The effect of financial and non-financial performance on investors' reactions: The role of corporate governance mechanisms as moderating

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ABSTRACT

The purpose of this study is to examine the effect of financial and non-financial performance on investor reactions and the role of corporate governance mechanisms as moderating. The analysis technique used is the moderated regression analysis (MRA). The research population is manufacturing sector companies listed on the Indonesia Stock Exchange (IDX). Based on the purposive sampling method, 78 companies were selected as the samples (390 firm-year observations). The results of this study provide empirical evidence that the existence of financial and non-financial performance in a company can increase investor reactions. Institutional ownership plays a role in the relationship between financial performance and investor reactions. Meanwhile, independent commissioners, boards of directors, and audit committees have no role in the relationship between financial performance and investor reactions. And independent commissioners and institutional ownership can moderate the influence of non-financial performance on investor reactions. Meanwhile, the board of directors and audit committee cannot moderate the influence of non-financial performance on investor reactions.

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Introduction

The capital market plays an important role in the economy which serves as an index of economic prosperity in a country (Rajabi et al., 2014). Investor reactions can describe a positive or negative response to the company. The investor's reaction is indicated by the existence of stock buying and selling transactions that have an impact on changes in stock prices (Jao et al., 2020). One of them is the SRI KEHATI Index on the Indonesia Stock Exchange (IDX) showing stock prices that have increased in stock prices every year. The increase in share prices of 25 issuers was recorded 10 percent higher which is committed to good financial performance and reducing carbon emissions.

Investment decisions are basically influenced by sources of information on financial markets. One of the useful sources of data is financial reports, which are used to assist users and facilitate investors in making decisions (Widiatmoko et al., 2018). The high and low share value can be reflected through the company's performance which is seen through the financial performance of a company (Ayuni, 2016). Karamoy et al., (2020) show that the higher the financial performance, the better the company, so that this condition will increase investor confidence which will make stock prices rise. Therefore, in gaining the trust of shareholders' interests, companies must develop policy strategies related to company value (Agrawal et al., 2020).

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Non-financial performance can provide more accurate, relevant and timely information to match the efficiency inherent in performance measures (Preda et al., 2004). Non-financial performance has a responsibility to environmental and social sustainability (Astari et al., 2020). Several authors suggest that corporate social responsibility reports can also play a role as investors in evaluating investment desirability (Simon et al., 1972; Anderson & Frankle, 1980; Shane & Spicer, 1983).

The company can tackle climate change through non-financial performance by disclosing carbon emissions. The company's annual report, especially carbon emissions, which are prepared in detail and transparently regarding social responsibility can provide investors' expectations about the sustainability of a company, so that it can attract investors' reactions to invest their shares (Liao et al., 2014 & Gray., 2010). Baboukardos et al., (2017) & Ramírez et al., (2016) reveal that disclosure of carbon emissions has an influence on investor reactions. In this case, investors will examine the company's financial statements and social reports as a consideration for investment (Patten, 1990). through corporate governance can improve the company's positive image to gain high trust from investors in investing their funds (Dwiridotjahjono, 2009). The role of corporate governance in corporate social responsibility and financial reporting should be able to help increase transparency in corporate reporting and minimize carbon emissions (Elyasih et al., 2018). The results of previous studies show that strong corporate governance has a significant impact on stock prices (Salah, 2016).

One of the important things related to the corporate governance mechanism is the high proportion of independent commissioners who can monitor management more effectively and improve financial quality (Liao et al., 2014; Matten & Moon, 2008; Aman & Pascal, 2008). This is in line with institutional ownership which, if it gets bigger, is expected to act in hindering the opportunistic behavior of managers (Nainggolan et al., 2015). The size of the audit committee has a positive influence on the stock market performance of the Bank of Tunisia (Samout et al., 2016). Meanwhile, the board of directors has a negative effect on stock returns (Rostami et al., 2016).

This study aims to determine the effect of financial and non-financial performance on investor reactions to the role of corporate governance as a moderating variable.

This finding contributes to agency and signaling theory which is used to explain corporate governance and its influence on financial and non-financial performance on investor reactions. In addition, it is hoped that it can be used as input and reference for company management in creating good corporate governance by providing transparent financial reports and sustainability reports so that they can influence investors' decisions to invest. And can be input for regulators to determine policies related to corporate governance regarding the implementation of company performance.

Literature Review

Theoretical Background and Hypothesis Development

Signaling theory is defined as an attempt by information providers to describe a problem accurately and precisely to the other party, so that the party is willing to invest even under uncertainty (Spence, 1973). Su et al., (2014) argue that signaling theory is one way for companies to convey information about their capabilities. Signaling theory focuses on actions taken by internal parties that intentionally communicate information that cannot be directly observed by external parties. There are two main characteristics that must be met before the information has benefits for external parties, namely the observed *signal* (*signal observability*) and the signal cost (Connely et al. 2011).

