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**ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG)
PRODUCTIVITY POLICY APPROACH TO MEASURING
CORPORATE INTEGRATED REPORTING AND CORE VALUES
OF COMPANIES ON THE INDONESIA STOCK EXCHANGE**

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Abstract

This study aims to analyze the dynamic relationship between the global Environmental, Social, and Governance (ESG) index and the Indonesian stock market, using data from the Indonesia Stock Exchange. ESG is an investment practice that considers environmental, social, and corporate governance impacts in investment decision-making. Thus, ESG is not only a priority for investors but also a crucial factor for companies seeking to attract new investors while maintaining the satisfaction of existing shareholders. In line with this objective, this study evaluates the effect of Corporate Integrated Reporting (CIR) on Core Value Company (CVC) disclosure in companies listed on the Indonesia Stock Exchange. The study sample includes 85 companies with available ESG scores for the period 2020 to 2025, along with annual report data for comparative analysis. Multiple regression methods are applied to assess the effect of ESG productivity policies on CVC within the context of integrated reporting. The results of the study show that CIR has a positive influence on CVC. In addition, ESG productivity policies are significantly associated with increased CIR benefits, although they do not have a direct impact on CVC. The results of this analysis emphasize the importance of implementing CIR and strengthening ESG productivity in enhancing a company's core value, as reflected in improved stock market performance. This research also indicates that advocacy for CIR and ESG disclosure can improve market efficiency, transparency, and corporate accountability.

Keywords: *Integrated Corporate Reporting; Productivity; Environmental, Social, and Governance; Corporate Core Values.*

Abstract

Studi ini bertujuan untuk menganalisis hubungan dinamis antara indeks Lingkungan, Sosial, dan Tata Kelola (ESG) global dan pasar saham Indonesia, menggunakan data dari Bursa Efek Indonesia. ESG adalah praktik investasi yang mempertimbangkan dampak lingkungan, sosial, dan tata kelola perusahaan dalam pengambilan keputusan investasi. Dengan demikian, ESG bukan hanya prioritas bagi investor tetapi juga faktor penting bagi perusahaan yang berupaya menarik investor baru sambil mempertahankan kepuasan pemegang saham yang ada. Sejalan dengan tujuan ini, studi ini mengevaluasi pengaruh Corporate Integrated Reporting (CIR) terhadap pengungkapan Core Value Company (CVC) pada perusahaan yang terdaftar di Bursa Efek Indonesia. Sampel penelitian meliputi 85 perusahaan dengan skor ESG yang tersedia untuk periode 2020 hingga 2025, beserta data laporan tahunan untuk analisis komparatif. Metode regresi berganda diterapkan untuk menilai pengaruh kebijakan produktivitas ESG terhadap CVC dalam konteks pelaporan terintegrasi. Hasil penelitian menunjukkan bahwa CIR memiliki pengaruh positif terhadap CVC. Selain itu, kebijakan produktivitas ESG secara signifikan terkait dengan peningkatan manfaat CIR, meskipun tidak memiliki dampak langsung pada CVC. Hasil analisis ini menekankan pentingnya implementasi CIR dan



penguatan produktivitas ESG dalam meningkatkan nilai inti perusahaan, sebagaimana tercermin dalam peningkatan kinerja pasar saham. Penelitian ini juga menunjukkan bahwa advokasi untuk CIR dan pengungkapan ESG dapat meningkatkan efisiensi pasar, transparansi, dan akuntabilitas perusahaan.

Kata kunci: Pelaporan Korporasi Terintegrasi; Produktivitas; Lingkungan, Sosial, dan Tata Kelola; Nilai Inti Perusahaan.

I. INTRODUCTION

Environmental, social, and governance (ESG) is a framework that represents a stakeholder-oriented business approach. ESG is used to assess the sustainability and ethical impact of a company's operations, with the principle that commitment to the environment is only one aspect of overall corporate responsibility. Companies that adhere to ESG standards are committed to behaving ethically in all three areas, utilizing a variety of strategies, tactics, and solutions to achieve sustainability goals. With board members paying increasing attention to ESG issues, it is important to consider the global context that influences each region's focus and priorities.

In modern financial literature, ESG-based investing is increasingly gaining traction. Integrating environmental, social, and governance factors into investment decisions is considered a way to manage long-term risk while creating sustainable value. Empirical research findings vary: some studies find a positive relationship between ESG practices and corporate financial performance, while others highlight that the benefits of ESG diversification depend on market conditions and a country's level of economic development (Wong et al., 2020; Zumente & Bistrova, 2021; Wu et al., 2022; Srivastava & Anand, 2023; Sany et al., 2024).

