ANALYSIS OF BEHAVIORAL PATTERN OF MANADO YOUNG INDIVIDUAL INVESTORS IN STOCK MARKET

ANALISIS POLA PERILAKU INVESTOR INDIVIDU MUDA MANADO DI PASAR SAHAM

By:
Sharell Sonia Merliany Tulende[1]
Willem J. F. Alfa Tumbuan[2]
Shinta J. C. Wangke[3]

[123] International Business Administration, Management Department
Faculty of Economics and Business
Sam Ratulangi University, Manado

e-mail:
[1]17061103076@student.unsrat.ac.id
[2]alfa.tumbuan@unsrat.ac.id
[3]shintawangke@unsrat.ac.id

Abstract: This study aims to identify the behavioral biases and behavioral pattern of Manado young individual investors in stock market. The qualitative approach has used in this research in order to observe and understand how the investors behave. The sample in this research are 15 Manado young individual investors (long-term and short-term investors) who have been involve in stock market for a minimum one-year experience, with the age range of 19 – 24 years old. The results of this study find that most of the young individual investors in Manado unconsciously apply the confirmation bias, overconfidence, and disposition effect. The endowment effect, self-attribution, and anchoring are also detected but not showing up too frequent. The hindsight, status-quo, narrative fallacy, and herding effect are undetected. Therefore, it shows that the behavioral pattern of Manado young individual investors are adaptive and independent. In addition, this research also identify the relationship between overconfidence and confirmation bias.

Keywords: behavioral pattern, young individual investors, investor psychology, overconfidence, confirmation

Abstrak: *Penelitian ini bertujuan untuk mengidentifikasikan bias-bias perilaku dan pola perilaku investor individu muda Manado di pasar saham. Pendekatan kualitatif digunakan dalam penelitian ini untuk mengamati dan memahami bagaimana para investor berperilaku. Sampel dalam penelitian ini adalah 15 investor individu muda Manado (jangka panjang dan jangka pendek) yang telah terlibat dalam pasar saham sekurang-kurangnya satu tahun pengalaman, dengan rentang usia 19–24 tahun. Hasil dari penelitian ini adalah kebanyakan investor individu muda di Manado secara tidak sadar melakukan bias confirmation, overconfidence, dan disposition effect. Endowment effect, self-attribution, dan anchoring juga terdeteksi namun tidak terlalu sering muncul. Bias hindsight, status-quo, narrative fallacy, dan herding effect tidak terdeteksi. Oleh karena itu, hal ini menunjukan bahwa pola perilaku investor individu muda Manado adalah adaptif dan independen. Sebagai tambahan, penelitian ini juga mengidentifikasikan adanya korelasi antara overconfidence dan bias confirmation.*

Kata Kunci: *pola perilaku, investor individu muda, psikologi investor, overconfidence, confirmation*

INTRODUCTION

Research Background

The latest data that published by *Kustodian Sentral Efek Indonesia* (KSEI) shows that the number of stock market investors reached 5,605,632 people until June 2021. It shows that the public involvement in Indonesian stock market is growing rapidly. People choose to invest in stock market due to the transaction is legal under the *Otoritas Jasa Keuangan* (OJK). Since the activities and legality have guaranteed, stock market becomes one of the best option to invest, trade, and gain additional money for public. In stock investment, all the investors or traders definitely want to get the return from his or her investment. In order to get the return on investment, the investors should be equipped with enough knowledge and skills about the stock market. These basic skills are important since many investors who have been trading for a long time still also experiencing losses. The loss that the senior investors experienced is not because of they do not improve their skills, but it is regarding on their mindset in investment activity. It shows that the investment activity involves the psychology of the investors. When it comes to money and investing, we are not always as rational as we think we are (Pareto, 2021) because we unconsciously involve our psychology. The irrational mindset of the investors lead them to make certain behavioral biases unconsciously. Previous research finds that the investors in a young age tend to be rational, and other research shows the opposite. Therefore, the investors do not always behave rationally and do not always make an anomaly (Widyastuti, 2011).