Agency theory can also be called the agency relationship, which means a theory about the relationship between the principal and the agent. Agency relationship is a contract between one or more people (known as the principal) with another person (known as the agent) to perform a service on behalf of the principal and authorize the agent to make the best decision for the principal (Jensen and Meckling, 1976). The principal is the shareholder or investor, while the agent is the management or the party who manages the company. Described by Watts and Smith (1992) that agency relations are closely related to the company's financial statements which are strongly influenced by market and political interests.

Financial Performance and Investor Reaction

Agency theory explains that as principals, investors certainly want profits from the funds they invest (Astari, 2020). Said and Ali (2016) argue that the company's capability to earn a profit is certainly related to total assets which is called profitability. One of the important indicators to assess the company's performance is to see the development of profitability through ROA measurement.

ROA is a ratio that measures the company's ability to generate net income based on certain asset levels (Zuliarni, 2012). Karamoy et al., (2020) found that ROA has a positive but not significant effect on investor reactions. This research is in line with Zuliarni, (2012) which shows that the company's ability to generate net income is based on a certain level of assets, so this can be an important reference for investors in making investment decisions.

H1: Financial performance has a positive effect on investor reactions

Non-Financial Performance and Investor Reaction

Signal theory states that when information is widely disseminated, the resulting risk is even smaller (Spence 1973). The signal for the disclosure of carbon emissions will be a reflection of the company's business ethics (Alvarez et al., 2015). The company's annual report that is prepared in detail and transparently regarding social responsibility can also provide investors' expectations regarding the sustainability of a company, so that it can attract investor reactions to invest their shares (Liao et al., 2014 & Gray., 2010).

Baboukardos (2017) found that the disclosure of carbon emissions has a positive effect on investor reactions. This research is in line with Ramírez et al., (2016) which shows that the publication of carbon emission disclosure reports has a much higher impact on stock prices compared to companies that do not participate in carbon emission disclosure reports, so this can attract investors to invest.

H2: Non-financial performance has a positive effect on investor reactions

Mechanism of Corporate Governance on Financial Performance and Investor Reaction

The concept of *corporate governance* has a close relationship with agency theory where there is a difference between shareholders and management. Shareholders give power to management to manage and make financial reports, but in practice there are times when management acts not in accordance with shareholder instructions because there are separate interests by management (Supatmi, 2007).

Good *corporate governance* mechanisms can improve the quality and accountability of the company to shareholders (Krenn, 2016); and can affect the company's stock price (Shares, 2016). The higher the implementation of *corporate governance*, the higher the level of company compliance in producing good corporate performance. The results of research by Aman & Pascal (2008), show that the *corporate governance* mechanism proxied by the board of commissioners and the ownership structure strengthen the company's performance with investor reactions. This can improve the company's performance which is then able to increase the confidence of investors.

H 3a: The Board of Commissioners moderates the effect of financial performance on investor reactions.

H 3b: Institutional ownership moderates the effect of financial performance on investor reactions.

H 3c: The Board of Directors moderates the effect of financial performance on investor reactions.

H 3d: The Audit Committee moderates the effect of financial performance on investor reactions.

Mechanism of Corporate Governance on Non-Financial Performance and Investor Reaction

Agency theory explains that management who acts as an *agent* in compiling carbon emission disclosures has the hope that the report can be good *news* for investors (*principals*) (Fiori et al., 2007). Rankin et al., (2011) stated that companies with strong *corporate governance* are more active in implementing carbon emission disclosure strategies, because this is considered to be able to manage environmental problems better and has long-term benefits that companies get from environmental disclosures that are environmentally friendly. transparent.

Nasih et al., (2019) revealed that companies with the number of boards of commissioners and directors can influence the company's decision to make higher disclosures related to carbon emissions. The higher frequency of audit committee meetings also helps each member in ensuring the quality of corporate social responsibility disclosure (Appuhami & Tashakor, 2017).

H 4a: The Board of Commissioners moderates the effect of non-financial performance on investor reactions.

H 4b: Institutional ownership moderates the effect of non-financial performance on investor reactions.

H 4c: The Board of Directors moderates the effect of non-financial performance on investor reactions.

H 4d: The Audit Committee moderates the effect of non-financial performance on investor reactions.

Figure 1: Research Conceptual Framework; **Source:** Authors

Research and Methodology

The population in this study is a manufacturing sector company listed on the Indonesia Stock Exchange (IDX) for the 2015 – 2019 period. The industrial sector is in accordance with Presidential Regulation no. 28/2008 related to the National Industrial Policy has the aim of increasing the competitiveness of resources and production capacity of the industrial sector, by planning a growth target in the industrial sector of more than 8% by 2025.