Socially responsible investing (SRI) aims to combine social and environmental benefits with financial returns (Ergun, 2022). This approach considers ESG factors in security selection (Mousa, 2022; Jan et al., 2023), unlike conventional investing, which focuses solely on financial returns (Pratama & Deviyanti, 2022). SRI seeks to generate both moral and financial returns, thus incorporating non-financial considerations, including ethical, social, and environmental aspects, into investment decisions (Cheng & Ryu, 2023). The term ESG is used interchangeably with sustainable, impact, or ethical investing and is often associated with corporate social responsibility (Chouaibi et al., 2022; Ruan & Liu, 2021; Giannopoulos et al., 2022).

Integrated reporting emerged as a response to the limitations of traditional financial reporting, which tends to focus on financial metrics and ignore non-financial information. By

integrating financial, strategy, governance, performance, and sustainability data into a single report, integrated reporting provides a more holistic and transparent view of company performance and value creation.

There are three types of ESG investments: (1) ESG integration, to improve the risk-return characteristics of a portfolio; (2) investments that align a portfolio with investor norms and beliefs; and (3) impact investments, which use capital to drive social or environmental change, such as decarbonizing the economy (Deng & Cheng, 2019). Investment decisions can be based on due diligence, ESG rating agency information, indices, or ESG strategy funds (Torelli & Lazzini, 2020). ESG investors are heterogeneous, with varying philosophies and conventions, and are typically willing to sacrifice financial returns for greater social or environmental impact (Cooray et al., 2020; Ibrahim & Isiaka, 2020).

Since the early 2000s, interest in ESG investing has increased as moral pressure from the public, politicians, and public money has increased for companies to be more environmentally friendly. Following the 2007 financial crisis, concerns about systemic risk forced companies, investors, and regulators to incorporate ESG factors into decision-making. ESG practices have been shown to increase accountability, transparency, and potential company value, although their implementation is largely voluntary. In Indonesia, the implementation of integrated reporting is still limited, and research on its impact on company value is relatively scarce. Therefore, further studies are needed to evaluate the influence of integrated reporting, including its moderating role on ESG performance, to support sustainable decision-making.

With this understanding, this study aims to analyze the relationship between global ESG indices and stock markets in developed and developing countries, using a time and frequency approach. The findings of this study are not only relevant to business stakeholders, but also to policymakers, academics, and the public who want to promote sustainable development and social responsibility.

II. THEORETICAL STUDIES

Definition of ESG

The term ESG, often used interchangeably with sustainable investing, refers to an investment approach that goes beyond purely financial factors. Market participants use various terms to describe ESG investments and investment strategies, and, as mentioned, there is no universally accepted definition of ESG.

ESG aspects are becoming increasingly clear and a key focus, with corporate management under greater pressure from government policies, following significant impacts,

to more seriously address their ownership and corporate management responsibilities . The report, based on existing global developments in developing countries regarding investment regulatory obligations, found that corporate management's consideration of ESG factors is fully consistent with their obligations to beneficiaries. The report concluded that corporate management should consider factors that are financially significant to the performance of an investment. If management considers ethical or environmental, social, or governance (ESG) issues to be financially significant, they should consider them against the company's financial performance. This also frees management to consider ethical issues if doing so does not imply a significant financial loss to the company and they believe it will support the company's vision. For many ESG practitioners, this provides the clarity and catalyst needed to identify ESG as an issue of concern and should be considered alongside other established management responsibilities.

Understanding ESG risks

ESG risks are diverse and growing: climate change, diversity, cybersecurity risks, reputational risks, and so on. If a company with a large portion of its customers in a particular region of the world experiences a major incident in that region, whether geopolitical, environmental, or otherwise, it will disrupt the company's business performance. Meanwhile, pressure is mounting from investors and other stakeholders to identify and mitigate ESG risks in a timely and effective manner. Boards of directors, in their oversight role, need to be leaders in ESG and risk management, but they often struggle to understand these issues, even with clear risk scores, largely because risks are spread across three distinct categories.

These risks can be particularly daunting for small and medium-sized businesses without robust ESG programs. However, organizations just beginning their ESG journey can base their approach on robust risk management by harnessing the power of AI. Integrating AI into risk management can analyze vast amounts of data to uncover hidden patterns and emerging risks, enabling companies to achieve more ESG with fewer resources.

There appears to be a growing opinion in the investment industry that companies that meet ESG criteria are well-equipped to manage risk and operate sustainably into the future, making them attractive investments. To this end, many investment managers are integrating ESG methodologies into their investment processes from the outset, rather than simply incorporating them into specific ethical or socially conscious strategies.

Benefits of ESG Reporting

The growing demand for socially responsible investments and the increasingly stringent regulatory environment certainly present significant challenges for companies, particularly SME issuers with more limited organizational capacity. On the other hand, sustainability reporting can bring new opportunities and significant benefits to companies.

