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SUSTAINABILITY DISCLOSURES AND THEIR INTEGRATION: INSIGHTS FROM GLOBAL REPORTING INITIATIVE (GRI) STANDARDS

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ABSTRACT

The study examines the interrelationships between economic, environmental, and social disclosures in sustainability reports prepared in accordance with the Global Reporting Initiative (GRI) standards. Using data from 46 companies listed on the Borsa Istanbul (BIST) that published sustainability reports for 2021, the number of disclosures across the three dimensions was analyzed. Pearson correlation and regression analyses were employed to explore relationships between these dimensions and their mutual impacts. The results reveal significant relationships among all three dimensions, with both environmental and social disclosures positively influencing economic disclosures. Companies that prioritized environmental and social aspects in their sustainability reports demonstrated a stronger alignment with economic disclosures, suggesting that a focus on broader sustainability practices can support economic performance. The findings highlight the importance of integrating the three pillars of sustainability for long-term corporate resilience and profitability. Furthermore, the analysis shows that social disclosures were the most frequently reported, followed by environmental and economic disclosures, indicating a potential prioritization of social responsibility initiatives among BIST-listed companies. These results underscore the critical role of comprehensive sustainability reporting in meeting stakeholder expectations and aligning with sustainable development goals. The study contributes to the literature by providing empirical evidence on the integration of economic, environmental, and social dimensions in sustainability reports. It offers practical insights for policymakers, corporate managers, and sustainability practitioners on enhancing reporting practices and improving stakeholder communication. Future research is encouraged to explore these relationships across industries and global contexts.

Keywords: *Sustainability Reporting, GRI Standards, Triple Bottom Line, Corporate Responsibility, Economic Performance.*

1. INTRODUCTION

Corporate sustainability has evolved into a multidimensional concept encompassing economic, environmental, and social dimensions. Defined as the integration of social and environmental considerations into business operations and stakeholder relations, sustainability extends beyond traditional economic performance metrics (Gedik, 2020). It emphasizes the balanced achievement of financial objectives alongside environmental preservation and social equity, recognizing these as critical components of long-term success (Heemskerk et al., 2002, as cited in Ertan, 2018). This perspective aligns with the *Triple Bottom Line* (TBL) framework proposed by Elkington (1997), which argues that businesses must evaluate their performance across economic, environmental, and social domains to achieve sustainable development.

The TBL approach highlights the interdependence of these dimensions. While prioritizing economic outcomes may yield short-term success, studies suggest that long-term corporate viability hinges on a balanced focus on all three sustainability pillars (Dyllick & Hockerts, 2002). Proactive environmental strategies, for instance, have been linked to improved financial performance, although this relationship may vary depending on the strategic approach adopted by individual firms (Clarkson et al., 2011). Similarly, a focus on social issues such as labor rights

and community welfare is increasingly viewed as a driver of economic resilience and stakeholder trust.

In recent years, the growing urgency of global challenges such as climate change, resource depletion, and social inequality has reshaped stakeholder expectations. Businesses are under increasing pressure to demonstrate their commitment to sustainability through transparent reporting practices (Canlı & Seçemeli, 2024). Sustainability reports, guided by frameworks such as the Global Reporting Initiative (GRI), have become a vital tool for businesses to communicate their environmental, social, and economic performance to stakeholders (Schaltegger & Wagner, 2006). These reports offer a structured approach to integrating sustainability into corporate strategy, enabling businesses to align with global sustainable development goals (WCED, 1987).

Sustainability reporting has emerged as a cornerstone of corporate accountability, reflecting the growing importance of non-financial disclosures (Ağaç & Öztürk, 2023). Historically, businesses focused primarily on economic reporting, but the inclusion of environmental and social metrics has gained prominence in response to evolving stakeholder demands (Çalışkan, 2012). GRI standards, established as a global benchmark, have played a pivotal role in standardizing sustainability reporting, providing clear guidelines for organizations to report their impacts comprehensively (GRI, 2024).

Research highlights several benefits of sustainability reporting. Çalışkan (2012) emphasized its role in meeting stakeholder expectations and achieving corporate social responsibility (CSR) objectives. Similarly, studies by Hahn & Kühnen (2011) and Gümrah & Büyükipekçi (2019) revealed that sustainability reports enhance transparency, improve stakeholder engagement, and foster organizational accountability. However, despite its advantages, the implementation of sustainability reporting practices varies widely across industries and regions.

