

# An Experimental Study of the Effect of Financial and Non-Financial Information on Intention to Invest in the Bearish and Bullish Market

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# An Experimental Study of the Effect of Financial and Non-Financial Information on Intention to Invest in the Bearish and Bullish Market

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This study examines the effect on the intention to invest financial performance information (upward or downward net income trends) and non-financial performance information (strong or weak corporate social responsibility) in the bearish and bullish capital market conditions. By using a 2x2x2 factorial experiment, this study found the following: 1) participants have a stronger intention to invest when the company's financial performance shows an upward net income trend; 2) participants also have a stronger intention to invest when the company's CSR performance is strong; and 3) without paying attention to financial and non-financial information, a bullish capital market condition is a time when individuals have a strong intention to invest. It is also found that participants have a strong intention to invest in companies that have an upward net income trend when the capital market conditions are bullish. This study has the implication that bullish or bearish capital market conditions represent kinds of momentum that also explain the investors behaviour in utilising information that the company has provided.

**Keywords:** *Bearish, bullish, financial and non-financial information, intention to invest.*

## Introduction

The decision to invest among individual Indonesian investors remains an important issue that must be explored, given the fact that the interest of the Indonesian people to invest is still considered quite low. Although, based on data from the Indonesian Central Securities



Depository (KSEI), which as of April 2018, then showed that the number of individual investors in the capital market in Indonesia had increased by 27 per cent from the previous year, yet was apparently still far behind neighbouring countries (Hadi, 2018). Including for example, Malaysia, which has an investment literacy population of 57 per cent of the population, Thailand at six per cent, China at nine per cent, and India at four per cent, while Indonesia is still at only 0.4 per cent of the population (Hadi, 2018).

The capital market in Indonesia is a growing market. In addition, generally, due to the higher volatility of stock returns and the lack of credible information dissemination, the capital market in Indonesia has a higher risk (Ekaputra et al., 2013). However, research on investor reactions in the capital market in Indonesia to company-specific information shows results that have not been consistent, even today (Rahayu, 2017). Even from a methodological perspective, experimental research on investor behaviour in Indonesia is still very limited.

The difference in reaction is caused by factors that originate from the financial aspect. However, an explanation based solely on financial aspects will not provide a comprehensive picture of the actual reaction of investors. The explanation of non-financial aspects also plays an important role in confirming investor behaviour in the capital market, especially for the imperfect capital markets in Indonesia (Suman & Warne, 2012). Regarding non-financial factors, researchers generally pay high attention to variables related to personality and psychology bias (Mayfield et al., 2008). In terms of the aspect of personality, there is also strong evidence that things such as overconfidence, myers-briggs type personality, risk preferences, and the big five personality also explain investment behaviour (Mayfield et al., 2008; Suman & Warne, 2012). Furthermore, related to the psychology bias factor, previous empirical evidence showed that overconfidence, overreaction, underreaction, framing effect, anchoring, loss aversion, and representativeness also have a significant influence on investor behaviour (Suman & Warne, 2012).

How companies disclose non-financial features, such as the environmental aspects of their financial reports, is increasing today. One specific area that shows high growth is related to corporate social responsibility (CSR). Cecil (2010) found that CSR reports in the United States increased from only two in 1991, to 154 in 2001, and to 230 in 2006. Even so, in Indonesia, reports on CSR increased more especially after Indonesia converged with the IFRS (Hapsoro & Fadhillah, 2017). This fact is not surprising, considering that of the top executives in the world, the majority assume that non-financial information is more valuable than financial information, especially when it is intended to assess the company's prospects in the long run (PWC, 2002).

Considering the dominance of research that links CSR to company performance, this study will explore how CSR information is able to influence investment decisions in the capital



market by investors because of limited research in that context (Cohen et al., 2017). This was driven by the opinion of Elliot et al. (2014), who found that when CSR information is positive, investors will consider it as a basis for making investment decisions when only explicitly asked to assess company CSR. By examining the effect of CSR information and quality governance information, Cohen et al. (2017) found that investment decisions are influenced by CSR performance. Besides that, the influence of governance has a marginal effect on investment decisions only when the CSR performance is strong.

