



College of Law and Management Studies

School of Accounting, Economics, and Finance

**An assessment of Environment, Social, and Governance (ESG)  
implementation and firm performance of Johannesburg Stock  
Exchange-listed firms**

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This thesis is submitted in fulfilment of the requirements for the degree of Doctor  
of Philosophy (Finance)

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## **Declaration**

I, Wilfreda Indira Chawarura (student number 223016211), declare that this thesis titled “**An assessment of Environment, Social, and Governance implementation and Firm Performance of Johannesburg Stock Exchange-listed Firms**” and the material enclosed in this PhD thesis is an outcome of my original empirical research work. I, as a result of this, proclaim that:

- This research project was conducted when I was a PhD (Finance) candidate at the University of KwaZulu-Natal.
- The research work has not been previously submitted in its totality or part, at any other institution for the award of any degree.
- I have acknowledged all sources through referencing and citations; and
- I authorise the University of KwaZulu-Natal to replicate the whole or any section of this thesis for research purposes in any way possible.

**Wilfreda Indira Chawarura**

Full Name

**11/11/2024**

Date

## **Dedication**

My baba, Benedict

## **Acknowledgements**

Firstly, I would like to give my greatest gratitude to God for giving me the strength and wisdom to keep pushing. Many times, I would have given up, but you upheld me and gave me the grace to complete.

This endeavour would not have been possible were it not for the support and guidance from my supervisors, Professor Mabutho Sibanda and Dr Kuziva Mamvura. I am grateful for the mentorship, unwavering advice, expertise and support throughout my study period at the University of KwaZulu-Natal. It was indeed an honour to work under the supervision of such prodigious minds.

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## **Abstract**

This study assesses the implementation of Environment, Social, and Governance (ESG) practices and their impact on firm performance among companies listed on the Johannesburg Stock Exchange (JSE). As ESG factors increasingly influence corporate strategy and stakeholder decision-making, understanding their effect on financial and non-financial outcomes, such as ESG reporting styles used by listed firms, becomes essential. The study assesses the extent to which JSE-listed firms integrate ESG principles into their operations, governance structures, and reporting frameworks. It also examined the roles of government, regulators, and investors in ESG implementation. Using a combination of quantitative methods, including the system Generalised Method of Moments, qualitative content analysis on corporate disclosures, and scoping review methodology, the study examined the relationship between ESG implementation and key performance indicators, such as stock performance and market valuation. Additionally, the study examined impression management in ESG reports and chairman's statements. Using scoping review methodology, the study assessed the South African government, regulators, and investors' progress towards adopting ESG in their policies, laws, and investment decisions, as well as research output on ESG implementation in South Africa. This multi-method approach employed in this study enhanced the robustness of findings, offering both empirical and interpretive insights into ESG implementation challenges and successes. In addition, this methodological triangulation enhanced academic rigor while maintaining readability for industry practitioners. The findings suggest a positive correlation between strong ESG practices and improved financial performance, with firms demonstrating robust governance frameworks, environmental stewardship, and social responsibility achieving superior market returns and stakeholder trust. However, the study also identified challenges, including inconsistent ESG reporting, impression management, and varying quality of ESG disclosures across industries. The results underscore the increasing significance of ESG factors in corporate performance, underscoring the need for enhanced regulatory standards and greater transparency in ESG reporting. In addition, the study contributes to the body of literature on sustainable business practices and provides valuable insights for investors, policymakers, and corporate managers in navigating the evolving ESG landscape.

**Keywords:** Environment, Social, Governance (ESG); firm performance; regulators; sustainability; investors; impression management.

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## List of Acronyms

BASA	Banking Association of South Africa
B-BBEE	Broad-Based Black Economic Empowerment
BEE	Black Economic Empowerment
CCPI	Climate Change Performance Index
CDP	Carbon Disclosure Project
CDSB	Climate Disclosure Standards Board
CEO	Chief Executive Officers
CERES	Coalition for Environmentally Responsible Economies
CIB	Corporate and Investment Banking
CRISA	Code for Responsible Investment in South Africa
DJSI	Dow Jones Sustainability Index
EPS	Earnings per Share
ESG	Environment, Social, and Governance
FRC	Financial Reporting Council
FSC	Financial Sector Code
FSCA	Financial Sector Conduct Authority
EU	European Union
GAAP	Generally Accepted Accounting Principles
GEPF	Government Employee Pension Fund
GHG	Greenhouse Gas (GHG)
GRI	Global Reporting Initiative
IFRS	International Financial Reporting Standard
IIRC	International Integrated Reporting Council
IoDSA	Institute of Directors South Africa
IR	Integrated Reporting
ISSB	International Sustainability Standards Board
JSE	Johannesburg Stock Exchange
MOU	Memorandum of Understanding

MPRDA	Minerals and Petroleum Resources Development Act
NCCRP	National Climate Change Response Policy
NDC	Nationally Determined Contribution
NEMA	National Environmental Management Act
PIC	Public Investment Corporation
PRI	Principles of Responsible Investment
ROA	Return on Assets
ROE	Return on Equity
SASB	Sustainability Accounting Standards Board
SDGs	Sustainable Development Goals
SEC	Security Exchange Commission
SICS	Sustainability Industry Classification System
SME	Small to Medium Enterprises
SRI	Socially Responsible Investment
SSE	Sustainable Stock Exchanges
TCFD	Taskforce of Climate-related Financial Disclosure
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNPRI	United Nations Principles for Responsible Investment
US	United States of America
VIF	Variance Inflation Factor
VRF	Value Reporting Foundation

# **Chapter 1: Introduction and Background**

## **1.1 Introduction**

Environment, Social and Governance (ESG) was first introduced in South Africa through the King's Report in 1994, which served as a guide for ethical and effective leadership among South African listed companies. In 2004, the Johannesburg Stock Exchange (JSE) launched a Socially Responsible Investing (SRI) index to reinforce governance and socially conscious themes such as the environment, society, and ethics. Over the years, investor interest in ESG has grown both globally and locally. In 2022, the JSE introduced sustainability disclosure guidelines to assist JSE-listed companies in navigating the ESG landscape, highlighting the country-specific sustainability challenges that need to be considered in their ESG reports. Despite these initiatives, South Africa faces post-colonial developmental challenges and the resource curse, failing to benefit from its abundant natural resources (Atsu & Adams, 2021). This study seeks to investigate how listed companies incorporate ESG into their operations and test the robustness of these initiatives. The effects of ESG on firm performance are analysed to establish whether the relationship encourages firms to adopt and implement ESG practices, ensuring that government, regulators, and other stakeholders comprehend the roles and challenges that South Africa faces in implementing ESG.

The chapter presents the background and motivations of this study, highlighting the history and evolution of ESG, as well as various reporting frameworks aimed at enforcing accountability and implementation. It also discusses the problem statement, objectives, research questions, and a brief overview of the methodologies used. Additionally, the chapter includes the significance of the study, contributions, delimitations, assumptions, and the thesis outline.

## **1.2 Background and motivations**

Environment Sustainability and Governance is a concept that dates back to 1960 when socially responsible investing was introduced to align investments with personal values (Townsend, 2020). Under socially responsible investment, investors were encouraged to refrain from investing in companies involved in controversial activities such as weapons and tobacco. In addition to promoting socially responsible investment, there was increased environmental concern in the 1970s, which led to the creation of the first environmental funds, also known as conservation trust funds. Environmental funds provided a source of long-term conservation finance and sustainable development by financing national environmental strategies such as wildlife and conservation

(Jenkins et al., 2017). The Brundtland Report of 1987 introduced the concept of sustainable development, marking a step beyond conservation. Sustainable development is defined as the ability to meet current needs without compromising the needs of future generations. Initially aimed at countering ecological disasters stemming from environmental degradation and the commercial exploitation of resources, the understanding and definition of sustainable development have evolved over the years (Hajian & Kashani, 2021; McChesney, 1991).

To achieve sustainable development, the United Nations Conference on Environment and Development in 1992 emphasised the importance of considering environmental and social factors in investment decisions. However, it was not until the late 1990s that the concept of ESG began to be widely recognised and implemented by companies. For example, the Dow Jones Stock Exchange launched the Dow Jones Sustainability Index (DJSI) in 1999 to encourage sustainable investment and sustainable business practices (Li et al., 2021). The recognition of ESG by firms can also be attributed to the Global Reporting Initiative (GRI), which was implemented in 1996 (Aljajawy et al., 2022). The GRI enabled corporations to understand, measure, and communicate their sustainability impact through a reporting framework.

The United Nations (UN) Principles for Responsible Investment (PRI) was launched in 2006, marking the first use of the term "ESG" in 2006. These principles were created to achieve a global sustainable financial system that rewards long-term sustainable investment and yields positive externalities for the environment and society as a whole (Kell, 2013; Li et al., 2021). Dorfleitner, Kreuzer, & Sparrer (2020) observed that companies had shifted towards Sustainable Development Goals (SDGs), introduced in 2015 as a reference in their ESG reporting framework. This resulted in various reporting frameworks being adopted by different companies in South Africa, leading to a lack of homogeneity in ESG reports. Despite this, SDGs apply to all sectors, and firms can achieve sustainable development goals through ESG practices. Thus, by managing ESG risks and opportunities, firms can set and achieve specific SDG targets by 2030, demonstrating the complementary nature of these two concepts.

ESG implementation is still in its infancy in Africa, driven by demand for sustainable investment products from a few investors looking to align their investments with their values and the United Nations Sustainable Development Goals (SDG) (Li et al., 2021; Singhania & Saini, 2021). The SDGs have been critical in the global adoption of ESG by countries and listed companies (Alam

& Peter, 2022). The 17 SDGs highlight areas that need urgent attention, such as poverty eradication, climate action, responsible consumption and production, good health, and preservation of life, both on land and in water are areas that critically affect Sub-Saharan Africa. According to UNDP (2022), an estimated 821 million people are undernourished due to land degradation, drought, and biodiversity loss. Companies need to reduce their ecological footprints by shifting their resource consumption and production strategies.

Mining and other exploration activities have led to land degradation and desertification of approximately 3.6 billion hectares of poor communal lands (UNDP, 2022). Sub-Saharan Africa is the worst affected by climate change despite producing the lowest greenhouse gas (GHG) emissions at 3.8%, compared to China at 23%, the US at 19%, and the EU at 13%. Africa is particularly vulnerable due to its low adaptive capacity (Serdeczny et al., 2017). Hence, both South Africa and listed companies need to adopt ESG. This need is further supported by existing literature that provides evidence of negative ecological footprints in South Africa from economic development (Jahanger et al., 2022; Nair et al., 2021). Africa is the most commodity-dependent region in the world, facing pressing developmental issues. Most of its income comes from the exploitation and extraction of natural resources such as coal, oil, and gold, South Africa is no exception (Atsu & Adams, 2021). Appiah-Konadu, Amoah and Acquah (2022) stated that given the developmental challenges faced by African countries, ESG implementation could effectively occur only if investors considered the complex context-specific factors that inhibit ESG adoption in Africa. Some of these factors are beyond current global ESG frameworks; nevertheless, ESG, though a new phenomenon in Africa, has the potential to address the continent's environmental, social, and economic challenges through public-private partnerships (Sonko & Sonko, 2023). Additionally, there is still a need for robust and enforced ESG regulatory frameworks, transparent stakeholder engagement, and institutional capacity building to achieve successful ESG adoption in Africa and prevent unscrupulous investors from taking advantage of the porous systems (Springer et al., 2023).

Considering the above, post-apartheid South Africa has developed, adopted, and enacted several policies and laws to address the country's ESG challenges (Pfaff, 2021). Laws and policies such as the National Climate Change Response Policy, Code for Responsible Investment, Regulation 28, the Carbon Tax Act (Act No. 15/2019), and the King IV Report of 2016 have been put in place.

However, these policies have been hampered by corruption, weak governance, and post-colonial challenges such as continued resource extraction with little to no beneficiation, which obscures the progress of ESG implementation (Pfaff, 2021). Continued exploitation of resources has resulted in land degradation (Sibanda & Ndlela, 2019). Thus, ESG implementation in South Africa primarily addresses political economy issues, viewing Africa as a source of resources for the developed world, which has impeded ESG progress (Pfaff, 2021). Additionally, the lack of a standardised ESG reporting framework and poor data quality hinder investors from effectively comparing ESG performance and risk mitigation across companies (Zumente & Bistrova, 2021).

South Africa is a founding signatory to the 2012 Sustainable Stock Exchanges (SSE) initiative launched at the United Nations Global Compact forum (Kell, 2013). This initiative aimed to promote sustainable finance and align capital markets with public policy goals on the sustainable development of stock exchange investments. Under South African laws, listed companies are not explicitly required to disclose ESG matters. However, must publish their ESG reports on an apply-and-explain basis as per Johannesburg Stock Exchange (JSE) listing requirements (Pfaff, 2021). The lack of explicit ESG disclosure regulation raises fundamental issues regarding the governance of firms in a country dominated by the extractive industry, which constitutes a significant portion of the JSE top 40 listed firms. The absence of punitive regulation and a standardised reporting framework has led to the greenwashing of reports by listed companies to meet listing requirements (De Silva Lokuwaduge & De Silva, 2022; Lee & Suh, 2022). Kim and Yoon (2020) observed that being signatories of the UN Principles for Responsible Investments led to increased capital inflows. However, most companies did not comply with ESG requirements in their operations despite using their ESG affiliation as an advertising tool to attract investors.

On the other hand, competition from alternative socially responsible investments such as ESG traded funds has led firms to voluntarily disclose their ESG activities. However, existing evidence shows that two-thirds of listed companies symbolically report on ESG to legitimise their operations by mapping ESG on existing activities (Lee & Suh, 2022; Silva, 2021). Furthermore, the integrity of ESG investing has been questioned, as it is difficult to ascertain if green financing is being used to finance green projects (Pérez et al., 2022). Other studies have shown that ESG implementation can positively influence firm performance and investor confidence (Saini et al., 2022; Shakil et al., 2019). However, Pérez et al. (2022) argues that there is a lack of a meaningful relationship between

ESG and firm performance. Listed companies, in a bid to maintain their social contracts and appease various stakeholders, have started to embrace ESG in their operations (Lee & Suh, 2022). Returns and shareholder value maximisation are no longer the only factors investors consider when making investment decisions due to the devastating effects of climate change resulting from environmental degradation (Lee & Suh, 2022). On the other hand, the Russia-Ukraine war led to a surge in demand for traditional energy sources, coercing investors to shift their funds towards ESG-unfriendly investments (Jiang et al., 2023). Interestingly, Basnet et al. (2022) found that companies with high ESG scores were more likely to disinvest in a warring country than firms with low ESG ratings, suggesting that a high ESG rating is a jewel to be protected at all costs.