1. Financing Benefits
2. Operational Benefits
3. Business opportunities
4. Advanced Communication and Reputation
5. Regulatory Process

Theoretical Framework and Hypothesis

As investors and regulators have increasingly focused on socially responsible and impactful investments, the role of ESG factors in investment decision-making has become increasingly important in recent years. This is reflected in several previous studies, which found a significant relationship between ESG performance and company performance (Wong et al., 2020; Zumente & Bistrova, 2021; Wu et al., 2022; Srivastava & Anand, 2023; Sany et al., 2024). Other studies have examined whether ESG-based investments can offer portfolio diversification opportunities (Wahl et al., 2020; Utomo & Hapsari, 2022; Shen, 2023).

Compared with traditional financial performance research, studies on the relationship between ESG or sustainability indices and conventional stock indices or other sustainability indicators are relatively limited. In this context, sustainability indices are often represented by the Dow Jones Sustainability Index (Sokil et al., 2020). In 2022, Santosa et al. examines the risk spillovers and dynamic correlations between conventional and sustainable stock indices across various sectors, to analyze the potential for sustainable investment-based portfolio diversification.

In this study, signaling theory and legitimacy theory serve as the main conceptual frameworks for understanding non-financial disclosure and integrated reporting. Signaling theory emphasizes that companies strategically use disclosures, including sustainability reports and integrated reports, as a means to convey positive signals to investors and stakeholders. Through these signals, companies affirm their commitment to sustainability practices, ethics, and long-term value creation, which ultimately enhances positive perceptions of the company's performance and reputation.

On the other hand, legitimacy theory emphasizes the importance of public and stakeholder perceptions of a company's alignment with social norms, values, and expectations. Voluntary reporting, whether in the form of sustainability reports or integrated reports, allows companies to maintain or enhance their legitimacy by demonstrating transparency, accountability, and a commitment to sustainability. Thus, comprehensive disclosure through integrated reporting serves not only as a communication strategy, but also as a mechanism to build trust, maintain stakeholder support, and strengthen the company's position in the long term.

However, the study also highlights challenges, such as the risk of greenwashing, where integrated reporting can be used symbolically to portray a company as more environmentally friendly than its actual practices. However, when done honestly and transparently, integrated reporting plays a vital role in aligning corporate strategy with social expectations, strengthening legitimacy, and creating sustainable value for the company and all its stakeholders.

Using this framework, further research is directed at understanding the relationship between ESG policy approaches and corporate integrated reporting, as well as how sustainability and legitimacy signals are reflected in financial market behavior, particularly on the Indonesia Stock Exchange.

Hypothesis

The ESG implementation process presents a number of challenges. Many evaluations implicitly assume that progressive environmental, social, and governance policies are universally desirable, so the primary emphasis is on how to integrate these policies into a company's operations or investment portfolio without creating significant financial burdens for shareholders. However, some ESG targets are often controversial and not universally accepted.

Integrated reporting has emerged as an innovative framework that brings together critical information about a company's various types of capital, including natural, human, social, intellectual, physical, and financial capital. Its primary objective is to provide a comprehensive and integrated picture of a company's performance and value creation, going beyond traditional financial statements.

Various studies show that the implementation of integrated reporting has a positive impact on company value, operational effectiveness, and market growth, which is reflected through indicators such as ROA, ROE, and market to book value ratio. From a signaling theory

perspective, integrated reporting serves as a strategic means to convey a company's commitment to transparency and accountability, thereby enhancing its reputation and attracting investor interest.

Meanwhile, stakeholder theory emphasizes that companies must consider the interests of all stakeholders, not just shareholders, and legitimacy theory highlights that integrated reporting helps companies strengthen operational legitimacy by demonstrating compliance with social, environmental, and ethical norms (Pratama & Deviyanti, 2022). Empirical evidence from various countries supports this, where companies with high-quality integrated reporting demonstrate higher market value and receive positive recognition from investors and the public.

Overall, integrated reporting not only improves the efficiency of resource and capital allocation but also strengthens a company's position in creating long-term value through a combination of financial and non-financial performance, while maintaining legitimacy and stakeholder trust. These findings form the basis for formulating research hypotheses regarding the relationship between integrated reporting quality, firm value, and market performance.

Based on the above discussion, we propose the following hypothesis:

H1: Corporate integrated reporting has a positive influence on The company's core values .

Recently, the ESG framework has been widely adopted by government agencies, quasi-governmental entities such as United Nations-affiliated organizations, nonprofit advocacy groups, financial rating firms, and influential policy bodies such as the World Economic Forum. These organizations have launched initiatives to formulate comprehensive principles and rating systems, encompassing all environmental, social, and governance priorities that companies should consistently implement.