This study developed a study belonging to Cohen et al. (2017) using the variable capital market conditions (bullish and bearish) as other variables because, after all, the economic aspects still have a major influence on the investment decisions or investor reactions. In general, bullish and bearish market conditions occur over a long period of time. For example, in the annual period. However, the use of JCI movements in the daily period as a proxy for the conditions of the bullish and bearish capital markets is considered to have been quite representative (Rahayu, 2017). Other economic variables that are also still considered in this study are the economic performance of the company as indicated by the achievement trend of the company's net income over the past three years. There will be three independent variables tested in this study, namely the condition of the capital market, financial performance, and non-financial performance.

The experimental methodology approach was used in this study because the approach was determined suitable in finding a causal relationship which appeared, especially when discussing behavioural aspects. Students will be used as proxies from investors because based on the results found by Elliott et al. (2007), that M.B.A students are valid speakers as non-professional investors, even in manipulations involving quite complex assignments. The influence of financial and non-financial information on investing intentions and investor reactions in bullish and bearish market conditions motivates researchers to conduct a study that is expected to be able to explain the phenomenon in settings in the Indonesian capital market. This research is expected to add empirical evidence that is still very limited in Indonesia, related to experimental research on investor behaviour.

This study aims to test the main effects of three variables. The first is the capital market condition variable, which consists of two levels: bearish and bullish. The second variable is financial performance, indicated by information on net income achievement, which also consists of two levels: the trend of increased net income and the trend of decreased net income. Finally, the third variable is information on disclosure of corporate social responsibility, which consists of two levels: strong or good information and weak or bad information. In addition, this study also aims to test the interaction effect of capital market conditions with economic information and the condition of the capital market with non-economic information. All test results will be assessed on how they affect the intention to



invest. The intention to invest is important to be explored, considering that investment passion in individual investors in Indonesia is still very low and intention to invest is considered as the strong predictor of behaviour itself. In the next section, this article will describe the literature review, methodology, results, discussion and conclusion, and managerial implication. Lastly, the limitation and avenues for future research will close the series of articles.

## **Literature Review**

### ***Stakeholder and Legitimacy Theory***

The main assumption regarding the relationship between companies and stakeholders is the lack of trust and cooperation, so maintaining relationships with stakeholders is a strategy for solving problems and helping companies to achieve a competitive advantage (Jones, 1995). Meanwhile, according to legitimacy theory, companies are part of the social environment in which they are located. Thus, the company always ensures that the various actions that are taken regarding its operational activities are considered legitimate and acceptable (Aerts & Cormier, 2009).

Disclosure of social and environmental information is one of the legitimization tools used by companies in carrying out their activities in order to achieve long-term continuity of their business. Of course, the company should show strong social and environmental performance and do so as best it can. When discussing environmental issues, including CSR, Henriques and Sadosky (1999) divide companies into four categories: reactive, defensive, accommodating, and proactive. In the experimental case used in this research, there are two levels of social and environmental information manipulation. The first is promoting the company as being in the proactive category (with strong CSR performance), and the second is a company that is in the defensive category (with weak CSR performance).

### ***The Effect of Capital Market Conditions, Financial Information, and Non-Financial Information on Intention to Invest***

Empirical studies using the archival data method provide empirical evidence that stock prices will respond to company-specific news differently, depending on the current capital market conditions (Mian & Sankaraguruswamy, 2012). Jones (1998) states that bullish market conditions are an upward trend in the capital market. This is indicated by the tendency of stock prices and new market indices to increase enabling them to surpass the previous values for stock prices and the market index. The opposite is true for bearish market conditions. Momentum and market timing, meaning, in this case, whether the capital market is in a bullish or bearish condition, represent something important to be investigated in a study of



behaviour in the capital market (Below & Johnson, 1996). Therefore, one factor that is considered by investors when conducting transactions on the capital market is the condition of the capital market itself, when the latest information has been received regarding the company issuing stock (Rahayu, 2017). The condition of the capital market is a signal for investors regarding when they should hold, buy, or sell their shares in order to obtain optimal returns.

With the aim of testing whether rumours being clarified has an influence on stock returns under different capital market conditions, Yang and Luo (2014) found that stock returns after rumours have been clarified show significant positive results in bullish markets and show significant negative results in bearish markets. The findings are similar and robust for all types of rumours, whether they pertain to mergers and acquisitions, asset restructuring, or changes in operational activities. Furthermore, in regard to whether dividend announcements also influence market reactions, Below and Johnson (1996) found that there are differences in stock price reactions when announcements of increases and decreases in dividends are made in different capital market conditions. Both bullish and bearish market conditions have a significant impact on abnormal returns around the announcement date. The pattern of predictions made by writers of investment newsletters can also have an influence on historical returns and stock volatility. Clarke and Statman (1998) find that the pattern of returns and volatility of stocks in the past can influence market sentiment, which means that capital market conditions can explain how most investors react. Specifically, they find that high returns over a four-week period were associated with the shifting of newsletter writers from the bearish camp to the bullish camp. Meanwhile, a high return for 26 to 52 weeks is associated with the writers moving from the bearish camp to the bullish camp.