Regardless of how rational the young investors behave, stock market is considered as a suitable place for the young people to build passive income and earn extra money. The KSEI has recorded the number of stock market investors in Indonesia based on the educational background is dominated by the high school degree as much as 53.54%. Based on age, the stock market is dominated by the investors under 30 years old as much as 58.39%. It shows that the young people dominate the number of stock market investors in Indonesia. The KSEI has recorded the number of stock market investors in Manado as of June 2021 that reach 16,486 people. The data shows that the young people with the age range of 21 – 30 years old dominate the stock market activity in Manado with 7,364 total investors. Therefore, this research aims to identify the behavioral biases and behavioral pattern of Manado young individual investors in stock market. The qualitative approach has used in this research in order to observe and understand how the investors behave. Through certain considerations, the sample in this research are 15 Manado young individual investors (long-term and short-term investors) who have been involve in stock market for a minimum one-year experience, with the age range of 19 – 24 years old.

Research Objectives

Based on the research background, this research aims to identify the behavioral biases and behavioral pattern of Manado young individual investor in stock market.

THEORETICAL REVIEW

Financial Management

Iman (2019) states that financial management is a business operation that is responsible for obtaining and using the funds needed for an effective and efficient operation. According to Husnan and Pudjiastuti (1998), financial management is the arrangement of financial activities in an organization that involves planning, analyzing, and controlling financial activities. There are three types of financial management, which are corporation financial, public financial and personal financial. This research will specifically discuss about personal financial, due to the stock investment is a form of managing personal financial.

Stock Market

Stock market is the collection of markets and exchanges where regular activities of buying, selling, and issuance of shares of publicly held companies take place (Chen, 2021). According to Zuravicky (2005) stock market is a market where stocks are bought and sold, and it is the best channel for the companies to raise their capital. Based on the definitions above, stock market is a part of the capital market, which only limited to companies' stocks transaction. *PT. Bursa Efek Indonesia* (BEI) or the Indonesia Stock Exchange (IDX) is the only capital market in Indonesia that facilitate and develop the activities regarding the stock market. The activity of the capital market has supervised by. *Otoritas Jasa Keuangan* (OJK) or the Financial Services Authority of Indonesia in Law Article No. 8 of 1995.

Behavioral Finance

According to Kengatharan and Kengatharan (2014) behavioral finance is a psychology based theory that try to understand how emotions and cognitive errors influence behavior of individual investors. Behavioral finance studies about the aspects of human interaction, dealing with uncertainty in making economic decisions. The most common human traits such as fear, anger, greed, selfishness are concerned with their decisions about money. Sense, reason (the long-term consequences of the action taken) and emotion (considering the action) are all related to one another (Permatasari, 2019). Based on the definitions above, behavioral finance is the study of how investors or traders react to certain situations, and sometimes they unconsciously make violation due to internal and external factors. In stock investment, the investors have their own consideration regarding the stock that they will sell or buy. However, the investors make certain behavioral biases in stock market due to the circumstances they face. The behavioral biases that occurred are classified as self-deception biases, cognitive biases, emotional biases, and social bias.

Previous Research

Luu Ngoc (2014) aimed to investigate behavioral factors influencing the decisions of individual investors at the Securities Companies in Ho Chi Minh City, Vietnam. Data for this research was collated from 188 responses from individual investors, accounting for the response rate of 63%. There are five behavioral factors of individual investors at the Ho Chi Minh Stock Exchange: Herding, Market, Prospect, Overconfidence-gamble's fallacy, and Anchoring-ability bias. Securities Companies may also use the findings of this research for better understanding on investors' decision to give better recommendations to them. Stock prices then reflect their true value and Ho Chi Minh stock market becomes the yardstick of the economy's wealth and helps enterprises to raise capital for business activities.

Quan Nhu Tran (2017) investigated behavioral patterns expressed by investors in the Thailand stock market. The paper examines investment decision-making processes in the context of the current financial market in Thailand to shed some light on behavioral-induced pattern behind such investments. Data for this research was collated from 8 individual investors by semi-structured and in-depth interview. There are four behavioral factors of individual investors in Thailand Stock Exchange: Overconfidence, Excessive Optimism, Psychology of risk, and Herding Behavior. Securities Companies may also use the findings of this research for better understanding on investors' decision to give better recommendations to them. Stock prices then reflect their true value and Thailand stock market becomes the yardstick of the economy's wealth and helps enterprises to raise capital for business activities.

