

## Firms-Specific Sustainability Reporting among Johannesburg Stock Exchange Listed Companies: Do IFRS S1 and IFRS S2 Matter?

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**Abstract** – This study investigates whether the ISSB sustainability requirements are going to result in a major change in terms of ESG disclosures among the JSE-listed companies. Quantitative content analysis employed. It was underpinned by the positivist paradigm. Secondary data was gathered from the sustainability reports of the top 40 JSE-listed companies based on their market capitalization. Reports spanning 2022-2023. Robustness analysis was entirely performed using descriptive statistics with the aid of STATA. Results reveal that the level of sustainability-related disclosure is not significantly different from ISSB requirements prior to the effective date of IFRS S1 and IFRS S2 (M = 67%). Furthermore, there is an 81% level of disclosure on governance, 43% level of disclosure on strategy, 100% level of disclosure on risk management, and 93% level of disclosure on metrics and targets. This indicates that these companies require more work on strategy to align themselves with ISSB requirements. The study results can aid policymakers, accounting bodies, and regulators in understanding sustainability-related disclosures, harmonizing frameworks, and providing a robust research agenda for future research.

**Keywords** – Specific Sustainability Reporting, IFRS S1 and IFRS S2, Environmental, Social and Governance (ESG) Reporting Disclosures

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## 1 Introduction

Private sector corporations are advancing towards sustainability-related reporting and the United Nations' Sustainable Development Goals (SDGs). However, they often choose only a few areas to report on due to the difficulty or impracticality to report on all sustainability-related issues, including the 17 SDGs (Whittingham et al., 2023). Sustainability-related reporting standards and principles are becoming an international trend, requiring companies to measure, disclose, and account for sustainability using Environmental, Social, and Governance (ESG) dimensions (Gunawan et al., 2022). This standardization aims to help companies understand sustainable production and consumption within resource capacity.

Firms have been reporting on sustainability for years, aiming to enhance their value and communicate their understanding of sustainable production and consumption (Al-Shaer & Hussainey, 2022). South African listed companies have adopted Global Reporting Initiatives (GRI) guidelines to ensure transparency on non-financial disclosures and environmental sensitiveness (Friske et al., 2023; Al-Shaer & Hussainey, 2022). Sustainability reports have higher relevance to stakeholders compared to integrated reports (Friske et al., 2023). The introduction of sustainability-related reporting standards in 2024 is expected to impact firms' information, improving firm value, legitimacy, reputation, and reducing information asymmetry (Permatasari & Narsa, 2022; Wachira et al., 2020; Jeriji & Nasfi, 2023; and Krueger et al., 2021). Mandatory reporting also improves liquidity and performance for companies mandated by the government.

Petersen et al. (2022), note that Johannesburg Stock Exchange (JSE)-listed companies are likely to continue using current sustainability reporting frameworks over the International Sustainability Standard Board's sustainability-related reporting standards. The gap between the sustainability information provided by JSE companies and the International Financial Reporting Sustainability Standard has not been analyzed. The International Sustainability Standards Board (ISSB) created a framework in 2021 to disclose sustainability-related risks and opportunities, providing material information to investors (IFRS Foundation, 2023). The standards allow companies to disclose climate risks and opportunities in their first year of reporting, allowing them to apply IFRS S2 without worrying about comparability information. Companies can therefore apply IFRS S2 in their first year of reporting without worrying about comparability information and later implement IFRS S1 (IFRS Foundation, 2023). The ISSB builds on the Task Force on Climate-Related Financial Disclosures (TCFD) framework, which was disbanded in 2023 and replaced by the ISSB (Force, 2023).

According to the IFRS Foundation (2023), IFRS S1, effective from 01 January 2024 with earlier application permitted, is set to provide basic sustainability-related risks and opportunities as well as disclosure of useful material information pertaining to risks and opportunities that impact an entity's prospects over the short, medium, and long term to users of general-purpose financial reports. Furthermore, the standard requires the disclosure of four sections that are similar to the TCFD framework. The sections are

governance, strategy, risk management, as well as targets and metrics. On the other hand, IFRS S2 covers climate change mitigation and adaptation and builds on the requirements of IFRS S1 and requires an entity to disclose information related to climate-related risks and opportunities to which an entity is exposed that is useful to primary users of general-purpose financial reports (IFRS Foundation, 2023). Like IFRS S1, an entity must provide users of financial information with climate-related risks and opportunities pertaining to governance, strategy, and risk management, as well as the metrics and targets used. Companies are required to disclose scope one and two Greenhouse Gas emissions pertaining to a company's production (direct impact) and use of purchased energy (indirect impact). Scope three from upstream and downstream activities showing indirect impact from an entity's value chain on Greenhouses Gases must also be disclosed (IFRS Foundation, 2023).

Prior research indicates that countries have an option to adapt or adopt the ISSB Sustainability disclosure standards without obscuring the global baseline (Pratama et al., 2022a). Furthermore, the level of adoption is expected to differ between countries as the standard is currently adopted voluntarily, and jurisdictions have an option to make it mandatory. This includes deciding whether to use external assurance on these reports or not despite assurance having positive results on the ESG performance (Chonco et al. 2024). Countries like Australia, New Zealand, and those in Europe have plans to make sustainability reporting mandatory (Pratama et al., 2022a). Sustainability reporting in South Africa is currently voluntary; however, JSE-listed companies are required to produce holistic view integrated reports that comprise six capitals including financial, manufactured, intellectual, human, social and relationship, and natural. A study conducted by Petersen et al. (2022) on 100 JSE-listed companies indicates that the frameworks currently used by South African companies for sustainability-related reporting include the SDGs, Carbon Disclosure Project, GRI, and TCFD. Companies are more likely to continue using current frameworks than adopting ISSB sustainability disclosure standards to report on sustainability-related issues (Petersen et al., 2022). Prior studies did not analyze the gap between what the ISSB sustainability disclosure standards require and how the JSE-listed companies report, as well as the gap between sustainability reporting between companies (Petersen et al., 2022).