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Using a dataset of more than 32 million messages in 91 companies posted on an online finance message board ("Yahoo Finance!"), Ho Kim and Kim (2014) found that investor sentiment was positively influenced by previous stock performance and also found empirical evidence that investor sentiment in internet postings had predictive power for volatility and trading volume.

From the explanation above, it can be concluded that bullish capital market conditions will generally produce a positive reaction from investors. This occurs because at times when the capital market is bullish, the atmosphere in the market seems very optimistic and active, so it may feel safe to invest.

**H1:** Investors who receive information on a bullish trend in capital market conditions (prices rising) will tend to have stronger investment intentions than investors who receive information on a bearish trend in capital market conditions (prices falling).



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Profit maximisation is a desired goal of investors. Therefore, investing in companies that have a good fundamental analysis is a safe and appropriate choice for an investor when entrusting funds to be managed by the company in question. Although investor orientation is generally divided into two categories, namely short-horizon investors and long-horizon investors, in general, the trend of continuously falling net income is a bad sign for investors, even though there is a possibility that the company is expanding (Wang, 2011). Therefore, investors will tend to avoid investing in companies whose financial performance is deteriorating (Dong, 2017).

Technical analysis is considered important for investors, especially if they decide to invest with a short-term horizon (Abdul-Rahim et al., 2016). Although technical analysis does not consider the company's performance in determining investment decisions, for investors who are relatively new to the world of stock investment, examining fundamental analysis or company analysis is a common method they use when considering whether to invest. The easiest way is to look at financial performance as indicated by the achievement of net income in the income statement (Dong, 2017).

However, financial information is recognised as always being the main consideration used by investors in making decisions about investment in a company (Dong et al., 2017). The tendency of individuals to be captivated by or too focussed on certain information is called fixation. Harris et al. (2016) found empirical evidence that investors are very susceptible to earnings fixation, where they fail to distinguish other favourable aspects aside from earnings. Non-professional investors dominate almost all markets and this has always been the case, so they often do not have sufficient ability to utilise important information from companies. However, this does not mean that professional investors or financial analysts are necessarily able to avoid fixation on financial data. Simpson (2010) found that analysts tend to ignore non-financial information and are more fixated on financial information. Similarly, Vergoossen (1997) found that most financial analysts are too fixated on accounting figures. Hewitt (2009) states that both financial analysts and non-professional investors are actually parties that can easily experience information overload and this directs them to focus too much on earnings.

From this evidence, it can be concluded that individuals — in this case, non-professional investors — tend to be too focussed and dependent on financial information and consequently, they will tend to choose companies with an upward income trend. That is one factor that prevents investors from being able to analyse other information properly.

**H2:** Investors who obtain information on economic performance with an increasing trend in net income will tend to have stronger investment intentions than investors who obtain information on economic performance with a declining trend in net income.



2 Various previous studies have succeeded in providing empirical evidence that there is a positive relationship between CSR investment, company performance, and stakeholders' values. For example, Waddock and Graves (1997) found that corporate social performance currently has positive associations with future financial performance. Similarly, Ioannou and Serafeim (2010) found an association between good CSR performance and good recommendations from analysts. Furthermore, Epstein and Freedman (1992) conducted a survey of individual investors and succeeded in demonstrating that shareholders want the company to disclose social and environmental information. This indicates that the company's social and environmental information has "content" for investors to consider in making investment decisions, in addition to those that have been conceived in stakeholder theory and legitimacy theory. It should be noted that this is not only for investors who are external parties. The company's management, as an internal party, also considers social and environmental information as a basis for making investment decisions (Madein & Sholihin, 2015).

However, there are indeed many previous studies that have found evidence that is consistent, but they have failed to engender confidence in the causal relationship because, generally speaking, previous research has used archival data or in-depth surveys as a method of collecting data which has a high probability of being influenced by other confounding variables.