Based on the literature review, ESG performance has been shown to have a positive impact on company value. Companies that demonstrate superior performance in environmental, social, and governance aspects tend to gain higher legitimacy, enhance their reputation, and strengthen relationships with stakeholders. This impact in turn drives an increase in company value (Rochayatun & Kholifah, 2021).

Furthermore, empirical evidence shows that companies with high ESG scores not only receive positive market recognition but are also more likely to achieve superior financial performance, higher returns, and face lower risks. These findings align with signaling theory ,

which emphasizes that strong ESG performance can serve as an indicator of a company's ability to generate superior operational and financial results.

Studies in various countries, including China, reinforce this by showing a significant relationship between ESG performance, firm value, and profitability. Thus, effective ESG management is not only relevant from a social responsibility perspective but also plays a direct role in increasing the overall value of the company.

Based on this, the second hypothesis of this study is:

H2: ESG performance has a positive influence on the company's core values .

The concept of environmental, social, and governance (ESG) has long historical roots, linked to similar predecessor ideas in both academic literature and business practice. For more than a century, critics of the market economy—some inspired by progressive political agendas—have argued that profit-seeking companies should not focus solely on shareholder interests. Companies are also expected or even required to engage in various forms of activism to address social issues and public concerns.

This movement has grown in line with increasing expectations of social responsibility in the business community, which has encouraged many managers and executives to provide voluntary services to employees and local communities.

The explanation shows that ESG performance positively moderates the relationship between integrated reporting and firm value . The impact of ESG performance on company value is more pronounced in companies with high levels of executive ownership compared to companies with low executive ownership. Companies with superior ESG performance tend to be perceived as more legitimate and trustworthy, thereby enhancing their reputation and strengthening relationships with stakeholders.

By integrating ESG performance into integrated reporting, companies can build greater stakeholder trust, improve the quality of decision-making processes, and provide more comprehensive information. These cumulative effects ultimately drive increased company value. This finding is in line with stakeholder theory , which emphasizes that companies that pay attention to ESG tend to have higher value.

Based on these findings, a moderation hypothesis is proposed:

H3: ESG performance moderates and strengthens the influence of corporate integrated reporting on corporate core values.

III. RESEARCH METHODS

Analysis Model

This research adopts a mixed methods approach, combining quantitative and qualitative methods to provide a more comprehensive understanding of the impact of Environmental, Social, and Governance (ESG) factors on company value and global business practices. This approach was chosen because it allows the research to capture numerical effects and statistical relationships through quantitative data, while simultaneously understanding nuances, perceptions, and strategic practices through qualitative analysis.

The research sample consisted of companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2025 period, selected using a purposive sampling method. The sample selection criteria included:

1. The company has an ESG score available.
2. The company has an annual report that can be accessed through the IDX or the official website.
3. Companies listed throughout the research period.

Based on these criteria, 458 observations were obtained from 2018 to 2022, with the annual distribution presented in Chart 1. The research variables are as follows:

- Independent Variables :
 - Integrated Reporting (COPR)
 - ESG Performance (ESGVALUE)
- Dependent Variable :
 - Company Value (TOBINSQ)
- Moderating Variables :
 - COPR × ESGVALUE Interaction
- Control Variables :
 - Firm Size (FSIZE) – natural logarithm of total assets (Juniarti et al., 2023)
 - Company Growth (GROWTH) – percentage change in annual sales (Kerkemeier & Kruse-Becher, 2022)
 - Leverage (LEV) – the ratio of total debt to total assets (Kim, Jung & Cho, 2022)

Based on the existing data, the methodology used in this research is as follows:

- Classical Assumption Test : multicollinearity (VIF), heteroscedasticity (White test), and autocorrelation (Wooldridge test).
- Model Estimation : using Weighted Least Squares (WLS) to address heteroscedasticity.

- Panel Model (Optional) : Fixed Effect vs Random Effect, tested using the Chow test and Hausman test.
- Endogeneity Check : if there is potential for endogeneity, Two-Stage Least Squares (2SLS) or Generalized Method of Moments (GMM) is used .

The quantitative approach allows for the measurement of the statistical relationship , significance, and strength of the effects of integrated reporting and ESG on firm value, as well as the moderating role of ESG.

Qualitative data was collected from several sources as follows:

- Academic journals, industry reports, and international publications related to ESG and global business practices.
- Case studies of companies that have successfully integrated ESG into their strategies.
- ESG policy documents and guidelines, such as SASB and CDP .

Qualitative data was analyzed using thematic content analysis , which included:

1. Identify key themes related to ESG integration and integrated reporting.
2. Grouping of patterns and best practices across various industry sectors.
3. Interpretation of ESG impacts on business strategies, investment decisions, and public policy.