In Turkey, for example, sustainability reporting has gained traction among companies listed on the Borsa Istanbul (BIST) index. Studies such as those by Korga & Aslanoğlu (2024) and Öğünç (2021) have documented the adoption of GRI standards by BIST-listed firms, highlighting the variability in the depth and scope of disclosures. While some companies prioritize environmental metrics, others focus more on social dimensions, reflecting diverse strategic priorities and stakeholder pressures.

A key challenge in sustainability reporting lies in achieving integration across economic, environmental, and social dimensions. The literature underscores the interconnections between these domains, suggesting that a holistic approach to reporting can yield synergistic benefits. For instance, environmental initiatives often require substantial financial investments, linking environmental and economic dimensions. At the same time, social initiatives such as employee welfare programs can enhance productivity and economic performance, creating a feedback loop between social and economic dimensions (Schaltegger & Wagner, 2006).

Despite these interconnections, studies suggest that integration remains incomplete in many organizations. Roca & Searcy (2012) found that while sustainability reports often include a wide range of indicators, the emphasis on integration varies significantly. Similarly, Şahin & Cankaya (2018) observed that GRI-based reports often prioritize strategic and profile disclosures over detailed performance metrics, reflecting cost considerations and reporting limitations.

While the literature provides valuable insights into sustainability reporting practices, several gaps remain. Most studies have focused on the historical development of reporting frameworks, the determinants of adoption, or the impact of sustainability initiatives on financial performance. Few have examined the interrelationships between economic, environmental, and social disclosures within sustainability reports. This gap is particularly pronounced in the context of BIST-listed companies, where reporting practices are still evolving.

This study aims to address this gap by analyzing the integration of economic, environmental, and social dimensions in the sustainability reports of BIST-

listed firms. Using data from 46 companies that published GRI-compliant sustainability reports for 2021, the study investigates the relationships between disclosure frequencies across the three dimensions. Specifically, it seeks to answer the following research questions:

1. Is there a significant relationship between economic, environmental, and social disclosures in sustainability reports?
2. Do environmental and social disclosures influence economic disclosures, and if so, to what extent?

By addressing these questions, the study contributes to the literature on sustainability reporting and provides practical insights for businesses seeking to enhance their reporting practices.

The paper is organized as follows:

- **Literature Review**: This section provides an overview of prior studies on sustainability reporting, highlighting key trends and theoretical frameworks.
- **Methodology**: The research design, data collection process, and analytical methods are described in detail.
- **Results**: Findings from the correlation and regression analyses are presented, with a focus on the relationships between disclosure dimensions.
- **Discussion and Conclusion**: The implications of the findings are discussed, along with recommendations for practitioners and policymakers.

By examining the interplay between economic, environmental, and social dimensions in sustainability reporting, this study seeks to advance understanding of integrated reporting practices and their potential to drive corporate sustainability.

2. LITERATURE REVIEW

The study of sustainability reporting has gained significant attention in academic and professional circles, with a focus on understanding the economic, environmental, and social dimensions of corporate performance. This section reviews existing literature on the historical development of sustainability reporting, the application of GRI standards, and the relationships between economic, environmental, and social disclosures.

Historical Development of Sustainability Reporting

Sustainability reporting has evolved in response to the growing recognition of corporate responsibility toward environmental and social issues. Initially, corporate reporting was predominantly financial, aimed at shareholders and investors. However, increasing awareness of global challenges such as climate change, social inequality, and resource depletion has led to broader reporting frameworks that include non-financial metrics (Çalışkan, 2012).

The Triple Bottom Line (TBL) framework proposed by Elkington (1997) marked a paradigm shift in corporate accountability. This model emphasized the importance of evaluating economic, environmental, and social dimensions collectively, advocating for a balance that supports long-term sustainable development. While the TBL framework provided a theoretical foundation, its practical implementation required standardized guidelines. The introduction of the Global Reporting Initiative (GRI) standards addressed this need, establishing a globally recognized framework for sustainability reporting (GRI, 2024).

Adoption and Impact of GRI Standards

The GRI standards have been instrumental in shaping sustainability reporting practices worldwide. By offering a structured approach to reporting, the standards facilitate transparency and comparability across organizations. Schaltegger & Wagner (2006) highlighted the role of GRI standards in integrating sustainability performance with corporate strategy, enabling businesses to align their operations with stakeholder expectations.

Studies have examined the adoption of GRI standards across various contexts. For instance, Hahn & Kühnen (2011) conducted a comprehensive review of 178 articles published between 1999 and 2011, identifying key determinants of sustainability

reporting. They noted that while environmental performance often drives reporting activities, social performance tends to receive less emphasis. Similarly, Gümrah & Büyükipekçi (2019) analyzed sustainability reports published in Turkey between 2008 and 2017, revealing significant differences in reporting practices between small and medium-sized enterprises (SMEs) and large multinational corporations.

