Sustainable Reporting Strategies: An Analytical Review of the Integration of ESG (Environmental, Social, and Governance) Factors in Financial Statements

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**ABSTRACT.** This comprehensive research delves into the seamless integration of Environmental, Social, and Governance (ESG) factors within the financial disclosures of 120 manufacturing enterprises situated in West Java. Employing a multifaceted approach encompassing content analysis, in-depth interviews, and comprehensive stakeholder surveys, this study uncovers sustainable reporting strategies and conducts an in-depth assessment of ESG integration. Furthermore, it diligently explores stakeholder perceptions surrounding these integrations. The results obtained from this extensive investigation portray a landscape marked by substantial ESG disclosures within the financial reports, with a particular emphasis on environmental aspects. Interviews conducted as part of the study brought to light a myriad of motivations, challenges, and innovative strategies employed by these manufacturing companies. Meanwhile, the stakeholder surveys were a testament to the growing reliance on ESG information as a critical decision-making resource. The study's findings offer guidance for manufacturing businesses seeking to achieve a harmonious integration of economic growth, social responsibility, and environmental stewardship. By enhancing transparency, accountability, and responsible practices, these companies may foster sustainable development not just in West Java but also in other regions.

Keyword: Sustainable Reporting; Strategies; Environmental; Social; Governance; Financial Statements

JEL Classification: Q56; R11
INTRODUCTION

In the past few decades, there has been a notable rise in the incorporation of Environmental, Social, and Governance (ESG) considerations by manufacturing firms into their operational frameworks. This shift is driven by the escalating need for sustainable and accountable practices (Behl et al., 2022). ESG variables are commonly employed metrics for assessing the performance of corporate social responsibility, encompassing environmental, social, and governance policies (Behl et al., 2022). Manufacturing enterprises have implemented diverse strategies in order to enhance their sustainability performance. An example of the implementation of Green Supply Chain Management (GSCM) practices is the effort to alleviate the financial and environmental burdens associated with manufacturing processes (García Alcaraz et al., 2022). The adoption of lean manufacturing practices has also been observed, wherein Green Supply Chain Management serves as a mediator in the association between these practices and environmental performance (Awan et al., 2022). In addition to adopting sustainable practices, manufacturing companies also focus on improving their ESG performance to increase firm value. Research has shown that high firm value can be achieved through various pathways, such as resource-constrained type, resource-slab type, and suitable management type (Behl et al., 2022).

In addition, executive and institutional ownership have been shown to positively and significantly affect firm value and moderate the relationship between ESG performance and firm value (Wu et al., 2022). Manufacturing companies are also increasingly disclosing their corporate social responsibility (CSR) initiatives, as it has positively affected stock returns (Hafidzi & Qomariah, 2022). Furthermore, it has been demonstrated that corporate governance procedures, such as the conduct of board meetings and the length of CEO tenure, exert an impact on the effectiveness of working capital management. This aspect holds significant importance for the long-term endurance and survival of a company (Kengatharan & Sanoli Tissera, 2019). In conclusion, manufacturing companies have incorporated ESG considerations into their operations to meet the growing demand for sustainable and responsible practices. This has been achieved through green supply chain management, lean manufacturing practices, and improved corporate governance, among other initiatives. These efforts contribute to better environmental and social outcomes and enhance these companies’ corporate value and financial performance.

Stakeholders, including investors, consumers, employees, regulators, and communities, are calling for greater transparency and accountability from businesses as worries about climate change, resource depletion, labour standards, and ethical governance practices intensify (Farooq et al., 2022). Financial reports are now expected to include a summary of the wider effects of a company's operations on its environment, society, and governance systems, as opposed to just the economic performance that has previously been the emphasis of such reports (Aljawazneh et al., 2021; Geissdoerfer et al., 2018). Due to this paradigm change, businesses must evaluate their methods for balancing the community’s and the environment’s needs with financial performance (Chamorro et al., 2009; Zhang et al., 2019). Manufacturing companies in West Java, a region known for its dynamic industrial landscape, face a complex terrain where economic development, environmental preservation, and social equity intersect. As the manufacturing sector often intersects with critical environmental issues such as pollution, waste management and resource consumption, understanding how companies in the region align their financial reporting with sustainable practices can provide insight into the broader evolution of corporate sustainability efforts (Frendika et al., 2022; Özbay, 2021; Shaukat et al., 2016; Suraji & Sastrodiharjo, n.d.).

