.-...

THE EFFECT OF MENTAL ACCOUNTING ON STUDENT'S INVESTMENT DECISIONS: A STUDY AT INVESTMENT GALLERY (GI) FEB UNIVERSITY OF BENGKULU AND SYARIAH INVESTMENT GALLERY (GIS) FEB IAIN BENGKULU

[1]Fitri Santi, [2]Nelsi Valetta Sahara, [3]Kamaludin
[1.2.3] Fakultas Ekonomi dan Bisnis Universitas Bengkulu
[1.2.3] Jl. Wr. Supratman, Kandang Limun, Muara Bangka Hulu,Bengkulu
[1]Fitri_santi@unib.ac.id, [2]nelsivaletta23@gmail.com, [3]kamaludin@unib.ac.id

Abstrak

Penelitian ini mencoba untuk mengeksplorasi fenomena keberadaan akuntansi mental (MA) antara investor di Galeri Investasi FEB Universitas Bengkulu dan investor di Galeri Investasi Syariah FEB IAIN Bengkulu, dan untuk menguji pengaruhnya terhadap keputusan investasi saham. Kami mengumpulkan data menggunakan kuesioner. Penelitian ini menggunakan analisis regresi linier sederhana untuk menguji hipotesis. Hasilnya menunjukkan bahwa investor memang memiliki MA. Rata-rata jawaban responden menunjukkan bahwa mereka memperlakukan uang bulanan dengan uang bonus berbeda dalam berinvestasi. Ketika menggunakan uang bulanan sebagai modal, mereka rata-rata menggunakan porsi kecil dari uang bulanan mereka untuk investasi, tetapi ketika modal adalah uang bonus mereka, maka mereka menggunakan lebih banyak porsi uang untuk investasi. Bagi responden, uang bulanan mereka jauh lebih penting daripada uang bonus, dan mereka juga lebih takut terhadap risiko ketika menginvestasikan uang bulanan daripada ketika menginvestasikan uang bonus, dan ketika ada kerugian, tingkat kerugian dari menginvestasikan uang bulanan lebih tinggi daripada tingkat kerugian penyesalan dari menginvestasikan uang bonus. Hasilnya menunjukkan MA ada di antara para investor, dan memang memiliki pengaruh yang signifikan terhadap keputusan investasi saham.

Kata kunci: *Mental accounting (MA), stock investment decision*

Abstract

Our study tries to explore the existence of mental accounting (MA) phenomenon among the investors at Investment Gallery FEB University of Bengkulu and the investors at Sharia Investment Gallery FEB IAIN Bengkulu, and to test its influences on the stock investment decision. We collect data using questioner. This study uses simple linear regression analysis to test the hypothesis. The results show that investors do have the MA. The average respondents' answers indicate that they treat monthly money with bonus money differently in investing while using monthly money as the capital, they averagely use a smaller portion of their monthly money for investment, but when the capital is their bonus money, then they use more portion of the money for the investment. For the respondents, their monthly money is more important than the bonus money, and they are also more afraid of the risks of investing the monthly money than investing the bonus money, and when there is a loss, the regret level of losses from investing monthly money is higher than regret level of losses from investing bonus money. The result shows the MA exists among the investors, and have a significant effect on the stock investment decisions.

Keywords: *Mental accounting (MA), stock investment decision*

INTRODUCTION

Mental accounting (MA) is an economic concept established by Richard Thaler, which contends that individuals divide their current and future assets into separate, non-transferable portions. It is a psychological factor that makes individuals tends to divide their money into certain categories in their minds. The theory mentions that individuals assign different levels of utility to each asset group, which affects their consumption decisions and other behaviors. Rather than rationally perceiving every Rupiah as identical, MA helps explain why many investors assign some of their money as safety capital which they invest in low-risk investments, while at the same time treating their risk capital quite differently.