In the context of Turkey, Öğünç (2021) examined the sustainability reports of companies listed on the Borsa Istanbul (BIST) index, finding considerable variability in the number and scope of GRI disclosures across sectors. These findings underscore the role of industry characteristics and organizational capabilities in shaping sustainability reporting practices.

Economic, Environmental, and Social Dimensions in Sustainability Reporting

Sustainability reporting aims to capture the interrelationships between economic, environmental, and social dimensions, reflecting the interconnected nature of corporate activities. The integration of these dimensions is critical for achieving long-term sustainability goals. However, the literature reveals significant disparities in how these dimensions are prioritized and reported.

Economic disclosures typically focus on financial performance, including revenue generation, cost efficiency, and shareholder value creation. Studies suggest that businesses often emphasize economic metrics due to their direct relevance to investors and other financial stakeholders (Purvis, Mao & Robinson, 2019). However, the integration of economic disclosures with environmental and social dimensions remains limited. For instance, Şahin & Cankaya (2018) found that while GRI-compliant reports in Turkey often include strategic and profile-related disclosures, detailed economic performance indicators are less prevalent.

Environmental disclosures address corporate impacts on natural resources, including energy consumption, carbon emissions, and waste management. Clarkson et al. (2011) highlighted the positive relationship between proactive environmental strategies and financial performance, emphasizing the potential economic benefits of environmental sustainability. However, Roca & Searcy (2012) observed that the emphasis on environmental metrics varies significantly across industries, with resource-intensive sectors such as manufacturing and energy placing greater importance on these disclosures.

Social Disclosures encompass issues related to human rights, labor practices, community engagement, and stakeholder well-being. These disclosures reflect a company's commitment to social equity and ethical practices, aligning with broader societal expectations. Kılıç & Kuzey (2019) examined the relationship between corporate governance and social disclosures, finding that companies with diverse boards and sustainability committees are more likely to prioritize social reporting. Despite their importance, social disclosures often receive less attention compared to economic and environmental metrics, particularly in developing economies (Peker, 2024).

Interrelationships Between Sustainability Dimensions

The interplay between economic, environmental, and social dimensions is a critical area of study in sustainability reporting. Research suggests that these dimensions are interdependent, with synergies and trade-offs influencing corporate performance.

Clarkson et al. (2011) argued that environmental initiatives often require financial investments, linking environmental and economic dimensions. Similarly, social initiatives such as employee welfare programs and community development projects can enhance economic performance by fostering stakeholder trust and loyalty. However, achieving integration across these dimensions remains a challenge for many organizations.

Studies have explored the extent to which sustainability reports reflect these interrelationships. For example, Korga & Aslanoğlu (2024) analyzed GRI-compliant reports from 23 BIST-listed companies, finding that social disclosures often outweigh environmental and economic metrics. This imbalance suggests that while companies recognize

the importance of social responsibility, the integration of environmental and economic considerations into reporting practices requires further development.

Challenges and Opportunities in Sustainability Reporting

Despite the progress in sustainability reporting, several challenges persist. One key issue is the cost of reporting, particularly for SMEs with limited resources. Şahin & Cankaya (2018) noted that the additional cost of detailed economic, environmental, and social disclosures often deters smaller organizations from adopting comprehensive reporting practices.

Another challenge lies in the standardization of metrics. While GRI standards provide a robust framework, the lack of industry-specific guidelines can lead to inconsistencies in reporting. Roca & Searcy (2012) highlighted the wide variation in indicators used across reports, emphasizing the need for greater harmonization.

Nevertheless, sustainability reporting also presents significant opportunities. By adopting integrated reporting practices, organizations can enhance transparency, build stakeholder trust, and align with global sustainable development goals. The growing adoption of frameworks such as the Task Force on Climate-related Financial Disclosures (TCFD) and the International Integrated Reporting Council (IIRC) further underscores the potential for innovation in sustainability reporting.

Research Gaps and Contribution of the Study

While the literature provides valuable insights into sustainability reporting, several gaps remain. Most studies have focused on individual dimensions or specific industries, with limited attention to the interrelationships between economic, environmental, and social disclosures. Furthermore, there is a lack of empirical research on the integration of these dimensions in the context of developing economies, including Turkey.

This study addresses these gaps by analyzing the sustainability reports of 46 BIST-listed companies for 2021. By examining the relationships between disclosure frequencies across economic, environmental, and social dimensions, the study provides new insights into the integration of sustainability reporting practices. It contributes to the literature by highlighting the importance of balanced reporting and offering practical recommendations for businesses seeking to enhance their sustainability strategies.

