Analysis of Factors Influencing Investment Decision

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Abstract

Gold presents as important role in an investor's portfolio because it provides stability of returns and favorable opportunity to improve investor wealth. Investment decision making depend on intrinsic factor investor behavior. Therefore, this study aims to investigate the impact of behavioral finance toward investment decision in gold instrument. Anchoring, availability bias, information asymmetry, representative bias, and risk aversion are chosen as behavioral finance factors. This study is conducted in Batam City Indonesia with 143 respondents and analysed using multiple linear regression analysis. Findings reveal behavioral factors such as information asymmetry and availability bias have significant impact on investment decision. However, the other independent variables do not have significant impact on investment decision.

Keywords: heuristics; information asymmetry; risk aversion; investment decision.

INTRODUCTION

Issues of behavioral finance has been developing since last decades. Behavioral finance merges theories from the area of classic economics, finance, and psychology. Behavioral finance tries to explain abnormal events in actual market and to explain what traditional finance theories are unable to explain before, since traditional finance theories are often based on the assumptions in an efficient market.

Modern finance suggests behavioral finance controlled the market behavior. Behavioral finance tries to investigate psychological and sociological issues that affect the investment decision and investment strategies. Investment decision making depends on intrinsic factor investor behavior (Sattar, Toseef, & Sattar, 2020). When making investment decisions, investors can be biased. Rational investors are very aware of optimized decisions should be part of their decision making (Ikram, 2016).

Investment is a planned method for saving safely on different assets or portfolio to get better return. The quality of an investment involves return. Gold presents as important role in an investor's portfolio because it provides stability for returns and favorable opportunity to improve investor wealth. Gold also as a way of risk diversification (Lahoti, 2017). Gold reflects as the best investment to secure money during stock market downturn (Saeed, Riaz, Lodhi, Munir, & Iqbal, 2014).

Many financial advisors all over the world now bring out about gold as an investment product (Singh & Joshi, 2019). The study of Robiyanto, Hadiyatno, Sudjinan, & Ernayani (2019) about gold and capital market investment revealed gold could function as hedging and diversification for the sharia stocks. Investor and fund manager are suggested to include gold instrument when forming portfolios.

Several studies show that heuristics behavior indeed have significant impact on investment decision. Ikram (2016) revealed representative bias and
availability bias have influence toward investment decision. The results also consistent with Rasheed, Rafique, Zahid, and Akhtar (2018). Sattar et al. (2020) on its study revealed behavioral biases have significant impact on investment decision. Anchoring, availability bias, and representative bias have significantly influence investment decision. Istrate (2018) expressed accounting information plays important factor on investment decision and existence of asymmetric information will lead investors to imitate the behavior of those who got essential information. Farooq and Sajid (2015) revealed risk aversion also have impact on investment decision. Ikram (2016) stated investors become risk averse when returns are above the target level and strongly related with prior loss and gain.

Therefore, the main objective of this study is to explore the behavioral finance influencing the investment decision especially in gold instrument. Hence, most of the studies were focused on stocks investment decision. This study will provide contribution in theoretical and practical implication of behavioral finance factors impact on gold investment decisions.

LITERATURE REVIEW

Anchoring

Anchoring defines as judgments of investors that based on the initial information and the decision anchored on some previous information. Anchoring can help investors to confirm investment decisions and can clear doubts about understanding why markets do not behave as planned or desired (Zahera & Bansal, 2018). Anchoring affects the investment decisions of individual investors according on heuristic theory and prospect theory, investor’s decisions influenced by heuristics to avoid the risk of loss in uncertain situations but it leads to errors in judgment; as the outcome, investors make illogical decisions, which can bring markets to overreact or under-react in both situations and markets becomes inefficient (Ahmad, Shah, & Mahmood, 2018). These results are consistent with Pandey and Jessica (2018), Abdin, Farooq, Sultana, and Farooq (2017), and (Farooq & Sajid, 2015). Therefore:

$H_1$: Anchoring has significant positive effect on investment decision.

Availability Bias

Availability bias can be observed when investors prefer to invest in local companies where investors are familiar or where information about the assets can be easily be obtained. Investors would rather invest an instrument that have more information provided than do a complete analysis. Availability bias has influence on investment decision (Rasheed et al., 2018). Ahmad et al. (2018), Bakar and Yi (2016), and Ikram (2016) revealed the similar result like above. Therefore:

$H_2$: Availability bias has significant positive effect on investment decision.