This approach allows research to understand the managerial nuances, stakeholder perceptions, and socio-business contexts that influence ESG implementation. The combined approach is conducted in two stages:

1. Sequential Explanatory Design :
 - First stage: quantitative analysis to identify significant relationships and patterns of ESG effects and integrated reporting on firm value.
 - Second stage: qualitative analysis to explain the quantitative findings , exploring the reasons, context and company practices underlying the statistical results.
2. Data Triangulation :
 - Quantitative results were compared with qualitative findings to ensure internal validity and strengthen inferences.
 - It also helps identify gaps or phenomena that are not detected through quantitative analysis alone.

By combining both approaches, this research aims to:

- Empirically measuring the impact of integrated reporting and ESG performance on firm value.

- Explains the mechanisms, practices, and strategic context behind quantitative results.
- Provides comprehensive insights for corporate management and policy makers regarding the integration of ESG in business strategies and capital markets .

This mixed methods approach increases inferential power , while providing a more holistic understanding of ESG as a strategic factor in corporate value creation and sustainability.

This analysis model includes several control variables: firm size, firm leverage, and firm growth.

Comment:

$$TOBINSQ_{i,t-1} = \beta_0 + \beta_1 COPR_{i,t-1} + \beta_2 ESGSCORE_{i,t-1} + \beta_3 DCOPR_{i,t-1} * ESGVALUE_{i,t-1} + \beta_4 FSIZE_{i,t-1} + \beta_5 LEV_{i,t-1} + \beta_6 GROWTH_{i,t-1} + \varepsilon_{i,t}$$

TOBINSQ_{i,t-1} = Value of company i in year T-1

DCOPR_{i,t-1} = Dummy variable for the company Integrated Report I in Year T-1

ESGVALUE_{i,t-1} = Company ESG Performance

FSIZEI = Company Size

LEV = Lever

GROWTH_{Hi,t-1} = Company Growth

Based on previous research The company's value will be measured using Tobin's Q. Tobin's Q is calculated as the market value of equity plus total debt divided by the book value of equity plus total debt.

$$TOBINSQ_{i,t} = \frac{\text{Market Value of Equity} + \text{Book Value of Debt}}{\text{Total Assets}}$$

Information:

Market Value of Equity = Share price × Number of shares outstanding

Book Value of Debt = Total liabilities of the company based on the balance sheet

Total Assets = Total assets according to financial statements

ESG Performance

ESG productivity is a comparative variable in its measurement. The researchers used data from <https://www.idx.co.id/id/perusahaan-tercatat/nilai-esg> to obtain ESG scores, consistent with previous research by Sany, Novica & Valentina (2024).

Risk Score	Category	Information
0-10	Can be ignored	Considered to have negligible ESG risk.
10-20	Low	Considered to have low ESG risk

20-30	Currently	Considered to have moderate ESG risk
30-40	Tall	Considered to have high ESG risk
>40	Heavy	Considered to have significant ESG risks

Control Variables

This study includes several control variables to capture the fundamental characteristics of the company that can influence the company's value, namely the company's size, growth, and leverage:

1. Firm Size (FSIZE)

Firm size is measured using the natural logarithm of the firm's total assets, following the approach used by Juniarti et al. (2023). This variable serves to capture scale effects, where larger firms tend to have greater resource capacity to implement integrated reporting and ESG practices.

2. Company Growth (GROWTH)

Company growth reflects the potential for future expansion and investment opportunities.

This variable is calculated using the formula:

$$GROWTH = \frac{Penjualan_t - Penjualan_{t-1}}{Penjualan_{t-1}}$$

This approach is similar to that used by Kerkemeier & Kruse-Becher (2022). High growth can influence market perceptions of a company's prospects, although it does not always translate directly into short-term firm value.

3. Corporate Debt Ratio (LEV)

A company's leverage is measured as the ratio of total debt to total assets, according to the methodology of Kim, Jung, & Cho (2022). This variable captures a company's financial risk, as high debt levels can lower its market valuation by increasing the likelihood of bankruptcy or financial distress.