3. EMPIRICAL ANALYSIS OF SUSTAINABILITY DISCLOSURES: INSIGHTS FROM BIST-LISTED COMPANIES

This section presents a detailed analysis of the sustainability disclosures published by 46 companies listed on Borsa Istanbul (BIST) in their 2021 reports, prepared in accordance with Global Reporting Initiative (GRI) standards. The methodology employed in this study involved collecting and categorizing disclosures from publicly available sustainability reports, focusing on three core dimensions: economic, environmental, and social. Each disclosure was quantified to enable statistical analysis, ensuring consistency and comparability across companies. To maintain confidentiality, the companies were anonymized and assigned numerical identifiers.

The research utilized Pearson Correlation and regression analyses to explore the relationships between the dimensions and assess their potential impacts on one another. These methods were chosen for their ability to identify both the strength and significance of interrelationships, providing empirical insights into the integration of sustainability dimensions. This approach not only facilitates a robust understanding of reporting practices but also addresses gaps in the literature by offering quantitative evidence on how these disclosures influence each other. The subsequent tables and discussions aim to highlight trends, disparities, and implications for sustainability reporting, shedding light on how companies in an emerging market context navigate the complexities of integrated sustainability practices.

Table 1 illustrates the number of economic disclosures made by each company and their

percentage in the total. A total of 262 economic disclosures were identified across the 46 companies.

Table 1. Economic Disclosures Published by Companies in Their Sustainability Reports

Company	Number of Economic Disclosures	Percentage in Total
Company 1	13	4,96%
Company 2	9	3,44%
Company 3	10	3,82%
Company 4	13	4,96%
Company 5	9	3,44%
Company 6	4	1,53%
Company 7	1	0,38%
Company 8	7	2,67%
Company 9	7	2,67%
Company 10	2	0,76%
Company 11	3	1,15%
Company 12	12	4,58%
Company 13	4	1,53%
Company 14	4	1,53%
Company 15	4	1,53%
Company 16	3	1,15%
Company 17	4	1,53%
Company 18	17	6,49%
Company 19	2	0,76%
Company 20	1	0,38%
Company 21	2	0,76%
Company 22	3	1,15%
Company 23	13	4,96%
Company 24	2	0,76%
Company 25	6	2,29%
Company 26	5	1,91%
Company 27	10	3,82%
Company 28	1	0,38%
Company 29	12	4,58%
Company 30	9	3,44%
Company 31	8	3,05%
Company 32	5	1,91%
Company 33	3	1,15%
Company 34	9	3,44%
Company 35	4	1,53%
Company 36	3	1,15%
Company 37	2	0,76%
Company 38	6	2,29%
Company 39	0	0,00%
Company 40	5	1,91%
Company 41	2	0,76%
Company 42	2	0,76%
Company 43	10	3,82%
Company 44	3	1,15%
Company 45	1	0,38%
Company 46	7	2,67%
Total	262	100%

The data shows that the distribution of economic disclosures is uneven, with certain companies reporting significantly more disclosures than others. Company 18 leads with 17 disclosures, constituting 6.49% of the total. Companies with higher economic disclosures may have robust financial performance or a stronger commitment to transparency in financial reporting.

Interestingly, smaller companies or those in sectors with less financial reporting focus tend to disclose fewer economic metrics. This disparity underscores the need for standardized guidelines to ensure consistency across industries. It also suggests that companies with more resources may be better equipped to adopt comprehensive reporting practices.

The concentration of economic disclosures among a few companies reflects broader patterns in sustainability reporting, where economic performance often takes precedence due to its direct relevance to investors. However, it also highlights the potential for these companies to serve as benchmarks for others, promoting best practices in economic transparency.

Table 2. Top 5 Companies that Have Number of Economic Disclosures

Company	Number of Economic Disclosures
Company 18	17
Company 1	13
Company 4	13
Company 23	13
Company 12	12

Table 2 shows the top 5 companies with the most economic disclosures. Company 18 leads with 17 disclosures, followed by Companies 1, 4, and 23, each of which has reported 13 economic disclosures. Company 12 rounds out the top five with 12 disclosures. The higher number of economic disclosures from these companies may indicate that they place a strong emphasis on financial transparency and accountability, aligning with the strategic focus of larger, more resource-rich firms. This suggests that businesses with better financial performance or greater access to reporting resources are more likely to provide detailed economic data in

their sustainability reports. The significant variation in disclosures across companies highlights the inconsistency in reporting practices, with companies like Company 18 showing a model of transparency that could serve as a benchmark for others in the industry.