3 Cheng et al. (2015) found that investors will pay more attention to CSR information if it is in accordance with the company's strategic direction. Similarly, Elliott et al. (2014) found that CSR information influences investors' decisions, as long as they are not asked to rate them personally. Investors believe that companies with good social and environmental performance have a legitimacy in the long run that is stronger than the legitimacy of companies with poor social and environmental performance (Lyon & Shimshack, 2015).

This relationship between CSR activities and company value, which has often been demonstrated, directs this research to predict that investors' decisions to invest also seem to be affected by CSR information. Although non-financial information can be obtained from various sources (Dong, 2017), CSR information is the most reliable kind of information in generalising non-financial performance of the company concerned.

Specifically, some studies have found that capital markets reward companies with good social and environmental performances (Klassen & McLaughlin, 1996; Folwer et al., 2013) and capital markets punish companies with poor social and environmental performance (Lourenco et al., 2012). In addition, in the United States, it has been demonstrated that investors consider social and environmental information in making investment decisions (Epstein, 1992). Similarly, the results of a study by Chan and Milne (1999) in New Zealand





show that some investors decide to invest because a company has become the environmental leader in the area where it was located. Based on this explanation, this study predicts that the investors' reactions will be more positive if they obtain information about strong CSR performance.

**H3:** Investors who obtain information on corporate social responsibility which shows strong performance will tend to have stronger investment intentions than investors who obtain information on corporate social responsibility showing weak performance.

Finally, the researchers hypothesize that there will be two interaction effects. Rahayu (2014) hypothesizes that when capital market conditions are bullish, and if the dividend announcement is then announced and framed positively, there will be a greater positive reaction than if the market is in a bearish condition. By contrast, if the dividend announcement is announced but framed negatively, there will be a greater negative reaction to the bearish capital market conditions than when the market is in a bullish condition.

Bosman, et al. (2015) examine the effect of the framing of the news on investor expectations and trust regarding stock prices. By forming two different treatment groups, each participant in the group reads the 'tone' of conflicting news about the same stock. Empirical evidence shows that for stocks with increasing price trends, subjects tend to predict positive returns in both framing conditions. The subject expects a higher (lower) marginal return for stock with an upward price trend on a positive (negative) news frame condition and vice versa for stock with a downward price trend.

The effect of variables working together (CSR performance and net income trend), will create a unique relationship. Below and Johnson (1996) found that announcements of dividend reductions in bullish markets, and increases in dividends in bearish markets, is information that has a more striking effect on investors than when the announcements are of a dividend reduction in bearish markets, and a dividend increase in bullish markets. In addition, Veronesi (1999) found that investors overreact to announcements of dividend reductions precisely when market movements increase. Thus, it can be said that the interactions that occur in two variables will be at a level that is mutually contradictory compared to only looking at one variable.

Based on the explanation above, this study predicts that there will be an interaction between capital market condition and financial information and the intention to invest. This study also predicts there will be an interaction between the condition of market prices and CSR information and the intention to invest. It is predicted that the intention to invest together will be higher in the condition where there is an upward net profit trend in bearish capital market conditions compared to bullish market conditions.



**H4:** Investors who obtain economic performance information in the form of an upward trend of net income will tend to have stronger investment intentions in market conditions that are bearish compared to bullish.

**H5:** Investors who obtain information on corporate social responsibility with strong performance will tend to have stronger investment intentions in market conditions that are bearish compared to bullish.

### Methodology

This study uses an experimental between-subjects method with a 2x2x2 factorial design. The participants used in this study are undergraduate and post-graduate university students in Surabaya, randomly selected according to certain criteria. Firstly, the participants are students of the Faculty of Economics. Secondly, the students have passed the Capital Market Introduction course and have either graduated or are taking a course in Portfolio Theory and Investment Analysis (Capital Market Theory).

The reason for using students as participants in this study is that they are surrogates who are suitable to play the role of individual investors, as well as non-professional investors. Firstly, anyone who has money can become an individual investor, including students. Secondly, individual investors tend to be biased because of limited rationality, which is true of students who also have limited knowledge, so it is easier for them to be manipulated (Oakes, 1972). Thirdly, students are considered capable of being the subject of research if the research objectives are not applied tests that require experience on the part of the participants (Ashton & Kramer, 1980).

