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Investor Behavior In Green Investment Information

Intan Puspitasari[1], Sugeng Wahyudi[2], Irene Rini Demi Pangestuti[3]

[1]Faculty of Economic of Muhammadiyah Purworejo University, Purworejo, Indonesia
[2,3]Faculty of Economics and Business of Diponegoro University, Semarang, Indonesia
intanps.msc@gmail.com

Abstract

Purpose - This study aims to analyze the behavior of investors towards voluntary disclosure in the form of green investment information.

Method - This research is using qualitative descriptive method, the data will be taken and collected from several literatures and literature studies.

Result - The result of this research indicates that there are investors' behaviors in voluntary disclosure of green investment information.The first, green investor refers to the investors rejecting to the stocks that do not receive green investment, investor will react positively if a disclosure of green investment information stands.The second, the investors react negatively by giving pessimistic respond towards green investment, investors who do not have choice of shares from other companies.

Implication - This study uses the data from study of literature.

Originality - This research develops several old and new theories related to green investment and it is applied using certain different types of companies as the objects.

Keywords: green investor; normal investor; green investment information.

Introduction

In the last ten years, many researches to reveal investors' reaction toward the disclosure of information have been conducted. The company's financial statements are the primary source of information for assessing investment prospects.Information disclosed in the company's financial statements can be grouped into two, namely mandatory disclosure and voluntary disclosure. Thus, companies are free to choose the type of information disclosed, which is considered as relevant management in helping decision making (Hadi and Sabeni, 2002). The benefit of voluntary information disclosure is the lower capital costs.

Voluntary disclosure is the disclosure of items made voluntarily by the company without being required by applicable regulations. One of the ways to increase the company credibility is through the broader voluntary disclosure. The main purpose of financial reporting is to provide information needed in decision making for interested parties.The information presented in the financial statements will be comprehended and will not lead to misinterpretationif the financial statements are completed with the adequate disclosures.

Information delivered to the public in the term of non-financial information can be disclosures about contributions in social responsibility of the company. In research (Martin and Moser 2016), it is stated that the disclosure that focuses on social benefits will get positive respond from investors compared to the disclosure that focuses on company operating charge.

That company contributes in preserving the environment is the requirement for the company when it is going to operate. This regulation is asserted in the law issued by the Ministry of Environment, which explains that a company conducting operational activities in Indonesia must obey the rules of environmental stewardship or be socially responsible.

Literature Review

Behavioral Finance

In the very beginning, those who invest do not only calculate the investment prospects, the rate of return or the risk obtained, but also consider psychological factors that impress the investment. The existence of psychological factor affectsthe investment and its result that will be achieved. Therefore, investment analysis that uses psychology and financial science is well-known as financial behavior or behavior finance.

According to (Ricciardi and Simon, 2000), behavioral finance attempts to explain and improve the understanding patterns of investor reasons includingemotional aspects and their degree in influencing the decision making process. More specifically, strives to find out the answers about what, why and how finance and investment are from a human perspective. (Ricciardi and Simon, 2000) divides three groups of individuals who have direct or indirect interests in behavioral finance: 1). Individual, which consists of small investor, portfolio manager, pension boards; 2). Group, which consists of mutual fund investors (portfolio); 3). Organization, for example financial institutions, non-profit organizations.

(Shefrin, 2001) defines behavioral finance is a study that refers to how psychological phenomena affects financial behavior. The behavior of the stock players where (Shefrin, 2001) states the practitioners' behavior. (Baker and Nofsinger, 2002) define financial behavior as study of how humans actually behave in a financial determination. Specifically, it explores how psychology influences financial decision, corporation, and financial market. The concept outlined clearly states that financial behavior is an approach explaining about how humans make investments or relate to finance which is influenced by psychological factors. The theory of financial behavior can be interpreted as the application of psychology in the discipline of finance. In another word, financial behavior is an investment analysis that uses psychology and finance, which is an approach that explains how humans (investors) make investments or relate to finance is influenced by 8 psychological factors.

Financial factor intends to understand investors' behavior in making decision related to investment and behaving in the capital market that will affect market performance (Qawi, 2010; Wendy, 2010; Shahzaddkk., 2013).

Theory Regret

It is related to people's reaction and emotional experiences after realizing they have made a mistake in judgment. Facing the prospect of selling stock, investors become emotionally affected by the price in which they purchase the stocks. Thus, they avoid selling it as a way to avoid the regret for making a bad investment and the embarrassment of reporting a loss. This theory can be implemented by the investors who find their stock in the danger of facing possible loss. Some investors avoid the possible regret by following conventional wisdom and purchasing only shares or stocks that others buy, rationalizing their decisions with "other people do it" (Pareto, 1997).