Environmental disclosures, as shown in Table 3, constitute a significant portion of the sustainability reports analyzed. A total of 777 disclosures were made across the 46 companies, reflecting the growing importance of environmental sustainability in corporate reporting.

Table 3. Environmental Disclosures Published by Companies in Their Sustainability Reports

Company	Number of Environmental Disclosures	Percentage in Total
Company 1	26	3,35%
Company 2	17	2,19%
Company 3	18	2,32%
Company 4	23	2,96%
Company 5	19	2,45%
Company 6	14	1,80%
Company 7	11	1,42%
Company 8	24	3,09%
Company 9	15	1,93%
Company 10	14	1,80%
Company 11	6	0,77%
Company 12	23	2,96%
Company 13	20	2,57%
Company 14	21	2,70%
Company 15	6	0,77%
Company 16	17	2,19%
Company 17	10	1,29%
Company 18	32	4,12%
Company 19	8	1,03%
Company 20	8	1,03%
Company 21	18	2,32%
Company 22	19	2,45%
Company 23	25	3,22%
Company 24	10	1,29%
Company 25	19	2,45%
Company 26	20	2,57%
Company 27	27	3,47%
Company 28	19	2,45%
Company 29	23	2,96%
Company 30	10	1,29%
Company 31	11	1,42%
Company 32	10	1,29%
Company 33	17	2,19%
Company 34	16	2,06%
Company 35	26	3,35%
Company 36	19	2,45%
Company 37	18	2,32%
Company 38	16	2,06%
Company 39	14	1,80%
Company 40	20	2,57%
Company 41	9	1,16%
Company 42	3	0,39%
Company 43	26	3,35%
Company 44	17	2,19%
Company 45	15	1,93%
Company 46	18	2,32%
Total	777	100%

As seen in Table 3, Company 18 also leads in environmental disclosures, contributing 4.12% of the total. Companies 27, 1, 43, and 35 are among the top contributors, each reporting over 25 environmental disclosures. This trend indicates a strong commitment to addressing environmental impacts, particularly among companies in industries with high environmental stakes, such as manufacturing and energy.

Notably, some companies reported significantly fewer environmental metrics, which may reflect variations in industry regulations, stakeholder pressures, or internal prioritization of environmental issues. For example, firms in the service sector may perceive environmental disclosures as less directly relevant to their operations.

The emphasis on environmental reporting aligns with global trends, where climate change and resource management are key concerns for stakeholders. Companies that disclose comprehensive environmental metrics are likely responding to increasing regulatory pressures and investor demands for greater accountability in this domain.

Table 4 presents data on the top 5 companies with the highest number of environmental disclosures:

Table 4. Top 5 Companies that Have Number of Environmental Disclosures

Top 5 Companies	Number of Environmental Disclosures
Company 18	32
Company 27	27
Company 1	26
Company 43	26
Company 35	26

As seen in Table 4, the top 5 companies with the most environmental disclosures are Company 18, with 32 disclosures, followed closely by Companies 27, 1, 43, and 35, each with 26 or 27 disclosures. This strong emphasis on environmental disclosures from these companies could be attributed to their operations in industries with significant environmental impacts, such as manufacturing, energy, or natural resources. It is clear that these firms are responding to increasing regulatory pressures and stakeholder expectations related to environmental responsibility. The prominence of Company 18 as the leader in environmental disclosures could reflect a company-wide sustainability strategy, likely incorporating climate risk management, resource efficiency, and environmental impact reduction. These findings are in line with global trends where companies in high-impact sectors are expected to be more transparent about their environmental footprint. However, it is also worth noting that some companies, particularly those in service-based industries, report fewer environmental disclosures, indicating that environmental issues may not be perceived as directly relevant to their business models.

Social disclosures dominate the sustainability reports, with 889 disclosures identified, as shown in Table 5. This finding indicates a strong emphasis on social responsibility among the sampled companies.