Investments are the activities which include investing some resources to get return in the future. Investments are basically placing some fund today in expected to get profits in the future. It is obvious that investors not only consider the estimate of the prospects of investment instruments alone in their investment behavior, but also involve psychological factors in making their investment decisions. That is we start to uses the psychology science and financial science in the effort to understand the financial behavior. Behavioral finance as a study of how psychological phenomena affect the financial behavior of an individual (Nofsinger, 2001; H. Shefrin, 2002)

The integration of psychology into economics and finance literature led prominent scholars, Daniel Kahneman and Amos Tversky, create prospect theory in 1979. Prospect theory modeled how individuals make a choice between probabilistic alternatives where risk is involved and the probability of different outcomes is unknown. It earned Kahneman the Nobel Prize in Economics in 2002. Prospect theory is an explanation of human decision making in a state of uncertainty outcome. This can be applied to situations ranging from life decisions such as changing careers or moving abroad, to financial options such as choosing an investment fund or deciding whether to buy insurance. Prospect theory suggests that people valued losses and gains differently, and thus individuals make decisions based on perceived gains instead of perceived losses. Also known as "loss-aversion" theory, the general concept is that if two choices are put before an individual, both equal, with one presented in terms of potential gains and the other in terms of possible losses, the former option will be chosen. Prospect theory suggests that humans are irrational decision makers. Tversky and Kahneman proposed that losses cause greater emotional impact on an individual than does an equivalent amount of gain, so given choices presented two

ways (with both offering the same result) – an individual will pick the option offering perceived gains.

Everyone in the world would certainly be involved in the decision-making process. This decision-making can take place in any situation, starting from the simplest to the most complex ones. Decision-making can occur in situations where one predicts future outcomes of the alternatives, and then chooses one of two or more options, and estimates the the probability of those outcomes on the basis of mostly limited evidence.

When making investment decisions, standard traditional theory in finance are relatively dominated by the expected utility theory. Expected utility theory assumes that individuals are rational decision makers, but they are often not rational when they make their choice (Robison, Shupp, & Myers, 2010). There are many psychological factors, such as emotion, mood, psychological biases, ect that affect the decision making process. Even Kahneman and Tversky (1979) developed Prospect Theory, in which there are factors such as regret aversion, loss aversion, and mental accounting that can affect one's decision making process.

In this study, the factor to be discussed is mental accounting (MA). Mental accounting was first created by the University of Chicago professor, Richard Thaler. MA describes people's tendency to code, categorize, and evaluate economic outcomes by grouping their assets into any number of nonfungible (noninterchangeable) mental accounts in their mind (R. Thaler, 1980). A very rational person will never be exposed to this psychological bias, because mental accounting will cause a person to take irrational steps to place money differently based on certain categories, such as how to earn money (work, inheritance, gambling, bonuses, other) or the nature of the use of the money (recreation, necessities, etc.) (Pompian, 2006). People may have multiple mental accounts for the same kind of resource. A person may use different monthly budgets for grocery shopping and dinning out at restaurants, for example, and constrain one kind of purchase when its budget has run out while not constraining the other kind of purchase, even though both expenditures draw on the same fungible resource (income) (Cheema & Soman, 2006). Similarly, supermarket shoppers spend less money at the market when paying with cash than with their debit cards (and credit cards), even though both cash, debit and credit cards draw on the same economic resource. Comparing the price of goods to a smaller mental account (e.g., the cash in their wallet) than to a larger mental account (e.g., the money in their bank accounts) increases the "pain of payment".

Mental accounting focuses on how a person responds and evaluates a situation where there are two or more possible outcomes. Not only related to financial problems, mental accounting can also cover human behavior widely. By understanding mental accounting, people are expected to understand the psychological processes underlying a person in making choices or making economic and other decisions.

We contribute to the literature by providing empirical evidence on the existance of MA and provide the further evidence on it's impact on the students investment decision. We administered questioners to 100 students as investors at GI FEB University of Bengkulu and GIS IAIN Bengkulu. We use descriptive statistics and simple linear regression to test the hypotesis. Our result show that the MA exists amongst students in Bengkulu, and the MA has a significant effect on investment decision of students in Bengkulu.