The gap between how the JSE-listed companies report on sustainability and what the ISSB sustainability disclosure standards has not been analyzed. This study has two objectives. Firstly, to analyze the gap between what ISSB sustainability disclosure standards require and how the JSE-listed companies report on sustainability-related issues. Secondly, to analyze the gap among JSE-listed companies on sustainability-related matters and to suggest a set of recommendations for the harmonization of ISSB, SDGs, and other related frameworks. This article makes the following specific contributions: (1) The empirical findings and discussions provide unique insights into sustainability reporting set by ISSB sustainability disclosure standards versus IFRS S1 and IFRS S2 among the top 40 JSE-listed companies.

(2) It provides regulators and policymakers with relevant information that can assist when formulating policies pertaining to sustainability-related reporting. (3) The study adds to the body of existing knowledge and a guide for future researchers to further research on the subject matter.

The rest of the study is organized as follows: section two presents the theoretical background and literature review; section three provides the research methodology used for the study; section four presents the study results, discussion, and implications; and section five concludes the study.

## **2 Theoretical Background and Literature Review**

This study was underpinned by the following widely known theories: legitimacy theory and Stakeholder theory. The two theories were considered relevant and appropriate for this study for the following reasons: (1) to understand how the JSE companies should operate to be regarded as legitimate corporate citizens, and (2) the layering reasons why JSE companies must cater to the interests of all stakeholders.

### **2.1 Legitimacy theory**

An organization would be regarded as a legitimate corporate citizen in accordance with the legitimacy theory if its actions are desirable, proper, or appropriate within a socially constructed system of norms, values, beliefs, and definitions (Deegan, 2006). Reports on an organization's impacts on society would enable users to assess if a company's actions are within desirable values and beliefs and thus assess its legitimacy. On the other hand, environmental accounting requires companies to report on the sustainable use of resources for the current and future human generations and other life forms (Lehman, 1995). Reporting on how resources are used would enable stakeholders to assess organizations' impact on society and assess if their practices are within desirable values and norms and thus assess their legitimacy. Environmental accounting and social accounting are related components and are the important elements from which sustainability reporting departs.

### **2.2 Stakeholder theory**

Stakeholder theory, developed by Freeman in 1984, indicates that no one stakeholder group should be regarded as superior over the other, but an organization's relationship with its stakeholders should be balanced, and any conflicts should be resolved using stakeholder conflict resolution mechanisms formulated by the organization (Goyal, 2022). According to the stakeholder theory, organizations should consider the interests of all those entities that stood to benefit or lose due to corporate actions. It opposes the agency theory of organizations, which indicates that agents or managers in organizations are primarily accountable to their shareholders to maximize their wealth within the ambit of law, and this is rooted in capitalism. Sustainability reporting requires

organizations to balance the interests of all the stakeholders by considering their environmental and social impacts to be regarded as legitimate. Stakeholder theory, as indicated in Goyal (2022), is related to legitimacy theory, as indicated by Deegan (2006), and should be considered as supporting sustainability reporting. Agents should consider the social and environmental aspects in making decisions and not only maximize shareholder wealth to comply with stakeholder theory and legitimacy theory. Companies should therefore be governed in a manner that ensures sustainability by taking the interests of all stakeholders into account to be regarded as legitimate. Sustainability reporting aims at connecting stakeholders and corporations to assist stakeholders in assessing whether they were considered during the decision-making of a company for that company to be regarded as legitimate.

### 2.3 Empirical literature

Companies provide sustainability reports to communicate with users of information on ESG disclosures. Investors and potential investors want financial and non-financial information that is understandable, reliable, and comparable within the same companies, across companies, industries, and across different countries to allow users to assess companies' impact on the natural environment, social welfare, and governance aspects, which is also referred to as triple bottom reporting (Akpan et al., 2023; de Villiers & Dimes, 2023). Users would use ESG reports to assess the legitimacy status of the corporate citizens.

Social accounting assesses how well a company fulfills its social contract or evaluates the firm's impact on society (De Villiers & Sharma, 2020). It is therefore a process whereby firm-level performance variables, measures, and measurement procedures systematically develop information useful for evaluating social performance and communicate such information to concerned social groups within and outside a company. The social responsibility of a business includes contributing to the economy, following the laws, applying ethics, and considering society in decision-making. It assists an organization to ensure its legitimacy by reporting on its actions on society (De Villiers & Sharma, 2020). Sustainability reports include the social accounting aspect, which assists users in assessing an entity's legitimacy in its actions on society.

Goyal (2022) indicates that the governance aspect deals with the extent to which those in governance and procedures in a company support the implementation of strategic plans and management control over business operations that support the company's sustainability. Sustainability reporting therefore incorporates the environmental aspect, the social aspect, as well as the governance aspect, referred to as ESGs.

The area of sustainability reporting is developing, and there are new standards emerging internationally (Meutia et al., 2021). Furthermore, research has been carried out mostly in developed countries on sustainability reporting, and some of these countries have made sustainability reporting mandatory. Both quantitative and qualitative research methodologies have

been used to investigate sustainability reporting, with the majority of sustainability reporting research taking place in developed countries and only a few studies conducted in developing countries (Meutia et al., 2021). The literature review by Meutia et al. (2021) shows that 70% of studies on sustainability were conducted in developed countries while only 30% in developing countries. There has been an increase in the number of articles on sustainability reporting between 2015 and 2020, which may be partly due to the 2015 United Nations SDGs agenda. However, most of the studies conducted are in developed countries, and more research is needed in developing countries to understand sustainability reporting in this context.

Christensen et al. (2021) conducted a systematic literature review on existing studies that focus on drivers of sustainability reporting. Most of the studies that were investigated reveal a positive association between firm size and Corporate Social Responsibility disclosure (Christensen et al., 2021). Market capitalization is indicated as a significant influence on Corporate Social Responsibility disclosure. Studies investigated indicate firm size as a driver of sustainability reporting, as large companies are subject to public scrutiny by capital markets and must provide information to meet various stakeholders' needs and maintain their legitimacy. Small and medium-sized companies withhold sustainability information as they lack the capacity to produce it and are also more sensitive to competition. Carmo and Miguéis (2022) add that firms that have been providing sustainability-related information voluntarily due to requirements from specific investors and holding companies, as well as to communicate with stakeholders including customers, local communities, and suppliers. This indicates that larger firms have been providing sustainability-related information prior to mandatory standards due to internal and external factors. However, these studies have not compared the information provided by larger firms to what the sustainability reporting standards require.