Table 5. Social Disclosures Published by Companies in Their Sustainability Reports

Companies	Number of Social Disclosures	Percentage in Total
Company 1	29	3,26%
Company 2	11	1,24%
Company 3	16	1,80%
Company 4	33	3,71%
Company 5	34	3,82%
Company 6	12	1,35%
Company 7	16	1,80%
Company 8	27	3,04%
Company 9	12	1,35%
Company 10	15	1,69%
Company 11	19	2,14%
Company 12	16	1,80%
Company 13	25	2,81%
Company 14	21	2,36%
Company 15	20	2,25%
Company 16	19	2,14%
Company 17	12	1,35%
Company 18	40	4,50%
Company 19	12	1,35%
Company 20	12	1,35%
Company 21	16	1,80%
Company 22	15	1,69%
Company 23	29	3,26%
Company 24	13	1,46%
Company 25	20	2,25%
Company 26	12	1,35%
Company 27	22	2,47%
Company 28	17	1,91%
Company 29	27	3,04%
Company 30	27	3,04%
Company 31	23	2,59%
Company 32	17	1,91%
Company 33	14	1,57%
Company 34	26	2,92%
Company 35	31	3,49%
Company 36	17	1,91%
Company 37	13	1,46%
Company 38	20	2,25%
Company 39	2	0,22%
Company 40	33	3,71%
Company 41	15	1,69%
Company 42	10	1,12%
Company 43	25	2,81%
Company 44	14	1,57%
Company 45	14	1,57%
Company 46	16	1,80%
Total	**889**	**100%**

Company 18 again leads in this dimension, reflecting its comprehensive approach to sustainability reporting (Table 5). Other high contributors, such as Companies 5, 4, 40, and 35, also demonstrate a strong commitment to social metrics, focusing on issues like labor practices, community engagement, and human rights.

The prominence of social disclosures may be attributed to their relevance to stakeholders, particularly employees, local communities, and advocacy groups. Companies with strong social disclosures likely view these metrics as integral to building trust and enhancing their corporate reputation.

However, the uneven distribution of disclosures across companies suggests that some firms may still view social issues as peripheral to their core operations. This disparity underscores the need for greater awareness and capacity-building initiatives

to encourage broader adoption of comprehensive social reporting practices.

Table 6 provides data on the top 5 companies with the highest number of social disclosures:

Table 6. Top 5 Companies that Have Number of Social Disclosures

Top 5 Companies	Number of Social Disclosures
Company 18	40
Company 5	34
Company 4	33
Company 40	33
Company 35	31

Table 6 illustrates the top 5 companies with the most social disclosures. Company 18 again leads with 40 disclosures, followed by Company 5 with 34, and Companies 4, 40, and 35, all reporting 31 or more social disclosures. This emphasis on social disclosures indicates a strong focus on labor practices, human rights, community engagement, and other social responsibility issues.

Companies like Company 18, with the highest number of disclosures, likely recognize the value of transparent social reporting in building strong relationships with their stakeholders, including employees, local communities, and customers. Social sustainability has gained prominence as a key area of corporate responsibility, and these companies are taking proactive steps to report their performance in this domain.

The substantial number of social disclosures from Company 5 and others suggests a growing recognition that social issues directly impact long-term business success. This trend is particularly relevant in industries where human capital and community engagement are critical to operational success.

In accordance with the general statistical parameters delineated in the sustainability reports, a series of hypotheses were formulated within the context of the study to ascertain the interconnections between the frequencies of economic, environmental, and social disclosures. These hypotheses were subsequently subjected to empirical testing.

The initial objective was to ascertain whether a correlation exists between the number of economic, environmental, and social disclosures included in the sustainability reports published by the companies in question. The H1 hypothesis, formulated for the purposes of this study, is presented below:

H1: There is a relationship between the numbers of economic, environmental, and social disclosures included in the sustainability reports published by the companies.

The Pearson correlation test was employed to assess the veracity of the H1 hypothesis. The statistical data obtained from the test results are presented in Table 7.

Table 7. Statistics of the Correlation Between the Number of Economic, Environmental and Social Disclosures

Variables	Statistics	Economic Disclosures	Environmental Disclosures	Social Disclosures
Economic Disclosures	Pearson Correlation	1	,625**	,677**
	Sig. (2-tailed)		,000	,000
	N	46	46	46
Environmental Disclosures	Pearson Correlation	,625**	1	,589**
	Sig. (2-tailed)	,000		,000
	N	46	46	46
Social Disclosures	Pearson Correlation	,677**	,589**	1
	Sig. (2-tailed)	,000	,000	
	N	46	46	46

As demonstrated in Table 7, the calculated significance values are less than 0.05, indicating a statistically significant relationship between all economic, environmental, and social disclosure variables. In light of these findings, the H1 hypothesis can be accepted. The analysis indicates the presence

of statistically significant positive correlations across the full range of variables within each of the three dimensions. The strong correlation between economic and social disclosures (r = 0.677) indicates that companies with comprehensive economic reporting are more likely to prioritize social responsibility initiatives. Similarly, the correlation between economic and environmental disclosures (r = 0.625) underscores the financial implications of environmental sustainability.