This paper is presented in the following sequence: the introduction, the literature review and hypotheses development, the reseach method, the results and discussion, and conclusions.

LITERATURE REVIEW

In this session we will discuss the assumption of rationality in traditional finance theory, and the investment decision and the effects of MA on the investment decisions.

The Assumption of rationality and traditional financial theory

Financial theories are generally built on the basis of various assumptions to clarify the position of the theory when faced with the real situation. Assumptions are needed to enforce a theory to be readily tested for implementation, and what happens if those assumptions are violated (Asri, 2013). Conventional financial theory has one important assumption that human beings in making decisions are rational. In general, it is known that some characteristics of human rationality, among others: always thinking before deciding, have preferences, able to choose the best viewed alternative among the available options, willing to pay attention to all information, and able to evaluate and compare information. However, a person's rational way of thinking has some limitation or bounded, so it is called bounded rationality. Bounded rationality is happened whenever the decision makers are bounded by the limited ability of their rationality by a number of limitations or obstacles when making decision and making choices.

In facing uncertainty condition, rational decision can be taken by using the principle of expected value maximization. This concept is well known as expected

utility theory. The expected utility theory related to choosing decision alternatives rationally with emphasize that individual has different behavior toward risk (Asri, 2013). This theory is overly simplifying the reality, as it argue that a decision making is merely defined by attitude toward risk.

Investment decision and the effects of mental accounting bias on investment decision.

Investments are activities which involved investing some resources to certain business in order to get returns or profit in the future. Investment is placing some funds today in a business in expecting to get profit or return in the future. In order to do investment activity in capital market properly, an investor needs to have enough knowledge, skills, and intuition about business, to analyze which stock to buy or hold and which stock to be sold. Investor is supposed to be rational in making stock purchasing decision. There are several reasons of why do individuals invest, for example: they pursue investment activity to get a better future life, to reduce inflation risk, to get tax saving benefits. Basically, people pursue investment activity for the purpose of gaining or increasing their wealth.

Bodie, Kane, and Marcus (2006) argue that there are two important aspects in investment: the expected return and the risk. Investment decision is a multi-dimension construct. It involves at least the following dimensions: (1) How much money to be invested, will we invest in small portion or large portion of our money? (2) When will we invest? Do we invest sooner or later? Do we take an investment whenever we have much money, or whenever we thought that this is the best time to invest? (3) Investment decision involves decisions on what kind or type of investments will we take. Is it investment in real assets or financial assets, short term or long-term assets, or combination of them? (4) Investment decision also involves decisions about the source of fund which will be invested.

Initially, in making an investment decision, an investor not only uses the estimates of investment instruments prospects, but also is influenced by psychological factors. Investment analysis which considers both the field of psychology science and the field of finance science is known as behavioral finance. Behavioral finance is a field of study in finance which explores how individual is behaving in financial settings. Specifically, it studies how human psychology affects individual financial decision making, corporate decision making, and market behavior (Nofsinger, 2001; H. Shefrin, 2002). It is also an alternative approach in studying how psychology aspects affect individual investment decision making.

In mental accounting concept it is assumes that individuals divides their money into some certain accounts based on its purposes. Thaler (1985) stated that "*mental accounting is the set of cognitive operation use by individuals and household to code, catagorize and evaluate financial activities.*" Mental accounting describes people's tendency to code, categorize, and evaluate economics outcomes by grouping their assets into any number of non-fungible (non-interchangeable) mental accounts. As Pompian (2006, p. 171) states: "*A complete rational person would never succumb to this sort of psychological process because mental accounting causes subjects to take the irrational step of treating various sums of money differently based on where these sums are mentally categorized, for example the way that a certain sum has been obtained (work, inheritance, gambling, bonus, etc.) or the nature of the money's intended use (leisure, necessities, etc).*"

The concept of framing is useful in mental accounting analysis. Individuals, due to heuristic thinking process, use framing to process information. Their perspectives on money and investment usually are framed accordingly to the surrounding circumstances that they face (H. M. Shefrin & Thaler, 1988). In Shefrin and Thaler's behavioral life-cycle theory (1988), it is states that people mentally allocate wealth over three classifications: (1) current income, (2) current assets, and (3) future income. The propensity to consume is greatest from the current income account, while future income is treated more conservatively.