An empirical investigation that was conducted by Ottenstein et al. (2022) on 905 firms from the European Union reveals that the directive influenced sustainability-related quantity and quality but is not a decisive factor in adopting the GRI. A study that was conducted on the United Kingdom's sustainability reports from 2014 to 2018 by Al-Shaer et al. (2022) also indicates that the content of sustainability reports is impacted by external and internal governance factors as well as the publication of the GRI. External governance factors include voluntary adoption of sustainability reporting assurance, stakeholder engagement, and ownership association. Internal governance factors impacting sustainability-related reporting include board quality as well as the existence of a sustainability committee. Studies by Ottenstein et al. (2022) and Al-Shaer et al. (2022) indicate that firms have been and are continuing to provide sustainability-related reporting to communicate with their stakeholders, which is not solely due to sustainability-related reporting standards provided by ISSB. Firms have therefore reported sustainability-related information prior to the promulgation of ISSB standards due to various factors. However, these studies did not compare the sustainability reporting disclosures by these companies to what the ISSB requires.



In an investigation of 138 firms listed on the Pakistan Stock Exchange using data collected between 2009 and 2018, it is indicated that firms with larger audit committees, higher institutional ownership, and gender-diverse boards are reporting more on sustainability-related issues (Hasan et al., 2022). A study that was conducted by Ikpor et al. (2022) on 50 large Nigerian companies also reveals that sustainability-related reporting is influenced by factors such as size, profitability, ownership structure, listing age, leverage position as well as auditor type. Furthermore, media visibility has a positive association with CSR, as companies with more media coverage tend to report more sustainability information to their stakeholders to avoid negative publicity and maintain legitimacy (Dienes et al., 2016). These findings correspond to the findings by Almashhadani and Almashhadani (2023), who reveal a positive association between sustainability-related reporting and the Return on Assets as well as on Equity. Firms have therefore been reporting voluntarily to improve their performance by communicating useful information to their stakeholders with the aim of maintaining their legitimacy. Similar results were also reported on firms listed on the JSE by (Thompson et al., 2022); (Wasara & Ganda, 2019); (Dzomonda & Fatoki, 2020). However, these studies reveal that sustainability reporting is influenced by factors other than ISSB sustainability reporting standards, and no comparison was done between how JSE-listed companies report and what the ISSB sustainability reporting standards require.

Profitability, including the Return on Assets and Return on Equity, capital structure, firm age, and board composition, has no clear impact on sustainability-related reporting, according to Dienes et al., (2016). Wasara and Ganda (2019) also reveal a negative association between environmental impact disclosure and return on investment, while social disclosure has positive results. This contradicts the findings by other researchers such as Ikpor et al. (2022); Almashhadani and Almashhadani (2023); Thompson et al. (2022); Wasara & Ganda, (2019); Dzomonda & Fatoki, (2020) who reported a positive association between Return on Assets, Return on Equity, board composition, and the sustainability-related disclosures. However, these studies did not investigate the impact of ISSB sustainability reporting standards on the level of sustainability disclosure by JSE-listed companies.

## 2.4 Literature gap

Limited studies have been undertaken on sustainability reporting in developing countries, including in South Africa. Studies conducted indicate a positive relationship between firm size and sustainability reporting (Christensen et al., 2021); (Carmo and Miguéis, 2022). Prior studies indicate that large organizations, including those listed on the JSE, have been providing sustainability reports voluntarily as early as the 1990s to communicate with their stakeholders to maintain their legitimacy (Thompson et al., 2022); (Wasara & Ganda, 2019); (Dzomonda & Fatoki, 2020). Companies have been providing sustainability reports to maximize shareholders' wealth, to maintain their legitimacy, and to manage reputational risk. These studies have not analyzed the gap between the sustainability

information provided by companies listed on the JSE and what the ISSB sustainability-related disclosure standards require. The sustainability reporting gap between companies has also not been analyzed.

### **3 Research Methodology**

The study followed a quantitative content analysis approach to collect data from the annual reports, integrated reports, sustainability reports, and company websites of the top 40 JSE-listed companies, as these are the reports used by most companies to communicate their sustainability-related information. Descriptive research was used to compare and describe the gap between the current integrated reporting by JSE-listed companies and the requirements of IFRS S1 and IFRS S2. Descriptive research has the aim of describing how reality is, and it differs from normative research, which is concerned with providing answers to questions on how reality should be (Lans & Van der Voordt, 2002). It describes a sample's characteristics and relationships between phenomena and events researched. The aim is not to answer cause-and-effect questions but to analyze the gap between what ISSB sustainability disclosure standards require and how the JSE-listed companies report on sustainability-related issues and to analyze the gap among JSE-listed companies on sustainability-related matters. The study used disclosures on sustainability within integrated reports of the top 40 companies listed on the JSE, as they are regarded as major players with large market capitalization and are monitored by stakeholders as an overall benchmark for the JSE as at November 30, 2023. These companies were divided into the following business sectors: (1) Banking and Insurance; (2) Energy; (3) Materials and Buildings; (4) Transportation; (5) Agriculture, Food and Forest Products; (6) Technology and Media; (7) Consumer Goods; and (8) Mining. Reports from the years 2022 and 2023 were used from the top 40 companies sampled. The quantitative approach was used to analyze the data descriptively by using descriptive statistics, including average, standard deviation, maximum, and minimum. Reports from the 2022 and 2023 financial years were used, as these are the financial years immediately before ISSB sustainability-related standards became effective.

The secondary data available from selected companies' webpages and the JSE webpage was collected with the assistance of Microsoft Excel application software. The focus was on sustainability-related reports provided by the top 40 companies. Data was collected during November 2023 and December 2023, which is before the effective date of the IFRS S1 and IFRS S2. Microsoft Excel was used in coding data under the sections reflected in Table 1. Coded data was then analyzed using STATA.

