

## Do ESG Narrative Disclosures Matter for Financial Analysts

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### ABSTRACT

The aim of this research is to examine whether CSR narrative reporting has information content that is used by analysts to predict stock prices. Corporate Social Responsibility (CSR) is still interesting today. Standalone CSR report in Indonesia as a voluntary nature. In this study we measure CSR reports based on the Environment, Social and Governance disclosure score (ESG\_score) and we examine the relationship between ESG Score and analyst forecast. Used 393 data from manufacturing companies that are listed in IDX, this study analyzed the association of ESG score and Analyst forecast. The results of this study show environmental, social and governance affect share price that predicted by the analyst, so we can say that the analyst used the CSR report. This paper tries to fill in a research gap about the relevance of the value of CSR narrative reports in the perspective of financial analysis. Financial analysts are those who have a significant influence on the capital market but mostly in Indonesia. This research is the first study that discusses the relevance of values based on the perspective of the analysis conducted with the Indonesian sample. The second contribution of this paper uses ESG scores as a proxy for CSR performance. The use of ESG scores as a measure of CSR results has never been done before in Indonesia, so this study is also the first study. The findings of this study are expected to stimulate the government, particularly the Indonesian Capital Market regulators (OJK and IDX), to be able to tighten policies regarding social responsibility reporting. It is hoped that with increasingly stringent policies, issuers will increasingly comply with these policies and more parties will benefit from the non-financial information disclosed by the company. The limitation of this study is that the sample was only conducted in the manufacturing industry, so it still requires testing in other industries to improve the external validity of the research results. These two studies do not separate positive and negative net income as control variables, so it cannot be seen in more detail whether this non-financial information will be consistent if carried out on companies with positive and negative earnings.

**Keywords:** ESG, Accounting Number, Analyst Forecast, Stock Price

**JEL Classification:** M14

### INTRODUCTION

High corporate going concern will reduce the risk of fund investment to the company (Jones & Frost, [2017]; Ng & Rezaee, [2015]). One indicator of the belief in a company's sustainability is to look at stock prices. Therefore, it is important to know how potential future stock prices are, even though stock prices do not fully reflect financial data (Beaver, 1968). Future stock prices can be seen from the results of forecasts conducted by analysts.

The role of analysts in the capital market is to provide information and advice for investors. Information from analysts is highly awaited by investors, especially their forecasts about stock prices, thus helping investors to be

able to make decisions. There are various things that will affect the accuracy of analyst forecasting. Therefore, research about analyst forecasts of stock prices is an interesting thing to study. Unfortunately there are still very few studies that examine the behavior of these analysts (Kothari, [2001]; Suhardianto et al., [2017]). Although interesting research on financial analysts has not been done much. There have only been 45 studies throughout the last 21 years, and even with different dependent variables. The results of the 1996-2017 meta-analysis identified three main groups of factors that affect the accuracy of financial analysts' forecasts. namely, (a) drivers of analyst forecast accuracy, (b) quality financial reporting, and (c) accounting standards. (Rahman, Zhang, & Dong, 2019)

Previous studies have focused on examining determinants of analysts' predictions based on financial data. Analyst predictions tested are profit forecasts (EPS). However, in the last ten years or so, researchers have begun to consider non-financial information that is considered used by analysts. Orens & Lybaert, (2007) Conduct a survey of financial analysis and conclude that forward-looking information and more internal-structure information offer more accurate forecasts. Dhaliwal & Tsang, (2012) start testing the latest non-financial information, which is CSR. In this research CSR is considered as a variable which is a combination of disclosure of corporate social responsibility activities. CSR is not described in detail and financial analyst forecasts are measured using estimates of EPS.

