

**THE ANALYSIS OF PSYCHOLOGY OF INVESTORS IN MAKING INVESTMENT
DECISIONS**

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ABSTRACT

This qualitative study aims to analyze the psychology of investor in making investment decision. Fundamental analysis and technical analysis are performed in this study. The method used to answer the research question is descriptive qualitative. Furthermore, the data collection method used in this study is in-depth interview. The results reveal that psychology has a role in the behavior of investors in making investment decisions and not only use fundamental analysis and technical analysis to analyze the stock prices. Furthermore the psychology of investors, such as: overconfidence, optimistic and pessimistic may influence the investment decisions. In addition the rational investor can reduce the chances for loss and can form an effective market in the stock market to the contrary irrational investors tend to get possibility of higher loss and can increase the volume of transactions on the stock market.

Key words: *Psychology Investment, Investment Decisions, Fundamental Analysis, Technical Analysis, Investor Psychology, Rational, Irrational.*

A. INTRODUCTION

Capital market plays an important role in the economy of a country because it serves two functions all at once. First, capital market serves as an alternative for a company's capital resources. The capital gained from the public offering can be used for the company's business development, expansion, and so on. Second, capital market serves as an alternative for public investment.

People could invest their money according to their preferred returns and risk characteristics of each instruments. It is important to note that the capital market is similar to human emotions, "which also can have a different feeling of sensitivity of ignorance". There are various factors that can affect the capital markets. Apart from the macroeconomic as well as the profitability of listed companies, psychology can also play an important role. Psychology an investor cannot only improve the market quickly because investment decisions are taken but also lowers the depth caused by investment decisions taken too fast.

The Efficient Market Hypothesis (EMH) which relates to the traditional finance theory assumes that individual investors are fully rational and desire to maximize their expected utility. Their behaviors do not depend on emotions or psychology (Fama 1970, 1991). Although this theory succeeded in explaining market behaviors and was accepted widely (Fama achieved a nobel price because of this theory), EMH could not satisfy economics, especially the scientists of behavioral finance. Suryawijaya (2003) in the concept of behavioral finance stated that the investment decisions made by investors to consider non-economic aspects particularly psychological aspects can affect the behavior of investors. This is because investors are in fact often perform actions based on judgment and contrary to theories that had been raised in the capital market on the assumption of rationality. The market may react quickly to information, but the influence of the reaction may be more influenced by the element of subjectivity, emotion, and various other psychological factors. This approach is an attempt to renew the old approach that assumes human economic behavior rational, by only considering fundamental factors measurable in economic decision-making, but the facts on the market showed frequent price movements that cannot be explained rationally, the phenomenon of booming and bursting also the examples of this irrationality.

B. LITERATURE REVIEW

Analysis of Stock Price

Analysis of stock prices can generally be made by investors by observing two basic approaches, namely:

1) Technical Analysis

Technical analysis is an attempt to predict stock prices by observing the changes of the stock price in the past (Husnan, 2005: 349). Technical analysis is an investment approach by studying historical data of stock prices and connect with trading volume that occurred and the economic conditions at that time. This analysis only considers the price movement without regarding to the performance of the company that issued the stock. The price movements are associated with the events of that time, such as the effect of economy, political influence, the influence of trade statement, the psychological influence and the influence of other issues (Sutrisno, 2005: 330).

Technical analysis is an attempt to predict stock prices by observing changes in stock prices in the last period and to determine when investors should buy, sell or retain their shares using technical indicators or analysis charts. Technical indicators used are moving averages (which follow the trend of the market), trading volume, and short interest ratio. While the chart analysis is expected to identify the various patterns such as key reversal, head and shoulders, and so on. This analysis uses data from the stock market, such as price and volume of the sale of shares to determine the share value.

2) Fundamental Analysis

Fundamental analysis is a factor that is closely related to the condition of the company, that is the condition of the organization's management of human resources and the company's financial condition as reflected in the company's financial performance.

Fundamental analysis tries to predict the stock price in the future to estimate the fundamental factors that affect stock prices in the future and establish the relationship of these variables in order to obtain the estimated price of the stock (Husnan, 2005: 315).

This analysis is often referred to as share price forecasting and is often used in a variety of analysis training on securities. The most important step in this analysis is to identify the fundamental factors that are expected to affect the stock price. Factors analyzed are associated with the condition of the company, which include condition management, organization, human resources, and corporate finance that is reflected in the company's performance.

Fundamental analysis is an analytical approach that focuses on the stock price performance of companies that issue shares and economic analysis that will affect the company's future (Sutrisno, 2005: 331).

