CHAPTER I

INTRODUCTION

1.1 Research Background

The main goal of being an investor is to gain the most profit and the least loss. To accomplish such goal, an investor must become rational. In other words, properly analyzing relevant information and formulating a strategy based on it. A rational investor will have a better chance to achieve the best possible scenario. On the other hand, there is an instance where investors do not properly analyze and strategize beforehand. This is the main idea of how irrational investor behaves. Rational investors are likely to be fundamental, while irrational to be trend chasers (Feldman & Lepori, 2016). Being a trend chaser is simply following any trend on the market, without making a proper plan ahead. Irrational investors have little knowledge, of why the trend would behave in such away. Therefore, irrational investors are riddled with uncertainties. Trading with uncertainties is very risky and can result in a huge loss. Therefore, rational investors can a achieve better result than those who are irrational.

Financial behavior can be used to explain investors' irrationality. Researchers have investigated numerous reasons, why an investor is being irrational in the first place. One study proposes there are four categories of financial behaviors. Those behaviors are namely Investor Sentiment, Investor Overconfidence, Overreaction and Underreaction, and lastly Herding Behavior. There is a connection between Investor overconfidence and Overreaction. This is due to Overreaction is often triggered by Investor overconfidence. However, this research will mainly focus on Investor Overreaction only. It is what happens when investors overreact to unexpected news (Metawa et al., 2019). Meanwhile, when investors successfully predict certain news, they become overconfident. They would trade more because they are confident it will be accurate. However, they would also fall dramatically, when their prediction is incorrect. This phenomenon is very likely possible to trigger investor overreaction (Mushinada & Veluri, 2018). Thus, when investors become overconfident in their predictions, they are very likely to overreact to news.

One of the possible sources of overreaction is the news about the company, which investors invested in. This news can be either good or bad, thus affecting investors' beliefs and plan for the company's stock. When good news arrived, the stock price is often higher than its intrinsic value. Oppositely, when bad news arrived, the stock price is often lower than its intrinsic value. Therefore, investors are likely to sense some sort of pattern is formed when following the release of the news. News is able to contribute toward investors' prediction, which is highly uncertain. Predicting the future will always be filled with uncertainties. When faced with uncertainty, investors make rash decisions in trading. This phenomenon is very likely to contribute toward overreaction (Shantha Gowri & Ram, 2019). Investors have the tendency to underreact towards public information, then overreact towards private information. The scenario is that informed investors are able

to discern private information faster than uninformed. Therefore, informed investors believed it was undervalued, therefore it was better to buy. While, uninformed investors lagged behind, believing that the price is normal and not undervalued. Uninformed investors will likely overreact when private information came to light (Rainer & Tallau, 2016). Investors' bias can be affected by media, to shift their initial behavior. Media provides various of information, especially if investors are seeking information about the company. If the media is publishing good news, investors are likely to buy more. Inversely, if the media published bad news, investors are likely to sell. However, since there are large numbers of different media, information can vary from one media to the other. This variation of information can lead to information noise, meaning it is difficult to discern which information is accurate. Therefore, when investors relied too much on media, it is highly possible to cause overreaction (Chan et al., 2015). Thus, from previous studies, it can be concluded that news has a significant contribution towards investor overreaction.

Another source of overreaction is investors' own information about the company. Uninformed investors engaged in momentum trading, causing overreaction (Duxbury, 2015). Meaning that uninformed investors are blindly following what is on the market. In other words, investors are disregarding their own plan, in order to pursue the trend. Informed investors also have better and faster reactions than uninformed investors (Geoffrey Booth et al., 2011). When obtaining information, uninformed investors fell behind informed investors. Uninformed investors aim to pursue any market trend they believe, causing market volatility (Cherono et al., 2019). When uninformed investors did not become equal with informed investors, they will likely panic when new information is released. Uninformed investors set up their plans after observing other investors' actions and the behavior of the price itself (Angelovska, 2016). Uninformed investors can be easily affected by other investors' actions, causing uncertainty in their actions. Informed investors have less noise when discerning information, whereas uninformed investors will likely become trend chasers (Liang, 2012). Uninformed investors are the source of market overreaction leading to abnormal volatility (Lobão & Costa, 2019). Thus, it can be concluded there are clear distinctions between informed and uninformed investors. Uninformed investors are likely to overreact to information, whereas informed investors do not.