Information Asymmetry

Information asymmetry can be defined as condition which one party has more or better information than the other party (Bergh, Ketchen, Orlandi, Heugens, & Boyd, 2019). However, information asymmetry can generate abnormal gains for certain party who has more information (Istrate, 2018). Information asymmetry is builded when the information is not distributed to all investors in the market sufficiently. Information asymmetry has existed in the market for a long time and influence investment decision, informed investors may take benefit to earn excess profits (Park & Chai, 2020). Therefore:

$H_3$: Information asymmetry has significant positive effect on investment decision.

Representative Bias

Representative bias can be observed when an investor to generalize about an object based on only a few attributes. It leads investor to make illogical decisions by counting on the basic of investment
characteristics (Rasheed et al., 2018). Irshad, Badshah, and Hakam (2016) concluded representative bias has has influence on investment decision. Investors are overreacted to invest in instrument with high abnormal returns in near past. This study also consistent with Ahmad et al. (2018) and Ikram (2016). Investors are often to use past performance as future indicator to decide their investments (Abdin et al., 2017). Therefore:

$H_0$: Representative bias has significant positive effect on investment decision.

**Risk Aversion**

Risk aversion can be described as investor preference for a certain return over a probability with same or better returns. Investment decision making becomes crucial for investors and their decision making will be affected along with increasing of risk aversion (Farooq & Sajid, 2015). Financial markets lean to respond to changes in investor risk aversion (De Silva & Lasantha, 2019). Same results expressed by Qureshi (2012) that risk aversion has crucial effect and positive relationship on investment decision. Therefore:

$H_0$: Risk aversion has significant positive effect on investment decision.

**RESEARCH METHODS**

The population of this study was investors in gold instrument at Batam City Indonesia. Data collection was using questionnaire instrument and a total of 143 questionnaires were collected in the period January 2019 to March 2019. Sampling used a ratio of 1:5 (Hair, Babin, Anderson, & Black, 2014), the total required sample of 26 questions is 130 respondents. Each variable applied Likert scale from 1 to 5. Hypotheses tested using multiple linear regression analysis by SPSS 21.

Dependent variable on this study is investment decision (ID), it adapted 5 items from Rasheed et al. (2018). Independent variables used in this study are anchoring (AN), availability bias (AB), information asymmetry (IA), representative bias (RB), and risk aversion (RA). Anchoring used 4 scale items adapted from Achieng and Nairobi (2015). Availability bias and representative bias used 5 scale items developed by Zahera and Bansal (2018). Information asymmetry adapted from Islamoğlu, Apan, and Ayvali (2015) with 5 scale items. Risk aversion used 2 scale items developed by Sarwar and Afaf (2016).

**RESULTS AND DISCUSSIONS**

Distribution of demography of this study is arranged in table below:

| Table 1. Demographic Distribution |
|-----------------------------------|
| **Description** | **Amount** | **%** |
| **Gender** | | |
| Male | 84 | 58.7 |
| Female | 59 | 41.3 |
| **Age** | | |
| Less than 20 | 13 | 9.1 |
| 21 to 30 | 119 | 83.2 |
| 31 to 40 | 9 | 6.3 |
| 41 to 50 | 1 | 0.7 |
| 50 & above | 1 | 0.7 |
| **Education** | | |
| High school | 76 | 53.1 |
| Diploma | 8 | 5.6 |
| Bachelor | 54 | 37.8 |
| Master | 5 | 3.5 |
| **Occupation** | | |
| Self-employed | 22 | 15.4 |
| Public sector | 6 | 4.2 |
| Private sector | 71 | 49.6 |
| Other | 44 | 30.8 |
| **Monthly income (in million Rupiah)** | | |
| Less than 3 | 32 | 22.3 |
| 3 to 5 | 66 | 46.2 |
| 5 to 7 | 27 | 18.9 |
| 7-10 | 9 | 6.3 |
| More than 10 | 9 | 6.3 |

The database was analysed and detected 2 outliers and it has been eliminated before testing hypotheses. Each item is valid if loading factor above 0.50 and reliable if Cronbach’s Alpha is above 0.60 according to Ghozali (2013). Validity and reliability test are shown below:
Table 2. Validity and Reliability Test

| Indicator | Loading Factor | Cronbach’s Alpha |
|-----------|----------------|------------------|
| ID1       | 0.786          |                  |
| ID2       | 0.754          |                  |
| ID3       | 0.829          | 0.842            |
| ID4       | 0.746          |                  |
| ID5       | 0.800          |                  |
| AN1       | 0.621          |                  |
| AN2       | 0.743          | 0.713            |
| AN3       | 0.761          |                  |
| AN4       | 0.800          |                  |
| AB1       | 0.620          |                  |
| AB2       | 0.610          |                  |
| AB3       | 0.824          | 0.763            |
| AB4       | 0.701          |                  |
| AB5       | 0.812          |                  |
| IA1       | 0.704          |                  |
| IA2       | 0.698          |                  |
| IA3       | 0.601          | 0.748            |
| IA4       | 0.696          |                  |
| IA5       | 0.831          |                  |
| RB1       | 0.769          |                  |
| RB2       | 0.818          |                  |
| RB3       | 0.662          | 0.814            |
| RB4       | 0.805          |                  |
| RB5       | 0.754          |                  |
| RA1       | 0.864          | 0.656            |
| RA2       | 0.864          |                  |

Examination of normality, multicollinearity, and heteroscedasticity were performed and can be concluded all the tests have not violated multiple regression assumptions.