The ISSB sustainability disclosures from IFRS S1 and IFRS S2 that were tested are indicated in Table 1 and are grouped into four categories, which include Governance (G), Strategy (ST), Risk Management (RM), and Metrics and Targets (MT) in accordance with the ISSB (IFRS Foundation, 2023). The location of disclosures of sustainability-related information within reports was also tested in the current study. The majority (78%) of companies researched



are from the following sectors: banking and insurance (28%), consumer goods (25%), and mining (25%), as shown in Table 2. Other sectors considered include technology and media, agriculture, food, and forest products, energy, as well as materials and buildings. Most companies researched (65%) have their reports externally assured (reasonable, combined, or limited) on their ESGs, which was done either on a full report or selected indicators. The technology and media sector, agriculture, food, and forest products sector, energy sector, as well as materials and buildings sectors, are grouped into other sectors for the purpose of analysis in the current study.

Table 1: The ISSB Sustainability disclosures from IFRS S1 and IFRS S2

<b>Governance</b>	<b>Strategy</b>	<b>Risk Management</b>	<b>Metrics and targets</b>
<b>G1:</b> Disclosure of information on the body responsible for oversight of sustainability-related risks and opportunities identified.	<b>ST1:</b> Disclosure of information on sustainability-related risks and opportunities that are expected to significantly impact on the entity's strategy and business model over the short, medium, or long term.	<b>RM1:</b> Disclosure of information about processes and related policies the entity uses to identify, assess, prioritize, and monitor sustainability-related risks and opportunities.	<b>MT1:</b> Disclosure of the metrics used for each sustainability-related risk and opportunity that could reasonably be expected to affect the entity's prospects.
<b>G2:</b> Disclosure of information on how sustainability-related risks and opportunities are reflected in the terms of reference, mandates, role description and other policies applicable to the governing body.	<b>ST2:</b> Disclosure of information on current and anticipated effects of sustainability-related risks and opportunities on the entity's business model and value chain	<b>RM2:</b> Disclosure of the extent to which and how the processes for identifying, assessing, prioritizing, and monitoring sustainability-related risks and opportunities are integrated into the entity's overall risk management process.	<b>MT2:</b> Disclosure of the information about the targets the entity has set to monitor progress towards achieving its strategic goals and any targets set by law the entity is required to meet.
<b>G3:</b> Disclosure of information on how the body	<b>ST3:</b> Disclosure of information on		

determines whether appropriate skills and competencies are available or will be developed to oversee strategies designed to respond to sustainability-related risks and opportunities.	how the entity specify and define the time horizons over which each of the sustainability-related risks and opportunities could reasonably be expected to occur (short, medium, or long term).		
<b>G4:</b> Disclosure of the processes on how the body and its committees are informed about sustainability-related risks and opportunities.	<b>ST4:</b> Disclosure of the impact of sustainability-related risks and opportunities on the entity's strategy and decision-making.		
<b>G5:</b> Disclosure of information on how the body and its committees considers sustainability-related risks and opportunities when overseeing the entity's strategy, decisions on major transactions, and risk management processes	<b>ST5:</b> Disclosure of the impact of sustainability-related risks and opportunities on the entity's financial position, financial performance, and cash flows for the reporting period as well as anticipated impact over the short, medium, and long term.		
<b>G6:</b> Disclosure of information on how the body and its committees oversee the	<b>ST6:</b> Disclosure of quantitative and qualitative information about how sustainability-		

<p>setting of targets related to sustainability-related risks and opportunities, and monitoring of progress towards targets including whether and how these are added in remuneration policies.</p>	<p>related risks and opportunities have affected the entity's financial position, financial performance, and cash flows for the reporting period.</p>		
<p><b>G7:</b> Disclosure of the role played by management in managing sustainability-related risks and opportunities and how the body exercise oversight over the management role.</p>	<p><b>ST7:</b> Disclosure of quantitative and qualitative information about how sustainability-related risks and opportunities are expected to affect the entity's financial position, financial performance, and cash flows for the reporting period.</p>		
	<p><b>ST8:</b> Disclosure of the resilience of the entity's strategy and its business model to sustainability-related risks</p>		
	<p><b>ST9:</b> Disclosure of information on trade-offs between sustainability-related risks and opportunities that the entity considered.</p>		

Source: Adapted from the IFRS Foundation (2023).

Table 2: Business sectors investigated and the level of external assurance on the ESG reports

Sector	Reasonable Assurance	Combined Assurance	Limited Assurance	No Assurance	Number of companies
Banking and Insurance	0	1	5	5	11
Consumer Goods	1	1	3	5	10
Mining Technology and media	2	4	3	1	10
Technology and media	0	0	3	1	4
Agriculture, Food and Forest products	0	0	1	1	2
Energy	1	0	1	0	2
Materials and buildings	0	0	0	1	1
<b>Total</b>	<b>4</b>	<b>6</b>	<b>16</b>	<b>14</b>	<b>40</b>

Source: Researchers' compilation (2024) using STATA.

## 4 Results

The aim of this section is to present the descriptive statistics results on the gap between the IFRS S1 and IFRS S2 and the current sustainability disclosure by JSE-listed companies. It also presents the gap in sustainability reporting between the top 40 JSE-listed companies. This research collected data from JSE top 40 listed companies with financial years ending between 2022 and 2023. The majority (78%) of companies researched are from the following sectors: banking and insurance (28%), consumer goods (25%), and mining (25%), as shown in Table 2.

Different frameworks were used in preparing ESG reports, including TCFD, Global Reporting GRI, JSE Sustainability Disclosure Guidance, Greenhouse Gas Protocol, Integrated Reporting Framework, King IV on corporate governance, Carbon Disclosure Project (CDP), United Nations SDGs, as well as industry sector standards.

Tables 3 to 6 present the level of sustainability-related disclosures by JSE-listed top 40 companies. These companies are already providing information on governance, strategy, risk management, and metrics and targets.