Minh Man Cao, Nhu-Ty Nguyen, and Thanh-Tuyen Tran (2021) aimed to clarify the relationship between financial behavior and investment decisions as well as its impact on investment results. Determine the influence of behavioral factors on individual investors' investment decisions and investment performance on the Vietnam stock market. The study surveyed 250 investors. The main analytical methods used are Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and Structural Equation Modeling (SEM). Research results show that Heuristic, Prospect, Market, and Herding directly and positively affect investment decision-making. Besides, the above factors have a direct and positive effect on investment performance. In particular, the Prospect factor has the strongest influence on investment decision-making and investment performance. The major findings of this study suggested that the important role of Heuristic, Prospect, Market, and Herding on Investment Decision-making and Investment Performance. Prospect had the strongest impact on Investment decision-making ($\beta = 0.275$). Heuristic had the second strongest impact ($\beta = 0.257$), then Herding ($\beta = 0.202$), and finally Market ($\beta = 0.189$) had the weakest effect. Regarding Investment Performance, the Prospect factor has a higher degree of impact than Heuristic Herding and Market.

Conceptual Framework

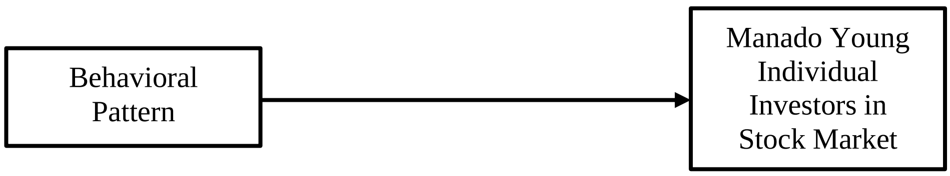

Figure 1. Conceptual Framework
Source: Data Processed (2021)

RESEARCH METHOD

Research Approach

This research use qualitative method that aimed to understand and identify the behavioral biases and behavioral pattern of Manado young individual investor in stock market.

Population, Sample, and Sampling Technique

The population in this research are the individual investors in Manado between 19 to 24 years old. There are 15 informants as sample in this research, consist of short-term investors (traders) and long-term investors, who have provided sufficient information in accordance with the objective of this research. The purposive sampling and snowball sampling have used in this research. The purposive sampling technique involves the researcher using the judgement to select a sample that is most useful to the purposes of the research (McCombes, 2021). In this research, snowball sampling has used to access more informants through existing informants. According to McCombes (2021), snowball sampling can be used to recruit participants via other participants.

Data Collection Method

This research uses both primary data and secondary data. The triangulation method is used to collect the primary data. The triangulation method consists of in-depth interview, moderate observation, and documentation. The in-depth interview is conducted through phone call and zoom meeting. In moderate observation, the researcher involves in some activities that the informants do, such as making stock transaction in order to have better understanding about the behavioral pattern of young investors in stock market in Manado. The documentation are in forms of pictures and voice recordings. The secondary data has gathered through literature review, articles, journals, handbook, previous studies, and any other sources that already exists before.

Operational Definition of Research Variable

The variable of this research is behavioral pattern, which consist of four indicators. Behavioral pattern is the combination of psychological, finance, investment, and sociology that will shape the pattern of how the investors behave in investment activity. The indicators of this variable are self-deception biases, cognitive biases, emotional biases, and social bias.

Data Analysis Method

This research use the data analysis method by. Miles and Huberman Models.