Table 3. Normality Test

| Kolmogorov-Smirnov | Asymp. Sig. (2-tailed) |
|--------------------|------------------------|
|                    | 0.087                  |

Table 4. Multicollinearity Test

| Variable                  | VIF |
|---------------------------|-----|
| Anchoring                 | 1.553|
| Availability Bias         | 2.010|
| Information Asymmetry     | 1.368|
| Representative Bias       | 1.776|
| Risk Aversion             | 1.580|

Figure 1. Heteroscedasticity Test

F test reveals significant effect of all independent variables on investment decision and shown below:

Table 5. F Test

| Model   | F      | Sig.  |
|---------|--------|-------|
| Regression | 34,332 | 0.000 |

Hypotheses results reveals that only availability bias and information asymmetry are significant positive on investment decision and the other independent variables do not have significant impact on investment decision. Results are shown below:

Table 6. Hypotheses results

| Variabel       | Coefficient | Sig.  |
|----------------|-------------|-------|
| Anchoring      | 0.142       | 0.155 |
| Availability Bias | 0.339     | 0.000 |
| Information    | 0.614       | 0.000 |
| Asymmetry      | -0.050      | 0.583 |
| Representative Bias | -0.421  | 0.687 |
Risk Aversion  -0.203  0.300

**H1: Anchoring has significant positive effect on investment decision.**

Based on results, anchoring with coefficient of 0.142 and a significance value of 0.155. This shows that anchoring has no significant effect on investment decision, thus H1 is rejected. This result is consistent with Zaiane (2015). It can be concluded that investors do not make investment decisions based on the first information that is anchored in investors’ minds.

**H2: Availability bias has significant positive effect on investment decision.**

This study finds that the availability bias has positive and significant effect on investment decision so that H2 is accepted. The results of this study show the same results as the results of Rasheed et al. (2018), Ikram (2016), and Ahmad et al. (2018). Availability bias can be monitor when investors prefer to invest in familiar investment towards investment decisions because gold investment in Indonesia is only available on certain platforms such as pawnshops and gold brand that are available only Antam and UBS.

**H3: Information asymmetry has significant positive effect on investment decision.**

The finding also indicates that information asymmetry has a positive influence on investment decision thus H3 is accepted. The results of this study show the same results from Istrate (2018) and Park and Chai (2020). It can be concluded that investors can obtain accurate confidential information about the development of gold investment so that investors can make profitable investment choices.

**H4: Representative bias has significant positive effect on investment decision.**

Based on the finding of this study, representative bias variable has no significant effect on the investment decision, thus H4 is rejected. The results of this study show results that consistent with Ahmad et al. (2018). Investors do not make investment decisions from the general characteristics of gold investments because gold investment in Indonesia is often considered a hedge or diversification (Robiyanto et al., 2019).

**H5: Risk aversion has significant positive effect on investment decision.**

Risk aversion has not significantly influence toward investment decision, therefore H5 is rejected. This finding consistent with Lambert, Bessière, & N’Goala (2012). It can be concluded that investors perceive gold instruments as diversified so that the willingness to accept uncertain profits or losses is greater.

The results of this study prove that 54.30% of all independent variables are able explain investment decision and remaining percentage is explained by other variables. Value of adjusted R square is shown below:

| R    | R Square | Adj. R Square |
|------|----------|---------------|
| 0.748| 0.560    | 0.543         |

**CONCLUSIONS**

This study aims to investigate effect of behavioral finance on investment decision in gold instrument. Anchoring, availability bias, information asymmetry, representative bias, and risk aversion are chosen as factors of behavioral finance. Findings reveal behavioral such as information asymmetry and availability bias have significant impact on investment decision. The other
independent variables do not have significant impact on investment decision. However, this study has several limitations. First, this study only applied in Batam City therefore it has limited geography. Secondly, adjusted R square shows there is 55.70% percentage that other independent variables can be used as gauges for investing in gold instrument. Future studies are suggested to expand the sample of population. Next studies may conclude other variables that could affect investment decision such as personality traits. It can also try to research investment decision on cryptocurrencies that still hard to find in Indonesia context.

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