Theory of Mental Accounting

It is stated that humans have a tendency to place certain events into mental compartments. Then, the difference between these compartments is sometimes an impact of our behavior compared to the event itself. The example of this theory is illustrated by the doubt to sell investments that once had very high profits and now have modest profits. When market corrections thin investors' net worth, they are more hesitant to sell at the lower profit margins. They make mental compartments for the profits they once had, causing them to wait for favorable return periods (Thaler, 2001).

Prospect / Loss-Aversion-Theory

Prospect shows that people express different levels of emotion towards the gains in the heading of loss. Individuals are more emphasized by prospective losses than the luck of the same benefits. Investors often make mistake by pursuing market action with investing in stocks or funds that garner the most attention. Research 12 shows that the money which flows into high-performance mutual funds faster than the money that flows out of funds left behind (Kahnemanandversky, 1979).

Over / Under Reacting Theory

This theory stated that investors get optimistic when the market goes up. With this assumption, the investors will continue to do so. Conversely, investors have become very pessimistic amid the slump. The consequence of anchoring, placing too much importance on recent events while ignoring historical data is over or under reaction to market events which result in prices is falling too much on bad news and arising too much on good news. On the top of optimism, investor greed moves stocks beyond their intrinsic value (Hong and Stein, 1999).

Theory of Overconfidence

Overconfidence theory tells that people generally rate themselves as above average in their abilities. They also overestimate the accuracy of their knowledge and their relative knowledge of others. Many investors believe that they can consistently market time. In fact, there is a large amount of evidence that proves the opposite. The result of overconfidence is in over-trading with the advantage of the uncertain trade costs, (Tapia and Yermo, 2007).

Investor Behavior in the Capital Market

Financial behavior is a model that emphasizes the potential implications of psychological factors influencing investors' behavior. Its emergence is driven by the notion that conventional financial theory pays little attention to how investors actually make investment decisions. Various financial theories and models assume that investors always behave rationally in the investment decision making process. Investors are assumed to be willing and able to receive and analyze all available information based on their rationality thinking. However, in reality investors often show irrational behavior (intent to be judgmental), so this situation deviates from the assumption of rationality and has a tendency to be biased. This irrational happens because investors have emotions other than ratios. Both of them make synergy in shaping long term and short term human reaction (Asri, 2013).

Investor's behavior is strongly influenced by information received because the information tends to be individual. It means individuals may react differently to the same source of information. This shows that the individual receives information and revises beliefs sequentially in an ongoing process through receiving information contained in the financial statements and also from other sources of information such as the media, and other announcements that can influence his decision. In connection with this matter as a source of information, financial statements are a provider of relevant and reliable accounting information. On the other hand, information usefulness for decision making emphasizes the content of information and accuracy of time in convincing the investors or changing prior belief of financial statement's user.

Bias Cognitive

The concept of behavior can lead to irrational behavior in investment decision making due to cognitive biases, specifically when the thought process is not based on rational considerations and is not equipped with strong reasons. As a result, there is a possibility of perversion, judgment deviation, illogical interpretation, or irrational (Asri, 2013). According to (Asri, 2013) There are three groups of cognitive biases, namely: heuristic bias, reaction bias towards information, information understanding and adjustment bias.

Theories Underlying CSR Practices

Gray et al. (1995) explains a number of theories behind the company to do social disclosure, namely: 1.) Decision Usefulness Studies, this theory includes other users of accounting reports from other investors into the basic criteria of users of accounting reports so that an accounting report can be useful for economic decision making by all elements of the report users; 2.)

Economic Theory Studies, this study is based on economic agency theory. The theory distinguishes between the owners of company and company managers. This theory also implies that company managers must provide accountability reports for all resources owned and managed by the company owners; 3.) Social and Political Studies, the economic sector cannot be separated from the political, social, and institutional framework in which the economy is located. Social and political studies include two main theories. Those theories are as follows; the first is Stakeholder Theory which assumes that the existence of a company is determined by the stakeholders. The main focus in this theory is how the company monitors and responds to the needs of its stakeholders. The second is legitimacy theory which states that companies must be able to adjust to the value system that has been implemented by the community. Among other things, the company's business is realized through social disclosure. This is carried out with the aim that the company's activities and presence will be legitimized in the public's perspective. Other theories that support the practice of social disclosure such as the social contract theory state that companies are an inseparable part of a community.

Green Investments

Many actions are known as "investments". This case brings confusion in defining the term "green investment". Broadly speaking, investment involves the use of money or capital into a business (business, project, real estate, etc.) in the hope of earning additional income or profits. This not only can refer to investment in project or business technology but also for the financial products that it invests.

For institutional investors, there are basically two main levels of investment decision making: 1.) strategic decisions are taken by the board of directors or trustees, investment committee or CIO (eg ESG type (Social Environment and Government), SRI (Socially Responsible Investment), green investment policy); 2.) The implementation of the decisions is taken by internal or external investment managers and "green" analysts (choices eg assets, benchmarks, funds etc.).