There are three parts to this experimental activity. The first is a preliminary test where participants are given ten questions related to their knowledge of the capital market. If the participant is wrong in answering half the questions, this data will be eliminated immediately. The second part is the provision of the case material, and the third part is asking questions to check the manipulation and to gather demographic data.

Case material for this study is adopted from Cohen et al. (2017) for manipulating CSR information. In addition, information on the condition of the capital market is adopted from Bosman et al. (2015), after being modified with the real movements in Indonesia's DXI Composite Index. The company name used is a pseudonym and not the actual name of the existing Indonesian company. Then, in terms of how financial information is presented, the participants are provided with information on the trends of net income achievements for three consecutive years.



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The case material in this study depicts the participant as an investor who is considering investing in a hypothetical company called PT Dita Farma. The authors did not use the real name of the company in Indonesia to avoid the participants being distracted from focussing on the characteristics of the company, which would cause bias in their decision-making. Even so, the data from the Indonesia Composite Index (IDX) about movements over a period of ten days in this study uses actual data generated at a time when the capital market in Indonesia was both bearish and bullish. Next, the participants are given a summary of information about financial performance in the form of net income achieved for three consecutive years. The CSR information is submitted afterwards. The participants are told they have succeeded in summarising information related to CSR performance from several sources in order to obtain a comprehensive overview in terms of environmental pollution and compliance with environmental law, labour, and society. The scale used to measure the intention to invest is a 1–10 Likert Scale ranging from a strong lack of desire to invest (code 1) to a strong desire to invest (code 10).

**Discussion and Analysis****Table 1:** Demographic Data about Experiment Participants

Note	Item	Total	Percentage
Participant data further processed	Amount of initial data	150	100.0
	Not passed preliminary question	17	11.3
	Not passed manipulation check	13	8.7
	Incomplete response	5	3.4
	Data further processed	115	76.6
<b>Participant Demographic</b>			
Gender	Male	48	41.7
	Female	67	58.3
	Total	115	100.0
Age	19–24	74	64.3
	25–30	27	23.5
	>30	14	12.2
	Total	115	100.0
Working Experience	Working	51	44.3
	Not yet working	64	55.7
	Total	115	100.0
Work Length	<1	2	3.92
	1–5	36	70.59
	6–10	7	13.73
	11–15	2	3.92
	>15	4	7.84
	Total	51	100.0
Stock Investing Experience	Yes	14	12.2
	No	101	87.8
	Total	115	100.0
Other investing experience (e.g. gold, time deposit, obligation, mutual fund, property)	Yes	49	42.6
	No	66	57.4
	Total	115	100.0

Table 1 shows the demographic data of the experiment participants. Table 2 shows the results of the descriptive statistics from groups 1–4 (bullish capital market conditions) and groups 5–



8 (bearish capital market conditions). Table 3 shows the results of the hypothesis testing, using three-way ANOVA. The results show that H1, H2, and H3 are supported but H4 and H5 are not.

**Table 2:** Descriptive Statistics

<b>Bullish Market</b>			
	<i>Good information</i> <i>CSR</i>	<i>Bad CSR information</i>	Total
<i>Profit Increased</i>	<b>Group 1 (N= 15)</b> Intention to invest: Mean= 8.13 Std= 0.99	<b>Group 2 (N= 15)</b> Intention to invest: Mean= 6.40 Std= 1.59	N= 30 Intention to invest: Mean= 7.27 Std= 1.57
<i>Profit Decreased</i>	<b>Group 3 (N= 15)</b> Intention to invest: Mean= 5.47 Std= 1.95	<b>Group 4 (N= 15)</b> Intention to invest: Mean= 3.47 Std= 0.83	N= 30 Intention to invest: Mean= 4.47 Std= 1.79
Total	N= 30 Intention to invest: Mean= 6.80 Std= 2.04	N= 30 Intention to invest: Mean= 4.93 Std= 1.94	N= 60 Intention to invest: Mean= 5.87 Std= 2.19
<b>Bearish Market</b>			
	<i>Good information</i> <i>CSR</i>	<i>Bad CSR information</i>	Total
Profit Increased	<b>Group 5 (N= 14)</b> Intention to invest: Mean= 6.57 Std= 1.22	<b>Group 6 (N= 14)</b> Intention to invest: Mean= 4.50 Std= 1.55	N= 28 Intention to invest: Mean= 5.54 Std= 1.73
Profit Decreased	<b>Group 7 (N= 14)</b> Intention to invest: Mean= 4.50 Std= 1.45	<b>Group 8 (N= 13)</b> Intention to invest: Mean= 3.62 Std= 1.89	N= 27 Intention to invest: Mean= 4.07 Std= 1.70
Total	N= 28 Intention to invest: Mean= 5.54 Std= 1.68	N= 27 Intention to invest: Mean= 4.07 Std= 1.75	N= 55 Intention to invest: Mean= 4.82 Std= 1.85