Non-financial information is voluntary information. Voluntary information can be defined as "all information disclosed in addition to financial statements issued by companies" (Robb & Zarzeski, 2001). Previous research (Eli & Lev, 1996; Ittner & Larcker, 1998) states that the increased relevance of non-financial information is caused by increased competition and globalization, technological developments, and the introduction of new business. Therefore, when analysts predict future stock prices, non-financial information should not be forgotten; it should be reliable information for analysts. Several previous studies have found that disclosure of non-financial forward-looking information positively influences the accuracy of analyst forecasts (Dal Maso & Rees, 2018; Muslu, Sunay, Suresh, & Albert, 2017)

This study fills the gap with Indonesia evidence of previous research by examining the value relevant to the CSR report by the analyst side. The factors tested are financial and non-financial information. Non-financial information used in this research is CSR disclosure measured using an ESG score individually. Analyst forecast as the dependent variable that will be used is the stock price. This study examines the relationship between financial and non-financial information and analyst forecast stock prices. The results of this test are used to see whether financial and non-financial information (social environmental and governance reports) are used by analysts in forecasting stock prices. Non-financial reporting about social, environmental and corporate governance activities, is an interesting variable to observe. In Indonesia, Law 40/2007 is strengthened by Government Regulation No. 47/2012 concerning Social and Environmental Responsibility of Corporations and OJK welcomes by issuing Regulation of the Financial Services Authority (OJK) No. 51 of 2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, companies listed on the Stock Exchange and Public Regulations. The Financial Services Authority (OJK) asks companies listed on the Stock Exchange to increase information disclosure about social and environmental activities (corporate social responsibility / CSR). CSR reporting is one way to increase public trust.

In general, investors differ, but in principle all investors face similar challenges and problems, such as risk analysis, including country risk, industry and policy, competitive position, quality of management, cash flow, financial return, and the company's financial position. However, their strategies can also differ depending on the type of investor, their authority, the time horizon of their investment and depending on their portfolio. Likewise, the needs of investors regarding non-financial information. Most investors also use ESG information to see the company's reputation. However, now investors are starting to integrate ESG into their analysis, to identify the company's contribution and the company's impact on the environment, community, development, etc. In addition, investor information needs also differ by region. This is due to differences in the development of regulations and government support, or cultural differences (WBCSD, 2019).

This researcher uses the ESG score to measure the company's non-financial performance. This ESG score was developed by Refinitiv, a global provider of financial markets data and infrastructure. Some researchers have used this proxy as a measure of non-financial information, especially CSR information (Yoon, Lee, & Byun, [2018]; K. However, in developing countries like Indonesia, research using ESG data as a proxy of corporate CSR performance is still rarely done. The existing research uses the GRI index as a proxy for CSR performance. The GRI index is an index of disclosure that is usually used by public companies as a guide for what should be reported in sustainability reports, so that it has not been able to measure environmental, social and corporate governance performance. The use of the GRI Index as a proxy for corporate CSR performance is often done by researchers because of data limitations, studies that use the GRI disclosure index as a measure of CSR include (E-Vahdati, Zulkifli, & Zakaria, [2018]; Awuy, Sayekti, & Purnamawati, [2016]; Li, Boudreau, Huber, & Watson, [2013]; Link et al., [2013]; Cheng & Christiawan, [201 1])

This ESG score will make it easier for information users to integrate social, environmental and governance factors into portfolio analysis, equity research, screening, or quantitative analysis. The ESG score from Refinitiv is designed to transparently and objectively measure the company's relative ESG performance, commitment and effectiveness in 10 key areas (emissions, environmental product innovation, human rights, shareholders, etc.), based on data reported by the company ESG scores, using a weighting called the Equal Weighted Ratings (EWR), this weighting reflects the ESC strategy framework so as to be able to provide strong assessments, driven by company ESG performance and capacity data where company size and transparency are minimal. The main advantages of equal-weighted are: 1) there is an ESG controversy score, so that it can accommodate a significant controversy impact on the overall ESG assessment; 2) consider the size of the industry and country in which the company operates, to facilitate comparable analysis in peer groups; 3) Weight of categories based on data, to reflect the availability of data in each category that supports more appropriate differentiation across companies; 4) The assessment methodology uses percentile ranking, to eliminate the hidden layers of calculation (WBCSD, 2019)

The ESG score will then be adjusted according to the news of the controversy aimed at the company. There are two entire ESG Scores in the model, namely: ESG Score and ESG Combined Score (ESGC). ESG score is a measure of a company's ESG performance based on published data. ESG Combined Score (ESGC), is an ESG Score that has been controversial for data to be adjusted. Adjustments are made to provide a discussion of the company's sustainability protection or user investment criteria. The score structure of this model is fully automated, supported by data and transparent, which is given free of subjectivity and hidden calculations or input. The underlying steps are granular enough to determine between companies that have limited and not transparent or provide minimal implementation, compared to companies that "carry out" conversations "and emerge as leaders in their respective or individual industries. ESG scores are calculated and available for all companies from the 2002 fiscal period. (Refinitiv, 2019).