This research embarks on an exploratory journey into the sustainability reporting strategies adopted by manufacturing companies located in West Java. This region, known for its industrial activities, provides an exciting context to investigate how companies embrace the sustainable development imperative and the extent to which ESG factors become an integral component of
their financial reporting. This study aims to identify and categorize the various sustainability reporting strategies employed by manufacturing companies in West Java. This involves dissecting the methods used to communicate ESG factors in financial reports.

This study also seeks to assess the extent to which ESG factors are integrated into the financial statements of manufacturing companies. By measuring the frequency and depth of ESG disclosures, the research seeks to provide insights into the level of ESG materiality in financial reporting. Integrating ESG factors into financial statements can have significant implications for audit clients, financial reporting, and audit firms. The integration of environmental, social, and governance (ESG) factors into the business model is a crucial consideration for audit clients (Appelbaum et al., 2023). According to Appelbaum et al. (2023), the evolution of financial reporting will be influenced by Exposure Drafts IFRS S1 and IFRS S2. In order to accurately represent the financial implications of ESG-related products and transactions, financial statements will necessitate a comprehensive understanding of current accounting standards. Furthermore, it is important to note that there exists a clear differentiation between the concepts of "financial audit" and "ESG assurance" within the field of audit and assurance services. Nevertheless, it is worth noting that some risks and issues pertaining to environmental, social, and governance (ESG) factors may be taken into account throughout the financial audit process (Appelbaum et al., 2023).

The conclusions drawn from the review study indicate that Environmental, Social, and Governance (ESG) considerations have emerged as a crucial issue that necessitates careful attention. Consequently, the financial sector is poised to undergo a series of transformative alterations (Appelbaum et al., 2023). This underscores the significance of integrating environmental, social, and governance (ESG) considerations into financial statements and the potential implications for audit practices. It emphasizes the necessity for companies and auditors to adjust to these developments and incorporate ESG factors into their financial reporting and auditing procedures (Alblas et al., 2014; Dong et al., 2023; Fairfax, 2022; Izzo et al., 2023).

Furthermore, this research explores manufacturing companies’ challenges in integrating ESG factors into their financial reporting. In addition, the study will also explore the opportunities that arise from effective ESG integration, explaining how companies can benefit from aligning their strategies with sustainability principles. Manufacturing companies are crucial in adopting sustainable reporting strategies due to their significant contributions to environmental impacts and social challenges. These strategies can be categorized into compliance-driven, stakeholder-driven, and value-driven reporting (Girella et al., 2021). Compliance-driven reporting focuses on meeting regulatory requirements and adhering to industry standards. Companies adopting this approach aim to minimize legal risks and maintain their reputation by demonstrating their commitment to sustainability (Girella et al., 2021). Stakeholder-driven reporting addresses the concerns and expectations of various stakeholders, such as investors, customers, employees, and communities. This approach helps companies build trust, enhance their brand image, and strengthen relationships with stakeholders (Girella et al., 2021). Value-driven reporting aims to create long-term value for the organization by integrating sustainability into its core business strategy (Sanches et al., 2022). Organizations that embrace this strategy prioritize enhancing their environmental, social, and governance (ESG) performance with the aim of stimulating innovation, diminishing expenses, and bolstering competitiveness (Girella et al., 2021; Iddrisu, 2023). The integration of Industry 4.0 technologies within manufacturing enterprises can support the implementation of various strategies, such as lean strategy, servitization, design-to-cost, supply chain integration, and machinery-electronic equipment and database integration (Chiarini et al., 2020). However, these technologies do not significantly contribute to improving environmental sustainability (Chiarini et al., 2020).

The perceptions of stakeholders are also explored in this research, including investors, customers, employees, and regulators, regarding the effectiveness and transparency of sustainability reporting.
practices. Stakeholders, including investors, customers, employees, and regulators, play a pivotal role in shaping the landscape of ESG integration. Research by (Amel-Zadeh & Serafeim, 2018) suggests that investors increasingly consider ESG factors when making investment decisions, signaling the growing significance of sustainable reporting in influencing capital allocation. Additionally, consumer demand for ethical products and employee preferences for socially responsible workplaces highlight the importance of ESG integration in maintaining strong stakeholder relationships (Beerbaum & Puaschunder, 2018; Gong & Grundy, 2011; Hindsley et al., 2020; Patel, 2018).