Institutional investors can approach green investment in very different ways. This also creates some confusion in the literature in terms of investment volume definition and measurement. Different approaches to investment are as follows: 1.) Green assets vs. green overlays, green investment refers to assets that in some ways are defined as "green", for example renewable energy companies, or the theme of managing green fund assets, or carbon credits. However, green investment can also be done in the form of investment overlays, such as integration of climate change or ESGelemen in the general investment approach or SRI compliance. Terminology varies across industries. The same distinction has been made for ESG investment using the term (Urwin 2010): "integrated ESG" versus "targeted ESG". What is formed refers to the use of ESG parameters in the general investment process, the latter for specific mandates, products or managers. 2.) Strategic asset allocation approach, At the level of strategic asset allocation, a number of important decisions must be made. Firstly, the form of green / ESG / SRI overlays are in the general investment process (eg "all managers need to integrate environmental considerations in their analysis"). Secondly, the decision can allocate a certain percentage of total green investment assets. Thirdly, the trustee decides to set certain targets for green investment in the different asset classes. The fourth, decisions are made about the type of green investment. The last, the implementation can be delegated to the main manager or to go green special manager. 3.) Green investment approach, investment managers implement strategic decisions in their mandates or funds. 4.) Green in the SRI / ESG Context.

Over the years, a number of different approaches have been developed. The main strands are: 1.) negative screening, exclusion of unwanted products (eg tobacco, palm oil) or sectors (eg weapons industry, nuclear industry); 2.) positive screening or asset selection (for example with the help of filters); 3.) Invest in a "green theme"; 4.) Engagement, activism, sound (to make a green company); 5.) Integration of green / ESG factors in general investment analysis; 6.) These approaches are not mutually exclusive. Investors often use a combination of green and different ESG approaches.

Green investments can stand alone, a sub-set of the broader investment themes or closely related to other investment approaches: 1.) Green investment (environmentally friendly, climate change, etc.); 2.) "E" investment in ESG (environmental, social and governance); 3.) investment themes (in the green sector or themes such as water, agriculture) 4.) SRI (socially or sustainably responsible investment); 5.) RI (responsible for investment); 6.) SI (sustainable investment), sustainable capitalism; 7.) Impact investment (including microfinance); 8.) Long term investment; 9.) The concept of Universal ownership; 10.) Double or triple bottom-line investment (with financial, social and ecological objectives).

Prior Research

Several studies connected to investors' behaviour in investment decision making related to information disclosure have been conducted by several researchers including (Lyon, Lu et al., 2013, Rodgers, Choy et al. 2013, Dhaoui 2015, Martin and Moser, 2016). They explained that investors behaved positively on the information disclosed in the financial statements. However, the behaviour that arises will vary based on investors' psychology.

The research about investors' reaction to voluntary disclosure of information was carried out by (Martin and Moser, 2016). He tests the investor's reaction if the company discloses Green Investment or does not disclose in the financial statements, and also tests the investor's reaction if the green investment is focused on costs or focuses on social benefits. The analytical tool used is Experiment Research conducted in the experimental market using z-tree software in computer laboratories. Participants involved as many as 90 people, consisting of 55% of men with an average age of 21 years divided into three sessions, with each session 30 people. At each session, the participants were given roles as follows, 1) as a manager who owned company shares, 2) other shareholders in the company, 3) one in three potential investors in the company.

The results shows that investors will react to the company for investment decisions if there are green investment disclosures compared to those without disclosures and investors will also react positively to investment decisions if green investment disclosures took more focus on social benefits rather than costs. The positive response of investors to the disclosure of minimal green investments based on social benefits associated with investment helps us to have better understanding on the rapid increases in SRI funds (Social Investment Foundation Forum, 2012).

The next research about investors' behavior was also conducted by (Dhaoui 2015), it is exploring about how investors' sentiment can create investors' behavior in investment decision making. He tested investors' sentiment in the form of optimistic and pessimistic confidence in the future of the stock market at the trading level. The data used is weekly time series data from stock prices and trading volume with the time period of July 1987 to May 2014 obtained from Yahoo Finance.

Stock Price, in which this study uses the percentage of stock market returns in the form of logarithms of stock prices multiplied by 100 (Chen, 2012). Trade Volume, i.e. the volume of trade transactions expressed in Natural Logarithms (Ln). Market Trend (MT), which is the difference between the closing price and the lowest price of x-day divided by the difference between the highest price of x-day and the lowest price of x-day.

The analysis used to test the relationship of variables in the long run is the VECM (Vector Error Correction Model). The dependent variable is Stock Return and the independent variable is investors' sentiment in the form of optimistic shocks and pessimistic shocks.