Important information delivered by the company depends on who the user is or who makes the decision. In accounting that is often referred to as decision makers are management (internal), company owners (shareholders) or investors, creditors, etc. Investors as parties often need several parties to be able to make better investment decisions. Analysts are parties closely related to investors. With their analysis, fund estimation and evaluation, financial analysis has a significant influence on community investment, making it easier for investors to rely solely on the results of analytical analysis. Previous research emphasizes the important role of financial analysis in capital markets (Barker, [1998]; Covrig & Low, [2005]; Holland & Johanson, [2003]). Because it's important to analyze the relevance of information from their perspective. This study tries to analyze the relevance of information from the perspective of analysis that has a significant influence on investors. Research that takes into account analysts' perspectives has never been done in Indonesia (Suhardianto et al., 2017). It is likely that this happened due to limited data analysts' forecasts for the public.

The purpose of this paper is to examine the direct relationship between the use of analyst information and the accuracy of their forecasts. Our study is similar to McEwen and Hunton (1999) with one key difference: we examine non-financial information, while McEwen and Hunton focus on financial information. This research topic is important for the following reasons. First, company managers are interested in the extent to which financial analysts actually use non-financial information published by companies. More importantly, managers want to know whether the use of information reported by analysts significantly affects their estimates. By studying this relationship, company managers may be able to improve their disclosure strategies in terms of information that can influence financial analysis results. In addition, previous studies have examined the benefits to companies, such as lowering capital costs or increasing company value as a result of more relevant information disclosure (Sengupta, 1998; Lang, Lins, & Miller, 2003; Richardson & Welker, 2001).

## LITERATURE REVIEW

### Triple-Bottom Line

Financial and non-financial performance are two important factors in a company that must be maintained so that the company's survival is guaranteed. This is in accordance with the Triple - Bottom Line (TBL) theory which states that corporate sustainability is demonstrated in Economic, Social and Environmental performance (Elkington, 1998). Economic performance can be seen from the financial performance in financial statements, while social and environmental performance is a non-financial performance that is able to be a driver of business continuity. (Stubbs & Rogers, 2013). Many previous studies have been developed regarding environmental and social concepts (Ansong, 2017; Bond, 2014; Brown & Dacin, 1997; Goss & Roberts, 2011; Hoepner, Oikonomou, Scholtens, & Schröder, 2016; Huang & Watson, 2015; Ng & Watson, 2015; Rezaee, 2015; Veleva, 2010). Environmental and social performance is also related to financial performance (Lee, Chin, & Lee, 2016).

## ESG

Environmental, Social, and Governance (ESG) refers to the three main pillars in measuring sustainability and business ethics: environment (such as carbon emissions and resource management), social (relationships with employees, communities, and human rights), and governance (transparency, anti-corruption, and board structure). This concept is increasingly important in sustainable investment decision-making, with global assets reaching trillions of dollars by 2025. The majority of studies find that ESG implementation improves corporate financial performance, such as higher ROA, better access to financing, and risk resilience, especially in non-state-owned enterprises and in eastern regions. However, mixed results emerge where ESG sometimes lowers performance or has no significant effect, influenced by factors such as digital transformation that reinforce positive effects. In the first half of 2025, sustainable funds outperformed traditional funds with a median return of 12.5% versus 9.2%.

A systematic review of Scopus and Google Scholar (2020 -2024) shows that ESG contributes to company value through bibliometric mechanisms, although challenges such as greenwashing (symbolic disclosure without real action) remain. In Indonesia, studies highlight the relevance of ESG in reducing the cost of debt and supporting stakeholder theory, with practices that strengthen long-term competitiveness. Regional heterogeneity is especially evident in polluting companies, where ESG has a more positive impact than in non-polluting companies.