There are three components in MA. (1) Individual captures how outcomes are felt and experienced, and how a decision is made and evaluated. (2) Mental accounting involves placing activities into certain accounts. Both sources and uses of money should be grouped in some accounts mentally like an accounting system. (3) The frequency of account evaluation, which means each account can be noted or evaluate daily, monthly, or yearly (R. Thaler, 1985).

MA is a cognitive bias type, which refers to the coding, categorization, and evaluation of financial decisions. It is a psychological factor which measurement has several goals. First, being a self-controlling tool that causes people to think rationally to make good decisions (R. H. Thaler & Sunstein, 2008). The second is to help individual to see the financial problems better but inefficiently, so there is a possibility of conflict with both goals, and consequently in an accurate representation does not always make a person happy for a short time (Prelec & Loewenstein, 1998). MA focuses on how a person responds and evaluates a situation where there are two or more possible outcomes. Not only related to financial problems, MA

can also cover human behavior widely. By understanding mental accounting, people are expected to understand the psychological processes underlying in making choices or making economic and other decisions.

Mental accounting can be illustrated as follows. Suppose we have for example, a civil servant (PNS) with a monthly salary and the thirteenth salary. Every civil servant (PNS) gets a thirteenth salary, a salary equal to one full monthly salary each year. For example, a civil servant (PNS) who is receiving a monthly salary of Rp.3.500.000, -., she/he usually restrict to use this monthly salary for some certain purpose, such as paying electricity bills, buying foods, paying school fee for their kids, etc. Sometimes, not a single bit of the salary is used for other purposes, for example let alone to have fun. It will be different whenever the money is come from his/her thirteenth salary. He/she would spend them for shopping and leisure. They frame their money differently, between the monthly salary and the thirteenth salary, because the thirteenth salary is a bonus salary, so he can spend it just like that.

MA can also affect the investment decision. For example, when someone gets a monthly salary and a bonus salary, and then he wants to invest. He would be more inclined to invest using his bonus money because he thinks (frames) that he invests his bonus money, when something goes wrong with his investment, he does not feel very bad for that failed investment. However, it will be different when the money for investment is from his monthly salary. Although he loses money in the same amount but he regrets more, because they frame and categorize these two type salaries differently and they place different weight for each of them. They fail to consider that money from monthly salary and bonus salary are interchangeable or fungible.

There are many previous studies about mental accounting. Barberis and Huang (2001) conducted research on mental accounting, loss aversion, and individual stock returns. They consider a form of MA as investors' concern about *return/gains* and *risk/losses* of individual stock values, and investors' concern about *return/gains* and *risk/losses* of the overall portfolio value. Those investment behaviors show that investors who suspect to mental accounting have two possible attitudes. First, the attitude toward the risk preference which is either risk seeker, risk averter, or risk neutral. Second, return preference where investors have certain preference to accept return in the form of capital gain, or dividend. Barberis and Huang (2001) used framing concept to explain the investor preference. Framing induce individuals to develop attitude; whether tend to accept gains/return in positive frame, or whether

tend to accept losses/risk in negative frame, or to treat them in balance.

With MA, investors pay attention to gains and losses (Barberies and Huang, 2001). Implementation of MA by investors is by using narrow framing. Thus, investors framing their financial decisions by expressing attention to gains/returns or losses/risks and evaluating investment decisions (outcomes), so the individual frames a subjective transaction in mind to determine the utility they receive. This reflects an attention to the non-consumption resources of utility, where the natural experience exceeds narrow framed gains and losses. Furthermore, investors consider two forms of MA. First, investors care about gains and losses in the value of individual stocks (individual stock accounting), and secondly, investors care about gains and losses in the value of all portfolios, and show that MA forms affect the price of assets in a significant way.