Table 3: Description of sustainability-related disclosures in the top 40 JSE-listed companies\_ focusing on Governance

Sector	G1	G2	G3	G4	G5	G6	G7
Banking and Insurance	100%	91%	82%	73%	64%	36%	82%
Consumer goods	100%	90%	80%	70%	70%	70%	80%
Mining	100%	90%	80%	70%	100%	40%	80%
Other	100%	100%	78%	89%	78%	67%	100%
<i>M</i>	100%	93%	80%	75%	78%	53%	86%
<i>SD</i>	0,00	4.87	1.65	9.08	15.86	17.52	9.73
Minimum	100%	90%	78%	70%	64%	36%	80%
Maximum	100%	100%	82%	89%	100%	70%	100%
<b>Overall <i>M</i></b>	<b>81%</b>						
<b>Overall <i>SD</i></b>	<b>14,89</b>						

Source: Researchers' compilation (2024) using STATA

Firstly, the level of disclosure under governance shows that companies started providing governance-related information in accordance with ISSB prior to the effective date of IFRS S1 and IFRS S2 ( $M = 81\%$  and  $SD = 14,89$ ) as shown in Table 3. The results indicate that 81%, on average, of these companies are disclosing governance information required by ISSB by using other standards. Disclosure of information on how the governing body and its committees oversee the setting of targets related to sustainability-related risks and opportunities and monitoring of progress towards targets, including whether and how these are added in remuneration policies (G6), shows an average of 53%, indicating there is not enough disclosure under this section. The banking and insurance sectors, as well as the mining sector, have less than 50% of companies disclosing in accordance with the requirements of G6.

Table 4: Description of sustainability-related disclosures in the top 40 JSE-listed companies\_ focusing on Strategy

Sector	ST1	ST2	ST3	ST4	ST5	ST6	ST7	ST8	ST9
Banking and Insurance	55%	82%	27%	91%	0%	0%	0%	45%	9%
Consumer goods	50%	80%	30%	70%	10%	10%	10%	50%	20%
Mining	90%	100%	10%	100%	0%	0%	0%	90%	50%
Other	78%	89%	22%	100%	22%	0%	0%	89%	67%
<i>M</i>	68%	88%	22%	90%	8%	3%	3%	69%	36%
<i>SD</i>	19.01	9.07	8.86	14.15	10.56	5.00	5.00	24.16	26.56
Minimum	50%	80%	10%	70%	0%	0%	0%	45%	9%

<b>Maximum</b>	90%	100%	30%	100%	22%	10%	10%	90%	67%
<b>Overall M</b>	<b>43%</b>								
<b>Overall SD</b>	<b>36.19</b>								

Source: Researchers' compilation (2024) using STATA.

Secondly, the level of disclosure in accordance with the ISSB under strategy shows an average that is below 50% prior to the effective date of IFRS S1 and IFRS S2 (M = 43% and SD = 36,19%), as shown in Table 4. Four requirements under strategy disclosure were complied with by more than 60% of the companies tested (ST1, ST2, ST4, and ST8). The remaining five strategy disclosure requirements show compliance ranging between 3% and 36% on average. Disclosure of information on how an entity specifies and defines the time horizons over which each of the sustainability-related risks and opportunities could reasonably be expected to occur (ST3) shows 22% average disclosure that ranges between 10% and 30%. There is a low level of disclosure (average of 8%) on the impact of sustainability-related risks and opportunities on the entity's financial position, financial performance, and cash flows for the reporting period, as well as anticipated impact over the short, medium, and long term (ST5).

A 3% disclosure of quantitative and qualitative information about how sustainability-related risks and opportunities have affected the entity's financial position, financial performance, and cash flows for the reporting period (ST6) as well as disclosure on quantitative and qualitative information about how sustainability-related risks and opportunities are expected to affect the entity's financial position, financial performance, and cash flows for the reporting period (ST7) is revealed by the results. Disclosure of information on trade-offs between sustainability-related risks and opportunities that the entity considered (ST9) indicates a 36% compliance.

Table 5: Description of sustainability-related disclosures in the top 40 JSE-listed companies\_ Risk Management and Metrics

<b>Sector</b>	<b>RM1</b>	<b>RM2</b>	<b>MT1</b>	<b>MT2</b>
<b>Banking and Insurance</b>	100%	100%	91%	91%
<b>Consumer goods</b>	100%	100%	80%	80%
<b>Mining</b>	100%	100%	100%	100%
<b>Other</b>	100%	100%	100%	100%
<b>M</b>	100%	100%	93%	93%
<b>SD</b>	0.00	0.00	9.51	9.51
<b>Minimum</b>	100%	100%	80%	80%
<b>Maximum</b>	100%	100%	100%	100%
<b>Overall M</b>	<b>100%</b>		<b>93%</b>	
<b>Overall SD</b>	<b>0.00</b>		<b>0.00</b>	

Source: Researchers' compilation (2024) using STATA.



Thirdly, 100% compliance is shown under risk management with a 0% standard deviation, which indicates companies tested started providing required information prior to the effectiveness of the IFRS S1 and IFRS S2 as shown in Table 5. Metrics and targets disclosures are high, as they range between 80% and 100% with a mean of 93% as shown in Table 5. High disclosure on metrics and targets is influenced by companies aligning themselves to TCFD disclosure requirements. This indicates that tested companies provided information on metrics and targets for each sustainability-related risk and opportunity that is expected to affect the companies' prospects.

Table 6: Description of sustainability-related disclosures in the top 40 JSE-listed companies\_ overall disclosure scores

Sector	Overall average disclosure scores
Banking and Insurance	61%
Consumer goods	63%
Mining	70%
Other	74%
<i>M</i>	<b>67%</b>
<i>SD</i>	<b>33.89</b>

Source: Researchers' compilation (2024) using STATA.

Lastly, companies investigated are presenting on average about ( $M = 67\%$ ) of the sustainability-related disclosures required by ISSB with a standard deviation of ( $SD = 33.89$ ), which indicates variations in treatment between these companies as shown in Table 6. The average disclosure between companies, as indicated in Table 6, is the highest among the companies that are grouped under the other sector, which shows 74%. This disclosure is above the mean disclosure of all the companies, which is 67%. The disclosure by companies under the mining sector is at 70%, consumer goods at 63%, and the banking and insurance sector is at 61%.

## 5 Discussion

The current study results indicate that various frameworks were used to prepare the ESG reports. This corresponds to research by Petersen et al. (2022), which indicates that the most common ESG reporting guidelines are GRI, TCFD, CDP, and SDGs. Different names are given to sustainability reports, and these reports were presented in different locations, and no cross-referencing was used as suggested in the ISSB standards. ACCA and the University of Glasgow (2022) indicated in their research based on 100 high Greenhouse Gas emission companies from all over the world that the sustainability disclosures prior to the effectiveness of ISSB standards were scattered, there were duplications, and they lacked cross-references, which correspond to the disclosure by the JSE-top 40 companies investigated in this

research. Sustainability-related disclosures are encouraged to be added to the general financial reports, including annual reports, and flexibility is allowed where cross-references must be included if applied.