Universal ESG metrics use the one-size-fits-all approach, yet the ESG materiality taxonomy needs to be attuned to a specific country or region's level of development and industrialisation. In South Africa, the need for ethical procurement and support of marginalised black small to medium enterprises is of paramount importance (Pfaff, 2021). This challenge is exacerbated by a lack of homogeneity in ESG measurement concepts among international ESG rating agencies (Dorfleitner et al., 2020). Unstandardised ESG measurements have resulted in various reporting styles between local and multinational companies, leading to unbalanced reports that emphasise either the "E," "S," or "G" of the ESG framework, depending on current global issues (Lee & Suh, 2022; Li et al., 2021). Recently, environmental aspects (E) have dominated reports due to global climate change, while the governance aspect (G) was more prominent during the 2007-2008 financial crisis (Lee & Suh, 2022; Pérez et al., 2022). This inconsistency in reporting all aspects of ESG is attributed to the distinct nature of the three components (Pérez et al., 2022). It can be further argued, as claimed by Pérez et al. (2022), further argue that ESG is more of a fad and may eventually fade away. ESG reporting is predominant in Europe, where it is a mandatory requirement, and companies are penalised for contravening ESG standards, enforcing accountability in business operations (Chen & Xie, 2022). The mandatory ESG reporting in Europe is not seen as a public relations gimmick to distract stakeholders while a profit maximisation (Pérez et al., 2022).

This study investigates the level of impression management in the chairman's statements and responsibility reports in South Africa to determine whether ESG reporting is merely a public relations gimmick. It also seeks to establish the role of various actors, namely, the government,

investors, and regulators, in ESG implementation. The study acknowledges that a balanced portfolio of ESG implementation and shareholder value maximisation is fundamental to the survival of firms. Therefore, the relationship between ESG reporting and firm performance in South Africa will be modelled to explore the ESG-shareholder value maximisation nexus.

### **1.3 Problem Statement**

South Africa faces post-colonial and developmental challenges, such as declining GDP and climate change-related socio-economic unrest, while needing to adhere to the Sustainable Development Goals as a United Nations member. This requires effective implementation of the SDGs through a functional ESG framework (Litvinenko et al., 2022). The government must balance economic development and sustainability to mitigate climate change impacts and ESG transition risks (Appiah-Konadu et al., 2022). The ESG implementation is further complicated by the need to address past apartheid injustices, emphasising diversity and community participation (Ndirangu Ngunjiri, 2023). The unpredictable nature of ESG threats highlights the need for effective measures to assess and mitigate environmental, social, and governance risks by the government, regulators, and investors. Therefore, it is essential to explore the roles of these stakeholders in ESG implementation in South Africa. In the same vein, the need for companies to address their negative externalities has become paramount to legitimise operations and maintain the social contract (Deegan, 2019; Hamza & Jarboui, 2022; Pérez et al., 2022). However, many companies resort to greenwashing in their reports to appease investors and stakeholders. A lack of a committed board guided by a clear ESG vision leads to greenwashing, with some managers using ESG to cover corporate scandals (Al-Hiyari et al., 2023; De Silva Lokuwaduge & De Silva, 2022). This issue is compounded by global business leaders who merely pay lip service to ESG as a risk-mitigating tool. Evidence from the developed world shows that two-thirds of listed companies symbolically report on ESG by mapping it to existing activities (Silva, 2021).

The impact of ESG on corporate decision-making is still evolving in South Africa. Firms need to embrace ESG and allow it to mature and develop within their organisations beyond mere compliance. A shift in ESG corporate thinking is necessary in South Africa (Morais et al., 2024). The absence of a legal framework to penalise non-compliance is problematic (Bhana, 2009; Khan et al., 2021; Ozsozgun Caliskan et al., 2021). Furthermore, inconsistency in ESG reporting styles between local and multinational companies due to the lack of a proper reporting framework in South Africa. (Lee & Suh, 2022; Ozsozgun Caliskan et al., 2021; Zumente & Bistrova, 2021).

These inconsistencies could lead to greenwashing of reports and challenges in ESG implementation, rather than facilitating the effective application of ESG frameworks for the betterment of society.

Furthermore, there is a scarcity of knowledge on ESG implementation in South Africa. Various laws and frameworks have been implemented to promote ESG adoption. However, there is a lack of literature measuring the effectiveness of these policies and laws (Morais et al., 2024, Johnson et al., 2019). Previous research on ESG in South Africa has mainly focused on corporate governance, and little research has been conducted on all three aspects of ESG, both aggregated and disaggregated (Johnson et al., 2019). On the other hand, the results from the few studies that have examined ESG and firm performance in South Africa have been inconclusive (Al-Hiyari et al., 2023; Chininga et al., 2023; Masongweni, & Simo-Kengne., 2024; Sandu, 2023). Additionally, strong regulatory agencies are critical for establishing ESG frameworks, and government structures act as drivers of change (Ndirangu Ngunjiri, 2023). However, there is a gap in the literature regarding the roles of the government and regulators in ESG implementation in South Africa. Investors react positively to ESG news, and ESG investing during crisis periods has a positive effect on stock price returns. (Magubane & Wesi, 2023; Nyakurukwa & Seetharam, 2023). However, little research has been conducted on the role of investors in ESG implementation in South Africa.

#### **1.4 Objectives**

This study seeks to achieve the following objectives:

- To explore the role of government, regulators, and investors in ESG implementation in South Africa from 2000 to 2022.
- To corroborate the use of impression management on ESG reporting and the chairman's statements on the JSE Top 40 listed firms from 2018 to 2022.
- To determine the impact of ESG on the financial performance of JSE-listed companies from 2002 to 2022.

#### **1.5 Research Questions**

This study is guided by the following research questions:

- Do the South African government, regulators and investors play an important role in ESG implementation?
- Is there use of impression management in ESG reports and the chairman's statement on JSE's top 40 listed companies?
- Is there a relationship between ESG and the financial performance of JSE-listed companies?

### **1.6 Justification of the study**

There is a lack of consensus on the extent of ESG adoption in South Africa (Al-Hiyari et al., 2023; Singhania & Saini, 2021). Thus, the study consolidates and clarifies ESG trends in South Africa given its unique history. This study, in addition, informs investors of the ESG risks and opportunities inherent in South Africa. As well as inform policymakers on the effectiveness of current ESG mandates. Moreover, studies examining the extent to which listed companies adhere to and implement ESG regulations in response to the global pressures for green economies remain inconclusive ((Alareeni & Hamdan, 2020; Martins et al., 2020; Yasseen et al., 2019). Research in other countries has revealed varying degrees of greenwashing in reports, and in South Africa, findings regarding levels of impression management in the chairman's statements and ESG reports are inconclusive (Aluchna et al., 2022; De Silva Lokuwaduge & De Silva, 2022). Additionally, studies have shown an inconclusive relationship between ESG implementation and firm performance, prompting an exploration of this relationship within the South African context. Thus, this study critically examines whether ESG reporting in South Africa enhances shareholder value, challenging prevailing assumptions and providing empirical evidence to reconcile fragmented perspectives on its financial impact (Ahmad et al., 2021; Alareeni & Hamdan, 2020; Chen & Xie, 2022; Mohammad & Wasiuzzaman, 2021). Furthermore, the roles of the government, investors, and regulators in effective ESG implementation in the South African economy, given its level of development and post-colonial challenges, have not been fully explored (Zumente & Bistrova, 2021). Ultimately, studies on the nexus between ESG reporting and shareholder value maximisation have produced inconclusive findings (Bebchuk et al., 2022; Sheehan et al., 2023) Thus, there is a need to contribute to the discourse on the connection between ESG reporting and shareholder value maximisation using evidence from South Africa.

## **1.7 Methodology**

The thesis is based on three articles that constitute chapters three, four and five. To carry out this research, the study employed three distinct methodologies to address the three key objectives guiding the research. Chapter three used the first methodology, a scoping review, to examine the roles of government regulators and investors in ESG implementation. The study adopted Arksey & O'Malley's (2005) five-stage scoping review framework to systematically map the fragmented literature on ESG implementation roles in South Africa. This method was selected because it enabled the study to identify gaps in under-researched areas such as nuanced government, regulators and investors' roles. In addition, it synthesised heterogeneous sources such as reports and articles in the South African socio-historical context. This review followed a constructivist philosophy, allowing the researcher to provide a contextual and subjective interpretation of the roles of government, regulators, and investors in ESG implementation. The constructivist philosophy enabled contextual interpretation of roles through discourse analysis of reports and articles. This approach captured South Africa's unique socio-historical ESG landscape while embracing reflective iteration for nuanced insights. The qualitative nature of the scoping review enabled the use of journal articles and reports as data sources, while also acknowledging the researcher's role in data interpretation. Furthermore, this methodology allowed the study to be contextualised within the unique historical, cultural, and social landscape of South Africa, with discourse analysis facilitating attention to language and tone in the reports. The scoping review methodology also embraced reflective iteration, allowing continuous revision of article analysis based on emerging insights, thus enriching the findings and leading to more nuanced interpretations over time. The iterative vetting process to ensure relevance culminated in 34 high-confidence articles and reports being reviewed in the study

The fourth chapter employed a quantitative-qualitative content analysis to examine impression management in ESG reporting among JSE Top 40 companies (2018–2022), guided by legitimacy and signaling theories. The methodology was selected for its ability to systematically analyse disclosure quality on a coded 200 chairman's statement and 200 sustainability reports across three sectors using predefined categories namely; linguistic features (passive voice, tone positivity), quantitative rigor (financial/non-financial metrics, time references), and structural elements (report length, readability). In addition, the methodology ensured objectivity through intersubjective verification of codes (García-Sánchez & Araújo-Bernardo, 2020). Finally,

the methodology enabled the study to test for sectoral differences using non-parametric tests such as the Kruskal-Wallis for cross-sector comparisons and the Mann-Whitney for intra-sector ESG vs. chairman's reports to address non-normal data distribution (Pentz et al., 2021). Supplemented with Dunn pairwise tests to identify specific sectoral contrasts (Bensken et al., 2021). This approach enabled the researcher to analyse ESG reports and chairman's statements through the lens of dialectical thinking and pluralism, which emphasises understanding multiple, often conflicting perspectives. Content analysis under dialectical pluralism allowed the researcher to explore contradictions and tensions present in the reports, leading to a deeper understanding of the conflicting viewpoints embedded in the texts. This methodology also considered power dynamics, ideologies, and the importance of historical and contextual sensitivity in the interpretation of ESG disclosures. In this framework, content analysis is not limited to examining the content itself but also challenges the methods used to produce, interpret, and consume the data.

The fifth chapter employed a dynamic panel data analysis of JSE-listed companies (2002-2022) to examine ESG's financial impact, addressing endogeneity through System GMM (Arellano & Bond, 1991). The methodology was structured. This methodology was inspired by postpositivist philosophy. Post-positivism strives for the most reliable and contextually rich results while acknowledging the limitations and potential biases in the findings. The study utilized the System Generalized Method of Moments (System GMM) estimator, a robust technique for addressing endogeneity in explanatory variables. This approach allowed for scientific rigour in explaining relationships while being cautious in interpreting results. Post-positivism also influenced the selection of variables and model specifications based on the researcher's assumptions and recognised that the findings would be dependent on both the context and the data. Additionally, the postpositivist philosophy allowed for the acknowledgment of multiple interpretations and explanations of the System GMM results, thereby enhancing the transparency, rigour, and reliability of the study's conclusions.

The study by triangulating constructivist qualitative critique, dialectical textual analysis, and postpositivist econometrics, achieved methodological pluralism; balancing depth, conflict-aware scrutiny, and empirical precision to resolve South Africa's ESG value debate with unprecedented rigor

## **1.8 Significance of the Study**

The research is of paramount importance to the government, regulators, and industry practitioners.

### **Government**

The study reveals the level of ESG impression management and the strategies that are being used by listed companies. This knowledge will enable the government to craft ESG laws, policies, and reporting frameworks that are effective and tailor-made for the South African economy. Legal frameworks that measure responsible investment can be enacted. This, in turn, can lead to an inflow of green capital. Furthermore, this study will enable the South African government to achieve sustainable development by understanding how different sectors operate and the challenges they face. This study shows areas and sectors in need of sustainable private-public partnerships, which will benefit marginalised societies and prevent land degradation and marine pollution.

### **Regulators**

This study serves as an ESG watchdog for how listed companies operate under current regulatory frameworks. It identifies regulatory loopholes, challenges, and areas for improvement to help the country meet its SDGs by 2030 and achieve sustainable development. Additionally, it highlights the gaps in legislative laws, regulatory frameworks, and practice. This identification allows regulators and policymakers to craft laws that ensure the successful implementation of ESG in South Africa beyond mere adherence to listing requirements.

### **Industry Practitioners**

Industry practitioners such as institutional investors, fund managers, CEOs, and private investors can use the findings of this study to understand the extent of ESG implementation in South Africa and identify gaps. These gaps can present business opportunities for investors, and corporations can capitalise to achieve sustainable profits. The study highlights sectors where investors are leading or lagging in ESG implementation and areas where they can advocate for public-private partnerships, as successful ESG implementation yields positive externalities for the environment. This study also emphasises ethical business practices, companies must effectively implement ESG into their operations rather than merely incorporating their current activities into ESG reports.

## **Academics**

This study contributes to the discourse on ESG adoption in African countries, where research is still limited. It analyses current ESG literature and identifies research gaps that academics can address to achieve sustainable development. Additionally, the study combines theory and practice through critical analysis and interpretation of financial statements. Furthermore, the scoping review methodology reveals research areas that still need to be explored in South Africa for successful ESG implementation.

### **1.9 Contributions of the study**

The contributions of this study are presented from chapter two to chapter six. This pioneering study assesses ESG implementation and firm performance in South Africa, particularly considering the country's reliance on the extractive industry and its economic challenges. The findings highlight the relationship between impression management in the chairman's statement and the ESG report on a sectoral basis, revealing which sectors are fast adopters and laggards in ESG implementation. The study further contributes to the discourse on impression management by analysing the presence of ESG impression management between the chairman's statement and the ESG reports, noting that most chairman's statements were silent on environmental and social issues, with corporate governance being the dominant topic reported.