The sample of this study was selected using a purposive sampling technique with the type of judgment sampling. Having considering these criteria, this study obtained a final sample of 78 companies with a total of 390 observations with details in the following table:

Table 1: Research Sample Results

No	Criteria	Number of Companies
1	Manufacturing companies listed on the Indonesia Stock Exchange in a row during the period 2015 – 2019	186
2	Manufacturing companies that do not consistently publish audited annual reports in a row during the 2015 – 2019 period	(50)
3	Manufacturing companies do not disclose at least one policy related to carbon emissions in the 2015 – 2019 annual report	(58)
Total		78
Observation for 5 years (2015 - 2019)		390

The data sources used are secondary data on financial reports and annual reports obtained from the official website of the Indonesia Stock Exchange (www.idx.co.id) and the company's website. This research test uses moderate regression analysis (MRA) data analysis using IBM SPSS 21 software. The operational definition of each variable can be seen in table 2 below:

Table 2: Operationalization of Variables

No	Variable	Measurement
1	Investor Reaction	$R_{it} = a_i + b_i R_{mt} + e_{it}$ (Source = Combs dan Skill, 2003)
2	Financial Performance	$ROA = \frac{EAT}{\text{Total Asset}}$ (Source = Tulung et al., 2016)
3	Non-Financial Performance	Indeks Checklist (Source = Choi et al., 2013)
4	Independent Board of Commissioners	$COMMIND = \frac{\sum \text{Independent Board of Commissioners}}{\sum \text{Board of Commissioners}}$ (Source = Amba, 2014)
5	Institutional Ownership	$INSOWN = \frac{\sum \text{Institutional Stock}}{\sum \text{Outstanding Share}}$ (Source = Amba, 2014)
6	Board of Directors	$WNTDIR = \frac{\sum \text{Women as Directors}}{\sum \text{Directors}}$ (Source = Ongore et al., 2016)
7	Audit Committee	$\sum \text{Audit Committee}$ (Source = Sembiring et al., 2019)
8	Company Size	$Ln = \text{Log}(\sum \text{Asset})$ (Source = Nasarudin et al., 2019)
9	Leverage	$Debt Ratio = \frac{\sum \text{Debt}}{\sum \text{Asset}}$ (Source = Huang et al., 2010)

Result and Discussion

The descriptive statistical test is used to describe the description of an object under study. The following is a description of the results that include the minimum value, maximum value, average, and standard deviation.

Table 3: Descriptive statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Investor Reaction	390	-0,012	0,010	0,00014	0,00367
ROA	390	-0,264	0,304	0,05907	0,06818
CED	390	0,044	0,176	0,11953	0,02295
Independent Commiss.	390	0	0,833	0,29427	0,15687
Institutional Ownership	390	0	0,998	0,47982	0,26374
Board of Directions	390	0	0,667	0,13789	0,13544
Audit Committee	390	0	4	2,58718	0,69618
Company Size	390	12,411	30,577	24,07773	5,21954
Leverage	390	0,002	0,999	0,42764	0,20161

Investor reaction is measured using *cumulative abnormal return* (CAR). The results of the analysis using descriptive statistics obtained a minimum value of -0.012 investor reaction and a maximum value of 0.010 with a standard deviation of 0.00367. The standard deviation which is higher than the average is 0.00014, indicating that the data distribution is normal.

Financial performance (ROA) as the dependent variable in this study is measured by total assets divided by net income. The minimum value for financial performance is -0.264 and the maximum value is 0.304. And the average value is 0.05907 and the standard deviation is 0.06818. The highest level of financial performance is owned by PT FKS Food Sejahtera Tbk.

Disclosure of carbon emissions (CED) is measured using a *checklist* index consisting of five categories. The five categories are translated into 18 assessment items and each item is assessed with a dichotomous score, namely 1 if it is disclosed and 0 if it is not disclosed. This is obtained in the descriptive statistical test with a minimum value of 0.044; maximum value 0.176; the average value is 0.11953; and the standard deviation of 0.02295.

Independent commissioners as a moderating variable in this study were measured by the number of independent commissioners divided by the total number of commissioners. The minimum value for independent commissioners is 0.00; maximum value of 0.833; the average value is 0.29427; and the standard deviation of 0.156874.

Institutional ownership is measured by the number of institutional shares divided by the number of shares outstanding in a company. In the calculation of the descriptive test, the minimum value for institutional ownership is 0.00 and the maximum value is 0.998. The lowest level of institutional ownership is owned by PT Gunawan Dianjaya Steel Tbk. While the highest is owned by PT Grand Kartech Tbk. the average value of institutional ownership is 0.47982; and the standard deviation of 0.26374.

The board of directors is measured by the number of women on the board divided by the total number of directors. The minimum and maximum values for the board of directors were obtained at 0.00 and 0.667. And the average value is 0.1378 and the standard deviation is 0.1354. The largest number of the board of directors is owned by PT Mustika Ratu Tbk.