A literature review by Sabauri and Kvatashidze (2023) indicates that a survey that was conducted in 2018/2019 from companies in different countries by Ernst and Young shows that 54% of the surveyed companies were already reporting in line with the TCFD requirements. In some countries, the increase in sustainability-related reporting is due to mandatory reporting by the country's authorities; this includes the European Union, which is indicated to have high levels of ESG reporting due to mandatory reporting requirements (Rezaee et al., 2023). This aligns with the study that was conducted by Pratama et al. (2022) on 258 companies from four Asian countries, which are Thailand, Indonesia, Singapore, and Malaysia, where there are mandatory sustainability-related reporting requirements. The results indicate a high level of disclosures across the four components of sustainability-related reporting. These findings correspond with the current study's results, as all (100%) of the companies tested present sustainability-related information at varying levels to their stakeholders despite the sustainability disclosure not being mandatory. ACCA and the University of Glasgow (2022) also indicated a high level of disclosure among the companies that they tested, which they attributed to the adoption of TCFD recommendations. The current study, however, only tested if the disclosure is in line with ISSB requirements. On the other hand, studies that were conducted in Malawi and Ghana show a low level of sustainability disclosures, where it is indicated in Malawi that this is not a priority (Kampanje, 2023), while in Ghana a 16% disclosure level is revealed (Institute of Chartered Accountants, Ghana, 2024).

Pratama et al. (2022b) indicate an overall reporting of 77% by companies that were tested under their empirical study, where there is a 91% level of reporting under governance, 80% under strategy, 79% under risk management, and 66% under metrics and targets in line with the ISSB requirements. These results contradict the current study's results from South Africa, where there is a 67% disclosure level by JSE top 40 tested companies, which is less than 77% reported in Asian companies. Sustainability-related reporting was not mandatory in South Africa when the study was conducted, which may partly explain the difference in the level of disclosures reported in the two studies. The results also reveal that the companies tested currently present separately the general-purpose financial statements from the sustainability-related information, which is not in accordance with the ISSB requirements. Mela (2024) revealed a 65% level of disclosure on their case study that was conducted based on an Indonesian bank, which is slightly below the overall disclosure level by the JSE top 40 companies tested under the current study.

Pratama et al. (2022b) indicate the level of disclosure by companies under finance to be the highest at 82% and consumer goods the lowest at 65%. Furthermore, their study indicates that the mining sector disclosure is at 79% and the agriculture sector at 74%. The current study indicates similar results on consumer goods sector disclosure at 63%, which is close to 65% reported by Pratama et al. (2022b). The current study reports a 70% level of disclosure

by mining companies, which is 11% below what is reported by Pratama et al. (2022b). The agriculture sector grouped under the other sector shows 74% disclosure, which is in line with the reported disclosure level by Pratama et al. (2022b). The banking and insurance sector is at 61% under the current study, which significantly differs from what is reported by Pratama et al. (2022b), who indicate an 82% disclosure by the finance sector, but is close to the results by Mela (2022), who investigated a bank and revealed a 65% level of disclosure.

The current study shows a high level of disclosure under the three components and a gap under strategy. Firstly, tested companies are not adequately addressing how they specify and define the time horizons over which each of the sustainability-related risks and opportunities could reasonably be expected to occur. Secondly, the impact of sustainability-related risks and opportunities on the entity's quantitative and qualitative information about how sustainability-related risks and opportunities have affected the entity's financial position, financial performance, and cash flows for the reporting period, as well as anticipated impact over the short, medium, and long term, is not adequately addressed. Thirdly, quantitative and qualitative information about how sustainability-related risks and opportunities have affected or are expected to affect the entity's financial position, financial performance, and cash flows for the reporting period is not addressed adequately.

Trade-offs between sustainability-related risks and opportunities the entity considered is the fourth item that is not adequately addressed by companies that were tested. Lastly, there is a gap in how governing bodies and their committees oversee the setting of targets related to sustainability-related risks and opportunities and monitoring of progress towards targets, including whether and how these are added to remuneration policies.

Kusuma and Gani (2024) revealed a 100% disclosure level on strategy. Deficiencies in strategy and risk management were reported due to difficulty in identifying risks and opportunities related to sustainability in line with the requirements of IFRS S1 and S2. Mele (2024) also revealed that there is a gap in the provision of quantitative information on the impact of climate change on entities' financial information, including the company's resilience. Sun (2024)'s study findings contradict our study's findings, where the research conducted on 70 leading Singapore companies indicated they were not adequately reporting on risk management as they struggled to incorporate risk management into sustainability reporting.

The current study reveals that all the investigated companies provide information on how their business activities impact the environment, social, and governance to be regarded as responsible corporate citizens. This result upholds the assumptions of legitimacy theory and stakeholders' theory (Deegan, 2006); (Lehman, 1995); (Goyal, 2022). The study further found that sustainability reports of the top 40 JSE-listed companies address the interest of all stakeholders to be regarded as legitimate corporate citizens. This result upholds the assumptions of stakeholders' theory (Deegan, 2006); (Lehman, 1995); (Goyal, 2022).

## 6 Conclusion

Evidence revealed that companies are more likely to continue using current frameworks without adopting ISSB sustainability disclosure standards to report on sustainability-related issues; this study was conducted to identify the gap between the ESG framework used by the top 40 JSE-listed companies in providing sustainability-related information and what the ISSB requires in IFRS S1 and IFRS S2. The study's objectives were twofold: firstly, it analyzed the gap between what ISSB sustainability disclosure standards require and how the JSE-listed companies report on sustainability-related issues. Secondly, it analyzed the gap among JSE-listed companies on sustainability-related matters and suggested a set of recommendations for the harmonization of ISSB, SDGs, and other related frameworks.

These objectives were achieved through descriptive statistics, and there were thus sufficient results to draw a very valid conclusion.