This study made significant theoretical contributions by advancing legitimacy and signaling theories in the context of ESG implementation within South Africa. The study revealed a critical dissonance between symbolic ESG signaling in chairman's statements, which disproportionately emphasise governance while neglecting environmental and social issues and substantive ESG performance in sustainability reports, highlighting institutionalised impression management strategies unique to South Africa's extractive-industry-dominated economy. By empirically demonstrating sectoral heterogeneity in ESG adoption (e.g., financials as strategic adopters vs. materials as compliance-focused laggards), the study challenged the uniform application of stakeholder theory and proposed a sectoral typology of ESG decoupling. Furthermore, the study introduced an "ESG Rhetoric-Action Gap" framework, quantifying linguistic tactics like passive voice and selective tonality to detect greenwashing, thereby enriching impression management theory with South African evidence. These insights not only refined institutional and legitimacy-based explanations of ESG disclosure but also provided policymakers with tools to design sector-

specific reporting mandates that bridge the gap between symbolic communication and tangible sustainability performance.

### **1.10 Delimitations of the study**

This study was limited to assessing ESG implementation and firm performance in South Africa. It focused on the roles of the Government, investors, and regulators towards ESG implementation, the chairman's statement and ESG report for impression management, and finally, the relationship between ESG implementation and firm performance among listed firms in South Africa. To fit models, the study adopted real-world data sets in financial statements, ESG reports, and chairman's statements of all JSE-listed firms from 2002 to 2022. Financial data was collected from the IRESS database, Bloomberg, and listed companies' websites. South Africa, facing post-colonial challenges such as economic downturns and unemployment, was one of the pioneering countries to advocate for ESG implementation, starting with the King Report in 1994 and subsequent legislation encouraging responsible investment, such as Regulation 28. Given this background, South Africa is an interesting context.

### **1.11 Assumptions of the study**

The study uses publicly available data from all the JSE-listed firms, and geographically, it is assumed that the sample dataset is a true representation of the South African economy. It is further assumed that the findings from this study portray a fair image of developing countries that rely heavily on extractive industries and where ESG implementation is still in its infancy. The study used annual financial statements and reports, and it assumed that these reports were a true and fair representation of the companies' financial positions.

### **1.12 Thesis outline**

The thesis comprises six chapters with chapter one representing the introduction and motivation of the study, the problem statement, research objectives, research questions, the importance of the study, limitations and delimitations, the thesis outline, and the conclusion. This introduction is followed by three chapters that address the study's three objectives. These three objectives are presented in a manuscript form.

Chapter two reviewed the theoretical literature and institutional frameworks underpinning this study, focusing on legitimacy theory, signaling theory, and stakeholder theory. These theories were examined from the perspective of ESG implementation, thus connecting theory with practice.

Additionally, the chapter analysed the institutional frameworks that govern ESG implementation by firms and the current progress toward the harmonisation of ESG reporting frameworks.

Chapter three reviewed the literature on the roles of government, regulators, and investors in ESG implementation in South Africa, using a scoping review methodology of Arksey and O'Malley (2005). This chapter investigated the reasons and motives for research, emerging trends, and research gaps in ESG implementation in South Africa. The second chapter is divided into five key segments: introduction, methodology, literature review, results, discussion, and findings.

The fourth chapter corroborates the use of impression management in ESG reporting and the chairman's statements on the JSE-listed firms. A mixed-method approach was used to investigate this complex relationship. The chapter analysed ESG reports, sustainability reports, and the chairman's statement to check for the relationship, consistency, ESG targets, and measurements of steps against set targets by firms towards ESG implementation among listed firms vis-a-vis the chairman's statement. Chapter three is divided into five key subsections. Namely, introduction, theoretical and empirical literature review, methodology, findings and results, and conclusions.

Chapter five designs a System GMM model to estimate the relationship between ESG and listed firm performance in South Africa. It also examines the factors that influence ESG in South Africa. The principal goal of this chapter is to find the relationship between ESG and firm performance and identify the factors that influence ESG in South Africa. This chapter is divided into six subsections: introduction, literature review, methodology, sample and data, empirical results and analysis, and conclusions.

Chapter six, the final chapter, starts with the study summary, conclusions, and recommendations of the study. In addition, it gives direction for further research. The chapter is divided into four subsections: introduction, thesis summary and conclusions, findings, implications, contributions, recommendations, and lastly, areas for further research.

### **1.13 Conclusion**

Chapter one provided a comprehensive introduction to the study, outlining the assessment of ESG implementation by listed firms in South Africa. It highlighted that while ESG adoption is still in its early stages, it is significantly shaped by the country's economic challenges and reliance on natural resources such as coal and agriculture. The chapter also detailed the research's background,

motivation, problem statement, objectives, questions, significance, limitations, and assumptions, setting a strong foundation for the study.

Moving forward, Chapter Two will delve into the theoretical and institutional frameworks that guide ESG adoption among South African listed firms. Key theories such as stakeholder theory, legitimacy theory, and signaling theory will be explored to provide a theoretical foundation for understanding ESG practices. Additionally, the chapter will examine the institutional frameworks that facilitate ESG reporting, emphasising their critical role in shaping ESG implementation globally. A detailed analysis of the history, development, and significance of these frameworks will be provided to offer deeper insights into their influence on corporate ESG practices.

## Chapter 2: Theoretical and Institutional Frameworks

### 2.1 Introduction

This section provides a brief discussion of theoretical arguments on ESG implementation and firm performance discourse. Furthermore, the chapter presents the current institutional frameworks guiding ESG adoption by firms in South Africa and globally. Three theories are reviewed: the stakeholder, signaling, and legitimacy theories. In the ever-developing landscape of ESG, an understanding of the theoretical and institutional frameworks is important for a comprehensive analysis of the topic. This chapter probes the theoretical reinforcements and institutional contexts that silhouette and influence ESG practices and implementation. By integrating insights from various theories and examining the role of institutional structures, this chapter aims to provide a solid foundation for analysing the roles of government, regulators, and investors in ESG implementation, corroborate the chairman's statement and the ESG report for impression management, and finally analyse the relationship between ESG and firm performance.

### 2.2 Stakeholder Theory

The *stakeholder theory*, developed by Edward Freeman in 1984, postulates that a business has relationships with various stakeholders for whom it creates value (Donaldson & Preston, 1995; Freeman, 2010; Parmar et al., 2010). According to the stakeholder theory, managers are responsible for the relationships between the business and its various stakeholders (Freeman, 1998; Laplume, Sonpar, & Litz, 2008). These stakeholders include employees, suppliers, customers, and communities. Every organisation must systematically identify all stakeholders affected by the firm's activities or who have an interest in the firm's operations. Interestingly, such relationships can change over time, and conflicts can arise; thus, executives must find solutions that ensure business continuity and value creation for all stakeholders (Freeman, 1999). According to Freeman, the alignment of stakeholder relationships enables firms to avoid moral failures.

Stakeholder engagement is paramount for successful stakeholder theory implementation. Strategies such as surveys and dialogue can be implemented to include various stakeholders in the firm's decision-making process (Parmar et al., 2010). However, Philips et al. (2003) observed that stakeholders' involvement in resource allocation could translate into shareholder maximisation through new value-creation opportunities, which results in a blend of capitalism and

ethics. In support of this notion, Parmar et al. (2010) assert that the stakeholder theory ensures that management is accountable to various constituencies in business deals, thereby reducing the threat of self-dealing.

The concept of business sustainability has recently been expanded to include business ethics and morals (Barney & Harrison, 2020). Management should embed stakeholder contributions into the overall business strategy to ensure alignment of business goals and stakeholder interests. Failure to incorporate the stakeholder theory in business management could lead to financial crises such as the global financial crisis of 2007-2008 (Laplume et al., 2008; Parmar et al., 2010). The stakeholder theory argues that to maximise shareholder wealth, there is a need to create value for all stakeholders (Barney & Harrison, 2020). Managers are expected to commit to value creation, guided by norms, values, and ethics that enhance business efficiency and positively impact society (Barney & Harrison, 2020). The stakeholder theory assists managers in ensuring ethical value creation. Analysing relationships between the business and its various stakeholders can enhance efficiency and firm value (Freeman, 1994; Parmar et al., 2010). Stakeholders are legally and economically bound to an organisation in exchange for a perceived and actual return on their contributions (McGahan, 2021). How a business treats some of its stakeholders can influence the level of trust others have in the company (Barney & Harrison, 2020).

Porter & Kramer (2006) argue that stakeholder needs should be considered, and firms should align their corporate social responsibility with business strategy to achieve shared value. There is an intersection between stakeholder theory and corporate strategy; thus, stakeholder management is crucial for the long-term success of the organisation (Bridoux & Stoelhorst, 2022). Friedman (2006) and Miles (2017) called for a revision of the stakeholder theory, advocating for mutual value creation premised on a balance between shareholder and stakeholder interests. Shared value creation could lead to a strategic partnership between the business and its stakeholders and result in improved firm performance. Additionally, Ayuso et al. (2014) emphasised the need for a balance between ethical practices in corporate governance and stakeholder interests. Despite this, Freeman et al. (2020) observed tension in balancing conflicting stakeholder interests in practice. This gap between theory and the practical application of stakeholder theory has posed challenges for firms as they struggle to reconcile diverse and sometimes conflicting interests. These conflicts are fuelled by different power dynamics among stakeholders. Recognising stakeholder conflicts is an essential

step in ethical conflict resolution and in implementing a practical framework for stakeholder management.

### **2.2.1 ESG and Stakeholder Theory**

In 2019, large capital firms in the US became signatories to a new statement on the purpose of doing business. The Chief Executive Officers (CEOs) pledged allegiance to a new approach, where firms no longer existed solely to maximise shareholder wealth but to serve and meet the interests of all their stakeholders (Signori et al., 2021). This momentous occasion signalled a shift in tide from shareholder primacy to a multi-stakeholder business orientation. Freudenreich et al. (2020) advocated for a change in business perspective from traditional value creation to firms as agents of change that facilitate stakeholder relationships and value exchange. Stakeholder theory provides a practical framework to investigate the dynamic socio-economic environments in which businesses operate. Effective implementation of stakeholder theory requires an organisational cultural shift and a new way of thinking that differs from the traditional, long-established shareholder primacy.

In recent years, ESG has been used as a proxy for stakeholder responsibility by investors in their investment decisions. The ESG is used due to its inclusion of the environmental aspect, which is negatively affected by a firm's production processes (Dinarjito, 2024; Signori et al., 2021). However, ESG metrics are dominantly based on qualitative data and are not directly involved in value creation (Signori et al., 2021). Despite this, ESG implementation has positive buy-ins from internal and external stakeholders, thereby increasing operational efficiency through increased sales, which ultimately translates to improved firm performance and an improved brand image (C. Wang, 2024). A similar study conducted in Sharia-compliant firms found that aggregate and individual ESG scores had a positive influence on firm performance, thus confirming stakeholder theory (Peng & Isa, 2020). The ESG, as a stakeholder value creation proxy, should be considered together with other indices, as ESG scores can be misleading if used in absolute decision-making. This notion is supported by Dinarjito (2024) who found no relationship between ESG and firm performance, as ESG had no moderating effect on profitability, yet profitability affected firm value. This finding implies that ESG ought to be incorporated into the corporate goals and strategy. Thus, ESG should be pursued with stakeholders in mind rather than solely for regulatory compliance.

Stakeholder theory posits that ESG disclosure is part of stakeholder management influenced by external demands, while legitimacy theory suggests that disclosure is primarily driven by the firm's internal need for social acceptance (Abeysekera, 2022; Ngu & Amran, 2021). Thus, companies seek legitimacy to meet stakeholder demands and gain societal acceptance. Firms utilise ESG materiality to legitimise their operations, with business success dependent on maintaining good relationships with internal and external stakeholders (Freeman, 1998). Additionally, focusing on impact and outcomes in ESG reporting enables the firm to communicate to stakeholders its commitment to the environment, society, and good governance (Abeysekera, 2022).

Stakeholder theory gives a holistic approach to corporate responsibility (Parmar et al., 2010). However, the theory is affected by the demand to address the interests of all stakeholders. Different stakeholders have diverse ESG expectations, and navigating and solving these challenges can be complex. Shareholders are mostly interested in the financial performance of the company; on the other hand, a fishing community may be interested in the environment (Freeman, 2023; Freeman et al., 2020). Thus, addressing and balancing the needs of all the company's stakeholders can be complex and time-consuming, as some stakeholders will have conflicting priorities (Abeysekera, 2022; Freeman, 1998; Freudenreich et al., 2020). To overcome this challenge, firms may end up diluting their ESG focus by spreading their efforts thinly, thereby affecting the quality of ESG initiatives. Thus, firms may end up compromising their ethics and greenwashing reports to cover for shortcomings in ESG implementation (Freeman, 2023). Stakeholder theory may result in increased costs and reporting fatigue, as firms are required to consider all the stakeholders' needs, views, and concerns in their ESG reports (Freeman, 2023). In addition, the success of a firm depends on the creation of value for the firm's various stakeholders. However, collecting, reconciling, and balancing the needs of diverse stakeholders tends to be cumbersome for the firm. Thus, in the end, equal treatment and inclusion of all stakeholders is almost impossible given their unique needs and expectations from the firm. The firm is further faced with the conflicting dilemma of transparency versus confidentiality. According to stakeholder theory, firms are required to be transparent with all stakeholders, however, the level of transparency required by stakeholders can be counterproductive. Thus, firms must find a balance between strategic confidentiality and transparency.

## **2.3 Signaling theory**

The *signaling theory* is concerned with the information asymmetry that exists between a signaller and the receiver (Spence, 1978). A dishonest individual can send a misleading signal aimed at benefiting oneself. This poses the risk of undermining the entire population's signaling system (Kharouf et al., 2020). The theory addresses the fundamental communication challenge of transparency in events in which the signaller has an interest but needs to convince the signal receiver of his/her honesty (Yasar et al., 2020). This challenge is exacerbated by the conflict of interest between the signaller and the receiver. In most cases, the signaller has the upper hand as he/she has insider information (Gambetta, 2008). Signals can be intentional or unintentional messages that are sent to be decoded by the receiver to eliminate information asymmetry (Kharouf et al., 2020; Riley, 1974). An effective signal should be fairly priced and credible, and above all, it should reflect the signaller and his/her capabilities (Kharouf et al., 2020). It can be new or additional information, different from that previously held by the receiver (Yasar et al., 2020). The signaling theory has been used to justify voluntary ESG disclosure in financial reporting (Abeysekera, 2022; Shehata, 2014; Ross, 1977). Companies disclose over and above legal and regulatory standards to signal to the market that they are superior to their competitors. Furthermore, ESG reporting significantly reduces information asymmetry between the firm and shareholders (Huang, 2021).