The next moderating variable is the audit committee as measured by the number of audit committees in a company profile. The minimum score and maximum score from the audit committee were 0.00 and 4.00, respectively. And this variable has an average value of 2.587 and a standard deviation of 0.6962.

Firm size as a control variable in this study was measured using the natural log of total assets. The minimum and maximum values of each company size are 12,411 and 30,577. The smallest level of company size is owned by Astra International Tbk. While the highest is owned by PT Mayora Indah Tbk. This company size also has an average value of 24.077 and a standard deviation of 5.2195.

Furthermore, for the control variables in this study using *leverage* as measured by total debt divided by total assets. The minimum and maximum values for leverage are 0.002 and 0.999. While the average value and standard deviation are 0.42764 and 0.1201612. The lowest level of leverage is owned by PT Darya Varia Laboratoria Tbk. And the lowest is owned by Alumindo Light Metal Industry Tbk.

Table 4: Results of regression analysis without moderation

Variable	Coefficients	T	Sig.
(Constant)	-0,00504	-3,31047	0,00102
ROA	0,00648	2,10085	0,03630
CED	0,01929	2,40636	0,01658
Company Size	0,00008	2,22702	0,02652
Leverage	0,00113	1,12456	0,26148

Notes: CAR = $\alpha + \beta_1\text{ROA} + \beta_2\text{CED} + \beta_3\text{SIZE} + \beta_4\text{LEV} + e$

Table 5: Results of moderation regression analysis

Variable	Coefficients	T	Sig.
1 (Constant)	-0,005	-2,881	0,004
ROA	0,005	1,687	0,092
CED	0,018	2,231	0,026
Independent Commissioner	0,003	1,999	0,046
Institutional Ownership	-0,001	-1,497	0,135
Board of Directions	-0,003	-1,834	0,068
Audit Committee	-8,063E-05	-0,285	0,776
ROA * Independent Commissioner	-0,024	-1,076	0,283
ROA * Institutional Ownership	0,028	2,096	0,037
ROA * Board of Directions	-0,020	-0,880	0,379
ROA * Audit Committee	-0,001	-0,158	0,875
CED * Independent Commissioner	-0,177	-2,695	0,007
CED * Institutional Ownership	0,083	2,133	0,034
CED * Board of Directions	-0,057	-0,916	0,360
CED * Audit Committee	-0,011	-0,976	0,330
Company Size	9,978E-05	2,599	0,010
Leverage	0,001	1,239	0,216

Notes: $CAR = \alpha + \beta_1 ROA + \beta_2 CED + \beta_3 COMMIND + \beta_4 INSOWN + \beta_5 GENDER + \beta_6 AUDIT + \beta_7 ROA * COMMIND + \beta_8 ROA * INSOWN + \beta_9 ROA * GENDER + \beta_{10} ROA * AUDIT + \beta_{11} CED * COMMIND + \beta_{12} CED * INSOWN + \beta_{13} CED * GENDER + \beta_{14} CED * AUDIT + \beta_{15} SIZE + \beta_{16} LEV + e$

The Effect of Financial Performance on Investor Reactions

The results of hypothesis 1, statistically shows a significance of 0.036 with a positive coefficient value. These results indicate that H1 is accepted. This financial performance is proxied by *return on assets* (ROA). The ROA variable is proven to be able to improve the company's performance, which is getting better. Company performance improvement is considered capable to increase profits and have an impact on stock prices.

This finding supports the assumption of agency theory. Agency theory states that as principals, investors certainly want profits from the funds they invest (Astari et al., 2020). This study is in line with Karamoy et al., (2020) and Todea et al., (2009) that if ROA increases, then the market reaction can directly affect the level of stock prices. The increase of the company attractiveness makes the company more attractive to investors, because the rate of return will be even greater (Zuliarni, 2012).

The Effect of Non-Financial Performance on Investor Reaction

The test effect of non-financial performance variables on investor reactions shows that H2 is accepted. In this case, non-financial performance is proxied by disclosure of carbon emissions. Disclosure of high carbon emissions in reducing carbon emissions and energy savings made by companies can be *good news* for investors that the risk of investing in these companies is low. In the end, this causes increased investor confidence and tends to encourage investors to invest more so that the company's stock price rises. This finding supports the assumptions of signal theory. Signal theory states that the wider the disclosure of information conveyed, the smaller the level of risk generated (Spence, 1973). Signal theory emphasizes how companies should provide signals to users of financial statements. Carbon emission information that has been disclosed by the company can be used as a signal to investors.

These results support research by Babourkardos (2017) & Ramírez et al., (2016) which state that the publication of carbon emission disclosure reports results in stock price movements that are much higher than those produced by companies that do not participate in carbon emission disclosure reports. This means that investors have the opinion that companies that disclose additional information in financial reporting, such as carbon emission information, are associated with better transparency (Astari et al., 2020).