**Table 3:** Results of Three-way ANOVA 2x2x2 Hypothesis Testing

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	266.355 <sup>a</sup>	7	38.051	17.377	0.000
Intercept	3261.157	1	3261.157	1489.268	0.000
X1	32.834	1	32.834	14.994	0.000
X2	131.223	1	131.223	59.925	0.000
X3	80.211	1	80.211	36.630	0.000
X1*X2	12.531	1	12.531	5.722	0.018
X1*X3	1.083	1	1.083	0.495	0.483
X2*X3	1.518	1	1.518	0.693	0.407
X1*X2*X3	3.787	1	3.787	1.729	0.191
Error	234.305	107	2.190		
Total	3811.000	115			
Corrected Total	500.661	114			

a. R Squared = 0.532 (Adjusted R Squared = 0.501)

X1 = Capital Market Conditions (IDX Composite movement)

X2 = Financial Performance (information on net income)

X3 = Non-financial performance (CSR information)

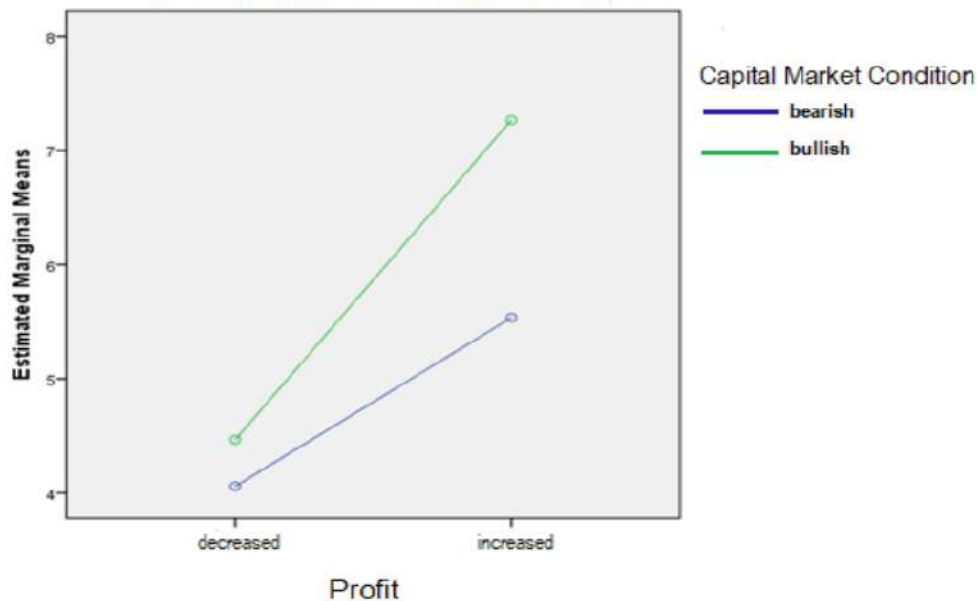
The first, second, and third hypotheses (H1, H2 and H3) predict each of the main effects of capital market conditions, financial information, and non-financial information. Meanwhile, the fourth hypothesis (H4) predicts the interaction effect between the conditions of the capital market and economic performance. The results are all significant, which are, sequentially: for H1 (F= 14.994, p<0.000); H2 (F=59.925, p<0.000); H3 (F= 36.630, p<0.000); H4 (F= 5.722, P<0.02). However, even though H4 shows a significant interaction result, it turns out that the interactions occur at the level of interaction that is not in accordance with the hypothesis. Therefore, H4 is also rejected.

This study has succeeded in finding empirical evidence of the impacts of the condition of the capital market in the form of movement in the IDX Composite, financial information in the form of achievement of net income for three consecutive years, and non-financial information in the form of CSR performance. Each has a main effect on the intention of individuals to invest. However, an interaction effect, in terms of economic performance, is only found with the condition of the capital market.