The results of the analysis obtained that the response of investors (optimistic and pessimistic reactions) occurs on an increase or decrease in trading volume. The VECM model shows a higher sensitivity of investors' trading behavior to their pessimistic forecasts than their optimistic forecasts (seen based on negative signs on ECM results). Optimistic Investors are seen from Investor's attitude to wait for the positive evolution of the stock market and believe that the market will react aggressively thereby increasing their trading volume, but in reality the market moves not as expected, and eventually they lose confidence. This is called an optimistic surprise. Pessimistic investors are those who are cautious, they have a high sensitivity of trading experience. And at last, the market will move well. This is called as a pessimistic surprise.

(Guo, Sun et al. 2017) explained that with the development of social networks, interaction between investors in the stock market became faster and more convenient. Thus, investor sentiment that can influence their investment decisions can be quickly spread and enlarged through the network, and to a certain extent the stock market can be affected. This paper collects the data about the users' opinion from a popular professional social networking site on the Chinese stock market called Xueqiu, so investor sentiment data can be obtained through semantic analysis. Analysis of the dynamics of the relationship between investor sentiment and the stock market is proposed based on the Thermal Optimal Path (TOP) method. The results show that sentiment data does not always lead to stock market prices, and can be used to predict stock prices only if stocks have high investor attention.

Another research done by (Lyon, Lu et al. 2013) asserted that companies winning Green Company Awards in China from 2008 to 2011 experienced insignificant averages and had a significant negative effect on shareholder value in some cases. Various resilience checks indicate that this finding was not driven by the inefficiency of the Chinese stock market or the perceived lack of credibility of the award. In addition, we found important variations in responses across companies: shareholders of companies in low-pollution industries and companies with private ownership primarily responded negatively to awards announcements. Furthermore, the winning company colleagues showed higher announcement results than the award winners.

Previous empirical research has found mixed results for the impact of corporate social responsibility (CSR) investments on corporate financial performance (CFP). In the paper submitted by(Rodgers, Choy et al. 2013), this paper contributes to the literature by exploring a two-stage investor decision-making model that includes the relationship between corporate innovation efforts, CSR, and financial performance. We simultaneously examine the impact of CSR on accounting-based financial performance measures (health finance) and measurement of market-based financial performance (Tobin's Q). From a sample of key corporate citizens, we discover that: (1) corporate social responsibility (CSR) commitment contributes to its financial performance; (2) After controlling investment for innovation activities, CSR continues to have a positive impact on the company's financial performance; (3) the customer dimension of CSR has a positive effect on the size of the CFP, while the employee dimension shows a significant impact only on financial health; and (4) CSR only influences on the size of CFP based on corporate market with the highest innovation of investment.

Discussion

Based on the theory and literature review described above, it can be concluded that in making investment decisions, an investor can behave positively or negatively on information disclosed in the financial statements. In the theory of investor behavior, Theory of Mental Accounting, proposed by (Thaler ,2001), is a suitable theory to explain this phenomenon.

The theory behind the company to do social disclosure according to (Gray et al. 1995) relevant to investor's reaction to voluntary disclosure in the form of green investment disclosuresis a decision usefulness studies. This theory including other users of accounting reports other than investors into the basic criteria of users of accounting reports, so that an accounting report can be useful for economic decision making by all elements of the report users.

The financial statements as voluntary disclosures can provide information to investors, so that investors can move to behave or act in decision making. Investors will react positively if the information presented in the financial statements reveals a green investment that takes more focus on social benefits.

Investors' behavior in responding to information that is voluntarily disclosed will produce different reactions according to investor sentiment type. Investors who have a pessimistic attitude will actually increase the trading volume of their shares compared to investors who have an optimistic attitude. This shows that there is an irrational attitude raised by investors. During the trading period, a pessimistic investor will be careful and alert to fluctuations in stock prices that will occur, so he can anticipate the failure that will occur.

Investor sentiment does not always lead to stock market prices. And it can be used to predict stock prices only if stocks have high investor attention. This shows that investors have framing effect, that is a person's reaction to the information conveyed, where he will react positively if the information conveyed with a positive frame, and will react negatively if (the same) information is conveyed with a negative frame.

Conclusion

The conclusion that can be concluded according to the result of this study is that the reaction of the investors towards the voluntary disclosure of financial information brings various attitudes based psychological factor. The pessimistic attitude of "investor shocks" will increase the volume of stock sales. Other type of investor who has a response to the voluntary disclosure of green investment is green investor. Those investors are those who refuse shares that do not accept green investments and normal Investors and those who do not have the choice of shares from other companies.

Based on the analysis that has been done, the researchers suggest for the next study to use qualitative approach with several samples of environmentally friendly companies.

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