Fundamental analysis focuses on financial ratios and events that directly or indirectly affect the company's financial performance. Some experts argue the fundamental analysis technique is more suitable for making decisions in choosing which company shares are bought for the long term. Several major or fundamental factors that affect stock prices, namely sales, sales growth, the company's operations, profits, dividends, shareholders, management change, and the statements made by the management company.

Investor Personality

When it comes to money and investing, there are many factors that contribute to the “how” and “why” of important decisions. According to Morse (1998) concludes that individuals have difficulty perceiving the actual risk associated with the choice of investments they face, and so have difficulty matching investments to their desired level of risk exposure.

According to the CFA Institute, there are four different types of investors, each with their own distinct behavioral biases. Understanding investor personality type can go a long way toward determining and meeting companies' long term investment goals, as well as producing better returns.

- Preservers are investors who place a great deal of emphasis on financial security and on preserving wealth rather than taking risks to grow wealth. Preservers watch closely over their assets and are anxious about losses and short-term performance. They may also have trouble taking action for fear of making the wrong investments decisions (Pompian, 2012).
- Accumulators are investors who are interested in accumulating wealth and are confident they can do so. Accumulators tend to want to steer the ship when it comes to making investment decisions. They are risk takers and typically believe that whatever path they choose is the correct one. Accumulators have frequently been successful in prior business endeavors and are confident that they will make successful investors as well (Pompian, 2012).
- Followers are investors who tend to follow the lead of their friends and colleagues, a general investing fad, or the status quo, rather than having their own ideas or making their own decisions about investing. Followers may lack interest and/or knowledge of the financial markets, and their decision-making process may lack a long-term plan (Pompian, 2012).
- Independents are investors who have original ideas about investing and like to be involved in the investment process. Unlike Followers, they are very interested in the process of investing and are engaged in the financial markets. Many Independents are analytical and critical thinkers who trust themselves to make confident and informed decisions, but they risk the pitfalls of only following their own research (Pompian, 2012).

C. RESEARCH METHOD

The research method was a qualitative research method. Sugiyono (2005) stated that qualitative research is a research method used to examine the condition of natural objects, (as his opponent is experimental). In qualitative research, researchers are a key instrument and data collection technique is triangulation (combined). Then, data analysis is inductive, and the qualitative research results in further emphasizing the significance rather than generalization.

The characteristics of qualitative methods (Bogdan and Biklen, 1982):

1. Qualitative research has the natural setting as the direct source of data, and the researcher is the key instrument
2. Qualitative research is descriptive. The data collected is in the form of words and pictures rather than numbers
3. Qualitative research is concerned with process rather than simply with outcomes or products

4. Qualitative research tends to analyze the data inductively
5. "Meaning" is essential to the qualitative approach

Researcher used a qualitative approach in order to obtain in-depth information about the nature of the problems in this research that aims to know the role of investor psychology towards the investment decision to be taken by investors. The qualitative research can also give insight into how the behavior of investors in making investment decisions in the stock market. The qualitative approach allows the researcher to obtain data from the investors so as to generate descriptive data as a reference in the study.

This stage of the analysis is conducted by making a list of questions for interviews, data collection, and data analysis conducted by researcher. In order to determine the extent of the information provided by the informant study, the researcher used several stages:

1. Preparing draft interview questions based on the element of credibility that will be asked on the informants.
2. Conducting interviews with investors as an investment decision makers, especially in the stock market.
3. Taking the documentation directly in the field to complete the data relating to the research.
4. Transcribing the data gained from interviews.
5. Analyzing the data gained from interviews.

Data used in the research are primary data. According to Umar (2003), the primary data are obtained directly in the field with the informants as the object of research. Depth interview method was used to obtain the data by conducting interviews with sources selected. Interviews conducted by researchers used interview guideline. Interviews using guidelines were meant for in-depth interviews with a focus on the issues to be studied. Interview guidelines typically do not contain detailed questions, but just the outline of the data or information to be obtained from sources which will be developed by taking into account the context of the development and the interview situation.

This study uses data collection techniques, namely: Semi-structured interviews. Sugiyono (2012) stated that the interview is the collection of data through meetings between researchers with the informant to exchange information. The exchange of information is done through the process of debriefing. This study using semi-structured interviews. Furthermore, Sugiyono (2012) stated that a semi-structured interview is a kind of interview that allows researchers to develop other questions which are different from the informant interview guide.

In qualitative research, data collection is done in a natural setting, the primary data source, and data collection techniques. Catherine Marshall, Gretchen B. Rossman (2006) stated that the fundamental method relied upon by qualitative researchers to gather information, participation in the setting, direct observation, interviews, review of documents.