The Role of Corporate Governance as a Moderating Variable on Financial Performance and Investor Reaction

Independent commissioners board is unable to moderate the effect of financial performance on investor reactions. The results rejected the possibility that the role of the commissioner's board in carrying out the supervisory function of financial reporting did not go well, thus causing the stock quality to not increase. This is certainly not in line with agency theory which explains that independent commissioners carry out the function of monitoring management performance to disclose relevant financial performance information (Astari et al., 2020). This research is in line with Lucas et al., (2015) which states that the greater number of commissioners board members will have a tendency to obtain lower financial performance, because there will be differences of opinion between the commissioner's board, so that board of commissioners will be more difficult to carry out their role.

Table 6 shows that H_{3b} accepted with a coefficient of 0.037. The greater the institutional ownership, the greater the control over management, and consequently will provide a greater impetus to optimize the company's performance which causes share prices to increase.

This finding supports agency theory which explains that institutional investors play a role in reducing conflicts of interest that occur between management and shareholders (Jensen et al., 1976). Institutional ownership has the ability to control the management through an effective *monitoring* process so it reduces the actions of fraudulent behavior by the management (Nuraini, 2012). Bjuggren et al., (2007) show that institutional ownership can be a reliable mechanism, so that it can motivate managers to improve performance. The results of this study are in line with Aman et al., (2008) which states that ownership can strengthen company performance with investor reactions. This means that by increasing the company's performance, it can increase investor confidence. The board of directors in H_{3c} is rejected with a coefficient of 0.379. The absence of a moderating role in the board of directors in this study is presumably because the female board of directors has a minority number and is less risk-averse than men in decision making. This risk causes it to be unable to improve financial performance and stock prices which has an impact on investor reactions. This is different from agency theory which explains that having women on board members of a company can make companies more independent and effective in supervising company managers, so that they can assist in the process of supervision and control in the company (Terjesen et al., 2015). Lonascu et al., (2018) said that if it is more dominant than either male or female gender it causes the company's performance to not run well, because each of them has weaknesses that can harm the company.

H_{3d} is rejected with a coefficient of 0.875. The audit committee does not play an effective role in carrying out the function of monitoring financial performance and investor reactions. This finding is not in line with agency theory which states that the audit committee plays a role in influencing the quality of financial reporting (Astari et al., 2020).

The size of the audit committee is not sufficient to improve the company's financial performance, so the number of audit committees is not the right measure in assessing the effectiveness of the audit committee in overseeing management performance. Lisic (2011) states that having an audit committee who is an expert in finance does not automatically create more effective oversight.

The Role of Corporate Governance as a Moderating Variable on Non-Financial Performance and Investor Reaction

Independent commissioners were able to moderate the effect of non-financial performance on investor reactions with a negative coefficient of 0.007. Companies with a high number of independent commissioners will be more inclined to the public interest as well as the interests of *stakeholders*. With companies performing non-financial performance through disclosure of carbon emissions, at least management can reduce agency problems that often arise in the relationship between managers and shareholders. In accordance with agency theory, the existence of an independent commissioner as a supervisory function can put pressure on the management, so that it can encourage the board of directors to disclose matters of public interest such as carbon emissions in accordance with the interests of shareholders. The increase in independent commissioners is considered to be able to maintain transparency and information disclosure for stakeholders (Jizi et al., 2014).

H_{4b} the interaction of non-financial performance with institutional ownership on investor reactions shows a significant coefficient of 0.034. Institutional ownership plays a role in building a company's reputation in disclosing carbon emissions and ultimately increasing investor confidence.

Signal theory states that companies that have good quality will intentionally give signals to the market so that they are expected to be able to distinguish good and bad quality companies (Nainggolan et al., 2015). Chang, et al., (2015) & Rao et al., (2012) institutional ownership can carry out the function of monitoring the disclosure of carbon emissions to build a company's reputation and gain legitimacy from the public, so it can be said that companies with higher levels of institutional ownership, tend to disclose carbon emissions.

The results of H_{4c} show that the hypothesis is rejected. This is due to the possibility that the diversity of women on the board of directors is still relatively small (minority), so they do not have majority voting rights in determining decisions made by the board and are considered unable to carry out responsibilities and improve relations with *stakeholders*. Kılıç & Kuzey (2019) stated that the proportion of gender diversity in the board of directors does not guarantee that companies will be more responsive and broader in reporting their carbon emissions disclosures. It because the tendency for female leaders to be more democratic will decrease if women are in jobs dominated by men (Nainggolan et al., 2015).

Table 6 shows that H_{4d} is rejected. It influenced by the possibility that companies forming audit committees are only limited to comply with regulations and supervising company performance related to the quality of financial reporting. However, they have not paid attention to the disclosure of non-financial performance, which should be used to improve the company's image.

In this study, the number of audit members was not sufficient to carry out management supervision related to carbon emissions. The results of this study are in line with Ayoib et al., (2015) & Bicer et al., (2019) which obtained the results that the audit committee has no effect on environmental disclosure.