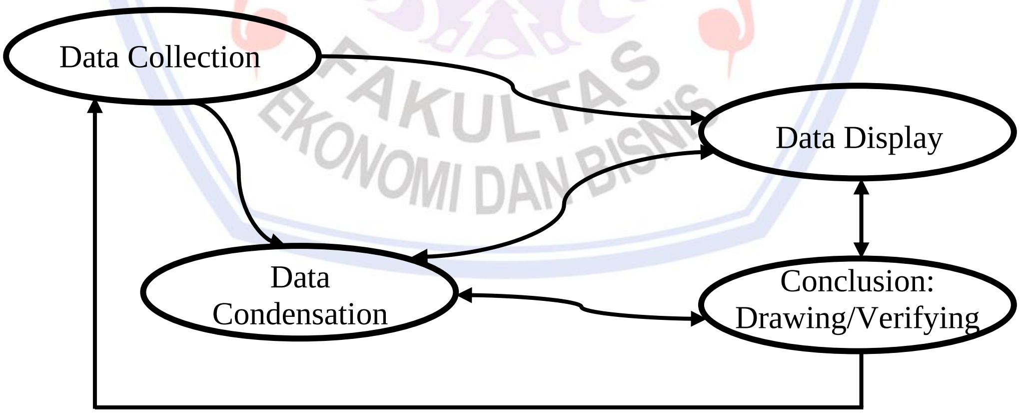

Figure 2. Miles and Huberman Data Analysis Model
Source: Miles, Huberman, and Saldana (2014)

Data collection is the process of gathering the data and information about the research using both primary and secondary data. Data condensation is the process of selecting, focusing back on the research purpose, simplifying, abstracting, and transforming the data that appear in the full transcripts and other materials (Miles, Huberman, and Saldana 2014). Coding categorizing has used in data condensation. Coding is a way of indexing or categorizing the text in order to establish a framework of thematic ideas (Gibbs, 2007). Data display is the process of presenting the in order to ease the understanding of the events. This research uses narrative text, tables, and figures as data display. Conclusion Drawing/Verifying is the result of the research that answers the problem and provide new knowledge for the readers. The conclusion has gathered through identifying the existing and non-existing behavioral biases, then matching it with supporting theories and previous research.

RESULT AND DISCUSSION

Result

The result of this research will be discussed in this section. There are 15 informants of this research with various background. The informants have a minimum one-year length of duration in stock market transaction activity. The informants' range of age are between 19 to 24 years old. Most of the informants are university student, and the rest are running their own businesses.

Interview Result

Informant 1 is a final year student of Sam Ratulangi University. She has been investing in stock market since the middle of 2018. She was a member of a stock market study group in her campus. She focuses more on long-term investment. She has no self-deception biases, cognitive biases, and social bias. However, disposition effect, a type of emotional bias, has detected. She use to sell in winning position and increase ownership at losing position.

Informant 2 is a student of Sam Ratulangi University. She has been investing in stock market since 2019. She knew about stock market investment due to her campus assignment, and then she realized that she interests in trading activity. She has no self-deception biases, emotional biases, and social bias. However, confirmation bias, a type of cognitive bias, has detected. She seeks for explanation from an application and use certain theories to convince herself.

Informant 3 is a university student that has been investing in stock market since 2017. She was a member of stock market study group in her campus. She knows about stock market from her campus. Her objective at the first time she involved in stock market was to make profit; therefore, she started with trading activity. She has overconfidence bias and confirmation bias, in which she believe in self-analysis but still consider others' opinion as a confirmation of the making the right analysis.

Informant 4 is a final year student in Sam Ratulangi University. She has been investing in stock market for 3 years. She knew about stock market investment from her campus and joined a stock market study group. She enjoys being a trader rather than investor. She has no behavioral biases detected.

Informant 5 has been investing in stock market since 2018. Her objective at first was to gain additional money through stock market; therefore, she started being a trader. Currently, she has become a long-term investor. The overconfidence bias has detected. She believe in self-analysis rather than other sources. She also use her favor theory to convince herself, therefore, the confirmation bias has also detected.

Informant 6 is currently focusing on starting her business, and besides she is an investor in stock market. She knew about stock market investment from her senior in campus, and then started to invest in stock market since 2016. She enjoys being a stock investor rather than a trader. She has confirmation bias, in which she use an application in seeking information to convince herself. Disposition effect has also detected. She hold onto losing position and sell winning position.