Policy frameworks and regulations significantly influence the extent and nature of ESG integration in financial reporting. The European Union’s Non-Financial Reporting Directive (NFRD) and the Sustainability Accounting Standards Board (SASB) standards are examples of regulatory efforts aimed at enhancing transparency in the non-financial reporting (Jørgensen, M. B., & Thomsen, 2013). These initiatives reflect a global trend towards promoting standardized ESG reporting, ensuring comparability and reliability of information (Hales, 2021; Zavarkó, 2023). While existing literature offers valuable insights into sustainable reporting, there needs to be more research gaps in comprehensively understanding how West Java manufacturing companies integrate ESG factors into their financial statements. This study aims to fill this research vacuum by examining the distinct tactics, problems, and possibilities that different organizations face while engaging in sustainable reporting. This exploration will enrich the understanding of the broader impact of ESG integration on stakeholder relationships.

METHODS
A mixed-method research approach will be used to comprehensively investigate the sustainability reporting strategies of manufacturing companies in West Java and the integration of ESG factors into financial reports. This approach combines qualitative and quantitative methods to provide a holistic understanding of the phenomenon under study.

Data Collection
The data collection process will include three main methods: content analysis of financial statements, interviews with key personnel, and stakeholder surveys.

Content Analysis: A systematic content analysis was conducted on the annual financial statements of selected manufacturing companies in West Java. This analysis identifies sections or disclosures related to ESG factors, sustainability initiatives, and other relevant information. Quantitative data, such as the frequency and depth of ESG-related exposures, will be extracted and coded for analysis.

Interviews: Semi-structured interviews are conducted with key personnel within manufacturing companies. These people may include sustainability officers and Chief Financial Officers (CFOs). The interviews are designed to explore motivations, challenges, strategies, and the overall process of integrating ESG factors into financial reporting.

Surveys: Surveys are distributed to various stakeholders, including investors, customers, employees, and regulatory bodies. The survey measured stakeholder perceptions of sustainability reporting practices, transparency and effectiveness of ESG disclosures, and the influence of such information on decision-making processes.

Sampling
Purposive sampling will be used to select a diverse range of manufacturing companies operating in West Java. 150 companies were engaged, and 120 responded and became the research sample. Companies are selected based on their reputation regarding sustainable practices, size, industry sector, and other relevant factors. In addition, stakeholders will be selected based on their direct involvement or interest in the sustainability reporting practices of the selected companies.
**Data Analysis**

The data that were obtained will be analyzed using IBM SPSS Statistics Version 26 so that we can determine whether or not there is a connection between the independent factors and the variable that is being tested. According to Ghozali (2018), the data from the research variables are processed by utilizing the SPSS 26 application. Hypothesis testing analysis, including partial, simultaneous, and coefficient of determination testing, is going to be used as one of the many analytical methodologies that will be utilized.

**RESULT AND DISCUSSION**

This section presents and discusses the findings obtained through the mixed-methods research approach used to investigate sustainable reporting strategies in manufacturing companies in West Java and the integration of ESG factors into financial statements.

The content analysis examined the annual financial statements of 25 West Java manufacturing companies with complete financial statements. The following numerical data and tables summarize the key findings:

| Table 1. Frequency of ESG-Related Disclosures in Financial Reports |
|-----------------------|---------------------|
| Type of ESG Disclosure | Percentage   |
| Environmental Impacts  | 58%              |
| Social Aspects         | 48%              |
| Governance Practices   | 36%              |

Source: Results Data Process (2023)

The content analysis results reveal significant insights into the level of integration of ESG in the financial statements of manufacturing companies in West Java. Most companies include ESG-related disclosures in their financial information, indicating a growing awareness of the importance of sustainability considerations in business operations. Among the types of ESG disclosures, environmental impacts are the most frequently discussed, with 58% of companies including relevant information in their financial statements. This reflects a higher focus on addressing ecological issues such as energy consumption, waste management, and carbon emissions.

Social aspects, which include issues related to labor practices, community engagement, and employee well-being, are disclosed by 48% of companies. This indicates a critical effort to address social responsibility alongside economic objectives. Governance practices, including board diversity, executive compensation, and ethical governance principles, were disclosed by 36% of companies. While this percentage is lower than the environmental and social disclosures, it still indicates a recognition of the role of governance in driving sustainable practices.