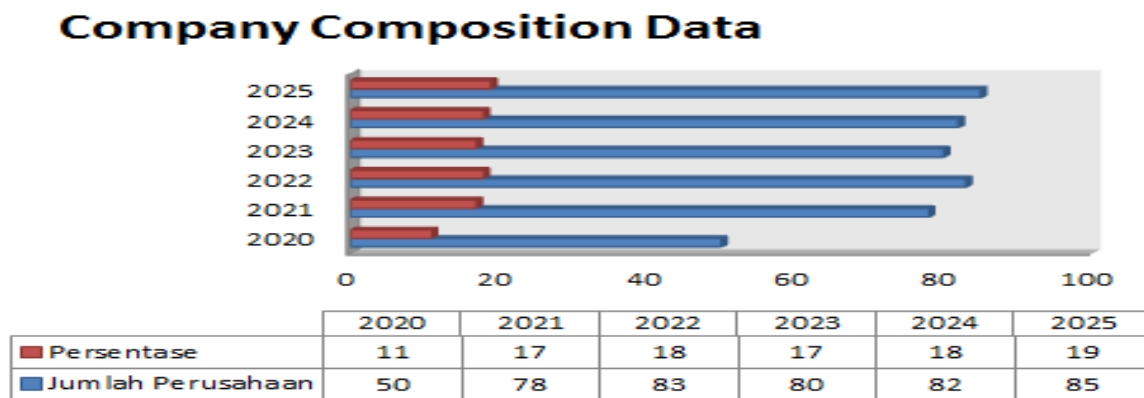
The research sample consisted of companies listed on the Indonesia Stock Exchange (IDX) and was selected using a purposive sampling method. The sample selection criteria were determined to ensure the availability of comprehensive ESG data and annual reports throughout the study period, as follows:

1. Companies must have ESG scores available for the 2020–2025 period , given the still limited implementation of ESG in Indonesia.

2. Companies are required to have an annual report that can be accessed through the official BEI website or the company website for the period 2020–2025 .
3. Companies must be listed on the IDX during the specified research period.

Based on these criteria, 458 observations were obtained from 2018 to 2022. The distribution of the number of companies per year is presented in Chart 1. This sample was selected to ensure adequate representation of various sectors and company sizes, while also facilitating an adequate panel analysis to estimate the effects of integrated reporting and ESG performance on firm value.

Chart 1. Company Composition per Year



Source: Data processing

From the total observations, the final sample size was determined to be 157, based on the number of industries in each cluster. The industrial cluster data are as follows:

Chart 2. Industrial Sector Clusters



Source: Data processing

An analysis of companies adopting integrated corporate reporting shows that the TOBINSQ variable has an average value of 2.002. This indicates that these companies have a higher market value than their asset value, as a TOBINSQ value above 1 indicates strong market performance. This can be seen in Table 3.

Table 1. Descriptive Statistics of Cluster Samples

VARIABLES	TOBINSQ	ESG VALUES	SIZE F	LEV	GROWTH
Min.	0.219	11,318	26.82	0.03	-0.538
Max,	27,583	87,083	52.11	0.91	1,399
Means	2002	59,177	31.12	0.52	0.072
Standard Deviation	2,871	18,997	1,322	0.21	0.249
Signature.	95%				

Source: Processed data from 2020 – 2025

Table 4 presents the results of hypothesis testing in research conducted on the Indonesia Stock Exchange during 2020 – 2025 .

Table 2. Hypothesis Testing Results

VARIABLES	CONTENTS	COPR	ESG VALUES	SIZE F	LEV	GROWTH	Adj.R-Sq	F-Stat	Signature.
Coefficient	9.2019	0.4112	0.0131	-0.2376	-1,319	0.181			
Standard Error	0.0271	0.3911	0.2887	0.3526	0.037	0.1008			
T Ratio	9.1198	5.1129	5.7261	-7.2931	-7,341	1.3165	0.439	48,008	-
P value	0	0	0	0	0	0.1666			

Source: Processed data from 2020 - 2025

IV. RESEARCH RESULTS

Descriptive Analysis

To provide an empirical basis for hypothesis testing, Table 1 presents descriptive statistics for all study variables. The ESGVALUE variable shows an average value above 50, with an average of 59.177 in companies that adopt integrated reporting. This value indicates a relatively high level of sustainability performance in the sample. Statistically, the average shows that the distribution of ESGVALUE is concentrated in the medium to high category, which implies that there is variation in the quality of governance and non-financial disclosures between companies.

From a financial theory perspective, an increase in ESG scores is empirically associated with a decrease in idiosyncratic risk and systematic risk, which in turn can lower the cost of capital. From a market perspective, greater transparency through integrated reporting reduces information asymmetry between management and investors, thereby improving pricing efficiency and company valuations. This effect is not limited to equity markets but is also

reflected in fixed-income instruments, particularly corporate bonds, through lower credit spreads.

The company size variable (FSIZE) shows that most of the companies in the sample, both those adopting and those not adopting integrated reporting, are classified as large companies. This indicates the possibility of a scale effect, where larger companies have more adequate resource capacity to implement comprehensive reporting practices.

A leverage ratio (LEV) that averages below one indicates that total assets exceed total liabilities, reflecting a relatively conservative capital structure. Econometrically, this is important because leverage can potentially act as a control variable that influences firm value through financial risk and capital structure.