Analysis of data on qualitative research is the process of compiling data obtained systematically by means of categorization according to the pattern, selecting the data that is important and needed to be explored, as well as making inferences from data analysis. The measures undertaken in the case study is part of a qualitative research. Moleong (2006) stated that the data analysis process begins by examining all the data that has been obtained is then reduced to a summary of which is the core of the data. The next step is to prepare a summary of the data into categories. The category is made while coding. The last stage of the analysis of the data is validity check of the data.

D. FINDING AND DISCUSSIONS

Description of Research Findings

The informant is a person who provides information to others who do not know. The informant in this research consisted of five (5) persons who are investors in the stock market. Therefore, informants who were interviewed were not willing to mention the original identity, the researcher changed the name of the informant by gender and for more detail below is as follow.

1. W1, around 50 years old

Woman aged about 50 years old is an investor who has experienced doing transactions on the stock exchange for many years. In the early years, she did not know what it was and how to share her transactions. She became an investor as a challenge from her husband who at that time suffered big losses. It was caused by the broker who did not give matching advice to him. In addition, she was only a housewife and found it difficult to compete with fresh graduates. Therefore, she decided to be an active investor until now.

2. M1, around 65 years old

He is a retired man who at the beginning did not have any background knowledge about the economy and stocks. He only relied on the knowledge obtained from friends, relatives and others. He said that his goal as an investor is to spend the time for making his brain and mind work. As an investor, he would not use the funds that would interfere with his family finance.

3. M2, around 20 years old

He is a last year university student who is waiting for graduation. He has been an investor for almost 3 years. However, he admitted that he has gained profit around 100 million rupiahs. He got interested in stock investment as he got less supportive finance from his family. Although his father experienced losses of 50 percent of the capital, he started investing in the stock with a capital of Rp.500.000,-

4. M3, around 30 years old

He is a receptionist in a company and he is an investor. He believes that an investor does not have to have a lot of capital. Even though he often suffered substantial losses, he believes that every loss will definitely gain back later. He believes that to be investor does not need to have a big capital. For him, 1 million rupiah is sufficient enough to make a profit.

5. M4, around 35 years old

The last informant is a man who no longer become an investor because he works at a securities company in which there is a rule not allowing employees of a securities company to open a private account in the stock market. This man said that the capital market is the most dynamic industry today because investors can buy and sell shares anywhere via smartphones and their gadgets without having to go to a securities company.

Analysis of the Implementation of Fundamental Analysis

Fundamental analysis is a factor that is closely related to the condition of the company. This analysis is commonly used by investors in making investment decisions, especially the stock market. Fundamental analysis attempts to analyze and predict stock prices based on the intrinsic value of the company's fundamental company. Fundamental factors can be seen on the company's financial performance, analysis of economic data, the quality of enterprise management, the company's position in industry, and the company's prospect in the future (Bodie et.al, 2006). Fundamental analysis constitutes the basic necessary analysis method of the overall evaluation of the company. The strong and weak points of the company hidden behind the accounting figures also pointed by fundamental analysis.

Well-managed companies are more likely to keep generating a steady stream of revenues in the future as well. Hence, there is a link between the past and current record of a company, and its future earnings prospects. Based on the explanations and findings it can be concluded that fundamental analysis can be a benchmark for some investors because of fundamental analysis using almost all of the elements and instruments of the company, such as company financial performance, analysis of economic data, the company's prospects and so on to decide which investment decisions will be taken. Fundamental analysis can also be spelled as "cause" of investors to buy or sell their stocks which can

be caused by poor corporate prospect analysis by investors even at the time, the company have good stocks price.

Analysis of the Implementation of Technical Analysis

Technical analysis is an attempt to predict stock prices by observing changes in stock prices in the last period and to determine when investor should buy, sell or retain their stocks using technical indicator or analysis chart. Technical analysis is a methodology of forecasting fluctuations in the stock price data taken from stock trade data that occur in the stock market. This type of data can be a source of information in stock prices, the amount of volume and value of trade transactions, the highest and lowest prices on each trading day or any other information relating to the transaction of stocks embodied in the share trend, could be in the form of a graph (Rahardjo, 2006).

Based on the explanations and findings can be concluded that technical analysis is how to analyzing stock price for some investors because technical analysis is using the information of stock prices, the amount of volume and value of transactions, the historical price movement and summarizes in the form of charts to forecast future price movement to determine investment decisions will be taken. Technical analysis can also be spelled as "results" of investors to buy or sell their shares which can be caused by the analysis from data history of stock price to predict stock price in the future.

Analysis of Psychology in Making Investment Decision

The identification of successful investment strategies is one of the major applications of behavioral finance. Behavioral finance seeks to identify and explain anomalies in economic behavior, such as under reaction, overreaction, and calendar effects in security prices (Thaler, 1992). Gervais et al. (2002) found that excessive optimism often causes positive impacts because it encourages managers to invest in. This effect is positive because awareness of risks usually affects firm value negatively. However, excessive optimism can cause negative impacts as it can lead companies or investors to invest in projects which have negative assets which have high risks.