MA is a bias that can cause a variety of problem for investors. Pompian (2001) mention that MA can cause at least five problems. First, it can cause individual to think or imagine that their investment occupy separate "packages," or accounts. There categories might include, for example money from monthly salary, money from bonus, college fund or money for retirement. However, envisioning distinct accounts to correspond with financial goals can cause investors to neglect positions that offset or correlate across accounts. This can lead to sub-optimal aggregate portfolio performance. Second, it can cause investors to irrationally distinguish between returns derived from income and those from capital appreciation. Many investors feel the need to preserve capital sums and prefer to spend interest. As a result, some investors tend to pursue income streams and can unwittingly erode principal (capital sums) in the process. Third, it can cause investor to allocate assets differently, especially when employer stock is involved. Individual in company retirement plans that offer no company stock as an option tend to invest in a balanced way between equities and fixed-income instruments. However, when employer stock is an option, individual (employees) usually allocate a portion of contributions to company stock, so total equity allocation then could be too high; and finally causing these investors portfolio to be potentially under-diversified. Fourth, it can cause investor to be trapped in or failed to resist "house money" effect, wherein risk-taking behavior escalates as wealth grows. Investor exposing this rational behave irrationally because they fail to treat all money as interchangeable or fungible. Fifth, it can cause investor to hesitate to sell investment that once generated significant gains but, later over time, have fallen in price. During the bull market condition investors become

accustomed to or familiar with healthy, unrealized gains. But whenever market started to goes down, they hesitate to sell their positions. Later; everything becomes too late, they regret not reaping gains when they could.

Lim (2004) conducted research on how mental accounting has impact on investors' trading decision by testing whether investors' trading decisions are influenced by their preferences for framing gains and losses. She find that investors are more likely to bundle sales of losers than sales of winners on the same day. She confirm that her findings are consistent with the Thaler's hypothesis (1985) that individuals prefer integrating losses and segregating gains. In addition, the extent to which mixed sales of winners and losers are consistent with the hedonic editing hypothesis is greater than what would be expected under random sales of stocks. She suggest that mental accounting is likely to play a significant role in investors' trading decisions.

In Indonesia, there are studies conducted related to the MA bias. One of them is a study conducted by Sumtoro and Anastasia (2015). They examine the effect of MA on decision making of residential property investment in Surabaya. They find that MA does have influence on investor decision of residential property investment. However, other factors such as regret aversion and loss aversion have more significant influence on residential property investment decision. The regret aversion becomes the first consideration and loss aversion becomes the second consideration for investors in investing residential property of house and apartment type in Surabaya. MA becomes the third consideration for investors to invest in residential property such as house and apartment in Surabaya. Their study show support for Thaler's (1985) study which found that investors tend to consider each asset that is owned separately rather than merge with the investment. Furthermore, MA will affect an investor's investment decision depending on whether the investor is concerned about gains and losses in the value of individual stocks or in the value of the entire portfolio (Barberis & Huang, 2001).

We will empirically examine the effect of MA on student's investment decision. Initially, there were only two investment gallery in Bengkulu Province (Investment gallery of Bengkulu University and Sharia Investment Gallery of IAIN Bengkulu), but later other private universities in Bengkulu Province also start to open investment galleries for their students and for the public to learn and to practice investing in capital market. These two investment galleries have investors who are mostly students. From the above discussion, we develop the following hypothesis:

H1: Mental accounting affects the stock investment decision of investors at the Investment Gallery (GI) FEB UNIB and investors at Sharia Investment Gallery (GIS) IAIN Bengkulu.

RESEARCH METHOD

Variables and operational definition

The dependent variable of this study is investment decision (KI), and the independent variable is mental accounting (MA). The operational definition of variables included in this study is presented in Table 1. We define investment decision is a decision made by respondent about investing in stocks at the Galeri Investasi FEB UNIB and at the Galeri Investasi Shariah IAIN Bengkulu. Respondents were asked to respond on the following seven statements as listed in Table 1.