### **2.3.1 Signaling theory and ESG**

In a world of information asymmetry, the signaling theory motivates management to report on the firm's ESG initiatives and activities. Pioneering ESG reporting firms aimed to show the firm's commitment to sustainability and ethical practices to various stakeholders. A firm has no control over how the various business stakeholders interpret these report signals (Huang, 2021). Despite this, signaling theory remains a cornerstone in the ESG and financial performance matrix, with sustainability-conscious firms enjoying a lower cost of capital as they are considered less risky by investors and financiers (Saini et al., 2023). Thus, firms invest a considerable chunk of resources towards the disclosure of favourable ESG activities that investors cannot find anywhere else (Pulino et al., 2022). In addition, firms try to reduce information asymmetry by disclosing their long-term ESG targets and initiatives. By disclosing long-term sustainability plans, the firms will equally be signaling to the market and various stakeholders the firm's commitment to environmental, social, and governance issues (Pulino et al., 2022). Signaling theory further

suggests that stakeholders can punish firms that are not sustainable and disregard ESG implementation by boycotting the firm's products and stocks.

Environmental, social, and governance reporting can be used to reduce information asymmetry between management and shareholders, thereby influencing long-term investments (Huang, 2022). This management theory is used in investment decisions, especially by institutional investors (Yasar et al., 2020). The ESG information from the chairman's statement results in market volatility because the announcement either confirms or contradicts investors' privately held information (Huang, 2022; Huang, 2021; Yasar et al., 2020). The quality of the ESG report is thus integral to the signaling theory (Yasar et al., 2020). Firms that invest in ESG activities do so to signal their commitment to ethical governance and sustainability. The ESG investment signals differentiate ESG firms from traditional firm competitors and, in turn, attract investors who prioritize ESG values (Dhaliwal et al., 2011). Choi, & Wang (2011) observed that investing in ESG activities was costly. Though it signaled a firm's commitment to substantial business practices, unlike the firms that desisted from investing in ESG activities. Interestingly, green investors increasingly use firm ESG metrics as a standard for investment decisions. Companies that achieve high ESG metrics use these accomplishments as signals to attract ESG-focused investors (Huang, 2021). Friske et al., (2023), using a hypothesis based on the signaling theory, observed that initial ESG reporting had an increased cost signal to the market. Continued ESG reporting improved the company's performance in the long run. This improvement was attributed to improved ESG communication signals by the company and enhanced understanding of ESG reports by the investors. External assurance by auditors significantly improved firm performance as it signalled the credibility of reports to investors.

Companies leverage their high ESG scores to enhance their brand and reputation. A strong ESG performance can signal ethical and sustainability reliability to consumers and other stakeholders (Friske et al., 2023; Heinkel et al., 2001). The ESG-leading firms that comply with the above minimum ESG regulatory compliance signal advocacy for higher standards and proactive ESG attitudes toward the market (Abramova, 2024; Ngu & Amran, 2021). The signaling theory thus explains companies' behaviour of investing in and reporting on ESG activities. Such activities can be perceived as the firm's commitment to ethical, responsible, and sustainable business practices. In turn, various stakeholders will deduce the firm's value, risk, and commitment to sustainable

business practices through ESG reports. Such information will influence investors' decisions and other stakeholders' choices and market perceptions. Thus, ESG disclosure helps firms achieve enhanced competitiveness in the market. However, this competitive advantage is short-lived as most listed companies now report on ESG, and most stock exchanges globally are beginning to make ESG disclosure a mandatory listing requirement.

Despite that, signaling theory is a framework for firms communicating ESG and sustainability initiatives, the theory is affected by the potential for greenwashing of reports due to a lack of standardised ESG reporting frameworks and metrics (Krueger et al., 2021). In addition, the lack of standardised reporting frameworks will enable firms to send misaligned signals, such as reporting strong ESG performance, yet in practice, the firm's operations and supply chain will be unsustainable (Krueger et al., 2021; Lee & Suh, 2022). Signal credibility becomes an issue with ESG reports, as no signals are created equal due to the information asymmetry that exists between the firm and its stakeholders (Kharouf et al., 2020). Firms that implement ESG frameworks use a less positive tone in ESG reporting than firms that are non-compliant (Sun et al., 2024). Investors, on the other hand, are affected by information overload in ESG reports, thereby weakening the signal and affecting investor decision-making. Finally, ESG reporting is expensive for smaller firms, thus affecting their ability to send ESG signals into the market, unlike large, listed companies.

#### **2.4 Legitimacy Theory**

Lastly, the *legitimacy theory* was developed by Dowling and Pfeffer in 1975. There are two types of legitimacy theory: macro legitimacy and underlying organisational legitimacy theory (Bitektine & Haack, 2015; Deegan, 2002), with most organisations deriving their reporting styles from the latter. The theory states that a firm has a right to operate if its values are aligned with those of the society in which it operates (Shehata, 2014). There is a social contract between the firm and society that influences how, what, why and when companies report to interested stakeholders to improve society's perception of the company (Deegan, 2002). Organisations are part of a broader social system and must earn the right to resources. Furthermore, only legitimate companies can sustain their right to resources (Deegan, 2019). The concept of legitimacy is affected by the social system in which the business operates; thus, legitimacy is affected by time and place (Deegan, 2019). According to this theory, if the social values of the company align with those of the society in which it operates, organisational legitimacy exists, while a gap between the two systems is a threat

to organisational legitimacy and such a company can be penalised by society (Deegan, 2019; Dowling & Pfeffer, 1975). Thus, according to Deegan (2019), when an organisation's operations are not aligned with social contracts, the company is forced to take remedial action in pursuit of legitimacy.

Sustainability reporting is mostly voluntary; thus, it is important to understand the motive for disclosure, as it influences the reliability of the information provided to various stakeholders (Dinh et al., 2023; Tsang et al., 2023). Deegan, (2002) identified legitimacy as the major motivation behind ESG disclosure. However, there is a lack of evidence on whether legitimising disclosure impacts society's perception of a company or which stakeholders influence legitimising disclosure. Nonetheless, this theory can explain non-financial information disclosure by management (Deegan, 2019; Maama & Appiah, 2019; Schiopoiu Burlea & Popa, 2013). If a firm is successful in legitimising its operations and disclosures, it may result in reduced pressure from stakeholders to introduce regulation (Deegan, 2019). Legitimacy theory can be used to promote accountability and encourage disclosure by firms (Patten, 2019). Annual financial reports are considered integral legitimacy documents for any listed company, and they should thus include regulatory and voluntary information (Shehata, 2014).

Legitimacy theory and signaling theory were adopted because corporate disclosure is influenced by environmental forces and aims to legitimise company actions (Deegan, 2019; Guthrie & Parker, 1989; Khan et al., 2021; Santamaria et al., 2021). Legitimacy theory is the basis for most companies to conduct materiality analysis in sustainability reports (Meutia et al., 2022). To attract investors and improve the company's reputation in the market, management signals certain information to the market, taking advantage of the problem of information asymmetry (Shehata, 2014). In impression management, a company signals to the market what various stakeholders expect of it to legitimise its existence in society.

#### **2.4.1 Legitimacy Theory and ESG**

Firms disclose ESG activities as part of fulfilling the social contract existing between the firm and society. The social contract forces firms to adopt and implement voluntary ESG disclosure guidelines (Hamza & Jarboui, 2022). Such implementations enable firms to survive the turbulent environment in which they operate. Firm operations are guided by social norms and values. Acceptance by society is important. Yet, social values, norms, and expectations are ever-changing.

Firms need to continuously evolve to maintain legitimacy (Meutia et al., 2022). For example, firms in different sectors tend to overemphasise different aspects of ESG depending on what stakeholders consider critical in that industry or country. Thus, firms use both reactive and proactive ESG reporting strategies to maintain legitimacy.

The ESG implementation and reporting can be viewed as a response to society's expectations regarding environmental, social, and governance issues. When faced with legitimacy threats such as the global financial crisis of 2007-2008, firms adopted, adhered to, and reported on corporate governance standards to regain society's trust. Firms that led in ESG adoption tend to be proactive in legitimacy and reputation-building (Pérez et al., 2022). These firms implemented ESG after observing a shift in society's expectations, such as society's concerns about global warming. Equally, pressure from various stakeholders has led to firms reporting and publishing ESG reports as independent reports.

On the other hand, in trying to legitimise their operations, firms may end up subscribing to superficial engagements, where they report on positive aspects of the business and downplay critical issues. A mining company is not addressing the hazards its mining operations have on the environment (Pandey et al., 2023). The theory can force firms to concentrate on the short-run effect of their ESG reporting rather than the long run, due to trying to address current stakeholder concerns and perceptions. After an ESG corporate scandal, a firm will try to legitimise its operations by addressing current stakeholders' concerns in its reports (Al-Hiyari et al., 2023; De Silva Lokuwaduge & De Silva, 2022). This reactionary approach to ESG implementation by firms will not benefit society in the long run. This is worsened by a lack of a standardised ESG reporting framework, which makes it difficult to assess the impact of a firm's ESG activities against a set benchmark (Zumente & Bistrova, 2021).

Legitimacy theory, stakeholder theory, and signaling theory are interconnected frameworks that help explain ESG disclosure and accountability practices by firms. Legitimacy theory posits that organisations must align their actions with societal expectations to maintain their social contract to operate (Deegan, 2002), while stakeholder theory emphasises the need to address the interests of various stakeholders to ensure the long-term success of a firm (Freeman, 1999). In addition, signaling theory complements the legitimacy and stakeholder perspectives by suggesting that firms disclose information to reduce information asymmetry and signal credibility to both society

(legitimacy) and stakeholders (Spence, 1973). Together, these three theories provide a holistic understanding of why companies engage in voluntary ESG reporting, balancing societal expectations (legitimacy), stakeholder demands, and strategic communication (signaling) to enhance transparency and trust (Deegan, 2002).

## **2.5 ESG Institutional Arrangements**

### **2.5.1 International Sustainability Standards Board (ISSB)**

On 3 November 2021, the International Financial Reporting Standards Board (IFRS) announced the formation of the International Sustainability Standards Board (ISSB) (IFRS, 2021). This announcement was made at COP26 in Glasgow after succumbing to market pressures for its establishment. Sustainability is now an integral part of investment decision-making; hence, the demand for a framework that is of high quality and easily comparable globally (De Villiers et al., 2024; Elidrisy, 2024). The ISSB was a response and a panacea to the highly fragmented sustainability standards environment. The ISSB standards revolve around the works of other market-led, investor-oriented initiatives such as the Climate Disclosure Standards Board (CDSB), the Taskforce on Climate-related Financial Disclosure (TCFD), and Integrated Financial Reporting, among other frameworks (Van Wyk & Els, 2023). In addition, the creation of the ISSB resulted in the new board succeeding the International Integrated Reporting Council (IIRC) and the Sustainability Accounting Standards Board (SASB) (De Villiers et al., 2024). Thus, the ISSB was built upon existing financial and sustainability frameworks to achieve unified global sustainability standards.

The ISSB board works in collaboration and alignment with existing standards setters such as GRI to eliminate duplication and improve coherence in sustainability reporting (De Villiers et al., 2024; Elidrisy, 2024; Van Wyk & Els, 2023). For example, under the Memorandum of Understanding with GRI, two pillars were declared: one to do with investor capital market standards and the other aligned with GRI standards aimed at addressing multi-stakeholder needs, though compatible with the first (De Villiers et al., 2024). This union with GRI added market legitimacy to the ISSB, thus strengthening ISSB standards that were being upheld with structural legitimacy only. Also, it aimed to eliminate duplication and align where possible (Millar & Slack, 2024). The standards major on the intersection between sustainability and financial performance. Thus, the ISSB aims to develop a global baseline of sustainability standards that inform investors of the sustainability-related risks and opportunities embedded within a given firm.

To date, the ISSB has produced the IFRS S1 and IFRS S2 standards (Millar & Slack, 2024). These sustainability standards apply to all firms that are required to prepare financial statements per the International Financial Reporting Standards (IFRS). In addition, these two standards aim to incorporate industry-specific disclosure requirements derived from SASB and climate-related recommendations from TCFD (De Villiers et al., 2024). Furthermore, the primary audience for both standards was investors, creditors, and lenders, highlighting the capital orientation of the standards (Millar & Slack, 2024). The IFRS S1 offers the general requirements for the disclosure of sustainability-related financial information. The standard offers guidance on the disclosure of a firm's sustainability-related financial performance information (Millar & Slack, 2024). The IFRS S1 articulates a wide range of sustainability-related information that can affect a firm's financial position. Thus, this standard aims to establish uniformity and comparability in sustainability-related financial disclosures. In so doing, it assists investors in seeing how sustainability factors affect the financial performance of a firm (De Villiers et al., 2024; Millar & Slack, 2024). Furthermore, the standard advocates for the adoption of the materiality principle in ESG disclosure. The disclosure of ESG governance structures and how these structures feed into the sustainability-related risks and opportunities of a firm. Furthermore, firms should disclose ESG risk management processes, sustainability strategies, sustainability-related metrics, and targets. ESG reports should be part of the integrated reports. IFRS S1 heavily borrowed concepts from SASB, hence the need for continued improvement of SASB.

Given the climate change risks, such as global warming and erratic weather patterns that have gripped and are affecting all stakeholders, ISSB's second standard was IFRS S2, which majors specifically on climate-related disclosures. This standard is inspired by the TCFD framework, and IFRS S2 recommendations are heavily derived from the TCFD framework (Millar & Slack, 2024). IFRS S2 gives a structured framework for disclosing relevant climate-related information by firms. This standard enables all stakeholders to fully comprehend how climate-related risks and opportunities feed into and affect a firm's financial performance and position. Thus, IFRS S2 enhances transparency and consistency in climate-related disclosures. Under this standard, firms should disclose the role of the board of directors in climate change activities, the climate strategy of the organisation, climate-related risk management strategy, climate-related metrics and targets, and climate-related physical risks and opportunities, including transition risks that may affect the company because of climate change. The standard's alignment with the TCFD framework brings

about consistency and uniformity in climate-related financial disclosures globally (De Villiers et al., 2024).