## Decision Usefulness Theory

Decision Usefulness Theory was first proposed by George J. Staubus in 1954 in a dissertation titled "An Accounting Concept of Revenue." In its early stages, this theory was known as A Theory of Accounting to Investors (Staubus, 2000). This theory was introduced into accounting theory in 1966 by a committee formed by the American Accounting Association (AAA) to design a Statement of Basic Accounting Theory (ASOBAT). This committee established important criteria used in selecting measurement methods in accordance with decision usefulness theory. These criteria are in line with the usefulness of accounting information for users. The criterion for usefulness in decision making is the predictive power of accounting information. The more accurately users can predict financial and economic events using this accounting information, the higher the usefulness of this information for its users. This criterion is used by accounting standard setters to select the best accounting measurements (Zoumaro, Djayoon, 2013a).

Decision Usefulness Theory became the reference for the development of the conceptual framework of the Financial Accounting Standards Board (FASB), namely the Statement of Financial Accounting Concepts (SFAC) applicable in the United States (Staubus, 2000). The weaknesses of Usefulness Theory in financial statement information were corrected by Jenkins, AICPA Committee in 1994, by adding a definition of accounting information users. Initially, only investors were identified as users, but this later expanded as outlined in the conceptual framework. The conceptual framework for financial reporting was developed through collaboration between the FASB and the IASB, contributing to the identification of parties who are users of information in financial statements (Zoumaro, Djayoon, 2013b).

Decision usefulness theory will be used to explain the trade-off between reliability and relevance that impacts owners' accountability for financial statements and provides useful information for investors. This approach makes financial statements based on historical costs more useful. One of these is through full disclosure.

## Hypothesis

Implementing good business practices can be seen as a signal of high corporate sustainability. Sustainable business practices show competent and trustworthy company managers (Goss & Roberts, 2011; Hoepner et al., 2016; Huang & Watson, 2015). In accordance with the TBL concept, social environmental performance and corporate governance are important in demonstrating corporate sustainability (Elkington, 1998). Comprehensive attention to environmental, social and corporate governance performance is not an easy task because of the many interests of stakeholders involved. Therefore attention to environmental, social and governance issues can increase company credibility and make it easier for them to obtain funds for business development (Ansong, 2017; Goss & Roberts, 2011; Hoepner et al., 2016). For analysts, this shows a signal which is positive and this will affect the price forecast done (Bernardi & Stark, 2018). This study hypothesizes that the better the environmental, social, and governance performance, the better the price level predicted.

Previous studies (Amir & Lev, 1996; Ittner & Larcher, 1999; Lev & Zarowin, 1999; Graham, Cannice, & Sayre, 2002; Beretta & Bozzolan, 2004; Liang & Yao, 2005) documented the increased relevance of non-financial information due to increased competition and globalization, technological developments, and the introduction of new businesses. When financial analysts predict future earnings, they must rely on non-financial information such as the company's future activities or acquisitions realized by the company. Vanstraelen, Zarzeski, and Robb (2003) found that the disclosure of forward-looking non-financial information affects the accuracy of analysts' earnings forecasts.

*H1a:* There is a positive relationship between environment and analysts' stock price forecast

*H1b:* There is a positive relationship between social and analysts' stock price forecast

*H1c:* There is a positive relationship between *governance* and analysts' stock price forecast

## METHODOLOGY

### Data

This study uses secondary data from the Bloomberg database. The population is all of the manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2012 to 2018. The total population is 1093 data, but only 325 data can finally be processed. Samples were taken by purposive sampling method, with the criteria of all research data fully presented. The sample consisted of 53 manufacturing companies.

### Variable

#### *Independent Variable*

ESG, Environmental, Social and Governance (ESG) is a set of standards for company operations that are used by investors to screen potential investments. In this study ESG, which is a non-financial variable, is broken down into three assessment criteria, namely Environment (ENV), Social (SOC) and Governance (GOV), all of these ESG variables are on a ratio scale.

ESG (Environmental, Social, and Governance) is a framework for assessing corporate sustainability that covers three main pillars: Environmental evaluates environmentally friendly performance such as energy use, waste management, pollution, natural resource conservation, animal welfare, and risk mitigation such as contaminated land ownership, hazardous waste disposal, toxic emissions, and government regulatory compliance; Social examines the management of relationships with employees, suppliers, customers, and communities through practices such as collaboration with suppliers of equal value, local profit donations, employee volunteer encouragement, safe working conditions, and attention to the interests of other stakeholders; while Governance assesses corporate leadership, executive compensation, auditing, internal controls, and shareholder rights with an emphasis on transparent accounting, shareholder voting rights, avoiding board conflicts of interest, non-partisan political contributions, and prevention of illegal practices.