It can be assumed that uninformed investors are also irrational investors. There are connections proven by previous studies. In early December of 2020, an American company by the name of Tesla Inc. planned to work together with Indonesia. More news about Tesla involvement came to light in the next five months. Tesla Electric Vehicle uses Lithium-Ion Battery for their Tesla Models. This battery is made out of Lithium, Nickel, Cobalt, and Manganese (Mo & Jeon, 2018). Indonesia appears to be rich in Nickel and is prepared to supply such demand. Indonesian Mining companies, especially in Nickel are PT. Vale Indonesia (INCO) PT. Aneka Tambang (ANTM), PT. Timah (TINS), PT. Central Omega Resources (DKFT), and PT. Ifishdeco (IFSH). These companies are listed on the Indonesian Stock Exchange, therefore can be traded by the investors.

When it comes to information, the most prominent source is from news regarding Tesla Inc. Initially during early December, Tesla's plan to visit Indonesia was canceled and the meeting was held virtually instead. News media speculated that Tesla will build a battery manufacturer. In January, there are news Tesla building their car manufacture in India, not as previously speculated in Indonesia. Although the following news stated, that Tesla's intention in India is not confirmed yet. However, early February suggested Tesla is still planning to place manufacturers in Indonesia. Nevertheless, Tesla still had the intention to invest in Indonesia, due to its rich nickel reserve. However, early march suggested that Tesla chose New Caledonia instead to get their nickels. These are the example of both good news and bad news. The news pattern is mostly good news followed by bad news or vice versa. There is also an apparent reaction in the stock market, each time Tesla news comes out.

Each time overreaction occurs, it will disrupt other investors' plans. The price in the market will be higher or lower than expected. This will cause more volatility and uncertainty. It is better to anticipate this behavior, rather than merely accept it. Thus, due to the irrationality of uninformed investors, it is important to understand overreaction behavior.

1.2 Problem Statement

This research aims to investigate the phenomenon of overreaction behavior in the Indonesian stock market. Especially stocks of companies in nickel mining, due to Tesla plan and news. Thus, the possible formulated question in this research is:

Is there news overreaction in the nickel mining companies regarding Tesla?

1.3 Scope of the Research

This research focuses on behavioral finance, overreaction in the Indonesian stock market. In order to limit the area of research, the following points are the boundaries of the research area:

- a) Five mining companies are used, especially those specialized in nickels. Namely PT. Vale Indonesia (INCO) PT. Aneka Tambang (ANTM), PT. Timah (TINS), PT. Central Omega Resources (DKFT), and PT. Ifishdeco (IFSH).
- b) There will be two periods of data. The first period following Tesla's development is taken from the earliest development until the latest. The second period will be before tesla development. Therefore, both periods have equally the same data, in order to compare.

1.4 Objective of the Study

The objective of this study is to investigate if Tesla news caused investors' overreaction in Indonesian nickel mining company stock.

1.5 Motivation of Research

As discussed in the background, this study focuses on the Investor's overreaction. A stock price can dramatically rise up or fall down, because of this irrationality. Of course, there are numerous sources, on why an investor becomes irrational in the first place. One of the most prominent factors I have seen is in the news. Each time news is released, most of the time there is an apparent reaction. With enough numbers, irrational investors can extremely disrupt the market. Most investors in Indonesia are like a duck, they tend to follow anyone who is at the front. This means most of them just simply don't have a good strategy and plan. When following others' work, they started to rely on it. This will spark overconfidence because it simply works. It is quite similar to how investors reacted to the news. Investors will start to rely on the news. Should their prediction come true, it will also spark overconfidence. I assumed with enough numbers of overconfidence; irrational investors can shift the market. Thus, if this study can prove that news indeed can cause overreaction, then future investors may use this research to anticipate what will happen. Of course, it will not be one fit all solution in any overreaction occurrence. But I do hope it will at least prepare future investors when any company-related news is released.

Another main reason why this research is done is due to how recent Tesla involvement is in Indonesia. I have always believed that no matter what the company is, overreaction will likely occur when it is supported by the news. With Tesla, it is easier to understand why overreaction might be occurring. Tesla has always been prominent in its electric vehicles department. Tesla is trying to focus on their electric car, and these cars required batteries. The main ingredient for the battery exists abundantly in Indonesia. Therefore, if Tesla wanted to be involved with Indonesia during their electric car project, then it can be easily assumed that they are trying to get some Indonesian nickels. Thus, any company related to nickel mining will be affected.