The ISSB standards are designed to be applicable globally and to work hand in hand with existing reporting and regulatory frameworks. It enables smoother standard adoption and implementation by companies. Furthermore, the ISSB aims to harmonise existing sustainability reporting frameworks, eliminate fragmentation and achieve uniformity in sustainability reporting across jurisdictions (De Villiers et al., 2024; Elidrisy, 2024). In so doing, the ISSB positioned itself as a crucial player in the evolution of sustainability reporting. However, De Villiers et al., (2024) observed that ISSB was facing a legitimacy challenge for failing to present its agenda effectively in setting up sustainability reporting standards. In addition, allegations of capture by influential stakeholders such as capital providers shrug the ISSB. The board's alignment with IFRS boosts investor confidence; yet, on the other hand, there is a great censure from various stakeholders. The bone of contention arises from the ISSB standards' emphasis on reporting on the risks and opportunities arising from ESG activities while ignoring how a firm's actions are affecting the environment and society (Ali et al., 2023; De Villiers et al., 2024). In addition, the ISSB's focus on business economic activities will only benefit investors and other market players. However, ISSB signed a memorandum of understanding with GRI in 2022 to ensure its standards apply to all stakeholders. There is already technical mapping of GRI standards with IFRS S1 and S2.

Despite all this, there have been other ESG reporting frameworks that were created and existed before the ISSB, and these other ESG reporting frameworks have played a significant role in shaping the ESG reporting landscape globally. ESG reporting frameworks such as the GRI, SASB, TCFD, IR, and the European Sustainability Reporting Standards birthed ESG reporting. These pioneering ESG reporting standards, coupled with growing stakeholder sustainability concerns, forced firms to start reporting on their environmental, social, and governance issues.

### **2.5.2 International Integrated Reporting Council (IIRC)**

The International Integrated Reporting Council (IIRC) was established in 2010 through the Accounting for Sustainability movement and was endorsed by the GRI (Van Wyk & Els, 2023). The IIRC advocated for integrated reporting that encompassed both financial and non-financial disclosure. The integrated reporting concept is used in over 70 countries, including South Africa, by over 2500 firms globally (Van Wyk & Els, 2023). Integrated reporting was stakeholder-

inclusive in its reporting approach as it aimed to communicate how a firm's strategy, performance, and governance created value for the external environment both in the short run and long run. The integrated reporting approach, which is stakeholder-oriented, is aligned with the King IV code (Van Wyk & Els, 2023).

The unique selling point of integrated reports in a sea of other sustainability reporting frameworks was its ability to show the connectivity of information, the interrelation, and the interdependency of different capitals used by firms. Hence, integrated reports emphasised stakeholder standpoints better. Integrated reporting advocated for integrated thinking, which took into cognisance the relationships between the business and its various stakeholders. Integrated thinking could translate into unified decision-making and actions that consider value creation in the business continuity concept (Van Wyk & Els, 2023). However, integrated reporting has been accused of failing to meet the sustainability reports criteria as it majors on the value creation for investors and disregards other stakeholders (Flower, 2015; Pigatto et al., 2023). Furthermore, integrated reporting has been accused of failing to live up to its expectations as a reporting norm, and no significant changes have been made to the reporting framework in over a decade. Consequently, the framework has failed to evolve to meet the dynamic needs of its users (De Villiers & Sharma, 2020; Pigatto et al., 2023; van der Lugt & Mans-Kemp, 2020). In contrast, De Villiers & Sharma (2020) argued that the term value could be interpreted in various ways, such as value to society and other stakeholders. Therefore, aligned with sustainability.

In 2020, IIRC merged with the Sustainability Accounting Standards Board (SASB) to form the Value Reporting Foundation (VRF). This merger was met with criticism from various industry stakeholders since IR enabled various stakeholders to understand a firm's value creation story. Integrated reporting is hinged on six capitals that firms use to create, destroy, or maintain value. The six capitals are financial capital, natural capital, intellectual capital, manufactured capital, human capital, and social capital (De Villiers et al., 2024; Van Wyk & Els, 2023). Thus, the creation of VRF was viewed by various stakeholders as a capture of integrated reporting by investors, as SASB's core mandate was the creation of sustainability reports that meet the informational requirements of investors (De Villiers et al., 2024; Deegan, 2020). While various stakeholders were still processing this information, IFRS announced the creation of ISSB at the UN Climate Change Conference (COP26). This announcement meant that VRF, which housed integrated reporting, was

absorbed into ISSB in 2022 (Ali et al., 2023; De Villiers et al., 2024; Pandey et al., 2023). The role of integrated reporting in the newly formed ISSB is still ambiguous to various stakeholders, though ISSB stated that there is a role that integrated reporting will play in future standard setting. Van Wyk & Els, (2023) opined that integrated reporting's investor-centric nature would align smoothly with ISSB, whose core value is meeting financiers' needs. This, consequently, puts ISSB's credibility as a sustainability reporting framework into disrepute.

### **2.5.3 Sustainability Accounting Standards Board (SASB)**

The SASB, a US sustainability-oriented private organisation, was established in 2011. SASB uniquely introduced industry-specific standards for reporting on environmental, social, and governance (ESG) issues for the benefit of investors (De Villiers et al., 2024; Van Wyk & Els, 2023). These standards were established to achieve accountability, transparency, and comparability of ESG data across industries. In addition, the industry-specific standards aimed to tackle sustainability risks and opportunities inherent in different sectors. The standards are unique in that they are compatible with the traditional Generally Accepted Accounting Principles (GAAP) and, therefore, could be integrated with existing financial reporting frameworks to give investors a comprehensive view of the business (Pizzi et al., 2023). According to SASB, sustainability refers to corporate ESG activities engaged in by firms aimed at addressing environmental, social, and governance issues. By conducting these ESG activities, the firm will maintain or increase its value in the long run.

The SASB created the Sustainability Industry Classification System (SICS) to cater to different materiality in various industries. The SICS system comprises 11 sectors that are further subdivided into 77 industries. The firms are grouped according to analogous industry intensity, sustainability risks, and opportunities (Busco et al., 2020). In addition, SASB identified 26 general sustainability issue categories that were grouped into five major dimensions, namely, business model and innovation, leadership and governance, and environment. social capital and human capital (Busco et al., 2020). SASB goes further to identify disclosure topics and subsets of accounting metrics to be used for each specific industry, and the standards can highlight the link between ESG disclosure topics and financial value drivers (revenue, operating expenses, non-operating expenditure, assets, liabilities, and cost of capital) (Busco et al., 2020). SASB has continuously engaged with investors to ensure that the standards are relevant and applicable to the investment community's needs. For completeness's sake, SASB standards have been used in conjunction with the GRI standards, as

these two standards serve different audiences, achieving financial and social materiality (Busco et al., 2020). SASB standards have been influential in shaping sustainability issues reporting in firms and improving the adoption of ESG factors in investor decision-making and corporate strategy.

In 2020, SASB merged with the International Integrated Reporting Council (IIRC) to form the Value Reporting Foundation before being absorbed into ISSB. The merger with IIRC was aimed at enhancing the integration of financial reporting and sustainability reporting to achieve a holistic view of a firm's performance (Van Wyk & Els, 2023). The mergers were aimed at streamlining global sustainability reporting frameworks and bringing coherence and consistency to ESG disclosures. ISSB aims to use SASB's industry-specific metrics to be the cornerstone of its global sustainability standards (Busco et al., 2020). Since SASB standards are easily integrated with financial reporting standards, this merger will result in enhanced sustainability reporting consistency, easier reporting, and improved ESG information to investors.

Despite the SASB standard's contribution to sustainability reporting, the standards had several drawbacks, such as ignoring other sustainability issues that affect other stakeholders, and emphasising investor materiality (Carvajal & Nadeem, 2023; Pigatto et al., 2023). Furthermore, the standards could be easily adopted and utilised by large firms, unlike Small to Medium Enterprises (SMEs), due to the complexity of reporting requirements and costs in the collection of accurate data. Sustainability issues are dynamic and ever-changing, consequently requiring continuous enhancement of SASB standards, which is costly (Salzillo et al., 2024). There have been allegations that the SASB standards concentrated on financial performance indicators due to their investor-centric nature.

#### **2.5.4 Global Reporting Initiative (GRI)**

The Global Reporting Initiative (GRI) is the pioneering, best-known voluntary ESG reporting framework (Ali et al., 2023). The standards were established in 1997 in Boston, Massachusetts, by a partnership between the Tellus Institute and the Coalition for Environmentally Responsible Economies (CERES) (De Villiers et al., 2024). The original aim of GRI was to develop a corporate sustainability reporting framework. In the year 2000, GRI produced its first sustainability reporting guidelines, which provided a framework for firms to report their environmental, social, and economic impacts. In 2002, the body published a more comprehensive set of guidelines that well-articulated indicators and performance metrics and achieved structured sustainability reporting. In

2006, the GRI introduced its third iteration, called G3, with more comprehensive performance indicators and a strong inclination towards stakeholder inclusivity in a sustainable context (Larrinaga & Bebbington, 2021; Safari & Areeb, 2020). Coherently, the birth of these frameworks led to an increase in sustainability-related disclosures by firms. These sustainability standards brought about rigour, quality, and adoption of sustainability reports among firms in the 2000s.

The GRI reporting standards emphasise the disclosure and development of the environmental, economic, and social performance indicators (De Villiers et al., 2024; Van Wyk & Els, 2023). The GRI further enhanced its guidelines in 2011 by producing guidelines with a strong emphasis on materiality. Companies were encouraged to report on issues pertinent to their stakeholders and that had an extreme impact on firm performance. In 2016, GRI transitioned from offering sustainability guidelines to sustainability standard setting to provide a flexible and structured approach to sustainability reporting (Caradonna, 2022; Larrinaga & Bebbington, 2021). The GRI standards were unique in that they enabled firms to report on all aspects of the organisation's operations harmoniously. Firms were able to report on the environmental, social, governance, and economic aspects of sustainability easily (Ali et al., 2023; De Villiers et al., 2024). Furthermore, in 2018, GRI introduced GRI 101: Foundation, GRI 102: General Disclosure, and GRI 103: Management Approach as enhancements to the GRI standards. In addition to these standards, there were topic-specific standards that were also introduced, aimed at improving clarity, usability, and alignment with other global reporting practices. The standard-making body has continued to refine its standards and guidance to align with emerging universal sustainability reporting inclinations, address imaging issues in ESG reporting, and harmonise its standards with other sustainability reporting frameworks.

In 2022, ISSB signed a memorandum of understanding (MOU) with GRI to collaborate in harmonising the sustainability reporting landscape to decrease the reporting burden on firms (De Villiers et al., 2024; Millar & Slack, 2024). Firms have traditionally used GRI standards to enhance their reputation in the market. GRI's first mandate was to formulate an environmental accountability mechanism to ensure firms operated in environmentally friendly processes. However, over time, the standard-setting body included social, governance, and economic issues. With these developments and advancements, GRI became an all-rounded ESG standard-setter (De Villiers et al., 2024). Thus, GRI established market legitimacy, having gained global recognition

as a primary standard setter that meets multi-stakeholder needs. In addition, it was able to adapt to emerging global challenges such as advancements in technology. For example, GRI in its ‘Sustainability and Reporting 2025’, advocates for the use of technology by both firms and their stakeholders in collecting, verifying, analysing, and managing non-financial data. To add on, the GRI standards focused on the triple bottom line: people, planet, and the organisation.

However, the voluntary nature of the standards was GRI’s major weakness, which enabled scrupulous firms to engage in selective and greenwashing reporting (Ali et al., 2023). Despite this, the GRI standards are widely used globally because they are based on a multi-stakeholder conceptual framework and thus apply to a wide audience (Ali et al., 2023; De Villiers et al., 2024). Thus, GRI enables firms to address stakeholder concerns and meet their informational needs. The standards are also comprehensive and enable comparability among global firms. In addition, the standards continue to evolve and be polished to ensure quality and consistency (Elidrisy, 2024). Thus, GRI standards became institutionalised as ESG reporting standards and were integrated into existing institutional structures as a panacea to the mounting sustainability informational needs.

### **2.5.5 Task Force for Climate-related Financial Disclosure (TCFD)**

In 2015, the Task Force for Climate-related Financial Disclosure (TCFD) was formed by the Financial Stability Board (FSB). The task force was chaired by Michael Bloomberg and comprised experts from various industries. The board was specifically formed to provide a framework for reporting the financial implications of climate-related risks, opportunities, and dependencies (Van Wyk & Els, 2023). The framework was intended to assist investors, insurers, and lenders in understanding and assessing the climate-related financial impacts. The framework revolves around four pillars: governance, strategy, risk management, and metrics and targets (Braasch & Velte, 2023). Firms must disclose their climate-related risk and opportunity governance structures. For example, the role of the company’s board in the management of climate-related issues. Companies are further required to disclose the actual and potential impacts of climate-related risks and opportunities on the firm’s business strategy and financial plans, as well as the climate-related risk management processes and the metrics and targets they use to measure climate-related risks (Caradonna, 2022; De Villiers et al., 2024).

The framework uniquely encouraged firms to engage in scenario analysis to test the robustness of their strategies under different climatic conditions. The TCFD additionally recommends a forward-

looking approach in climate-related disclosures to align with the going concern concept of businesses. Accordingly, firms should show how climate-related risks and opportunities will affect the future business prospects and avoid concentrating on historical data (O'Dwyer & Unerman, 2020). The framework aims to bring consistency in sustainability disclosures across sectors and firms to enhance comparability, and firms must disclose climate-related information materially relevant to the firm's financial performance. In addition, the TCFD recommended that these climate-related disclosures be included in the annual financial reports published to the public (Braasch & Velte, 2023). This implied the investor-centric nature of the recommendations and a strong desire to rally capital allocation for climate-related issues (Van Wyk & Els, 2023). The TCFD recommendations' popularity has increased since 2017, when they were released with numerous firms adopting and reporting based on the framework as part of their response to climate change in their sustainability reports (Arvidsson & Dumay, 2022). The TCFD recommendations are used in conjunction with other sustainability reporting standards such as GRI and SASB. Additionally, the task force continues to fine-tune its recommendations to remain relevant and applicable in the dynamic business landscape.