Financial variables used in this study are EBIT, Gross Margin (GM), Market Capitalization (MCAP), ROE, Selling, General and Administrative Expense (SGA), TAX, Market Capitalization to Book Value (MCBV). EBIT is Earnings Before Interest and Tax. EBIT is an accounting number that can be directly seen in annual reports and the scale of this variable is the ratio. Gross Margin is the accounting number which is the difference between sales revenue after deducting the cost of goods sold. Market Capitalization (MCAP) is the value of the company's shares outstanding in the market. MCAP is calculated by the number of outstanding shares of the company multiplied by the company's current share price. ROE, in this research ROE stands for Return on Investment. Selling, General and Administrative Expense (SGA), is the company's total operating expenses. SGA is a ratio scale variable. TAX, is an annual tax burden borne by the company. Market Capitalization to Book Value (MCBV), is the ratio of the company's capitalization to the book value of the company.

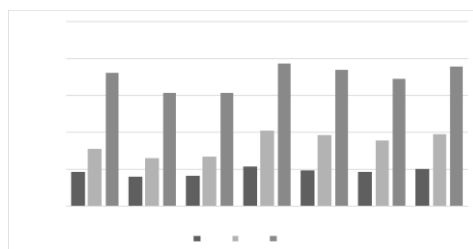
Stock Price Forecast (FORPRICE), is the value of Stock Prices predicted by analysts. In this study, the dependent variable with a ratio scale.

### Method of Analysis

Regression with eviews software is used to analyze the data in this study. This hypothesis testing tool was chosen because this research will examine the relationship between financial and non-financial data with analysts' stock price forecasts. The independent and dependent variables are ratio scale, therefore regression is considered as the most appropriate hypothesis testing tool.

## RESULTS AND DISCUSSION

The descriptive statistical results in Figure 4.1 show that the awareness of companies to disclose social environmental and governance activities began to be high in 2012. This is very understandable because in 2012 the government announced the Starring Regulation on social and environmental responsibility. However, it began to decline slowly and again increased quite dramatically in 2015. This is likely due to the 2015 House of Representatives (DPR) discussing the Law of CSR. The government is preparing a new law asking companies to set aside part of their profits for social and environmental responsibility activities.



**Figure 4-1:** Descriptive Statistics

Source: Secondary data that is processed

Before testing using regression, researchers have tested the classical assumptions first. Adjusted R-squared number of 0.415, meaning that the stock price results from analyst forecasts are influenced by financial and non-financial variables in this regression model of 41.5 percent. F-statistics of 6.04 (p-value 0.00) means that at least one independent variable significantly influences the dependent variable. The regression model is significant, so it can be concluded that the independent variables can predict the dependent variable, so it is necessary to continue interpreting each regression coefficient of the independent variable.

The results of this study have limitations in terms of **generalizability**, as the research sample focused only on **manufacturing companies**. Each industrial sector has different ESG characteristics, both in terms of risk, regulation, and stakeholder expectations. For example, the **financial sector** While the **mining sector** places greater emphasis on governance and risk management, it is highly sensitive to environmental issues, while the **services and technology sectors** tend to emphasize social aspects such as data protection, inclusion, and labor practices. These differing characteristics also influence **how financial analysts process and utilize ESG information** in their projections. Therefore, the findings of this study may not be directly applicable to other sectors with different ESG dynamics and analyst behaviors.

Further research is recommended to expand the sample size to various industry sectors (finance, mining, services, technology). Conduct a cross-sector comparative analysis to test whether the influence of ESG on analyst forecasts is universal or sector-specific. Use an industry-sector moderation approach to capture differences in analyst sensitivity to specific ESG dimensions.

This study also potentially contains **selection bias**, as only companies with **complete ESG data and analyst forecasts** were included in the sample. This makes companies with high transparency, large size, or international exposure more likely to be selected, while smaller companies or those less active in ESG reporting are more likely to be excluded.