Conclusion

This study aims to examine the effect of financial and non - financial performance on investor reactions moderated by *corporate governance*. The sample which used in this study is the manufacturing sector listed on the Indonesia Stock Exchange for the period 2015 to 2019. The results of this study provide empirical evidence that the existence of financial and non-financial performance in a company can increase investor reactions. Increasing the company's performance is considered able to increase profits which lead to an increase in stock prices. And the non-financial performance as proxied by the disclosure of carbon emissions can be *good news* for investors that the risk of investing in the company is low, so that it can increase investor confidence.

In addition, based on data analysis that has been done previously, this study shows that (1) independent commissioners cannot moderate the effect of financial performance on investor reactions; (2) institutional ownership can moderate by strengthening the effect of financial performance on investor reactions; (3) the board of directors cannot moderate the effect of financial performance on investor reactions; (4) the audit committee cannot moderate the effect of financial performance on investor reactions; (5) independent commissioners can moderate by weakening the influence of non-financial performance on investor reactions; (6) institutional ownership can moderate by strengthening the influence of non-financial performance on investor reactions; (7) the board of directors cannot moderate the effect of non-financial performance on investor reactions; (8) the audit committee cannot moderate the effect of non-financial performance on investor reactions.

This research has several contributions both theoretically, practically and policy. The theoretical contribution of this study provides support for the application of agency and signal theory with the acceptance of the first and second hypotheses, namely the influence of financial performance and non-financial performance on investor reactions. Second, the results of this study can be used as a reference for companies that high investor reactions can be associated with financial and non-financial performance. In improving management performance and increasing investor reactions, companies can review the functions of each aspect of corporate governance in order to achieve effective implementation of *corporate governance*. Third, this research is expected can give contribution for the government as the main regulator in Indonesia to make laws that specifically regulate accounting standards that guide the preparation of financial statements in order to protect the interests of the general public.

This researcher has several limitations, there is the possibility of an element of subjectivity when the researcher interprets the information contained in company reports and this research is limited to manufacturing companies listed on the Indonesia Stock Exchange.

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References

- Agrawal, P., Bansal, P., & Kathpal, S. (2020). Effect of financial performance on corporate social responsibility and stock price: A study of BSE listed companies. *International Journal on Emerging Technologies*, 11(1): 286-291.
- Aman, H. & N. Pascal. (2008). Do Stock Prices Reflect the Corporate Governance Quality of Japanese Firms? *Journal of Corporate Finance*, 22: 647–662. <https://doi.org/10.1016/j.jjie.2008.05.001>
- Amba, S. M. (2014). Corporate Governance And Firms' Financial Performance. *Journal Of Academic and Business Ethics*, 8, 1–11.
- Anderson, J. C. & Franlde, A. W. (1980). Voluntary Social Reporting: An Iso-Beta Portfolio Analysis. *The Accounting Review*, 467-479. <https://www.jstor.org/stable/246408>
- Astari, A., Saraswati, E., Purwanti, L. (2020). The Role of Corporate Governance as a Moderating Variable on Earnings Management and Carbon Emission Disclosure. *Jurnal Dinamika Akuntansi dan Bisnis*, 7(1): 69-86.
- Alvarez, I. G., Segura, L., & Martínez-ferrero, J. (2015). Carbon Emission Reduction: The Impaction the Financial and Operational Performance of International Companies. *Journal of Cleaner Production*, 103: 149–159.
- Appuhami, R & Tashakor, S. (2017). The Impact of Audit Committee Characteristics on CSR Disclosure: An Analysis of Australian Firms. *Australian Accounting Review*, 83(27).
- Ayuni, A. D. (2016). Pengaruh Kinerja Keuangan dan Kebijakan Dividen terhadap Reaksi Investor pada Perusahaan Otomotif. *Jurnal Ilmu Riset dan Riset Akuntansi*, 5(7).
- Ayoib, C.-A., & Peter, O. N. (2015). Directors Culture and Environmental Disclosure Practice of Companies in Malaysia. *International Journal of Business and Technopreneurship*, 5(1).
- Baboukardos, D. (2017). Market Valuation of Greenhouse Gas Emissions Under a Mandatory Reporting Regime: Evidence From the UK. *Accounting Forum*, 41: 221-233. <https://doi.org/10.1016/j.accfor.2017.02.003>