The task force's lack of stakeholder engagement is one of its major weaknesses in ESG implementation and reporting. Financiers are not the only stakeholders in need of climate-related financial disclosures. The local community may have different climate-related disclosure needs, and are not recommended by the task force. The financial-centric nature of the TCFD recommendations may fail to fully cover the comprehensive environmental, social, and governance impacts wholly, with social risks and outcomes excluded from the recommendations (Brief, 2022; Demaria & Rigot, 2021). Being a voluntary framework, TCFD's recommendations are not mandated. Companies choose what and how to use the recommendations to achieve their agenda. This has resulted in variability in reporting among firms that have adopted and implemented the recommendations. Consequently, this variability makes it difficult for financiers to compare TCFD disclosures across firms and sectors (Braasch & Velte, 2023). However, as of 2020, 110 regulators and governments had endorsed the TCFD recommendations, with some governments making the recommendations mandatory in their jurisdictions and others adopting and incorporating them into their own ESG reporting guidelines (Brief, 2022). The TCFD's recommendations can be daunting and challenging to implement, especially for smaller firms. The climate change scenario analysis can be challenging due to a lack of accurate and reliable climate

data. Despite this, the task force aims to provide regulators and policymakers with a solid foundation upon which they can build climate-related financial disclosure to eradicate regulatory fragmentation haunting sustainability reporting (Brief, 2022). To date, the TCFD's recommendations on climate-related risks and opportunities were the basis upon which IFRS S2 was built, in conjunction with industry-based disclosure requirements derived from SASB (Baboukardos et al., 2022). Thus, meeting the consolidating mandate of the task force.

### **2.5.6 United Nations (UN) Sustainable Development Goals (SDGs)**

The Sustainable Development Goals were birthed at the United Nations Conference on Sustainable Development in 2012 in Rio de Janeiro. The mandate was to set universal goals that addressed the environmental, economic, and political challenges ravaging the world (UNDP, 2022). These goals replaced the Millennium Development Goals, which had been set in 2000 and had run their course in poverty alleviation, expiring in 2015. The 17 SDGs were a step further in addressing pressing global challenges; in addition, these goals were interconnected, and the success of one goal had ripple effects on other goals. Interestingly, it was only in 2015, at the UN Sustainable Development Summit, that the 2030 Agenda for Sustainable Development blueprint was adopted by all United Nations member states. The blueprint housed 17 sustainable development goals, 169 targets, and 244 indicators based on the triple-bottom-line principle (Calabrese et al., 2021). The sustainable development goals aim to create a habitable planet by 2030 by achieving several social and environmental goals, such as climate change, environmental issues, land degradation, poverty alleviation, inequality, and justice (Bose & Khan, 2022). For successful implementation, the SDGs require strategic partnerships between governments and the private sector.

The SDGs were created through a consultative process involving governments, investors, private players, civil society, and other stakeholders. This was aimed at achieving a multi-stakeholder inclusive sustainability framework (Bose, 2020). The SDG Compass was one of the tools that emerged from such synergies of GRI, the UN Global Compact, and the World Business Council for Sustainable Development. This was a tool aimed at fostering creative, sustainable thinking towards SDG reporting (Abeysekera, 2022). Firms are encouraged to map their SDGs by reporting on their value chain, from raw material sourcing to product life. However, as much as the value chain analysis approach is the best approach towards sustainability reporting in an ideal world where everyone is responsible, it can be difficult to implement as it requires the firm to include other variables such as suppliers (Abeysekera, 2022). Countries are encouraged to further localise

the SDGs to meet and achieve the country's sustainability needs (Elalfy et al., 2021). There has been an increase in SDG reporting by firms since their inception in 2015, though the level of reporting varies between countries with mandatory sustainability laws and those without. In addition, Bose & Khan (2022) and Whittingham et al. (2023) observed higher SDG reporting in shareholder-centric countries than in stakeholder-oriented countries. Developing country firms had better SDG reporting than developed country firms. Sustainability reporting frameworks have increasingly embraced the SDGs; yet, there is a strong inclination towards performance. The alignment was more significant towards certain SDG targets than others and varied across industries (Elalfy et al., 2021; Whittingham et al., 2023). These findings were further supported by Tsalis et al. (2020), who observed differences in the breadth and depth of quality of SDG disclosure among Greek firms, firms reported mostly on SDGs 7, 9, 13, and 16 after factoring in the sector in which the firm operated.

Despite the SDGs' contributions to sustainability reporting, several challenges hinder their effectiveness, such as economic disparities between developed and developing countries. These disparities affect the application and adoption of SDGs in various regions. Additionally, there are conflicting sustainability goals, such as economic versus environmental goals. There is a natural trade-off between these goals until a country reaches a certain level of development. Developing countries have limited technical and institutional resources for implementing the SDGs due to pressing developmental challenges that require urgent attention.

### **2.5.7 The Carbon Disclosure Project (CDP)**

The Carbon Disclosure Project (CDP) was created in the year 2000 and focused on corporate environmental impact disclosures (Van Wyk & Els, 2023). According to Redondo Alamillos & De Mariz (2022), Williams & Nagy (2021), and Van Wyk & Els (2023), the CDP is financially supported by major institutional investors since it is a non-profit making organisation. The CDP gathers environment-related information such as climate change, deforestation, and water security from firms through the deployment of a voluntary standard questionnaire to various firms requesting responses to climate and environmental-related issues (Redondo Alamillos & De Mariz, 2022). The organisation aims to encourage sustainable business practices by promoting transparency in environmental reporting by firms and states. The organisation was created due to climate change concerns and the desire to bring greater accountability to firms. Originally, the project only encouraged firms to report on their carbon emissions. Yet, over the years after realising

the interconnected nature of various environmental issues on climate change, the organisation included water and forest management as part of its scope (Williams & Nagy, 2021). The organisation has grown in leaps and bounds over the years, with thousands of firms using the CDP in reporting environmental-related disclosures. The CDP aligns with the Sustainable Development Goals, and such alignment makes it easier for companies to report their contributions to sustainable development.

The organisation uses a standardised instrument in collecting environmental data: this approach enables easy comparability and assessment of reports by stakeholders such as investors and policymakers. Furthermore, the CDP awards scores to firms, and these scores give insight into the firm's environmental practices. Interestingly, CDP data is widely used by investors in making investment decisions and by policymakers in developing climate-related policies. However, large firms mostly participate in the data collection process since they have the resources, unlike smaller firms. Also, since participation is voluntary, companies with better ESG practices may decide to participate, leading to a skewed sustainability outlook. The organisation's findings rely heavily on the honesty of the self-reporting organisation, consequently raising questions about the accuracy and reliability. In addition, the desire for high CDP scores may force firms to report well on the environment-related areas, yet in practice, the firm may not be implementing sustainable practices. Moreover, the disclosure and scoring matrix is a bit complex for smaller companies, consequently deterring their participation in the CDP surveys. Additionally, certain regions of the world do not participate in the CDP surveys, thereby making them less effective as a measure of sustainability. Despite this, CDP has contributed immensely towards sustainability reporting.

## **2.6 Conclusion**

The chapter examined the stakeholder theory, signaling theory, and the legitimacy theory, which aim to explain the behaviour of the firm in adopting and reporting ESG activities. This study is guided by legitimacy theory, which revolves around the social contract that exists between business and society (Ali et al., 2023; Whittingham et al., 2023). The underlying assumption of legitimacy theory is that firms will gain, preserve, or restore their social contract rights to operate only if their activities align with society's norms, values, and beliefs (Braasch & Velte, 2023). Failure to uphold the social contract will result in public and government scrutiny, with the possibility of losing the rights to operate embedded in the social contract. Therefore, legitimacy theory explains firm behaviours such as voluntary ESG disclosure. This is especially true for

mining and carbon-sensitive industries, which are under immense pressure to legitimise their operations (Braasch & Velte, 2023; Deegan, 2019). Thus, firms use ESG disclosure to counter societal and political gravities. This theory also helps to explain the behaviour of firms in opportunistically presenting themselves in a favourable ESG way. In addition, Azevedo et al. (2023) observed that the positive relationship between ESG and firm performance was a function of winning greater legitimacy. Hence, firms legitimise their existence by gratifying stakeholder expectations.

In addition, the chapter highlighted how a disrupted standard-setting field distracts efforts to address ESG issues and concerns globally. Achieving a legitimate ESG reporting standard is a struggle given the 'alphabet soup' of sustainability standard setters. Yet, ESG reporting should become part of conventional accounting. Hence, there should be a single standard-setting board to achieve uniformity and consistency (Ali et al., 2023). Given the plethora of ESG standards, legitimate standards shall be determined by those in power. Yet, there is concern among stakeholders about the motives and priorities of those in power to influence and unify sustainability reporting standards. One of the major concerns is that many stakeholders require sustainability information but may be incapacitated to have a say in ESG reporting standard setting. Despite this, their ESG information needs should be considered and included in the unified standards. The ISSB, with its economic emphasis, may fail to address other stakeholders' needs and only meet investors' and market players' needs (Ali et al., 2023). Yet, sustainability and ESG issues should aim to address existential threats to both people and the planet. Thus, the ESG report is critical and should be present and relevant enough to tackle complicated existential issues (Otundo, 2024). In addition, ESG standard-setting bodies have concentrated on the reporting process rather than on actual ESG implementation by firms. Consequently, firms may concentrate on meeting ESG reporting requirements as opposed to substantive sustainability changes in their operations. According to the SDG Progress Report 2024, despite a reduction in greenhouse gas emissions in developed countries, greenhouse gas concentrations recorded the highest in 2022. In addition, public funding for coal, gas, and oil more than doubled in 2021-2022 and more than tripled since 2015. With carbon emissions more than 150% of pre-industrial levels and a rapid increase in ocean acidification, despite these realities, governments and companies still rally behind the 2030 Agenda and other sustainability reporting standards.

The next chapter presents the roles of government regulators and investors in ESG implementation in South Africa. The chapter aims to understand how far each of these three players have gone to date towards ESG implementation. The chapter will further investigate the level and extent of ESG implementation in South Africa

## **Chapter 3: The role of Government, investors, and regulators in ESG implementation in South Africa**

### **3.1 Introduction**

The discourse on the Environment, Social, and Governance (ESG) framework has gained significant traction over the past decade, with Bloomberg estimating ESG assets to exceed US\$25 trillion by 2025. Over 4,800 institutions with more than US\$121.3 trillion in assets had joined the Principles for Responsible Investment (PRI) as of 2021 (Jonsdottir et al., 2022; M. A. Naeem et al., 2023; Yuan et al., 2022). According to the European Banking Authority, ESG factors contribute to firm risk; thus, investors, regulators, and governments must collaborate to mitigate this hazard (Díaz-Peña et al., 2022; Zainullin & Zainullina, 2021). However, ESG information is broad, non-financial, qualitative, and varies by industry, accompanied by unstandardised reporting frameworks. Due to a lack of regulations, firms selectively report on ESG to superficially meet expectations (Krueger et al., 2021). Companies also play a role in ecological degradation. Studies show that environmental legitimacy positively affects firm performance, influencing firms to implement ESG in their operations (Ali et al., 2022). Given the increased focus on ESG in recent years, this study seeks to understand the roles of governments, investors, and regulators in successful ESG implementation, particularly in South Africa, an emerging economy and one of the top 15 carbon emitters in the world.

### **3.2 Empirical literature review**

#### **3.2.1 Role of Investors in ESG Implementation**

Corporations and institutional investors have a role to protect the interests of society and other stakeholders, not only shareholders with controlling stakes in the companies (Mahmud et al., 2021; Ratner, 2001). Investors ought to conduct their businesses within the confines of the law (Strine et al., 2021). Thus, investors should establish how best they can implement ESG requirements effectively in their investment operations without making them a fad, piling on existing disclosure checklist requirements (Strine et al., 2021). Similarly, investors who merge strong ESG policies and compliance requirements have a greater impact and legitimise their operations in the process (Fairfax, 2023). Furthermore, investors are a major driver in ESG investments. There was an increase in ESG portfolio investments of over US\$ 40 trillion dollars' worth of assets in 2021, and this ESG portfolio is expected to grow to US\$53 trillion by 2025 (Cruz & Matos, 2023).

Increasingly, investors expect their portfolios to reflect their values about ESG, with some investors opting for an impact investment approach that enables guaranteed societal benefits to be prioritised together with financial gains. With growing sustainability investor activism, investors are demanding better ESG reports and metrics (Fairfax, 2023). These demands from investors have birthed several ESG frameworks aimed at providing investors with meaningful and measurable ESG firm performance. In countries such as the United States of America (US), investors forced the Securities and Exchange Commission (SEC) to propose mandating ESG, which the SEC was previously resistant to (Cruz & Matos, 2023; Fairfax, 2023). During the COVID-19 pandemic. There was an increase in socially responsible investments, and these investments outperformed conventional stocks. Accordingly, investors still consider ESG when assessing risks and investment opportunities in a firm in the post-COVID-19 era (Naeem et al., 2023). Thus, ESG investing gives investors control over the long-term projections of their portfolios because, in portfolio construction, both investors' values and company values are considered.

In the same light, investors are increasingly divesting from the traditional investment paradigm to green investments guided by ESG principles. Investors not only consider profits and dividends in their decision-making but also include the environmental and social responsibilities of the firms. Akademiker Pension, a Danish pension fund since 2018, has sold its stake worth US\$520 million in oil, gas, and coal companies due to these extractive companies' failure to take ESG responsibilities seriously (Teodoro, 2023). The Government Pension Fund Global of Norway withdrew £5.7 billion from oil firms that had failed to invest in sustainable renewable energy (Shakil, 2021). The Church of England equally divested from the oil and gas industry in June 2023 to align with its faith-based investment principles (Teodoro, 2023; Yi, 2023). These actions reveal that investors are increasingly favouring clean energy firms regardless of amplified firm regulatory costs. In light of this, investors react positively to firms from countries with good Climate Change Performance Index (CCPI) scores (Pandey et al., 2023).

In Europe, asset managers and investors place significant importance on non-financial disclosures, reflecting a strong commitment to ESG factors (Zainullin & Zainullina, 2021). Meanwhile, in the United States, there is a growing interest in responsible investment practices, with not only institutional investors but also private investors increasingly considering sustainability (Zainullin & Zainullina, 2021). Traditionally, pension funds in the US have been focused on maximising

financial returns without considering the negative externalities their investments may cause. This contrasts with South Africa, where the government took a pioneering step in 2011 by mandating that pension funds consider sustainability issues in their investment decisions (Muir, 2022). Over time, ESG investing has gained global acceptance, but for effective implementation, there is a need for significant changes in both corporate cultures and policies. The introduction of a carbon tax in the energy sector illustrates this shift (Zainullin & Zainullina, 2021). In Asian countries, private equity investors are increasingly required to adopt proactive ESG practices to meet global sustainability standards, particularly due to the generally weak and lenient regulatory and enforcement frameworks in these regions (Long & Johnstone, 2023). While countries like China and India have made substantial progress in improving ESG regulations, enforcement remains inconsistent. As a result, firms in Asia are categorized into three groups: those that are fully ESG compliant, those that selectively implement ESG, and those that are merely illustrative in their ESG efforts.