Semi-structured interviews were conducted with sustainability officers, CFOs, and experts from 10 diverse manufacturing companies in West Java. The interviews yielded valuable insights into the motivations, challenges, and strategies associated with integrating ESG factors into financial reporting.

The interviews revealed that internal and external pressures drive the main motivation for integrating ESG factors into financial reporting. Sustainability officers emphasized aligning with the global sustainability agenda and corporate values. One interviewee stated:
"We want to demonstrate our commitment to environmental responsibility and social welfare as a core part of our identity."

In addition, CFOs highlighted the growing influence of investors and stakeholders demanding transparency on ESG performance. They recognize that integrating ESG factors can enhance a company's reputation and attractiveness to responsible investors.

Despite the motivation, interviewees recognized challenges in integrating ESG factors into financial reporting. One recurring challenge is the need for standardized metrics to measure and quantify non-financial impacts. A sustainability official stated:

"Measuring our social impact is quite challenging. No universal metric can capture the value we create in local communities."

Another challenge mentioned was the difficulty in assessing the financial benefits of sustainability initiatives. CFOs needed a clearer methodology to link ESG investments to tangible economic results. In addition, concerns about greenwashing and the potential for misrepresenting sustainability efforts were discussed, highlighting the importance of maintaining credibility in ESG reporting.

Interviewees shared various strategies and approaches they have implemented to overcome challenges and effectively integrate ESG factors into financial reporting. Some companies emphasize cross-functional collaboration between sustainability teams, finance departments, and senior management to ensure accurate and comprehensive reporting. In addressing the lack of standardized metrics, interviewees discussed customizing key performance indicators (KPIs) that align with the company's specific industry and impacts. This customized approach is seen as a way to capture a company's unique sustainability journey while still providing meaningful and comparable data. In addition, companies highlighted the importance of external assurance and audits to validate the accuracy and transparency of their ESG disclosures. This approach enhances the credibility of reported information and strengthens stakeholder trust.

The survey was distributed to 150 stakeholders, and 120 complete responses were received, resulting in an 80% response rate. The following numerical data and tables summarize key survey results:

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider ESG disclosures in decision-making</td>
<td>62%</td>
</tr>
<tr>
<td>View companies with ESG disclosures as trustworthy</td>
<td>48%</td>
</tr>
<tr>
<td>Believe ESG integration enhances long-term value</td>
<td>58%</td>
</tr>
<tr>
<td>Think ESG disclosures provide meaningful insight</td>
<td>76%</td>
</tr>
</tbody>
</table>

Source: Results Data Process (2023)

The results of this survey provide valuable insights into stakeholder perceptions regarding the integration of ESG factors into financial reporting in manufacturing companies in West Java. The majority of respondents (62%) consider ESG disclosures to be moderately to highly influential in their decision-making process. This highlights the growing importance of ESG information in guiding stakeholder choices, ranging from investment decisions to consumer preferences. In addition, almost half of the respondents (48%) view companies that include ESG disclosures in their financial statements as more trustworthy and transparent. This suggests that transparent ESG
reporting enhances a company’s overall credibility and image, reinforcing that stakeholders value ethical and responsible practices.

The survey also shows that most respondents (58%) believe ESG integration contributes to increasing long-term value. This aligns with existing research showing that companies with strong ESG performance offer better financial performance in the long run. In addition, most respondents (76%) stated that ESG disclosures provide meaningful insights. This suggests that stakeholders value companies’ non-financial information, demanding more comprehensive and transparent reporting.

Table 3. Regression Result Test

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>15.261</td>
<td>4.857</td>
</tr>
<tr>
<td>Environmental</td>
<td>.427</td>
<td>.132</td>
</tr>
<tr>
<td>Social</td>
<td>.584</td>
<td>.121</td>
</tr>
<tr>
<td>Governance</td>
<td>.621</td>
<td>.108</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Financial Statements

<table>
<thead>
<tr>
<th>Simultant Test</th>
<th>Determination Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-count</td>
<td>Sig</td>
</tr>
<tr>
<td>423.219</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Results Data Process (2023)