As a result, the sample used may not fully represent the overall population of companies, putting the research results at risk of **overestimating** the role and relevance of ESG information for financial analysts. To minimize this potential bias, further research can use statistical methods such as *the Heckman correction* or *propensity score matching* to control for sample selection bias. Combining ESG data from various providers (e.g., Refinitiv, MSCI, or corporate sustainability reports) can expand the number of observations. Conducting sensitivity tests by comparing the characteristics of companies included and excluded from the research sample.

Table 4.1 shows that all non-financial information variables namely Environment (ENV), Social (SOC) and Governance (GOV) have a significant positive relationship with analysts' stock price forecast. The regression coefficients of each variable in sequence are 11,389.39; 5,039.66 and 5,583.03 are all significant at the alpha level of five percent. Therefore, it can be concluded that Hypotheses 1a, 2a and 3a are accepted.

Variable	Coefficient
C	(25,093.77)
ENV	11,389.39 **
SOC	5,039.66 **
GOV	5,583.03 **
EBIT	0.01 *
GM	(3.53)
MCAP	(0.00) *
ROE	(473.91) **
SGA	(0.00) **
TAX	(0.01)
MCBV	1,803.98 *
R-squared	0.50
Adjusted R-square	0.42
F-statistic	6.04
Prob(F-statistic)	0.00

**Table 4-1:** Results

Dependent Variable: *forepric*; \*  $p < 0.05$ ; \*\*  $p < 0.01$

These results indicate that entities with better non-financial disclosure (environmental, social and governance), will be responded positively by analysts. It can also be interpreted that when analysts conduct an analysis, they consider social environmental and corporate governance information. Shareholders as an interested party can see the benefits of a company that carries out its social responsibilities. An environmentally friendly company that is able to maintain its social relations with all its stakeholders, both external and internal, and has good corporate governance, is apparently able to provide guaranteed returns for its investors.

However, financial factors are also still being considered by analysts. EBIT is the only financial variable that has a significant positive effect on analysts' stock price forecast (0.01). Selling General and Administrative (SGA) Expenses, and Market Capitalization to Book Value Ratio (MCBV) also have a significant negative effect on analysts' stock price forecasts. Based on these results, then H2a, H2e, H2g are accepted. Market Capitalization and ROE have significant negative correlation with analysts' stock price forecast so do not H2c, H2d, But Gross margin variable (3.53;  $p = 0.984$ ) and Tax expense (-0.011,  $p = 0.118$ ), so do not accept H2b and H2f.

Research findings showing a positive and significant relationship between ESG (environmental, social, and governance) scores and analysts' stock price predictions cannot necessarily be interpreted as strong evidence that analysts actually use ESG as substantive information in their fundamental analysis process. These findings require careful consideration, taking into account several methodological and conceptual aspects.

First, the dependent variable used is stock price forecast, not forecast accuracy or projection revisions following the publication of ESG information. This raises the possibility that the ESG-forecast relationship reflects analysts' adjustments to market sentiment and expectations rather than the use of ESG as an independent analytical input. In other words, analysts could be "following the market" (market-tracking behavior), where companies with high ESG scores are already appreciated by the market, and then analysts adjust their price projections accordingly. Second, the ESG score used comes from Refinitiv, which is essentially an aggregation of public information and historical data-based assessments. This score can serve as a proxy for a company's reputation, not solely for the quality of its actual sustainability performance. If analysts use the ESG score solely as a signal of a company's reputation or legitimacy, then the relationship found is more accurately described as a reputation-price correlation, not evidence of decision-useful ESG information.

Third, although robustness tests indicate that ESG components remain significant at one- and two-year lags, this is not sufficient to prove causality. While this temporal consistency does indicate that ESG has a longer "economic lifespan" than financial variables, it still fails to answer whether the analysis truly captures ESG narrative content, or simply using ESG scores as a *summary indicator* that has been internalized in market prices. Fourth, there is no additional testing such as forecast accuracy (forecast error), forecast revision, or analyst reactions before and after the publication of the ESG report, limiting the conclusion that ESG is used as new information (incremental information).

Without such testing, the research results more strongly indicate association than information usage. Thus, the findings of this study are more accurately interpreted as evidence that ESG is positively correlated with expectations of firm value as reflected in market prices, and that analysts respond to or reflect these expectations in their projections. Evidence that analysts actively and qualitatively use ESG information as a basis for fundamental analysis remains implicit, not conclusive. The implication is that this study successfully demonstrates the value relevance of ESG from an analyst perspective, but it does not fully demonstrate the quality of ESG information use within the *Decision Usefulness Theory framework*. Further research should examine analysts' cognitive dimensions (how ESG is processed), not just the final output of price predictions.