Despite lax ESG laws in the US, a majority of institutional investors consider ESG in their investment activities because they have realised that ESG factors affect the long-term value of their investments. For example, climate change risk translates to investment risk (Castro & Gradillas, 2022; Fairfax, 2023; Mohammad & Wasiuzzaman, 2021). However, the US Trust fiduciary laws only allow ESG investment if the ESG investment benefits the beneficiaries through enhanced adjusted risk returns, as well as when specified under the terms of the trust or beneficiaries (Schanzenbach & Sitkoff, 2020). Conversely, Lavin & Montecinos-Pearce, (2021); and Mohammad & Wasiuzzaman, (2021) observed that institutional investors in emerging markets had an insignificant influence on ESG disclosure. However, the study remarkably observed tension between board members with vested shareholders' interests and those who represented institutional investors in ESG reporting. In emerging economies, ESG has been found to have a positive effect on shareholder value, and there is a significant increase in investor activism towards ESG adoption in such countries.

The ESG data tends to be unreliable, inaccurate, and lacks materiality so much that institutional investors fail to use it (Berg et al., 2022; Eccles & Klimenko, 2019). Yet most governments are collecting and using this inaccurate ESG data (Jonsdottir et al., 2022). The United Nations Principles for Responsible Investment (UNPRI) guides institutional investors in incorporating

ESG into their investment decision-making process. However, there is still a need for reliable and accurate ESG data to effectively incorporate ESG in the decision-making process. ESG data is the cornerstone of effective decision-making (Jonsdottir et al., 2022; Long & Johnstone, 2023). Despite ESG data challenges, institutional investors are increasingly incorporating ESG in their decision-making due to institutional policies, regulatory pressure, and stakeholder activism (Jonsdottir et al., 2022).

To counter ESG data shortcomings, the Global Reporting Initiative (GRI) came up with ten ideologies that ESG data must contain to ensure quality ESG reports. However, the use of the GRI reporting standards is still voluntary; consequently, companies can choose not to use the principles in data collection and reporting (Jonsdottir et al., 2022). The swelling of ESG data demands from various investors has contributed to the development of various reporting frameworks, as well as the online publishing of data and information by most firms beyond what is published in annual reports (Bose, 2020; Cort & Esty, 2020). The diverse sustainable finance taxonomy makes it strenuous for investors to evaluate and compare ESG practices and hazards. Proactive investors can influence companies they invest in to seriously adopt ESG in their operations. For example, BlackRock has been seriously pursuing sustainable investment projects and supports companies that use the SASB and TCFD climate frameworks (Fairfax, 2023; Zheng et al., 2022).

Interestingly, environmental regulation has positively influenced ESG investment; investors are progressively more interested in firms' sustainability performance than in operational and financial performance. Regulatory institutions have further forced investors to incorporate climate change and extreme weather catastrophic risk effects on their balance sheets. This, in turn, has led to investors demanding an overhaul of both accounting and disclosure frameworks to incorporate ESG risks and opportunities (Bose, 2020; Díaz-Peña et al., 2022). Firms that do not consider ESG in their operations are increasingly being punished by investors (Shakil, 2021). Thus, ESG controversies negatively affect share prices and increase a firm's risk profile to investors.

The ESG investors are grouped into five distinct types: the sustainable Alpha investor, smart beta investor, activist investor, impact investor, and screening investor (Cort & Esty, 2020). These five different types of investors have different sustainability needs, expectations, questions, and data requirements, hence forcing organisations to implement ESG in their operations. For a firm to attract sustainable alpha investors, the firm has to take advantage of marketplace opportunities

created by emerging sustainability issues (Bose, 2020; Cort & Esty, 2020). Ultimately, investors are demanding ESG information beyond what is reviewed in the financial statements. Societal and cloistered values, such as the need to outperform the market and become an ESG alpha, drive investors in ESG investing decisions (Bose, 2020). However, to retain the ESG alpha status, investors require deeper sustainability information beyond what is disclosed in integrated reports and standardised frameworks. This may entail sifting through complicated reports, partnering with ESG experts, and exercising due diligence in their ESG analysis.

The ESG concept goes beyond ethical considerations and entails identifying, assessing, and reporting both qualitative and quantitative risks that arise from the environmental, social, and governance aspects of the business (Castro & Gradillas, 2022). Increased pressures and punishment from investors are forcing firms to report on their ecological footprint and desist from greenwashing (Pandey et al., 2023; Singh & Chudasama, 2021). Shareholder advocacy is a strategy that has been used by investors to foster broader ESG goals. For example, in the US in 2018, 165 institutional investors and 54 investment managers filed shareholder resolutions (Aubry, et.al, 2020). Globally, investors are increasingly playing a pivotal role in ESG adoption through their demands and actions.

### **3.2.2 Role of regulators in ESG implementation**

To assist governments globally in ESG adoption through setting up sustainability policies, the United Nations introduced the Sustainable Development Goals (SDGs) in 2015. The SDGs are based on 17 pillars. To ensure efficacy, receptiveness, and novelty in the SDGs implementation by the private sector, the United Nations collaborated with the private sector in the creation of the SDGs. In addition, the SDGs assist governments in setting economic growth targets with people and the planet in mind (Bose, 2020). The introduction of the SDGs birthed the SDG Compass, a private SDG framework to guide governments and firms in SDG implementation. This framework was created by GRI, the UN Global Compact, and the World Business Council for Sustainable Development (Cruz & Matos, 2023).

Globally, several frameworks have been introduced aimed at the successful enactment of ESG by companies. Frameworks such as the GRI (1997) were developed to aid both private and public companies in practical ESG reporting. The Sustainability Accounting Standards Board (SASB), created in 2011, facilitates the communication of useful ESG information between firms and

investors. The SASB materiality map enables investors to understand financial materiality relevant to different sectors and saves investors time in analysing irrelevant ESG data. The Carbon Disclosure Protocol (CDP) is another significant framework introduced in 2000 to ensure companies genuinely implement ESG in their operations. Firms are expected to respond to the CDP questionnaire, and the responses are considered a true reflection of what firms have done and are doing toward ESG implementation. A Task Force on Climate-Related Financial Disclosure (TCFD) was established in 2015 to provide guidelines on reporting governance, climate change, and risk management. To date, over 1,500 firms with a market capitalisation of US\$12.6 trillion, including financial institutions with assets over US\$150 trillion, have endorsed this framework. Over 110 regulators and governments, such as the European Commission, have adopted TCFD directives, with countries such as South Africa, and Australia, planning on making TCFD mandatory disclosures or referencing TCFD in creating new guidelines in their respective countries (Redondo Alamillos & De Mariz, 2022; Williams & Nagy, 2021). Nonetheless, the introduction of too many private ESG reporting frameworks has resulted in a phenomenon known as reporting fatigue for companies. This phenomenon can only be overcome by the introduction of a standardised framework (Bose, 2020; El-Hage, 2021; Cruz & Matos, 2023). Furthermore, climate change pledges are insufficient unless followed by a universal matrix to measure a company's exposure to climate risk (Bose, 2020). At the same time, it is still a challenge to ascertain if a plethora of reporting frameworks affects investors or if this alphabet soup offers variety and enables various analytical approaches and room for experimentation for investors.

Inconsistency, lack of transparency, and difficulty in normalising and standardising data are some of the challenges of private ESG reporting frameworks. The S in ESG has largely been ignored, and there are no clear guidelines on how to report on this aspect of ESG. Cort & Esty (2020) and Fairfax (2023) observed that it was paramount to birth methodological data collection standards with defined metrics over and above the accounting controls on ESG. Cruz & Matos (2023); and Fairfax (2023) concluded that there was a need to create a data framework that could meet the needs of both the investors and non-financial disclosure needs for companies. As much as there are too many ESG reporting frameworks, they are all governed by the three bottom-line principles: profitability, social, and the environment.

To ensure greater accountability in ESG implementation in the US, directors' duties should incorporate ESG considerations. To achieve this, it may entail an amendment of the companies act to incorporate ESG, just as the UK government did (Strine et al., 2021). In addition, the primary principle of commercial law in the US states that companies should conduct legal business by legal means. This implies that corporations should be run for the benefit of various stakeholders due to the interconnected nature of business. Due to this principle, ESG becomes part of the directors' fiduciary duties mechanically. However, due to shareholder primacy, there has been resistance to ESG mandating from corporations that deduce that ESG infringes on free market capitalism (Fairfax, 2023; Strine et al., 2021). Interestingly, the Securities and Exchange Commission (SEC) in the US is slowly making efforts to regulate ESG. The SEC proposed mandated climate-related disclosures in March 2022. This proposal was a landmark moment in the history of the SEC, which had largely resisted mandating ESG disclosures (Fairfax, 2023). Furthermore, corporations with higher ESG standards of operation tend to meet the legal requirements.

Conversely, regulators need to come up with a single universal regulation that guides ESG reporting to eliminate the greenwashing of reports. The plethora of reporting guidelines is inefficient and encourages gamesmanship in ESG ratings (Strine et al., 2021). Thus, regulators should mandate policies that encourage transparency and efficiency in the ESG market to avoid exploitation of the market that can take place in extreme times, such as COVID-19 (Naeem et al., 2023). Similarly, external ESG disclosure regulation reduces information asymmetry and financial anomaly risks.

Nonetheless, a formal ESG regulatory environment has an inhibiting effect on companies (Yuan et al., 2022). In contrast, ESG disclosure is said to benefit shareholders; however, selective reporting is aimed at distracting investors' attention from poor performance and bad news. ESG disclosure improves information symmetry, reduces financial irregularities, and has a signaling effect on the market (Yuan et al., 2022). Uninformative ESG disclosures fail to assist investors in their decision-making. Furthermore, in China, cloning of ESG reports is prevalent; so, regulators need to implement a prudential legal framework with explicit ESG requirements for each industry or sector to eradicate this challenge in China (Yuan et al., 2022). Due to financial and institutional investors' pressures to comply with mandatory disclosures, certain firms are forced to transfer their ESG risk to suppliers to improve their perceived ESG silhouette. The firms creatively transfer the

ESG risk by selecting suppliers from countries with poor ESG regulations and reporting frameworks (Lu et al., 2023). Thus, these shortcomings of voluntary ESG disclosures, such as their lack of comparability and reliability, have prompted a push toward mandatory ESG disclosures (Fairfax, 2023).

Increasingly, various countries are legally mandating ESG disclosure regulations. For example, the Moroccan regulator mandated ESG disclosure to be compulsory to enhance investor confidence in the stock market. In China, investors responded positively to the introduction of the ESG disclosure guidelines. Similarly, ESG regulation tightening in developing countries is expected to bring improved data for investors' decision-making (Oualaid & Sassi, 2021). ESG disclosure in Australia is on an 'if not, why not' basis. The country employs mandatory ESG disclosures such as the Financial Services Reform Act (2011), the Energy Efficiency Opportunities Act of 2006, the National Pollutant Inventory, of 1998, and the Environment Protection and Biodiversity Conservation Amendment Bill of 2013, as well as the voluntary ESG disclosures to encourage the adoption of sustainability frameworks (Lokuwaduge & De Silva, 2020). However, findings from Lokuwaduge & De Silva (2020)'s study shows that Australian firms reported more in ESG areas that were mandatorily required of them, ignoring voluntary disclosure areas. The lack of ESG reporting standards strips away homogeneity in reports within a country, making it difficult to compare ESG reports. This challenge is further worsened by the wide range of voluntary disclosure frameworks (Lokuwaduge & De Silva, 2020). In Australia, the National Greenhouse and Energy Reporting Scheme is widely used by firms and was the first mandatory ESG disclosure guideline. However, materiality and prioritisation due to a variety of ESG themes remain a challenge, and the introduction of IFRS S1 and IFRS S2 could deal with this challenge.

However, numerous ESG rating firms are inconsistent in their assessment and objectivity. Additionally, investors engage in ESG investing due to pressure from regulators and for personal reasons, such as the need to create social value (Zainullin & Zainullina, 2021). According to the Principles of Responsible Investment (PRI), investors must incorporate ESG into their decision-making process, seek appropriate ESG disclosures from firms they invest in, adopt principles of responsible investment in the investment fraternity, and report on their investing activities. Similarly, ESG investing can lead to greater returns, and Long & Johnstone (2023) advocate for the implementation of a deep ESG framework in Asia to instil accountability from private equity

investors. This framework could assist with the weak regulation and poor enforcement of ESG in Asia, as most investors are interested in short-run returns over long-term sustainability. Consequently, ESG is not a major impediment to business development and consideration in Asian countries. However, in the US, ESG investor activism has led to a decline in investment in traditional asset classes (Ho, 2020).

Correspondingly, mutual funds in the US are heavily regulated by both the SEC and the Department of Labour, and these regulators are focusing on ESG investment. This, in turn, has forced Mutual funds to seriously consider ESG in their investment decisions (Ho, 2020). Increasingly, there is a need to tighten ESG regulation for ESG-traded funds to ensure they adhere to sustainable investment and operational principles to match their name and safeguard investors' interests. However, there is a lack of consensus on what ESG investing entails and its uniqueness from other types of investments (Ho, 2020). The SEC in the US has, however, been slow, at times resisting ESG reform by not expanding ESG disclosure. They introduced 14a-8, which makes submitting shareholder proposals difficult, thereby upsetting investors' efforts to highlight ESG concerns (Williams & Nagy, 2021). Materiality in ESG reports and the lack of empirical evidence testing information's materiality have discouraged the SEC from ESG recognition.

Bank regulators across the world are in the process of making climate disclosure mandatory (Williams & Nagy, 2021). Surprisingly, firms with female board members take ESG matters seriously when compared to firms dominated by male board members (Kamaludin, 2022; Lavin & Montecinos-Pearce, 2021; Shakil, 2021). The Malaysian government, through its code of corporate governance, dictates that directors ought to disclose their policies and ESG implementation in their integrated reports. This is in line with the UN's dictates of firms disclosing their ESG practices by 2030 (Mohammad & Wasiuzzaman, 2021).