A growth rate (GROWTH) that averages below one indicates heterogeneity in expansion opportunities among firms in the sample. In a regression model, this variable is relevant as a proxy for the investment opportunity set, which can influence market valuation.

In aggregate, descriptive analysis indicates that companies that adopt integrated reporting tend to have higher market values than non-adopters. This finding is consistent with the hypothesis that integrated reporting and ESG performance have a positive relationship with firm value. Furthermore, indications that firms with higher ESG scores also have stronger fundamental characteristics (larger size, healthier leverage, and better growth prospects) suggest potential endogeneity, thus further testing requires a multivariate regression approach with adequate control variables.

From a strategic perspective, systematic sustainability reporting enables companies to internalize medium- and long-term risks, including climate transition risks and reputational risks. In the context of industry competition, early adoption of ESG practices has the potential to create abnormal returns through reputational differentiation and increasing investor preference for sustainable assets.

Overall, this descriptive evidence provides initial justification for estimating a regression model that tests the direct effect of integrated reporting on firm value as well as the moderating role of ESG performance in strengthening this relationship.

Hypothesis Testing

Providing ESG information to investors contributes to reducing information asymmetry and increasing corporate transparency. Reporting standards such as those from the Sustainability Accounting Standards Board (SASB) and CDP were developed specifically to meet investors' information needs regarding financially material sustainability risks and

opportunities. The ESG disclosure process requires cross-functional data collection, including non-financial indicators not previously integrated into traditional reporting systems. Economically, this mechanism enables companies to more systematically identify, quantify, and mitigate operational risks. Improved information quality has implications for operational efficiency, reduced risk premiums, and optimized capital cost structures.

This study uses the White test to detect the presence of heteroscedasticity in the regression model. The null hypothesis states that the residual variance is homoscedastic. The test results show a significant probability value ($p < 0.05$), thus rejecting the null hypothesis, indicating the presence of heteroscedasticity.

To address this issue, estimation is performed using the Weighted Least Squares (WLS) method. This approach weights observations based on error variance, resulting in a more efficient estimator than OLS under conditions of non-constant variance.

Estimation Results of Model 1 which is a Test of H1 and H2, This first model tests the direct effect of integrated reporting (COPR) and ESG performance (ESGVALUE) on company value proxied by Tobin's Q (TOBINSQ), without including interaction variables.

The estimation results show:

- COPR has a coefficient of 0.4112 ($p < 0.01$), indicating that companies that adopt integrated reporting experience an increase in market value of 0.4112 Tobin's Q units, *ceteris paribus*.
- ESGVALUE has a coefficient of 0.0131 ($p < 0.01$), indicating that every one-point increase in the ESG score is associated with an increase in firm value of 0.0131 Tobin's Q units.

The positive and statistically significant coefficients support Hypothesis 1 and Hypothesis 2. Economically, these findings are consistent with signaling theory and stakeholder theory, where transparency and sustainability performance enhance market perceptions of a company's long-term prospects.

Model 2 tests H3 (Moderation Effect). The second model includes an interaction variable (COPR \times ESGVALUE) to examine the moderating role of ESG performance. The positive and significant interaction coefficient ($p < 0.01$) indicates that ESG performance strengthens the relationship between integrated reporting and firm value. Interpretatively, the marginal effect of integrated reporting on firm value increases at higher ESG levels. This indicates a complementary effect between reporting transparency and sustainability performance quality.

The Adjusted R² value in both models shows that the combination of independent, moderator, and control variables is able to explain a substantial proportion of the variation in company value, so that the model has adequate explanatory power.

Control Variable Analysis can be seen as follows:

- GROWTH shows a positive but insignificant coefficient ($p = 0.166$), indicating that expansion opportunities do not directly translate into increased market valuations during the observation period. This could be due to higher expected investment costs or expansion risks.
- FIRM SIZE (FSIZE) shows a negative and significant coefficient. This finding indicates the possibility of diseconomies of scale, or the market perception that larger firms face greater operational rigidity.
- LEVERAGE (LEV) has a negative and significant coefficient, consistent with the trade-off theory and pecking order theory, which states that increasing debt levels above the optimal limit can increase the risk of bankruptcy and reduce the value of the company.

As for the econometric and economic implications, Overall it shows that:

1. Integrated reporting has a substantial economic impact on company value.
2. ESG performance serves not only as a direct determinant of firm value, but also as a moderating variable that strengthens the reporting effect.
3. Capital structure and company characteristics remain fundamental factors in determining market valuation.