- Bjuggren P., Eklund J., and Wiberg D., (2007). Institutional Owners and Firm Performance: The Impact of Ownership Categories on Investments. *Working Paper*. Jonkoping International Business School (JIBS), and Centre of Excellence for Science and Innovation Studies (CESIS), Royal Institute of Technology, Stockholm, Sweden.
- Chang, K., & Zhang, L. (2015). The Effects of Corporate Ownership Structure on Environmental Information Disclosure — Empirical Evidence from Unbalanced Penal Data in Heavy-pollution Industries in China. E-ISSN: 2224-2856, 10, 405–414.
- Choi, B. B., Lee, D., & Psaros, J. (2013). An Analysis of Australian Company Carbon Emission Disclosures. *Pacific Accounting Review*, 25(1): 58–79. <https://doi.org/10.1108/01140581311318968>
- Combs, J. G., & Skill, M. S. (2003). Managerialist and Human Capital Explanations for Key Executive Pay Premiums: A Contingency Perspective. *Academy of Management Journal*, 46(1), 63–73. <https://doi.org/10.5465/30040676>
- Connely, B. L., S. T. Certo, R. D. Ireland, & C. R. Reutzel. (2011). Signalling Theory: A Review and Assessment. *Journal of Management*, 37: 39-67. <https://doi.org/10.1177/0149206310388419>
- Dwiritodjahjono, J. (2009). Penerapan Good Corporate Governance :Manfaat Dan Tantangan Serta Kesempatan Bagi Perusahaan Publik Di Indonesia. *Jurnal Administrasi Bisnis*, 5(2).
- Elyasih, J., Tang, Q., & Len, Y. (2018). Corporate Governance and Carbon Transparency: Australian Experience. *Accounting Research Journal*, 31(3): 405-422.
- Fiori, G., di Donato, F., & Izzo, M. F. (2007). Corporate Social Responsibility and Firms Performance - An Analysis on Italian Listed Companies. *SSRN Electronic Journal*.
- Gray, R. (2010). Is Accounting for Sustainability Actually Accounting for Sustainability and How Would We Know? An Exploration of Narratives of Organisations and the Planet. *Accounting, Organizations and Society*, 35(1): 47–62. <https://doi.org/10.1016/j.aos.2009.04.006>
- Huang, R., & Tompkins, J. G. (2010). Corporate governance and investor reactions to seasoned equity offerings. *Managerial Finance*, 36(7): 603–628.
- Jao, R., Hamzah, D., Laba, A., & Mediaty. (2020). Corporate Reputation and Investor Reaction (Study on Listed Companies in Indonesia Exchange). *Journal of Management & Business*, 3(2): 124-133.
- Jizi, M.I., Salama, A., Dixon, R. and Stratling, R. (2014). Corporate Governance and Corporate Social Responsibility Disclosure: Evidence From The US Banking Sector, *Journal of Business Ethics*, 125(4), 601-615.
- Karamoy, H. & Tulung, J. (2020). The Effect Of Financial Performance And Corporate Governance To Stock Price In Non-Bank Financial Industry. *Corporate Ownership & Control*, 17(2).
- Kılıç, M., & Kuzey, C. (2019). The effect of corporate governance on carbon emission disclosures: Evidence from Turkey. *International Journal of Climate Change Strategies and Management*. 11(1). <https://doi.org/10.1108/IJCCSM-07-2017-0144>
- Krenn, M. (2016). Understanding decoupling in response to corporate governance reform pressures the case of codes of good corporate governance. *Journal of Financial Regulation and Compliance*, 23, 369–382.
- Lang, M., & Lundholm, R. (1996). Cross-Sectional Determinants of Analyst Ratings of Corporate Disclosures. *Journal of Accounting Research*, 31(2): 246-271. <https://doi.org/10.2307/2491273>
- Liao, L., Luo, L., & Tang, Q. (2014). Gender Diversity, Board Independence, Environmental Committee and Greenhouse Gas Disclosure. *British Accounting Review*, 47(4): 409–424. <https://doi.org/10.1016/j.bar.2014.01.002>
- Lisic, L., Neal, T., & Zhang, Y. (2011). Audit committee financial expertise and restatements: The moderating effect of CEO power. *School of Management, George Mason University, Fairfax*.
- Lonascu, M., Lonascu, I., Sacarin, M., & Minu, M. (2018). Women on boards and financial performance: Evidence from a European emerging market. *Sustainability (Switzerland)*, 10(5). <https://doi.org/10.3390/su10051644>
- Matten, D. & J. Moon. (2008). Implicit and Explicit CSR: A Conceptual Framework for a Comparative Understanding of Corporate Social Responsibility. *Academy of Management Review*, 33(2).
- Nainggolan, N. E., & Rohman, A., (2015). Pengaruh Struktur Corporate Governance terhadap Pengungkapan Lingkungan. *Diponegoro Journal of Accounting*, 4(2): 2337-3806.
- Nasarudin, I., Suhendra, S., & Anggraini, L. (2019). The Determinant of Stock Price: Evidence on Food and Beverage Companies in Indonesia. *Etikonomi*, 18(1). 143-154.
- Nuraini, E. (2012). Pengaruh Kepemilikan Institusional Dan Ukuran Perusahaan Terhadap Kebijakan Hutang Dan Nilai Perusahaan. *Jurnal Bisnis dan Ekonomi (JBE)*, 19(2).
- Ongore, Vincent O. Peter O K'obonyo dan Martin Ogutu. (2015). Board Composition and Financial Performance: Empirical Analysis of Companies Listed at The Nairobi Securities Exchange. *International Journal of Economics and Financial Issue*. 5(1). 23-43.
- Patten, D. (1990). The Market to Social Responsibility Disclosure: The Case of The Sullivan Principles Signings. *Accounting Organizations and Society*, 15(6). [https://doi.org/10.1016/0361-3682\(90\)90035-S](https://doi.org/10.1016/0361-3682(90)90035-S)
- Preda, P., and T. Watts. 2004. Contemporary Accounting Innovations in Australia: Manufacturing versus service organizations. *Journal of Management Accounting Research* 2, Vol 2 (2).