Informant 7 has been investing in stock market since 2018. She tends to be a stock trader, but also has an intention to be an investor in stock market. The overconfidence bias, confirmation bias, and disposition effect have detected. She really trust the self-analysis. The news support 30% to confirm the analysis. However, she hold a stock that keep decreasing due to her own feeling and confident.

Informant 8 has been investing in stock market since the Covid-19 Pandemic started. At first, she has an intention to be a long-term investor. However, she thought that she is still a student that does not have fixed income yet. Therefore, she decided to do a short-term investment. The overconfidence bias, confirmation bias, and disposition effect have detected. She seek for information from credible news as confirmation to increase confident. She sell the winning position, hold losing position and average down. It shows that she has disposition effect.

Informant 9 is an entrepreneur that runs a food business. He has been investing in stock market since 2017. In stock market, he has two portfolio, for long-term and short-term investment. He has built good behavior and made his own parameter in stock investment activity.

Informant 10 is a final year university student. Besides, he also involve in stock market investment. He has been investing in stock market for two years. At first, his objective was to do a long-term investment. However, there was a moment that made him tend to be a trader. He has self-attribution bias, in which he blame others due to take a wrong recommendation in decision-making. The anchoring has also detected. He always sell when the price increase 10% in a day, and hold and average down when it decreased 7%. He sell the winning position and hold onto 7% losing while increasing ownership, which shows that he has disposition effect.

Informant 11 is a civil engineering student and currently focusing on starting a new business. He got the right momentum to involve in stock market, which is when the international market crash due to the Covid-19 Pandemic. For him, entering the stock market during the market crash will bring opportunity to get high profit in a short time period. He enjoys being a stock investor rather than trader. He has overconfidence bias and confirmation bias. He overestimate his own analysis instead of receive public information. He also use favor theory to support his beliefs.

Informant 12 is a final year university student that has been investing in stock market for one year, since the Covid-19 Pandemic started. He started as a stock trader, until one day he changed his mind to switch to be an investor because he loss so much money in trading. He has self-attribution bias, in which he blame others due to the bad experience in waiting others' opinion. He also has confirmation bias. He is subjective in judging a company based on how often a company share the dividend.

Informant 13 is a final year university student and currently focusing on running his own business. He has been investing in stock market since 2017. His objective is to make a long-term investment. He has good behavior in stock investment, always learn from mistakes, and filter the news.

Informant 14 is a fresh graduate and currently running his family business. He involved in stock market since 2018. First, he started his journey in stock market as a trader, and finally became a stock investor since 2019. The overconfidence bias has detected. He overestimate his own abilities, but not underestimate others' information. The disposition effect has also detected. He holds onto losing position as long as the market accumulation is still good.

Informant 15 is a final year university student. He involved in stock market since 2019. At first, he began with long-term investment. In the early 2020, when the market crash due to the Covid-19 Pandemic, he changed his mind to be a trader. He has overconfidence bias, in which he always go deep into self-analysis and trading plan. The endowment effect has also detected. He loves the first stock he bought and always average down.

Discussion

Behavioral Biases Identification

The interview result shows that the overall Manado young individual investors unconsciously apply certain behavioral biases. The biases that frequently appeared consists of confirmation, overconfidence, and disposition effect. The confirmation bias is a part of cognitive biases, overconfidence is a part of self-deception biases, and disposition effect is a part of emotional biases.