The positive relationship between ESG scores and analyst-predicted stock prices has the potential to contain endogeneity issues, so causal interpretations should be approached with caution. Endogeneity can arise through at least three main mechanisms: reverse causality, omitted variable bias, and measurement error. First, reverse causality may occur when companies with good financial performance prospects or high projected stock prices have greater incentives and resources to prepare more comprehensive and systematic ESG reports. In this context, it is not ESG that influences stock price predictions, but rather market and analyst expectations of company performance that encourage companies to improve the quality and intensity of ESG reporting.

Second, omitted variable bias can arise when unobserved factors such as management quality, governance culture, corporate reputation, or corporate communication strategy simultaneously influence both the ESG score and analysts' stock price predictions. If these factors are not fully controlled for in the empirical model, the ESG coefficients have the potential to capture the influence of these latent variables, rather than the pure impact of ESG itself. Third, and most crucially, ESG scores have the potential to reflect reporting quality more than actual ESG performance. ESG scores, especially those based on secondary data and disclosure-driven, are often heavily influenced by narrative completeness, terminology consistency, and compliance with reporting standards. Thus, a high ESG score does not necessarily reflect substantive sustainability practices, but rather a company's ability to strategically articulate its ESG narrative.

In this context, the finding of a positive relationship between ESG scores and analysts' stock price predictions can be interpreted as evidence that analysts respond more to the "ESG substance" that can be extracted from the narrative, rather than simply ESG numbers as a symbol of compliance. Professional analysts generally conduct a critical reading of sustainability reports, combining ESG disclosures with other information such as policy consistency, track record of controversies, and ESG alignment with the company's business model. Therefore, ESG scores function as signal carriers, not as perfect representations of actual ESG performance. Consequently, the observed relationship between ESG scores and analysts' stock price predictions cannot be fully interpreted as a direct causal impact of ESG on valuation, but rather as the result of a complex interaction between reporting quality, narrative credibility, and analysts' ability to distill substantive information from ESG disclosures.

EBIT, Selling General and Administrative Expenses, and Market Capitalization to Book Value Ratio results are in accordance with the predictions of researchers, the higher the EBIT and MCBV ratios, the higher the predicted stock prices. Selling General and Administrative Expenses has a negative effect, meaning that the higher SGA expenses, the analyst will predict the stock price will be smaller. The regression coefficient for Market Capitalization and ROE shows that these two financial variables have a negative effect on stock prices predicted by analysts. In many analyzes that use market capitalization, researchers usually separate public companies that have large and small market capitalization. In this study the researchers did not do this. This is what causes Market Capitalization to have a negative effect. Meanwhile for ROE the researcher did not separate the sample of companies with negative ROE and positive ROE, so the results appear to be contrary to initial expectations.

Gross Margin and Tax Expense are two variables that are not significant to the stock price forecast by analysts. So that analysts do not seem to use these two financial variables when forecasting. This can be understood because the Gross Margin movement is similar to EBIT so that most analysts are quite likely to see EBIT. As for tax expense, in Indonesia tax expense is not too significant to the company's net profit, so that's why analysts still ignore company tax expense data.

Table 4.1 also shows the results of the robustness test. The model was tested using 3 data, 1 year lag and 2 years, and the results were consistent. All independent variables that have a significant effect on the dependent on current data also have a significant effect when tested on the dependent variable 1 year in the future and 2 years in the future. Based on testing with data lags, the results show that non-financial variables (environmental, social and governance) are more consistently used by analysts in the long run than financial data. Financial data is used by analysts in the current year and increasingly does not significantly affect the results of analyst forecasts.

Claims of novelty are put forward through the use of **the Indonesian context**. This research tends **to be descriptive in nature**, limited to statements that the research was conducted on companies in Indonesia or used samples from the Indonesian capital market. Its novelty has not been fully demonstrated through **in-depth analysis**, about how Indonesia's institutional characteristics, regulations, business culture, or market structure **substantively differentiate** the findings of this study from similar studies in other countries.