- Rajabi, R., MahdaviKhou, M., & Khotanlou, M. (2014). Board of Directors' Characteristics and the Stock Return Evidence from Tehran Stock Exchange (TSE). *European Journal of Economics, Finance and Administrative Sciences*, (66): 78-92.
- Ramírez, C. Z., González-González, J. M., & SabaterMarcos, A. (2016). Carbon Reporting: Analysis of the Spanish Market Response. *Spanish Journal of Finance and Accounting*. 45(2): 231–265.
- Rankin, M, Windsor, C, dan Wahyuni, D. (2011). An investigation of voluntary corporate greenhouse gas emissions reporting in a market governance system Australian evidence. *Accounting, Auditing dan Accountability Journal*, 24(8), 1037–1070. <https://doi.org/10.1108/09513571111184751>
- Rao, K. K., Tilt, C. A., & Lester, L. H. (2012). Corporate governance and environmental reporting: an Australian study. *Corporate Governance: The international journal of business in society*. 12: 143-163. <https://doi.org/10.1108/14720701211214052>
- Rostami, S., Rostami, Z., & Kohansal, S. (2016). The effect of corporate governance components on return on assets and stock return of companies listed in Tehran Stock Exchange. *Procedia Economics and Finance*. 36: 137-146. [https://doi.org/10.1016/S2212-5671\(16\)30025-9](https://doi.org/10.1016/S2212-5671(16)30025-9)
- Said, M., & Ali, H. (2016). An analysis on the factors affecting profitability level of Sharia banking in Indonesia. *Banks and Bank Systems*, 11(3): 28-36.
- Salah, W. (2016). The impact of Corporate governance on stock price and trade volume. *International Journal of Accounting and Financial Reporting*. 6(2).
- Samout, A & Nekaa, N. (2016). Impact of an audit committee on the stock market performance of Tunisian Banks. <http://dx.doi.org/10.2139/ssrn.2743251>.
- Sembiring, Y. & Saragih, A. (2019). Pengaruh Komisaris Independen Dan Komite Audit Terhadap Kinerja Keuangan Pada Perusahaan Perbankan Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Riset Akuntansi Dan Keuangan*, 5(2): 229-242.
- Shane, P. B. & Spicer, H. (1983). Market Response to Environmental Information Produced Outside the Firm, *The Accounting Review*. 521-538. <https://www.jstor.org/stable/246532>
- Simon, J. G., Powers, C. W. & Gunnemann, J. P. (1972). *The Ethical Investor Universities and Corporate Responsibility*. New Haven, CT: Yale University Press.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3): 355.
- Supatmi. (2007). Corporate Governance dan Kinerja Keuangan. *Jurnal Bisnis dan Ekonomi*, 14.
- Su, Peng, Tan, & Cheung. (2014). The signaling effect of corporate social responsibility in emerging economies. *Journal of Business Ethics*, 134(3): 479–491.
- Terjesen, S., & Couto, E. (2015). Does the presence of independent and female directors impact firm performance? A multicountry study of board diversity. *Journal of Management and Governance*, 20(3).
- Todea, A., Lenciu, A., & Filip, A. (2009). Profitability of the Moving Average Strategy and the Episodic Dependencies: Empirical Evidence from European Stock Markets. *European Research Studies*, 12(1). 63-72.
- Tulung, J. E., & Ramdani, D. (2016). The influence of topmanagement team characteristics on BPD performance. *International Research Journal of Business Studies*, 8(3), 155-166. <https://doi.org/10.21632/irjbs.8.3.155-166>
- Widiatmoko, J., & Indarti, K. (2018). The determinans of earning respons coefficient: an empirical study for the real estate and property companies listed on Indonesia Stock Exchange. *Accounting Analysis Journal*, 7(2): 135-143.
- Zuliarni, S. (2012). Pengaruh Kinerja Keuangan terhadap Harga Saham pada Perusahaan Mining and Mining Service di Bursa Efek Indonesia. *Jurnal Aplikasi Bisnis*, 3(1): 36-48.

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