors are associated with the division of roles, positions, and duties between men and women that are determined and deemed appropriate according to the norms, customs, beliefs and habits of the community. Investment decisions also relate to individual attitudes in the face of risk. Men and women have different attitudes towards risk. Therefore the 5th hypothesis is built.

Hypothesis 5: Gender factors have different attitudes in retirement preparation and investment decisions.
METHODOLOGY

Subjects in this study are employees who live in DKI Jakarta in 2018. The object in this study is a Financial Behavior Investment Decision with Retirement as moderation. This relationship model will see based on gender factors.

The samples used are employees (both private and government employees), professionals, entrepreneurs who live in the DKI Jakarta area in 2018. The sampling method used is nonprobability sampling. Data was obtained by distributing questionnaires online and manually. Data analysis was carried out using path analysis, namely by testing the outer and inner models. To analyze the data, Smart PLS Version 3.0 software is used. Indicators are measured using a Likert scale with a scale of 1-5.

The data used in this study is primary data by distributing questionnaires. Questionnaires are distributed directly through online media, namely through google chrome, WhatsApp, line, and questionnaires. Respondents were selected based on the introduction and chain of distribution through previous respondents. Respondents were asked to fill in all questions in the questionnaire distributed.

The sampling method used is purposive sampling. The criteria for respondents are those who work in the Jakarta area with the following criteria: (1) Employees who have fixed income per month (both private and government employees), and (2) Professional.

The statistical test used is to test the outer model and inner model. Outer test to examine validity and reliability. The outer model is assessed by seeing convergent and discriminant validity or the magnitude of the loading factor for each construct. In this study will use a loading factor limit of 0.50. Instrument reliability testing is done using the Composite Reliability value where the value must be > 0.70. (Hair et al, 2011). Inner model test is done by looking at the coefficient of determination (R-square), Goodness of Fit Index (GFI), and t-test.

Statistical Hypothesis Test. This research was conducted to see the effect of Financial Behavior on Investment Decision which is moderated by Retirement. Research also wants to know about gender differences. The research model is presented in Figure 1.

Figure 1. Research Model
**Outer Model Test.** Test the outer model to test validity and reliability. The test is conducted by distinguishing by gender, male, female, and total sample. Indicator of each variable consists of, Financial Behavior Variables using six indicators (Fb1-FB6), the Retirement Variable uses Nine indicators (R1-R9), and the Investment Decision Variable uses four indicators (ID1-ID4).

Validity test for women's gender is carried out in two stages. Valid indicators for Retirement are R7, R8, and R9. Valid Investment Decision variables are ID1, ID2, and ID3. For the Financial Behavior variable, all indicators are valid. For Gender Men, three validity tests are conducted. Valid indicators for Retirement are R3, R7, and R8. Investment Decision variables and Financial Behavior variables for all indicators are valid. For all samples (combined gender balance), the validity test was carried out in two stages. Valid indicators for Retirement are R3, R7, R8, and R9. Investment Decision variables and Financial Behavior variables for all indicators are valid.

Test Reliability based on gender and combined using Composite Reliability. The results of this test obtained the smallest composite reliability value on female gender that is 0.77, this value is higher than 0.7 (Hair et al., 2014) so that all variables based on gender and the combination of gender are declared reliable (Table 1).

<table>
<thead>
<tr>
<th>Gender</th>
<th>Cronbach's Alpha</th>
<th>rho_A</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINANCIAL BEHAVIOUR</td>
<td>0.829</td>
<td>0.831</td>
<td>0.876</td>
</tr>
<tr>
<td>INVESTMENT DECISION</td>
<td>0.66</td>
<td>0.811</td>
<td>0.784</td>
</tr>
<tr>
<td>RETIREMENT</td>
<td>0.646</td>
<td>0.712</td>
<td>0.781</td>
</tr>
</tbody>
</table>

(Source: Output PLS)

**Inner Model Test.** Inner Model test dilakukan untuk menguji model dan hipotetis penelitian. Uji model dilakukan dengan mengukur Goodness of Fit dengan menggunakan NFI. Nilai NFI berkisar 0 sampai dengan 1 (Hair et. Al, 2011). Nilai NFI didasarkan pada klasifikasi gender disajikan pada Table 2. Hasilnya model dinyatakan fit.