An interaction effect can be described as two independent variables working together or two such variables simultaneously affecting a dependent variable and doing so more deeply as a consequence. Specifically, the effect of an independent variable on a dependent variable will depend on the level or level of the other independent variables. Based on the 2x2x2 ANOVA

test results, the interaction effect is found for the capital market conditions variable working with the financial performance variable. H4 predicts that the intention to invest is higher if the company experiences an increasing profit trend but in a bearish capital market condition (IDX composite tending to decline). This prediction turns out to be different from the ANOVA test results which show that interactions occur if the level of earnings trend is increasing when the capital market conditions are bullish, as can be seen in Figure 1 below.

**Figure 1.** Interaction between Capital Market Conditions and Financial Performance  
**Estimated Marginal of Intention to Invest**



The possible reason for H4 not being supported is as follows. It is logical that investors will tend to feel that when the capital market is bullish, it is not the right time for making investments because individuals will wait for a better time to buy shares when the IDX is bearish. Therefore, it is most likely that individuals can buy shares when prices are down. This is not supported by this study because the manipulations of financial performance variables used do not cause shocking moments. The trend of achieving net income for three consecutive years, as manipulated in this study, has a number of increases or decreases in a regular ratio and shows a pattern that can be easily predicted. Thus, if the capital market conditions are bullish, investing in companies that regularly generate net income with a predictable increase ratio is not a risky thing to do.



In regard to the support for H5, it also predicts that interactions will occur when CSR performance is strong with bearish capital market conditions. Financial accounting research that involves the use of financial information by investors reveals that investors overemphasise information about income without fully considering other relevant matters. In this study, the other information used is CSR performance. Brown-Liburd et al. (2018) state that improving CSR performance can increase corporate accountability in the long run. Similarly, Kritzman (1994) found that short-term investors tend to choose more risky market portfolios over a given period of time than long-term investors do. This is caused by the trade-off between risk and return in stock investment (Wang, 2011). Thus, individuals who are faced with short-term investment strategies tend to consider investing in companies with good financial information and do so in generally good capital market conditions, even when the social and environmental performance is bad (so-called “sinner companies”). Conversely, individuals who are faced with long-term investment strategies tend to consider investing in companies with good social and environmental performance, despite bad financial information (so-called “saint companies”). Investors believe that companies with good social and environmental performance have a legitimacy in the long run that is stronger than companies with poor social and environmental performance.

By demonstrating the lack of support for the interaction effect, this study shows that, in fact, the effect of non-financial information in the form of CSR performance will not depend on the conditions of the capital market at the same point in time and in terms of influencing individual decisions to invest. As Kritzman (1994) and Wang (2011) have pointed out, it is possible that there is an interaction between the two, but it would depend on the time horizon of the investor in question. Unfortunately, this was not explored in this study.

### **Conclusion**

This research has both theoretical and practical implications. The use of the experiment in this study allows researchers to capture data that cannot be observed directly, albeit only through methods such as using archival data. Aside from this, the experimental method also allows researchers to investigate the efficacy of the manipulative interventions provided to help assess and make investor decisions. As a result, this research can potentially expand upon and complement previous archival studies by providing a closer examination of what effects financial information (net income trends), non-financial information (CSR performance information), and capital market conditions (IDX Composite movements) have on an individual’s intention to make an investment.

In practical terms, the results of this study can provide direction for management regarding the importance of achieving good CSR performance because these achievements are also considered by investors in their investment decision-making. In accordance with the theory of





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planned behaviour, subjective norms are individual subjective evaluations of whether a behaviour is acceptable to others who are in their environment. Nowadays, environmental issues are a topic of hot debate and if a company is unable to demonstrate its good CSR performance, then individual evaluations — in this case those of investors — will not be optimal. Therefore, promoting a positive attitude towards a company that is concerned with pro-social behaviour can be done through the disclosure of the company's CSR performance, and this will, of course, have positive results.

Some of this study's limitations should be considered. The use of an experimental method results in low external validity, so it is necessary to be careful in generating results. Furthermore, the possibility of time horizon strategies being employed by investors when deciding to invest is not considered because the assumption underpinning this study is that investors decide to make long-term investments. In addition, risk preferences are not considered in this study, even though the effects of individual variables also contribute to determining their intention to make investments.

This research also focusses on individual non-professional investors who generally will face difficulties when given data relating to the company for their decision-making process. Therefore, further research could consider testing the results that would be obtained if professional investors are used.



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