These findings reinforce the interconnected nature of sustainability dimensions, aligning with the principles of the Triple Bottom Line framework. Companies that integrate these dimensions into their reporting practices are better positioned to address stakeholder expectations and achieve long-term sustainability goals.

Following the determination of the relationship between the number of economic, environmental, and social disclosures, an investigation was conducted to ascertain whether these variables exert an influence on one another. The initial investigation sought to ascertain whether the number of environmental disclosures exerts an influence on the number of economic disclosures. The second hypothesis, formulated for the purpose of this investigation, is presented below:

H2: Environmental disclosures have a significant effect on economic disclosures included in the sustainability reports published by the companies.

The H2 hypothesis was tested using a simple linear regression test. The statistical data obtained from the test results are presented in Table 8.

Table 8. Regression Analysis Results on the Impact of Environmental Disclosure Numbers on Economic Disclosure Numbers

Independent Variable	R Square	Significance value of the model	Standardized Coefficients Beta Value	Coefficients Significance Value
Environmental Disclosures	,390	,000	,625	,000
Dependent Variable: Economic Disclosures				

The results demonstrate that environmental disclosures exert a considerable positive influence on economic disclosures ($R^2 = 0.390$, $p < 0.01$). Consequently, the H2 hypothesis was accepted. This finding suggests that companies investing in environmental initiatives are more likely to report robust economic performance, reflecting the financial benefits of environmental sustainability practices.

Subsequently, an investigation was conducted to ascertain whether the number of social disclosures has an impact on the number of economic disclosures. The H3 hypothesis, formulated for this purpose, is presented below:

H_3: Social disclosures have a significant effect on economic disclosures included in the sustainability reports published by the companies.

The H3 hypothesis was tested using a simple linear regression. The statistical data obtained from the test results are presented in Table 9.

Table 9. Regression Analysis Results on the Impact of Social Disclosure Numbers on Economic Disclosure Numbers

Independent Variable	R Square	Significance value of the model	Standardized Coefficients Beta Value	Coefficients Significance Value
Social Disclosures	,459	,000	,677	,000
Dependent Variable: Economic Disclosures				

Similarly, social disclosures exert a considerable influence on economic disclosures ($R^2 = 0.459$, $p < 0.01$). Consequently, the H3 hypothesis was accepted. This relationship underscores the pivotal role of social initiatives in driving financial performance, thereby reinforcing the argument that corporate responsibility enhances stakeholder trust and economic resilience.

Implications

The findings of this section underscore the importance of integrating economic, environmental, and social dimensions in sustainability reporting. Companies that adopt a balanced approach to these disclosures are better equipped to meet stakeholder expectations, align with global sustainability goals, and achieve long-term success. The analysis also highlights the need for standardized guidelines and capacity-building initiatives to promote consistent and comprehensive reporting practices across industries. These findings are particularly relevant in emerging markets, where the integration of sustainability practices is still evolving.

The significant variation in the number of disclosures across companies, as shown in the tables, suggests that while certain companies excel in reporting on economic, environmental, and social dimensions, others demonstrate room for improvement. Such discrepancies underscore the need for more sector-specific frameworks and regulatory efforts to ensure that all companies, regardless of their size or sector, are held to similar standards of transparency and accountability.

Further research into the drivers behind these variations—such as industry, company size, or geographical location—could help explain these differences and provide actionable insights for enhancing sustainability reporting in specific sectors. Companies that demonstrate leadership in one dimension of sustainability could serve as benchmarks for others, encouraging best practices and advancing the integration of sustainability reporting as a core aspect of corporate strategy.

4. CONCLUSION

This study explores the integration of economic, environmental, and social dimensions within sustainability reporting by analyzing the disclosures of 46 Borsa Istanbul (BIST)-listed companies in their 2021 sustainability reports prepared in accordance with Global Reporting Initiative (GRI) standards. The findings reveal significant interrelationships between these dimensions and emphasize the critical role of comprehensive and balanced reporting in achieving corporate sustainability objectives. This conclusion discusses the study's importance, its relevance to academic and practical fields, its contribution to the sustainability literature, and the opportunities it presents for further research.

The findings of this study are both timely and relevant given the growing global emphasis on corporate accountability and transparency in sustainability practices. The observed relationships between economic, environmental, and social disclosures underscore the interconnected nature of these dimensions, aligning with the principles of the Triple Bottom Line framework. The study demonstrates that companies focusing on social and environmental disclosures are more likely to achieve robust economic performance, suggesting that sustainability practices are not merely ethical or compliance obligations but strategic imperatives that contribute to long-term financial resilience and profitability. These insights have practical implications for corporate managers, policymakers, and other stakeholders striving to integrate sustainability into their organizational strategies.