Table 1 Operational definition of research variables

Variable	Indicators	Scale
Investment decision	1. I always care about the gains and losses that I get from my investment in the stock I choose using my monthly money. 2. I always care about the gains and losses that I get from my investment in the stock I choose using my bonus money. 3. I invest in the type of investment that suits to my income sources type.	5 point - Likert scale: 1 = strongly disagree 2 = disagree 3 = neutral 4 = agree 5 = strongly agree
Mental Accounting	1. I always allocate my income into several accounts 2. I always treat my monthly income and bonuses differently 3. I always calculate the cost to be incurred from my monthly money 4. I do not always calculate the cost to be incurred from my bonus money	5 point - Likert scale: 1 = strongly disagree 2 = disagree 3 = neutral 4 = agree 5 = strongly agree

Population and sample

The population of our study are investors at GI FEB UNIB and GIS IAIN Bengkulu. The sample of our study are 50 investors at GI FEB UNIB and 50 investors at GIS IAIN Bengkulu. We distributed questioner to these 100 investors in February – March 2017. Sampling technique in this study is convenience

sampling. Simple regression analysis is used to test the hypothesis.

RESULTS AND DISCUSSION

Descriptive statistics

Based on the data obtained from the Investment Gallery of Bengkulu University, the students who are registered as investors are 75 students, with the average investor coming from the students of semester 4 and semester 6. The total deposit amount is Rp.8.450.000,-. While based on data obtained from IAIN Bengkulu, total investors are 332 student investors, but only 261 investors are active in trading. The average investor comes from students of semester 4 and 6. The total deposit amount is reaching Rp.303.128.100,- (table2).

Table 2 Respondens profile

	Frequency	Persentage
Male	42	42%
Female	58	58%
Age:		
17	-	-
18	-	-
19	18	18%
>20	82	82%
Student at semester:		
2	-	-
4	45	45%
6	48	48%
8	7	7%
Monthly money:		
<Rp 500.000	28	28%
Rp 500.000	3	3%
Rp 500.001 -Rp 999.000	50	50%
Rp 1.000.000-Rp1.500.000	19	19%
>Rp 1.500.000-	-	-
Have been investors for:		
Less than 1 month	22	22%
About 1 month	14	14%
About 2 month	16	16%
More than 2 month	48	48%
Portion of monthly money to buy stock:		
25 % of monthly money	75	75%
50 % of monthly money	14	14%
75 % of monthly money	11	11%
100% of monthly money	-	-

Table 2 shows that 58 percent of our respondent is female. Respondents mostly have aged more than 20 years old (82%). Respondents are mostly at semesters 4 and 6, only 7% respondents are students of semester 8. Majority of respondents receive

monthly money of less than Rp 1,000,000. Regarding the length of time to invest and how much is invested, many respondents have invested more than 3 months. Meanwhile, most respondents invested only 25% of the monthly income in stock.

Table 3 describes the frequency distribution of respondent response on seven items statement. The first 4 items are items for mental accounting variable, and the rest are items for investment decision variable. In Table 3, the first items we obtained the result: 10 respondents gave the answer of strongly agree, 44 respondents gave answer agreed, 38 respondents gave neutral answer, 3 respondents disagreed, and no respondents answered strongly disagree. This means more than 50% of respondents agree on it. The average obtained is 3.52 and indicating that the respondent is influenced by mental accounting.

The second item in Table 3 show that 62 respondents stated strongly agree and agree about the second statement, 32 respondents answered neutral, while 6 respondents answered disagree. Because respondents who answered agreed more than 50%, as well as the average obtained is 3.61, then it indicates that more than half of respondents are influenced by mental accounting. Because mental accounting in a person seems to be his way of treating his money, one of them by distinguishing bonus money and monthly money received.

The third items in Table 3 shows that 60 respondent gave response agree, 34 respondent answered neutrally and 6 respondent answered strongly disagree. The average is 3.57, indicating that most respondents are influenced by mental accounting.