Discussion

Environmental, Social, and Governance (ESG) factors have evolved from being merely regulatory compliance instruments to strategic determinants in long-term value creation. In contemporary financial literature, ESG is viewed as both a risk mitigation mechanism and a source of competitive advantage. The results of this study confirm that ESG value, company size, leverage, and company growth simultaneously have a significant effect on company value during the observation period. This finding strengthens the argument that the integration of sustainability practices into corporate strategy is valued by capital markets.

The positive effect of integrated reporting on firm value indicates that the market responds rationally to improvements in disclosure quality. This finding is consistent with signaling theory, which states that companies with good long-term prospects will signal their position through more comprehensive information transparency. Furthermore, this finding aligns with stakeholder theory and legitimacy theory, which emphasize that organizations that

meet social and environmental expectations will gain broader support from investors and the public.

Empirically, the results of this study align with the findings of Wong et al. (2020), Zumente and Bistrova (2021), Wu et al. (2022), Srivastava and Anand (2023), and Sany et al. (2024), which show that integrated reporting and ESG have a positive relationship with firm value. This consistency strengthens the generalization that comprehensive reporting practices enhance corporate credibility and reduce information asymmetry, thus impacting market valuation.

Hypothesis testing also shows that ESG performance has a positive and significant impact on company value. These findings indicate that the market is no longer solely focused on traditional financial indicators but is also considering non-financial factors in company valuation. These results are consistent with research by Ergun (2022), Mousa (2022), and Jan et al. (2023), which confirm that ESG performance contributes to increased company value. These findings also broaden the classic investment perspective, which focuses solely on short-term financial returns, by emphasizing the importance of sustainability as a determinant of long-term value.

The moderating role of ESG performance on the relationship between Corporate Integrated Reporting (CIR) and Corporate Value Creation (CVC) is an important contribution of this research. The results show that ESG strengthens the positive impact of integrated reporting on firm value, indicating a synergistic effect. Companies with high levels of ESG disclosure derive greater market benefits from integrated reporting than companies with low ESG performance. This finding is consistent with Meng et al.'s (2023) research, which emphasized that ESG quality strengthens the relationship between transparency and firm value.

Theoretically, these findings support stakeholder theory, which states that the integration of ESG factors in reporting increases stakeholder trust and engagement. Greater transparency creates the perception of credibility and long-term orientation, thereby reducing market uncertainty. Furthermore, this moderating effect also indicates that integrated reporting without substantive ESG performance support is potentially less effective, thus emphasizing the importance of consistency between disclosure and actual practices.

From a managerial perspective, the results of this study have strategic implications. Management needs to prioritize the implementation of integrated reporting and simultaneous improvement of ESG performance. Investing in sustainable practices, strengthening governance, and managing environmental and social risks is not only a normative obligation,

but also a strategy for increasing corporate value. This integrated approach enables companies to build legitimacy, enhance reputation, and strengthen competitive position in global capital markets.

Overall, this study contributes to the international literature by providing additional empirical evidence regarding the positive relationship between ESG, integrated reporting, and firm value, and confirming the role of ESG as a moderating variable that strengthens value creation. These findings enrich the academic discourse by showing that the combination of reporting transparency and sustainability quality is an important determinant in driving long-term growth and sustainable value creation.

V. CONCLUSION

This research confirms that the implementation of ESG (Environmental, Social, and Governance) is in line with management's responsibility to optimize risk management and increase the company's long-term value. ESG is not interpreted as a sacrifice to profitability, but rather as an additional perspective in identifying and controlling portfolio risks more comprehensively. Global climate change, economic dynamics, and increasingly stringent policy developments are encouraging companies and investment managers to integrate sustainability principles into their strategies to maintain the stability and growth of investment value.

The study's findings indicate that integrated reporting positively impacts company valuation, reflecting market appreciation for the transparency and comprehensiveness of the information provided. Furthermore, superior ESG performance has been shown to significantly contribute to increased corporate value, indicating that non-financial aspects are increasingly being considered in the decision-making process by investors and stakeholders. Furthermore, ESG achievement also acts as a moderating variable, strengthening the relationship between integrated reporting and company value, maximizing the benefits of such reporting when supported by strong sustainability practices.

The managerial implications of these findings emphasize the importance of adopting integrated reporting to enhance credibility and positive market perception. Companies also need to strengthen governance practices and invest in sustainability programs as strategic factors in creating added value. The synergy between transparency in reporting and solid sustainability performance has been proven to increase corporate legitimacy and build stakeholder trust.

From a policy perspective, regulators are expected to encourage and even mandate ESG information disclosure to strengthen transparency and accountability in the market system. For future research agendas, it is recommended to conduct industry sector-based studies, comparative analysis between sectors, and exploration of the role of artificial intelligence in improving reporting accuracy and shaping market perceptions. Taking into account the various existing limitations, the interpretation of the results of this study needs to be done carefully and contextually

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