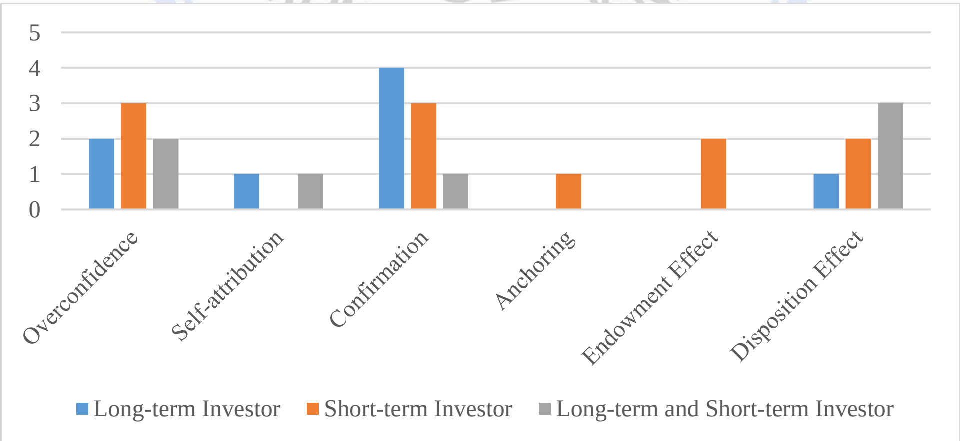

Figure 3. The Existing Behavioral Biases of Manado Young Individual Investors in Stock Market based on the Types of Investor

Source: Data Processed (2021)

Figure 3 shows that the short-term investors (traders) dominate the overconfidence bias and the long-term investors dominate the confirmation bias. The investors that involve in both types dominate the disposition effect. In addition, it shows that the short-term investors have endowment effect and anchoring bias.

As stated by Wira (2020), the existence of the biases are normal, but if it occur too often, it will endanger the investors' money. Hence, Douglass (2019) states that understanding the biases can lead to better decision-making, lowering risk, and improving investment returns over time. It means, as long as the individual investors understand the existence of the biases, they will make a proper decision-making and invest with less risk and high return. The risks are important to reduce due to it may lead to speculative motive of the investors. The speculative motive is an irrational behavior of investors that caused the risks of market crashes.

Confirmation

This research identified that 8 informants have the confirmation bias. They seek many explanations or information to confirm their analysis and increase confident. The news, applications, and the theories of a famous public figure are the things that convince the Manado young individual investors in decision-making process.

Overconfidence

The interview result shows that most of the investors will feel confident when they have enough knowledge and information. Informant 7, 8, and 14 agree that the information and knowledge are important in order to increase self-confidence. Meanwhile, informant 3, 5, 11, and 15 trust their own ability more in decision-making process.

Disposition Effect

In this research, informant 1 and 6 are the long-term investors that sell the winning position and hold onto losing position. Informant 8 is a short-term investor that also has the same thought as the informant 1 and 6. However, informant 8 also has an intention to be a long-term investor. Meanwhile, informant 7 and 14 are the investors and traders that tend to hold onto losing position only. Therefore, the disposition effect mostly occurred to the long-term investors and the short-term investors (traders) who has an intention to be long-term investors. Informant 10, on the other hand, is a short-term investor that has this kind of bias due to the unwillingness to cut loss when the price is declining for 7%.

Other Existing Biases

Endowment effect, self-attribution, and anchoring are also existing biases that applied by Manado young individual investors in stock market that do not occurred too often.

Non-existing Biases

There are several biases that do not appear from 15 informants, which are hindsight, status-quo, narrative fallacy, and herding effect. The hindsight and status-quo are the part of cognitive biases, narrative fallacy is a part of emotional biases, and herding effect is a form of social bias.

The Relationship between Overconfidence and Confirmation Bias

This research indicates that the informants whose overconfidence, tend to have confirmation bias. Informant 3, 5, 7, 8, and 11 have both overconfidence and confirmation bias. They agree that the news, application, or other forms of information are enough to increase their confidence in decision-making process. This research is in line with Supramono and Wandita (2017) who finds out that the investors with confirmation bias only want to hear what they want to hear, which ultimately leads them to overconfidence. Park et al. (2010) also find that investors with stronger confirmation bias exhibit greater confidence.

Behavioral Pattern

The behavioral biases that occur in stock market are normal as what happened to Manado young individual investors. The researcher finds that most of the informants unconsciously make certain biases. In the other side, there are also undetected biases in this research. Therefore, both existing and non-existing biases should be considered in identifying the behavioral pattern of Manado young individual investors in stock market.