**Table 2. Goodness of Fit Test**

<table>
<thead>
<tr>
<th>Gender</th>
<th>NFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woman</td>
<td>0.599</td>
</tr>
<tr>
<td>Man</td>
<td>0.767</td>
</tr>
<tr>
<td>Combine</td>
<td>0.738</td>
</tr>
</tbody>
</table>

(Source: Output PLS)
Research hypothesis testing is conducted by seeing p-value. The hypothesis is accepted if the p-value is <0.05 (Hair et al., 2014). Hypothesis test results are presented in Table 3. Table 3 shows that Financial Behavior (FB) has a significant positive effect on Investment Decision (ID) and Retirement (R). The Retirement (R) does not affect Investment Decision (ID). Retirement (R) is also not a variable mediating the relationship between Financial Behavior (FB) and Investment Decision (ID). This relationship is the same according to gender classifications (Men and Women) and a combination of gender.

Table 3. Statistical Hypothesis Tests According to Gender and Combined

| Gender       | Original Sample (O) | T Statistics (|O/STDEV|) | P Values |
|--------------|---------------------|----------------|----------|
| **Woman**    |                     |                |          |
| FB → ID      | 0.177               | 2.106          | 0.036    |
| FB → R       | 0.431               | 6.135          | 0        |
| R → ID       | 0.001               | 0.007          | 0.995    |
| FB → R → ID  | 0                   | 0.007          | 0.995    |
| **Man**      |                     |                |          |
| FB → ID      | 0.584               | 11.722         | 0        |
| FB → R       | 0.2                 | 2.083          | 0.038    |
| R → ID       | -0.061              | 0.52           | 0.603    |
| FB → R → ID  | -0.036              | 0.516          | 0.606    |
| **Combined Gender** |               |                |          |
| FB → ID      | 0.17                | 3.077          | 0.002    |
| FB → R       | 0.505               | 11.606         | 0        |
| R → ID       | -0.021              | 0.285          | 0.776    |
| FB → R → ID  | -0.011              | 0.285          | 0.776    |

(Source: Output PLS)

**DISCUSSION**

The dominant factor is the variable Financial Behavior, both based on gender and a combination of gender, namely the FB2 indicator (I try to save regularly). So increasing the behavior of investment decisions is done by saving awareness. In addition, planning retirement preparation because of increased awareness of saving.

The results show that there is a positive influence between the Financial Behavior on Investment Decision so that it can be concluded that a person's financial behavior can influence the investment decisions that will be taken by that person. The dominant indicator of Financial Behavior is the habit of saving. Thus to increase investment decisions to provide better results is done through getting used to saving. This saving habit can be taught from the age of children.
(Shefrin, 2001) states that financial behavior is a study that studies how psychological phenomena affect a person’s financial behavior. Where behavioral finance is the science of combining psychology and economics that forms new behaviors for decision making. Before making an investment, usually investors will conduct various analyzes as a material consideration in making investment decisions, for example studying financial statements and evaluating company performance, but in addition to various analyzes, investment decisions usually get more influence from psychological factors such as emotions, individual traits, and preferences. These psychological phenomena can be categorized as financial behavior so that it can be concluded that an individual's investment decisions are strongly influenced by individual financial behavior. The results of this study are in line with previous research conducted by (Sumtoro and Anastasia, 2015) which states that financial behavior will influence investors' investment decisions.

Financial behavior has a positive effect on retirement plans. This finding proves that financial behavior is able to instill awareness of the importance of preparing and composing a better retirement plan. The factor of habitual saving becomes the dominant factor that can encourage individuals to make better retirement plans.

Retirement preparation does not affect investment decisions. This can be caused by the preparation of retirement of employees more relying on social fund programs, such as pension systems for civil servants and BPJS ketenagakerjaan programs. The outsourcing system of employees also influences the behavior of individuals in preparing retirement. This is because this system creates uncertainty for workers towards the income that will be received in the future. In addition, this system also causes the income of workers to be reduced, because as their income is deducted by the outsourcing agency. As a result retirement plans is carried out by employees, not because of the awareness of individual employees, but merely a minimum preparation through the compulsory labor program. To make retirement plans, the income earned by employees is more spent on short-term needs, and there is even a possibility that the income is not sufficient for a reasonable life.

CONCLUSION

Based on the background of the problem, theoretical studies, and the results of data analysis, it can be concluded several things, namely: (1) Financial behavior affects Retirement planning and investment decisions, both for male, female, and overall gender. (2) Retirement preparation does not affect investment decisions, both for male, female and overall gender. (3) Retirement planning is not a moderation variable of the relationship between financial behavior and investment decisions, both for male, female, and overall gender.

REFERENCES


Tapia, W and Termo. 2007. Implications of behavioural economics for mandatory individual account pension system. Working papers on insurance and private pensions no 11.