In other words, the Indonesian context serves more as a **research setting** than as a **contextual variable subject to critical analysis**. Indonesia, however, possesses unique characteristics, such as the initially voluntary nature of CSR reporting, varying levels of regulatory enforcement, the dominance of retail investors, and a still-developing level of ESG literacy. These aspects have not been explored to explain *why* and *how* ESG narrative disclosures operate differently compared to developed country contexts. Consequently, the claimed novelty remains at the level of **"first evidence in Indonesia,"** rather than **developing a theoretical understanding based on the local context**.

This research actually has a significant opportunity to provide a **stronger contextual contribution**, but this opportunity has not been optimally utilized. Some potential contributions that have not been maximized include the research not explicitly linking the findings to Indonesia's institutional characteristics, such as the role of the Financial Services Authority (OJK), sustainability regulations, corporate governance quality, or the level of market transparency. This context should be able to explain why analysts in Indonesia respond to ESG information in certain ways. **Implicit comparisons with other countries** without the need for cross-country studies can strengthen its contribution by conceptually comparing the findings with research results in developed countries and then highlighting differences in analyst behavior due to differences in market maturity and ESG regulations.

**Deepening the Meaning of ESG in the Local Context:** ESG in the Indonesian context is often symbolic or normative. However, this research has not yet explored whether analyst responses reflect the use of ESG as substantive information or simply as a signal of corporate legitimacy. **Theoretical implications are context-based**. Empirical findings have not been fully integrated into theoretical discussions that demonstrate how Decision Usefulness Theory or stakeholder theory can be modified or enriched when applied to emerging markets like Indonesia.

Overall, claims of novelty based on the Indonesian context have yet **to move from the descriptive to the analytical level**, and opportunities to produce **stronger and more reflective contextual contributions are lacking**. The scope is still wide open. Strengthening the institutional, cultural, and regulatory analysis of Indonesia



will help this research become not only a "first-of-its-kind study in Indonesia" but also a **conceptual reference for ESG research in developing countries** .

### Robustness Test

**Table 4.2.** Robustness Test Results

VARIABLE	COEFFICIENT		
	CURRENT	LAG-1	LAG-2
C	(25,093.77)	(38,047.78)	(66,873.63)
ENV	11,389.39 **	11,655.35 **	15,756.50 **
SOC	5,039.66 **	5,030.60 **	6,669.03 **
GOV	5,583.03 **	5,890.23 **	8,208.68 **
EBIT	0.01 *	0.01 *	0.01 *
GM	(3.53)	(19.33)	(166.52)
MCAP	(0.00) *	(0.00) *	(0.00) **
ROE	(473.91) **	(346.89)	(343.67)
SGA	(0.00) **	(0.00) ***	(0.00)
TAX	(0.01)	(0.01)	(0.01) **
MCBV	1,803.98 *	1,431.81 *	1,164.76 **

The robustness test results in the table 4.2 show that the main findings are relatively stable over time (current, lag-1, lag -2). ENV, SOC, and GOV consistently have positive and significant coefficients in all specifications, so that current, one-year-old, and two-year-old ESG components remain associated with an increase in the dependent variable (eg, company value or market performance). The MCBV coefficient is also positive and significant in all models, while other control variables (EBIT, GM, MCAP, ROE, SGA, TAX) are only significant in some lags, meaning that their effect on the dependent variable is weaker or not always stable compared to ESG. Thus, this robustness check reinforces that the positive influence of ESG on company performance/value is not sensitive to different time specifications.

## CONCLUSION

This study concludes that CSR reports, measured in this study using ESG scores individually, are reports that provide benefits to users. Information about the environment, social and governance is used by analysts as a basis for forecasting. Even though the information is historical, information about social environmental activities and governance still influences the stock prices predicted by analysts. Analysts use the non-financial information consistently and long-term. In addition to non-financial information, this study is also appropriate to consider accounting numbers and other financial information for stock price forecasting by analysts. Financial information used by analysts is more short-term. Economic life of financial data is shorter than non-financial data for analysts. The limitation of this study is that it does not separate data from negative ROE and positive ROE, so the results are not in accordance with initial expectations. Beside s this study also does not separate companies with large and small Market Capitalization, so the results are also not in accordance with the hypothesis. Future studies should test separately positive and negative ROE data and separate companies with large and small capitalization.

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