Adaptive

Based on the interview results, even if the investors have their own behavioral biases, they always want to learn and improve in dealing with the volatility and uncertainty. Considering the undetected biases, it shows that they try to build good mental and behavior in investment activity through avoiding those biases. The willingness to always learn and improve demonstrate that they are adaptive. Informant 1, 3, 5, 6, 10, 12, 14, and 15 are detected as having certain biases, however, they have the same thoughts to always learn more, improve, or rechecking their method. This adaptive behavior is in line with the Adaptive Market Hypothesis (AMH) which proposed by Lo in 2004. According to Lo (2004) in Liberto (2019), the AMH combines principles of the well-known and often controversial efficient market hypothesis (EMH) with behavioral finance. The investors are basically rational, however, in dealing with certain situation, they could be irrational. This research finds out that some of Manado young individual investors unconsciously apply the AMH in investment activity. The undetected of status-quo and hindsight biases in this research shows that the informants are adaptive even though they make other kinds of biases. They make their mistakes as lessons-learned, not as a tool to predict their success, and they always want to improve.

Independent

All of the informants in this research have no herding effect. It means that the investors are self-dependent. They prefer to make self-analysis rather than take a recommendation from the others. This type of investor is familiar known as the independent individualists. Pompian (2008) states that the independent individualist investors are self-assured and “trust their gut” when making decisions; however, when they do research on their own, they may be susceptible to acting on the initial information rather than getting corroboration from other sources. It means that the independent investors put higher trust on themselves rather than other people. This situation is the same as the Manado young individual investors. Most of the informants tend to believe in their own analysis and doubt the recommendation from other people. Informant 10 and 12 with self-attribution bias had a bad experience when taking advice from the group. Therefore, it leads the investors on having trust issue towards other people’s statements. However, this kind of investors have a positive side. The non-existing of narrative fallacy shows that the investors are able in filtering the information they receive. Since they have trust issue on others, they will consider many aspects such as the economy condition in general, the sentiments or news, and then make a fundamental or technical analysis. Some of them also combine it with *bandarmology* analysis. It shows that they do not depend on one aspect only, as well as other people’s recommendation. They will be critical to all the information they receive and the make their own analysis. In addition, since the researcher finds out the relationship between confirmation and overconfidence that occur to Manado young individual investors, it also explains why some of the informants are independent. Informant 11 with both biases agree that the information from others could be a reference; however, the investors should be independent in analyzing and decision-making process.

CONCLUSION AND RECOMMENDATION

Conclusion

This research is conducted in order to find out the behavioral biases that the Manado young individual investors in stock market make. The conclusion has taken based on the interview results and discussion in the previous chapter are:

1. The most behavioral biases that the Manado young individual investors unconsciously applied are the confirmation bias, overconfidence, and disposition effect. The long-term investors dominate the confirmation bias, the short-term investors dominate overconfidence, and the investors that involve in both types dominate the disposition effect. The endowment effect, self-attribution, and anchoring are the other existing biases that not showing up too frequent. This research also finds that Manado young individual investors in stock market have no hindsight, status-quo, narrative fallacy, and herding effect. In addition, the investors with confirmation bias usually have overconfidence bias.
2. Both existing and non-existing biases have identified the behavioral pattern of Manado young individual investors: adaptive and independent.

Recommendations

The recommendations below are given to several parties.

1. For the young individual investors in stock market in Manado:
   When you detect certain biases in your investment decision-making process, do not stressed out because it is normal. Just try to reduce it. You take a full control of your mind. Besides, it is important to keep increasing knowledge and information in stock market. You may combine all the elements such as fundamental, technical, and *bandarmology* analysis, and the sentiments in decision-making. It is highly recommended to always recheck and adjust your investment method due to the market is dynamic. Always positioning yourself in between. Lower the ego, seek more information, make an analysis, accept the fact, adjust, and then make a reasonable decision. Finally, get used to the losing position occasionally in order to build good behavior and mental in investment.
2. For future research:
   The researcher recommends that it is important to conduct a further research about how the Manado young individual investors or traders in other types of investment behave, considering the research or supporting journal about the behavioral pattern of Manado young individual investors or traders is still lacking. It is also possible to conduct the research with different sample criteria, through both qualitative and quantitative approaches. Since this research has identified the behavioral biases, the future research may focus more on how to minimize the biases that could harm the investors' money.

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