The fourth items in Table 3 shows that 86 respondents gave agree response, 12 respondents gave neutral response and 2 respondent gave disagree response. The average obtained is 4.19 which indicates that the respondent is influenced by mental accounting. Indeed when someone instilled mental accounting in his mind, then he will feel that the bonus money is not so important so that the spending from bonus money did not have to be counted carefully.

The fifth items in Table 3 is concerning about the gains and losses obtained from the investment of monthly money. We obtained that 19 respondents gave response of strongly agree, 48 respondents answered agree, 30 answered neutral, and 3 respondents answered disagree. The number of respondents who gave response of agree and strongly agree is 67 respondents or 67%. The average obtained is 3.83 which indicates that on average the respondents are influenced by mental accounting in their investment.

The sixth items in Table 3 is concerning the gains and losses obtained from the investment of bonus money. Table 3 shows that 6 respondent answered

strongly agree and 42 respondent people answered agree, 45 respondents answered neutral, 4 respondents answered disagree, and 3 respondents answered strongly disagree. This means that as many as 48 respondents or below 50% give an agree answere on this item. The average of 3.44 indicates that the respondents are influenced by mental accounting. This question is related to the fifth question where fewer respondents care about the profit and loss of their bonus money investment because a person with mental accounting will be more concerned about the profit and loss of his monthly money investment than his bonus money investment.

The seventh items in Table 3 is about matching investment and sources of fund for investment. Table 3 shows that 67 respondents gave agree response, 31 respondents answered neutral, the remaining 3 respondents answered disagree. The average earned of 3.71 indicates that the respondent is influenced by mental accounting in his investment.

From the responses of respondents discussed above, individuals who exhibit to mental accounting will tend to divide his income into certain accounts or categories. They will also treat the money received differently according to the use of the money. This is in line with the opinion of Asri (2013) that mental accounting assumed that humans divide their money into certain groups (accounts) based on the purpose of utilizing the money. Based on the above data in Table 3, we can conclude that investors who have filled the questionnaire largely exhibit to mental accounting.

Tabel 3. Frequency distribution of respondents response results

No	Items	Frequency of respondents response:					mean
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	I always allocate my income into several accounts	4	4	38	44	10	3.52
2	I always treat my monthly income and bonuses differently	6	-	32	51	11	3.61
3	I always calculate the cost to be incurred from my monthly money	6	-	34	51	9	3.57
4	I do not always calculate the cost to be incurred from my bonus money	-	2	12	51	35	4.19
5	I always care about the gains and losses that I get from my investment	-	3	30	48	19	3.83

	in the stock I choose using my monthly money.						
6	I always care about the gains and losses that I get from my investment in the stock I choose using my bonus money.	3	4	45	42	6	3.44
7	I invests in the type of investment that suits to my income sources type	2	-	31	59	8	3.71

Regression result

Table 4 describes the regression result of mental accounting (MA) variable on Investment decision variable. The coefficient of MA is 0.33 and significant. Therefore, we can conclude that the hypothesis that mental accounting affect the stock investment decision of investors at the Investment Gallery (GI) FEB UNIB and investors at Sharia Investment Gallery (GIS) IAIN Bengkulu, are accepted. Mental accounting has influence on investor investment decision.

Table 4 Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	2.6259	0.2828	9.2849	0.0000
MA	0.3307	0.0889	3.7181	0.0003
R-squared	0.1236	Mean dependent var		3.6601
Adjusted R-squared	0.1147	S.D. dependent var		0.5445
S.E. of regression	0.5123	Akaike info criterion		1.5201
Sum squared resid	25.7232	Schwarz criterion		1.5722
Log likelihood	-74.0051	Hannan-Quinn criter.		1.5412
F-statistic	13.8242	Durbin-Watson stat		1.7175
Prob(F-statistic)	0.0003			

Predictors: (Constant), MA (mental accounting).
Dependent variable is KI (investment decision).