The study's results indicate that companies empirically investigated using descriptive statistics are disclosing information using various frameworks to report on governance, strategy, risk management, and on metrics and targets. The level of disclosure is below 50% for strategy information, which indicates more work needs to be done on this fundamental area. The study's findings revealed that there is also a gap in governance, which implies that JSE-listed companies are not doing adequate reporting in accordance with the requirements of the ISSB standards. The level of reporting is less than that reported in similar studies from countries where there is mandatory reporting on sustainability-related information. Companies in South Africa provide sustainability-related information to deal with information asymmetry and to ensure legitimacy for their stakeholders. There is also a varying level of disclosure between companies, as this is currently voluntary. The level of disclosure overall is high, indicating companies are likely to continue using current frameworks in disclosing sustainability-related disclosures.

The current study contributes to the literature by highlighting areas that require JSE-listed companies' improvements to align with ISSB sustainability-related disclosure requirements. The study also addresses a dearth in research on ESG reporting in conjunction with IFRS S1 and IFRS S2 in South Africa. It recommends the standardization of disclosure on sustainability reporting to ensure the reported information is useful, reliable, and uniform to the internal and external users of sustainability reports. The study further recommends the harmonization of sustainability-related reporting, which would potentially assist companies in dealing with various reporting frameworks, which makes it difficult in comparing JSE-listed companies' sustainability reports across industries in South Africa and beyond.

This study suffered from some limitations as it was conducted in the South African context, focusing on only the top 40 JSE-listed companies. Future studies can look at the quality of reported sustainability reports, focusing on all JSE-listed companies and unlisted companies to overcome survivorship bias and to allow a very robust generalization. Future research could also consider the impact of sustainability reports with IFRS S1 and IFRS S2 and their impact on financial performance among JSE-listed companies and

unlisted companies. Future studies should consider qualitative research to assess the perceptions of preparers of sustainability-related disclosures on ISSB adoption. Furthermore, future studies should consider comparing the level of disclosure on sustainability-related information prior to and after the effectiveness of ISSB disclosure standards to assess the differences.

## 7 References

Akpan, J. U., Oluwagbade, O. I., & Owonifari, V. I. (2023). Integrated Reporting: Enhancing Stakeholder Engagement and Performance through Sustainability Accounting in Nigeria. DOI: <https://doi.org/10.5281/zenodo.8106820>.

Al-Shaer, H., Albitar, K., & Hussainey, K. (2022). Creating sustainability reports that matter: an investigation of factors behind the narratives. *Journal of Applied Accounting Research*, 23(3), 738-763. <https://doi.org/10.1108/JAAR-05-2021-0136>.

Al-Shaer, H., & Hussainey, K. (2022). Sustainability reporting beyond the business case and its impact on sustainability performance: UK evidence. *Journal of Environmental Management*, 311, 114883. <https://doi.org/10.1016/j.jenvman.2022.114883>.

Almashhadani, M., & Almashhadani, H. A. (2023). The Impact of Sustainability Reporting on Promoting Firm performance. *International Journal of Business and Management Invention*, 12(4), 101-111. DOI: 10.35629/8028-1204101111.

Association of Chartered Certified Accountants and University of Glasgow 2022. Companies' Readiness To Adopt IFRS S2 Climate related Disclosures. United Kingdom: The University of Glasgow.

Carmo, C., & Miguéis, M. (2022). Voluntary sustainability disclosures in non-listed companies: An exploratory study on motives and practices. *Sustainability*, 14(12), 7365. <https://doi.org/10.3390/su14127365>.

Chonco, C. M., Madwe, M.C., & Zungu, A. (2024). Assuring Sustainability: Enhancing Environmental, Social and Governance (ESG) Ratings in Top-40 Johannesburg Stock of Exchange Companies. *IJARBM- International Journal of Applied Research in Business and Management*,5(2). <https://doi.org/10.51137/ijarbm.2024.5.2.22>

Christensen, H. B., Hail, L., & Leuz, C. (2021). Mandatory CSR and sustainability reporting: Economic analysis and literature review. *Review of accounting studies*, 26(3), 1176-1248. <https://doi.org/10.1007/s11142-021-09609-5>.

de Villiers, C., & Dimes, R. (2023). Will the formation of the International Sustainability Standards Board result in the death of integrated reporting? *Journal of Accounting & Organizational Change*, 19(2), 279-295. <https://doi.org/10.1108/JAOC-05-2022-0084>.

De Villiers, C., & Sharma, U. (2020). A critical reflection on the future of financial, intellectual capital, sustainability and integrated reporting. *Critical perspectives on accounting*, 70, 101999. <https://doi.org/10.1016/j.cpa.2017.05.003>.

Deegan, C. (2006). Legitimacy theory. In *Methodological issues in accounting research: theories, methods and issues* (pp. 161-181). Spiramus Press Ltd.

Dienes, D., Sassen, R., & Fischer, J. (2016). What are the drivers of sustainability reporting? A systematic review. *Sustainability accounting, management and policy journal* (Print), 7(2), 154-189. <https://doi.org/10.1108/SAMPJ-08-2014-0050>.

Dzomonda, O., & Fatoki, O. (2020). Environmental sustainability commitment and financial performance of firms listed on the Johannesburg Stock Exchange (JSE). *International journal of environmental research and public health*, 17(20), 7504. <https://doi.org/10.3390/ijerph17207504>.

Friske, W., Hoelscher, S. A., & Nikolov, A. N. (2023). The impact of voluntary sustainability reporting on firm value: Insights from signaling theory. *Journal of the Academy of Marketing Science*, 51(2), 372-392. <https://doi.org/10.1007/s11747-022-00879-2>.

Goyal, L. (2022). Stakeholder theory: Revisiting the origins. *Journal of Public Affairs*, 22(3), e2559. <https://doi.org/10.1002/pa.2559>.

Gunawan, J., Permatasari, P., & Fauzi, H. (2022). The evolution of sustainability reporting practices in Indonesia. *Journal of Cleaner Production*, 358, 131798. <https://doi.org/10.1016/j.jclepro.2022.131798>.

Hasan, A., Hussainey, K., & Aly, D. (2022). Determinants of sustainability reporting decision: evidence from Pakistan. *Journal of Sustainable Finance & Investment*, 12(1), 214-237. <https://doi.org/10.1080/20430795.2021.1964813>.