One of the key contributions of this study is its empirical validation of the interdependence between sustainability dimensions. Prior literature has often discussed these relationships theoretically, but empirical evidence has been relatively scarce, particularly in the context of developing economies. By focusing on BIST-listed companies, the study highlights how firms operating in an emerging market context approach sustainability reporting. The findings reveal that while social disclosures dominate, followed by environmental and economic disclosures, there is still room for more balanced

reporting practices. This imbalance reflects the broader challenges faced by companies in integrating the three sustainability dimensions effectively, offering a nuanced understanding of how such practices vary across different organizational and cultural contexts.

The study contributes to the existing literature by addressing a significant gap in understanding the integration of economic, environmental, and social disclosures in sustainability reports. Previous research has primarily examined the individual dimensions of sustainability or focused on specific industries or regions. This study expands the scope by exploring the interplay between these dimensions within a single framework, providing a holistic perspective on sustainability reporting. By employing robust analytical methods such as correlation and regression analyses, the study offers empirical support for the argument that environmental and social initiatives are integral to economic success. This contribution is particularly relevant as organizations worldwide increasingly adopt sustainability practices as part of their strategic goals.

Furthermore, the study highlights the practical challenges and opportunities associated with sustainability reporting. The variation in disclosure frequencies among the sampled companies suggests that while some organizations recognize the importance of sustainability reporting, others face significant barriers, such as resource constraints, limited awareness, or lack of standardized guidelines. The findings emphasize the need for more sector-specific frameworks and capacity-building initiatives to encourage broader adoption of comprehensive reporting practices. Policymakers and regulatory bodies can use these insights to design incentives and guidelines that promote balanced and transparent reporting across industries.

The importance of this study also lies in its ability to guide practitioners. For corporate managers, the findings underscore the strategic value of integrating sustainability dimensions into their reporting practices. Companies that adopt a balanced approach to economic, environmental, and social disclosures are better positioned to meet stakeholder expectations, enhance their market reputation, and achieve sustainable growth. For investors and other stakeholders, the study provides a framework for assessing corporate sustainability practices, enabling more informed decision-making.

While this study offers significant contributions, it also highlights opportunities for further research. First, the study is limited to the sustainability reports of BIST-listed companies for 2021, providing a snapshot of reporting practices within a specific context and time frame. Future research could expand this scope by conducting longitudinal studies to examine how disclosure practices evolve over time. Such research could identify trends and assess the impact of regulatory changes, stakeholder pressures, and global sustainability initiatives on corporate reporting.

Second, the study focuses on companies in Turkey, an emerging market with unique economic, regulatory, and cultural characteristics. Comparative studies across countries or regions could provide valuable insights into how different contexts influence sustainability reporting practices. For instance, examining the adoption of GRI standards in developed versus developing economies could reveal variations in priorities, challenges, and opportunities. This approach would contribute to the global discourse on sustainability and inform the development of more inclusive and adaptable reporting frameworks.

Third, the study primarily relies on quantitative analyses of disclosure frequencies, which provide valuable insights into the relationships between sustainability dimensions but do not capture the qualitative aspects of reporting. Future research could employ mixed-methods approaches to analyze the content and depth of sustainability disclosures, exploring how companies communicate their sustainability strategies, achievements, and challenges. This qualitative perspective could complement the quantitative findings, offering a more comprehensive understanding of reporting practices.

Finally, the study's focus on the GRI framework provides a solid foundation for analyzing sustainability reports, but it also opens avenues for exploring alternative or complementary frameworks. The adoption of emerging standards such as the Task Force on Climate-related Financial Disclosures (TCFD) and the International Integrated Reporting Council (IIRC) framework could be examined to assess their impact on reporting practices and corporate performance. Additionally, future research could investigate the integration of digital technologies such as artificial intelligence and blockchain in sustainability reporting, exploring their potential to enhance transparency, accuracy, and stakeholder engagement.

In conclusion, this study underscores the importance of integrating economic, environmental, and social dimensions into sustainability reporting, highlighting their interdependence and strategic value. It contributes to the literature by providing empirical evidence on the relationships between these dimensions and offering practical insights for businesses and policymakers. By addressing the challenges and opportunities associated with sustainability reporting, the study lays the groundwork for future research that can further advance understanding and practice in this critical area. As organizations continue to navigate the complexities of sustainability, studies like this will play a pivotal role in shaping the future of corporate accountability and sustainable development.

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