Students mostly earn their monthly money from their parents, and if they want to invest, then they will use their monthly money. In this study, we examined what if they get the bonus money equivalent to the monthly money. Will they treat both money differently? Our study finds that most of students (investors) treat the money differently. This is called mental accounting. Mental accounting will cause a person to take irrational steps to place money differently based on certain

categories, such as how to earn money (work, inheritance, gambling, bonuses, etc.) or the nature of the use of his money (recreation, need, and others) (Pompian, 2006).

Investors are given a questionnaire with two forms the questioners, one with multiple choice answers and another one with Likert scale. The result of respondent's response on the multiple choices questioners shows that on average respondents appears to have some mental accounting bias. It is proved that half the respondents have mental accounting thought, but not so badly. For example, when they earn monthly money and bonus money, they will treat the money differently, for example in investing. When they invest in monthly money, they tend to invest a little of their monthly money. While with the bonus money, most respondents choose to invest with an amount greater than their monthly money. Because for them, the monthly money is much more important than the bonus money because after being scrutinized, they are also more afraid of the risks they face when they invest the monthly money than the bonus money, and when there is a loss, they will regret more of the losses they get when they invest with monthly money rather than their bonus money.

CONCLUSION AND SUGGESTION

This study has two main conclusions. First, we found that investors at GI UNIB and GIS IAIN Bengkulu exhibit to mental accounting bias. Second, we found that mental accounting has significant influence on investor investment decision in stock.

REFERENCES

Asri, M. (2013). *Keuangan Keperilakuan*. Yogyakarta: BPFE.

Barberis, N., & Huang, M. (2001). "Mental Accounting, Loss Aversion, and Individual Stock Returns." *The Journal of Finance, 56*(4), 1247-1292.

Bodie, Z., Kane, A., & Marcus, A. J. (2006). *Investments*. Jakarta: Salemba Empat.

Cheema, A., & Soman, D. (2006). "Malleable Mental Accounting: The Effect of Flexibility on The Justification of Attractive Spending and Consumption Decisions." *Journal of Consumer Psychology, 16*(1), 33-44.

Kahneman, D., & Tversky, A. (1979). "Prospect Theory: An Analysis of Decision under Risk." *Econometrica, 47*(2), 263-291.

Lim, S. S. (2004). *Do Investors Integrate Losses and Segregate Gains? Mental Accounting and Investor Trading*

Decisions. Paper presented at the EFA 2003 Annual Conference (November 19, 2004) Paper No. 87. Retrieved from https://ssrn.com/abstract=423942 on June 23, 2019

Nofsinger, J. R. (2001). *Investment Madness: How Psychology Affects Your Investing--and what to Do about it*: Financial Times Prentice Hall.

Pompian, M. M. (2006). *Behavioural Finance and Wealth Management: How to Built Optimal Portfolios That Account for Investor Biases*. New Jersey: John Wiley & Sons, Inc.

Prelec, D., & Loewenstein, G. (1998). "The Red and the Black: Mental Accounting of Savings and Debt." *Marketing science, 17*(1), 4-28.

Robison, L. J., Shupp, R. S., & Myers, R. J. (2010). "Expected Utility Paradoxes." *The Journal of Socio-Economics, 39*(2), 187-193.

Shefrin, H. (2002). *Beyond greed and fear: Understanding behavioral finance and the psychology of investing*. New York: Oxford University Press on Demand.

Shefrin, H. M., & Thaler, R. H. (1988). "The behavioral life-cycle hypothesis." *Economic Inquiry, 26*(4), 609-643.

Sumtoro, A., & Anastasia, N. (2015). "Perilaku Keuangan dalam Pengambilan Keputusan Berinvestasi Properti Residensial di Surabaya." *Finesta, 3*(1), 41-45.

Thaler, R. (1980). "Toward a Positive Theory of Consumer Choice." *Journal of Economic Behavior & Organization, 1*(1), 39-60.

Thaler, R. (1985). "Mental Accounting and Consumer Choice. *Marketing science, 4*(3), 199-214.

Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Chicago: Yale University Press.