Ikpor, I. M., Bracci, E., Kanu, C. I., Ilevoli, R., Okezie, B., Mlanga, S., & Ogbaekirigwe, C. (2022). Drivers of sustainability accounting and reporting in emerging economies: evidence from Nigeria. *Sustainability*, 14(7), 3780. <https://doi.org/10.3390/su14073780>.

Institute of Chartered Accountants. (2024). Market readiness for IFRS S1 and S2 sustainability disclosure reporting standards implementation in Ghana. Ghana-Accra: Accountancy House.

International Financial Reporting Standards Foundation. (2023). IFRS Sustainability Disclosure Standards. In (Vol. IFRS S1 and IFRS S2). London-United Kingdom: IFRS foundation Publications Department.

Jeriji, M., & Nasfi, A. (2023). The value relevance of mandatory sustainability reporting assurance. *South African Journal of Accounting Research*, 37(2), 122-138. <https://doi.org/10.1080/10291954.2022.2148887>.

Kampanje, B. P. (2023). Assessing the readiness of the Malawian public companies in the adoption of the IFRS S1 and IFRS S2-Sustainability Disclosure Standards. *International Journal Sustainability Journal*, 1(1).

Krueger, P., Sautner, Z., Tang, D. Y., & Zhong, R. (2021). The effects of mandatory ESG disclosure around the world. *European Corporate Governance Institute–Finance Working Paper* (754), 21-44. <https://doi.org/10.1111/1475-679X.12548>.

Kusuma, K. N., & Gani, L. (2024). Implementation of Published IFRS S1 and S2 Standards Globally. *Dinasti International Journal of Economics, Finance & Accounting (DIJEFA)*, 5(3). DOI: <https://doi.org/10.38035/dijefa.v5i3.2734>.



Lans, W., & Van der Voordt, D. (2002). Descriptive research. In Ways to study and research urban, architectural and technical design (pp. 53-60). DUP Science.

Lehman, G. (1995). A legitimate concern for environmental accounting. *Critical Perspectives on Accounting*, 6(5), 393-412. <https://doi.org/10.1006/cpac.1995.1037>.

Mela, A. (2024). Gap Analysis in Implementing IFRS S1 and IFRS S2: A Case Study at Bank X in Indonesia. *International Journal of Economics Development Research*, 5(2). <https://doi.org/10.37385/ijedr.v5i3.5755>.

Meutia, I., Yaacob, Z., & Kartasari, S. F. (2021). Sustainability reporting: An overview of the recent development. *Account. Financ. Control*, 3(1), 23-39. [http://dx.doi.org/10.21511/afc.03\(1\).2020.03](http://dx.doi.org/10.21511/afc.03(1).2020.03).

Ottenstein, P., Erben, S., Jost, S., Weuster, C. W., & Zülch, H. (2022). From voluntarism to regulation: effects of Directive 2014/95/EU on sustainability reporting in the EU. *Journal of Applied Accounting Research*, 23(1), 55-98. <https://doi.org/10.1108/JAAR-03-2021-0075>.

Permatasari, I., & Narsa, I. M. (2022). Sustainability reporting or integrated reporting: which one is valuable for investors? *Journal of Accounting & Organizational Change*, 18(5), 666-684. <https://doi.org/10.1108/JAOC-12-2020-0204>.

Petersen, A., Herbert, S., & Daniels, N. (2022). The likely adoption of the IFRS Foundation's proposed sustainability reporting standards. *The Business and Management Review*, 13(2).

Pratama, A., Jaenudin, E., & Anas, S. (2022a). Environmental, Social, Governance-Sustainability Disclosure Using International Financial Reporting Sustainability Standards S1 in Southeast Asian Companies: A Preliminary Assessment. *International Journal of Energy Economics and Policy*, 12(6), 456. DOI: <https://doi.org/10.32479/ijeep.13581>.

Pratama, A., Jaenudin, E., & Anas, S. (2022b). Environmental, social, governance sustainability disclosure using international financial reporting sustainability standards S1 in Southeast Asian companies: a preliminary assessment. *International Journal of Energy Economics and Policy*, 12(6), 456-472. DOI: <https://doi.org/10.32479/ijeep.13581>.

Rezaee, Z., Homayoun, S., Poursoleyman, E., & Rezaee, N. J. (2023). Comparative analysis of environmental, social, and governance disclosures. *Global Finance Journal*, 55, 100804. <https://doi.org/10.1016/j.gfj.2022.100804>.

Sabauri, L., & Kvatashidze, N. (2023). Sustainability reporting issues. *Entrepreneurship and Sustainability Issues*, 11(2), 282-289. [http://doi.org/10.9770/jesi.2023.11.2\(19\)](http://doi.org/10.9770/jesi.2023.11.2(19)).

Task Force on Climate-Related Financial Disclosures. (2023). Task Force on Climate-related Financial Disclosures 2023 Status report.

Thompson, E. K., Ashimwe, O., Buertey, S., & Kim, S.-Y. (2022). The value relevance of sustainability reporting: does assurance and the type of assurer matter? *Sustainability Accounting, Management and Policy Journal*, 13(4), 858-877. <https://doi.org/10.1108/SAMPJ-08-2021-0329>.

Sun, Z. (2024). Evaluation Singapore's Sustainability Reporting Alignment with the IFRS S1 Standards. *Preprints* 2024, 2024090236. <https://doi.org/10.20944/preprints202409.0236.v1>.

Wachira, M. M., Berndt, T., & Romero, C. M. (2020). The adoption of international sustainability and integrated reporting guidelines within a mandatory reporting framework: Lessons from South Africa. *Social Responsibility Journal*, 16(5), 613-629. <https://doi.org/10.1108/SRJ-12-2018-0322>.

Wasara, T. M., & Ganda, F. (2019). The relationship between corporate sustainability disclosure and firm financial performance in Johannesburg Stock Exchange (JSE) listed mining companies. *Sustainability*, 11(16), 4496. <https://doi.org/10.3390/su11164496>.

Whittingham, K. L., Earle, A. G., Leyva-de la Hiz, D. I., & Argiolas, A. (2023). The impact of the United Nations SUSTAINABLE DEVELOPMENT GOALS on corporate sustainability reporting. *BRQ Business Research Quarterly*, 26(1), 45-61. <https://doi.org/10.1177/23409444221085585>.