According to the findings shown in Table 3, it can be observed that the Sig values for the Environmental impacts, Social aspects, and Governance practices variables are 0.003, 0.000, and 0.000, respectively. The statistical analysis reveals that the three independent variables have a substantial impact on the financial statements variable, as indicated by their significance values being less than 0.05. The coefficient of determination is often acknowledged to have a magnitude of 0.540, which is equivalent to 54%. This finding indicates that the collective influence of the independent factors on the dependent variable, which represents the financial statements, amounts to 54% in this research. Additionally, it can be inferred from this study that 46% of the observed outcomes are influenced by external variables that are not accounted for in the regression equation or variables that were not specifically investigated. Furthermore, the regression equation obtained from Table 3 is as follows.

\[ FS = 15.261 + 0.427E + 0.584S + 0.621G + e \]

Description:

FS = Financial Statements
E = Environmental Impacts
S = Social Aspects
G = Governance Practices
DISCUSSION

The findings indicate a positive trend in integrating ESG factors into financial statements among manufacturing firms in West Java. The growing prevalence of ESG-related disclosures indicates an increasing recognition of the importance of sustainability in business operations. Environmental disclosures feature prominently, highlighting the emphasis on addressing the ecological impacts of manufacturing activities (Kurniawan, 2017; Magoma, 2022; McPherson, 2015; Uwuigbe & Jimoh, 2012). According to Magoma (2022), there is evidence suggesting that corporate environmental disclosure can be influenced by various factors, including profitability, business size, financial leverage, and board size.

In addition, businesses encounter demands from stakeholders to enhance their level of transparency through the issuance of comprehensive reports that outline their environmental (Uwuigbe & Jimoh, 2012), social, and governance (ESG) activities, strategies, and policies (Balogh et al., 2022). Nevertheless, it is imperative to acknowledge that there is a universally acknowledged methodology for the execution and evaluation of corporate sustainability (McPherson, 2015). The utilization of commercial Excellence Models (BEMs) has been employed as a means to advance the cause of sustainable development. However, these models have faced criticism due to their perceived emphasis on commercial and financial outcomes (McPherson, 2015). To attain corporate sustainability, businesses must ensure the viability of their cash flow, maintain a rate of raw material consumption that is lower than the pace of natural resource production, and have a beneficial influence on society and its stakeholders (McPherson, 2015).

Interview insights underscore the importance of ESG integration in building stakeholder trust and attracting responsible investors. However, the challenges raised echo existing literature, highlighting the need for standardized metrics and clearer methodologies to measure non-financial impacts. The stakeholder survey results reinforce the importance of ESG disclosure in the decision-making process. As stakeholders increasingly value transparency and ethical practices, the integration of ESG factors can enhance a company’s reputation and competitiveness. ESG variables encompass nonfinancial data pertaining to a company's operational practices, which have the potential to serve as indicators of its financial performance over the long run. ESG criteria encompass a comprehensive evaluation of environmental, social, and governance aspects. Numerous studies have demonstrated that the aggregate performance of Environmental, Social, and Governance (ESG) factors has a positive impact on financial performance. However, it is worth noting that governance performance specifically influences Return on Assets (ROA) exclusively.

CONCLUSION

This study investigated the complex landscape of sustainability reporting methodologies and the integration of environmental, social, and governance (ESG) concerns into the financial reports of manufacturing companies in West Java. The collective findings underscore the substantial undertaking that organizations undertake when confronting the complex intricacies of sustainability. This research offers significant perspectives on the multifaceted and intricate elements of ESG integration. Additionally, the research demonstrates the positive outcomes that can be achieved by integrating environmental, social, and governance (ESG) considerations into sustainable financial reports. The significance of incorporating standardized metrics, fostering collaboration, and engaging stakeholders is emphasized when considering the implementation of sustainable reporting practices. The results of the study provide valuable insights for manufacturing companies that aim to successfully merge economic expansion, social accountability, and environmental conservation. By implementing measures to improve transparency, accountability, and responsible practices, these corporations have the potential to promote sustainable development in additional regions besides West Java.
Implication and Future Research

The findings of this study have implications for industry practitioners and policymakers. Companies in the manufacturing sector can leverage the positive perceptions associated with ESG integration to improve stakeholder relationships and access responsible investment opportunities. Policymakers can use these insights to tailor regulatory frameworks that encourage standardized ESG reporting to address the challenges companies highlight. Future research could expand coverage to different regions and industries, enabling cross-comparison of sustainability reporting strategies. Longitudinal studies could also track the evolution of ESG integration practices over time, providing insights into the dynamics between sustainable practices and financial performance.

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