Each investor must expect the profit of investment decisions taken but the attitude in facing advantages obtained are also important for an investor. Most people would prefer to stop the transaction or start new business once they lose, but based on the findings, all informants agreed to answer that they would not cease to be an investor because of the loss, they all claimed to have a strategy or principles for dealing with their loss. It can be concluded that investor psychology can influence investment decisions taken by their overconfidence caused by profits that he may previously get, made them confident in their ability as investors in the face of the market. Optimism can also affect the making investment decision investors due to the nature of optimistic, they sure can reverse their losses. Furthermore, herd behavior could make investors become too fast or too long in making investment decisions because depend on the behavior of other investors. This explanation show investor psychology can influence their analysis against the market price which may result underreact and overreact to the stock price.

The Contribution of the Rational and Irrational Investment decision in Forming Stock Price

Suryawijaya (2003) in the concept of behavioral finance stated that the investment decisions made by investors to consider non-economic aspects particularly psychological aspects can affect the behavior of investors because investors are in fact often perform actions based on judgment and contrary to theories that had been raised in the capital market on the assumption of rationality. Dhoui et al. (2013) stated that, optimistic as well as overconfident investors are more prone to risky investments. Investors trade irrationally and their irrational reaction can induce abnormal volatility in trading volumes and consequently in stock returns.

Based on the findings it can be concluded that for a rational investors who has enough information, they have a smaller chance to get losses and the effect of the stock market will create the

effective market in stock market. Furthermore that irrational investor overconfidence can lead to losses for investors due to the lack of information obtained and can increase the amount of volume of transactions in the stock market. It can be concluded that rational investors are investors who have sufficient information in making investment decisions and they are able to control their emotions when earn large amount of profits by not increasing the amount of volume or value of their transactions in stock market. Furthermore investors who are irrational do not have enough information but remain confident in making investment decisions and remain confident to continue to stocks transaction in stock market despite continuing losses.

E. CONCLUSIONS

Based on the findings in this study, it can be concluded that the behavior of investors in making investment decisions in the stocks always rely on fundamental analysis and technical analysis to analyze the stock price on the stock market. This study also showed subjectivity that investors are consciously or unconsciously use their psychology in conducting transactions on the stock market.

- **Fundamental analysis**

Some investors use fundamental analysis as a benchmark to buy stocks or predict stock price movements. Fundamental analysis is used by investors who will make long term investments. Fundamental analysis itself is usually "cause" the stock price change price increase or decrease in the stock price. Some examples, among others, the company's financial statements to see the company's financial situation, the company corporate action in the form of a performance management company, as well as other considerations related to the performance of the company itself.

- **Technical analysis**

Investors have a wide range of factors in using technical analysis. This analysis usually is subjective based analysis used by investors who may be assisted by a broker for technical analysis more towards "results". Technical analysis is short-term oriented on stock transactions. As a result of the question is the price of stocks to be turned up or down as affected by the incident that had occurred beyond the control of the company. There are many examples that illustrate the technical analysis, including changes in the global economy, changes in a country's economy, interest rates, the level of purchasing power, a growing issue today, rumors in the community, and more. Investors will see the chart before making a decision on stock transactions in the stock market.

In addition to use the fundamental and technical analysis, some investors use the irrational and irrational in making an investment decision after a gaining or losing in a stock transaction. There are also some investors who will make transactions in large numbers if they got profit. They do not hesitate to hold their gains. This shows whether investors involve their feelings and emotions in making investment decision made to try to be rational or even following the euphoria they felt after getting profit. Investors have the principle that when they enter the world of investments, especially stocks, they must be prepared to accept all the risks, both the losses and gains in large amount. Moreover, investors actually believe that the losses should not make them afraid to do stock transactions or cease to be an investor because they have confidence that any loss will be gained back, can be tricked, and can be tuned into profit.

Limitation of the study

This study has limitations in the lack of information that can be interviewed because of investors' avoidance as it may disturb their privacy and did not want his strategies known by others. Therefore, this study may be less accurate to be generalized because of the results of the analysis of data obtained from several viewpoints informants, researcher and supporting theories.

Suggestions for further research

Future researchers who studied the same topic are expected to fill gaps identified include lack of data obtained to analyze within the limits of the study as part of the questionnaire used to obtain more data from investors. The importance of controlling the psychology of investors for investment decisions made will affect the level of profit and loss that investors will experience. Thus more research is needed to investigate the psychology of investors in Indonesia because capital markets have an important role for the country's economy.

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