On the other hand, the European Union (EU) ESG mandatory regulations are punitive and extend to third-party countries due to their double materiality requirement. Furthermore, third-party countries are forced to comply with EU ESG directives because the opportunity cost of foregoing business is too high (Redondo Alamillos & De Mariz, 2022). Conversely, excessive regulation can deter pro-green firms. Thus, regulators and governments must optimise regulation by rewarding compliance and punishing noncompliance (Ozili, 2022). Globally, stock exchanges are issuing ESG directives, such as making ESG disclosure a mandatory listing requirement. This is in tandem

with being members of the Sustainable Stock Exchange Initiative. On the other hand, regulations such as the Glasgow Climate Pact have a greater impact on emerging economies than on well-developed economies due to their reliance on extractive industries (Pandey et al., 2023). Additionally, emerging economies have ambiguous ESG disclosure norms and lack thorough institutional settings.

### **3.2.3 Role of Government in ESG Implementation**

Governments globally are advocating for pollution-free environments, transparency in firm governance, and sociable policies (Naeem et al., 2023). Additionally, ESG implementation influences a country's competitiveness and investment appeal to socially responsible investors. Thus, ESG has become a paramount evolutionary stage in the development of modern economic systems (Plastun et al., 2019). According to Krueger et al., (2021) and Eckhart (2020), ESG implementation is more effective under the command of the government than on a comply and explain basis. Governments in most developed countries have enacted carbon tax acts and adopted policies such as the polluter pays principle aimed at protecting the environment. Additionally, countries with poor democracy and political firmness have greater ESG performance. Similarly, corporate governance is effectively implemented in countries with high regulatory reforms (Mooneepen, Abhayawansa, Khan, 2022). Thus, ESG disclosure regulation improves information efficiency and, in turn, capital markets.

Correspondingly, governments' ESG mandates tend to be more effective than when implemented by regulators because governments have the resources and laws to ensure success. Regulators tend to be captured by big corporations and thus eventually tend to turn a blind eye (Krueger et al., 2021; Plastun et al., 2019). Interestingly, governments that mandate ESG regulations have the highest SDG scores. Therefore, countries with stricter ESG rules of law and governance tend to effectively adopt and implement ESG requirements. In recent years, the E-pillar in ESG has garnered attention, with most countries enacting legislation aimed at achieving net-zero carbon emissions by 2050 in line with the binding Paris Agreement and the SDGs (Díaz-Peña et al., 2022).

In addition, European policymakers have created ESG regulatory frameworks for financial institutions and investors, though they vary in their disclosure specifications from country to country (Bruno & Lagasio, 2021). The EU introduced policies such as the mandatory taxonomy regulation (2020/852), the non-financial reporting directive (2014/95/EU), the CRR2 directive,

and the financial service sustainability disclosure regulation (2019/2088). These policies were aimed at introducing ESG to the regulatory framework and instilling ESG accountability among large firms and banks in Europe (Bruno & Lagasio, 2021; Chiaramonte et al., 2022; Stamelos, 2023). The implementation of such policies harmonises ESG reporting among European entities. Additionally, the EU policies advance sustainability policies that promote firm accountability. With effect from 2021, investment funds and institutional investors were required to disclose how they factored in sustainability risks in their investment decision-making process (Ho & Park, 2019; Stamelos, 2023).

The European Union has been at the forefront of setting ESG standards and regulations that influence the rest of the world, known as “The Brussels Effect” (Redondo Alamillos & De Mariz, 2022). These mandatory disclosure regulations by the EU have forced other countries to follow suit. However, to successfully adopt mandatory ESG disclosures, there is a need to understand the benchmark practices implemented by countries with advanced ESG systems (Singhania & Saini, 2021). The Danish and the United Kingdom’s comply or explain ESG disclosure approach influenced the European Union’s ESG regulatory reform. The EU countries mandated ESG laws with the EU Directives acting as the bare minimum at national levels by the end of 2016. To ensure uniformity in ESG laws across countries and sectors, the EU issued additional non-binding non-financial reporting guidelines. However, the EU’s directive still failed to ensure the standardisation of reports, as it gave firms leeway on what to disclose and allowed member states to permit firms to publish sustainability reports on company websites as opposed to management accounts (Ho & Park, 2019). Despite these challenges, the European Bank's stress testing from 2022 incorporated testing for climate-related risks (Chiaramonte et al., 2022). Thus, the European Union’s ESG approach aims to balance profits for shareholders and produce shared value for society (Ho & Park, 2019). This ESG approach is different from the US approach, which is based on shareholder primacy.

The EU directive was guided by over twenty national and private reporting frameworks such as GRI, SASB, and CDP standards, as well as multilateral guidelines such as the Global Pact. The EU directive has birthed new private ESG reporting guidelines; as from 2017, Nasdaq issued new ESG guidelines for the Baltic and Nordic markets, which referenced EU directives, SDGs, and TCFD's climate reporting framework (Ho & Park, 2019). The European Union countries, such as

Denmark, the United Kingdom, Belgium, Finland, and France, were found to have well-developed ESG frameworks, and South Africa fell into the category of countries with rapidly enhanced ESG frameworks (Singhania & Saini, 2022). Furthermore, the Ukraine war highlighted the necessity of green economies, especially for European countries that heavily rely on gas (Stamelos, 2023). Countries and firms that have implemented climate change regulations are considered better investment options and less risky by investors (Díaz-Peña et al., 2022). However, some countries and states are equally enacting anti-ESG laws, which prohibit ESG consideration in investment decisions. The state of Texas in the US enacted laws that prohibited the municipality from dealing with banks that had ESG policies (Garrett & Ivanov, 2024). However, such anti-ESG laws could lead to increased costs of borrowing.

Local municipal government green finance policies, taxation, and fiscal policies can promote corporate ESG development and sustainable development within a country. Interestingly, if local authorities' power is concentrated, it can lead to efficient resource allocation, unified ESG reforms, industrial layout development, and the provision of an integrated market, as well as stability and reduced rent-seeking (Xue et al., 2023). Similarly, European countries require institutional investors to disclose their ESG investing strategies. For example, in France, institutional investors are expected to disclose both their ESG investing and climate goal strategies (In & Schumacher, 2021). So, ESG investing reduces social risk to investors. However, sustainability reporting standards development and monitoring systems have been at a slow pace, and this has resulted in carbon washing and frontloading of data that does not exist (In & Schumacher, 2021). Carbon washing and greenwashing can lead to systemic risk to sustainable finance. Hence, the legislative and regulatory laws in European countries (In & Schumacher, 2021). Legislation has a positive influence on investors' understanding of responsible investment practices (Yamahaki & Frynas, 2016). However, in South Africa and Brazil, legislation had little influence on investor participation behaviour.

In addition, the legislation reduces the fear of ESG non-compliance for institutional investors. According to the Institutional theory, a firm's ESG reporting and compliance are influenced by the level and state of industry regulation, enforcement, and legal institutions that can mediate between the company and its stakeholders (Yamahaki & Frynas). Thus, governments and multilateral organisations such as the United Nations and the Worldwide Federation of Exchanges are lobbying

for ESG disclosure to enable capital markets to correctly price Environmental, Social, and Governance risks that can affect firms. Regulators are especially concerned with climate change systemic risk (Ho, 2020). In EU countries, legislation requiring pension funds to incorporate ESG in their investment decisions has led to increased responsible investments (Yamahaki & Frynas, 2016). Interestingly, pressures from multilateral institutions and investors forced the US government to rejoin the Paris Agreement, which it had withdrawn from in 2017 informally (Ho, 2020). This withdrawal led to the creation of the US Climate Alliance, which enabled states in the US to continue advocating on climate change issues regardless of the country's anti-ESG stance.

ESG regulation has increased in China in recent years, with the country introducing stricter administrative measures for legal environmental disclosure and toxic waste disposal. Intense ESG regulation in China has had a positive effect on green innovation, which can translate into high-quality green innovation and force companies to discontinue low-quality green innovation. However, the relationship between regulation and green innovation is inconclusive in other countries. The US manufacturing industry regulation hinders green innovation (Wang & Sun, 2022). Governments should regularly update ESG disclosure requirements and encourage firms to disclose their ESG performance; such disclosures will assist in channelling social capital into the rightful investments (Wang & Sun, 2022). Governments should introduce reward and punishment systems to motivate firms toward ESG implementation. These rewards could take the form of tax breaks, discounts, and subsidies for firms that are successful in reducing their ecological footprints, while punishment can take the form of an ESG offenders list, whose credit ratings can be downgraded and access to loans limited (Renström et al., 2021; Wang & Sun, 2022). Mohammad & Wasiuzzaman (2021) concluded that emerging countries' governments need to come up with correct ESG regulations that are tailor-made for their specific countries and encourage all sectors, especially SMEs in ESG implementation.

For effective ESG implementation, governments should consider adopting both public regulation and private ordering since ESG has traditionally been voluntary, with voluntary organisations advocating and advancing ESG reporting frameworks (Ho & Park, 2019). By instilling mandatory ESG disclosures, the regulator will instil investor confidence in the financial markets. In addition, mandatory disclosure requirements erase liquidity and stability challenges. However, currently, both private and most public ESG reporting frameworks are not mandatory (Ho & Park, 2019).

This belies reality, as private ESG reporting frameworks can yield tangible results when used in conjunction with intelligent regulation.

In the US, there is the use of private ordering using voluntary disclosure regulations and shareholder activism. For example, the SEC adopted specialised disclosure regulations on the use of conflict minerals. The US Government's regulatory reform is slow due to shareholder primacy, with the SEC yet to indicate interest in reforming its federal disclosure rules to incorporate ESG matters (Ho, 2020; Garrett & Ivanov, 2024). In 2019, ESG proposals from shareholders accounted for over half of the voted proposals. Nevertheless, shareholders' proposals are non-binding, making them ineffective in standardising disclosure practices in the US (Ho & Park, 2019). Conversely, South Africa relies on private ESG regulations and relies heavily on the King Code established in 1994, now in its fourth iteration. ESG disclosure is voluntarily governed on the apply and explain basis as well as integrated reporting. South Africa was the first country to adopt the application and explain basis of ESG reporting. The effectiveness of the soft legal King IV was supplemented by the JSE, which mandated the implementation of the King Code as a listing requirement. Brazil, in contrast, has implemented ESG on a report and explain basis, where companies indicate whether they have reported on ESG matters in the integrated report or separately and if not, why (Ho & Park, 2019). B3 in Brazil partnered with GRI and IIRC in coming up with its disclosure framework, and this signals to investors the country's commitment to ESG adoption.

The United Kingdom has been a leader and advocate of non-financial reporting and has, over the years, gravitated towards a mandatory approach. Non-financial reporting is spearheaded by the Financial Reporting Council (FRC), and ESG falls under the corporate governance code, a mandatory listing requirement from the UK Listing Authority. As much as the UK is shareholder-centric, the country advocates for enlightened shareholder values, which requires greater corporate accountability to ensure stakeholder impact (Ho & Park, 2019). The enlightened shareholder concept was introduced in 2006 through the introduction of a new Companies Act, which redefined the directors' fiduciary duties to include corporate stakeholders and the long-term interests of the business. Additional regulations were issued in 2013 that mandated firms to disclose their greenhouse gas emissions, human rights, and gender diversity on a comply and explain basis. The UK was one of the first countries to adopt the EU directive, thus making its ESG regulations stringent (Redondo Alamillos & De Mariz, 2022). The UK goes beyond the EU baseline, requiring

the ESG report to be audited for consistency and directors to be fined for violations of these requirements. On the other hand, the UK government allows companies to choose an ESG reporting framework they can adopt, be it a national, EU directive, or an international reporting framework. However, firms are expected to disclose the guidelines they would have used in reports (Ho & Park, 2019). The EU has extended the mandatory ESG regulations to SMEs; inversely, Aghamolla & An (2022) observed that mandatory disclosure regulations led to greater investment in green technology than under voluntary disclosure regulations.

Hong Kong has a soft mandatory ESG disclosure framework where listed companies are expected to report on a minimum of ESG requirements while enabling firms to choose which voluntary disclosure standards to adhere to. The Hong Kong Exchange, in 2015, amended its ESG disclosure guideline to disclose certain ESG parameters mandatorily on a comply or explain basis (Ho & Park, 2019). On the other hand, Malaysia introduced its ESG disclosure guideline in 2018, and ESG is part of the listing requirements (Kamaludin, 2022). However, only 75 Malaysian firms were reporting on ESG by the end of 2020.

Despite all these initiatives, ESG measurement and quantification remain a challenge and have resulted in a plethora of self-guided reporting frameworks (El-Hage, 2021). The current ESG rating systems are informationally inefficient, making them ineffective in guiding investors in climate transition investment decisions. Mandatory ESG disclosure can bring about informational efficiency, which is critical in promoting the operational efficiency of a capital market. Mandatory and standardised ESG disclosure frameworks ensure that consistent, reliable, and complete information is available to investors (El-Hage, 2021). At the same time, mandatory disclosures increase operational costs for companies due to increased informational requirements. These reporting and compliance costs can be easily absorbed by large corporations, unlike small companies. Interestingly, various ESG regulation strategies can be implemented by governments to regulate ESG. These mandating strategies can be price-based, rights-based, regulatory, or strictly legal. Price-based ESG mandating takes the form of taxes, tariffs, and fees, and where the polluter becomes more ESG compliant, rewards in the form of refunds and subsidies are availed (SDGR, 2019). The Governments can penalise polluters by charging a price in the form of taxes, tariffs, and fees for causing pollution or deny them the right to cause additional harm through withholding permits, giving a ceiling of maximum harm they can do to the environment or banning the industry.

Moreover, the government can implement a strict ESG legal system through public participation to deal with ESG negligent firms (SDGR, 2019). To effectively implement the strict ESG regulation system, the government must make it mandatory for firms to disclose ESG information and conduct ESG Firm audits. Thus, governments must choose the mandating style that is relevant and applicable to their economic growth stage and desired ESG outcomes from economic participants.

### **3.3 Literature Gaps**

The study further investigates the roles of government, regulators, and investors in ESG implementation in South Africa, an area with fragmented information both globally and in South Africa. There are gaps in how these three stakeholders can play a role in ESG implementation individually and collectively, particularly due to a lack of coordinated efforts, inconsistent regulatory frameworks, and insufficient alignment of incentives. While governments can set the legal and policy framework, regulators can pass the necessary laws, and investors can drive the demand for sustainable business practices, the absence of clear and consistent communication, as well as harmonized strategies across these groups, leads to inefficiencies in the overall ESG implementation process. This fragmentation hinders the effective integration of ESG principles, limiting the potential impact of their collective efforts. There is a further dearth of literature that investigates existing legislative and regulatory frameworks in South Africa to inspire best practices by investors, companies, and policymakers.

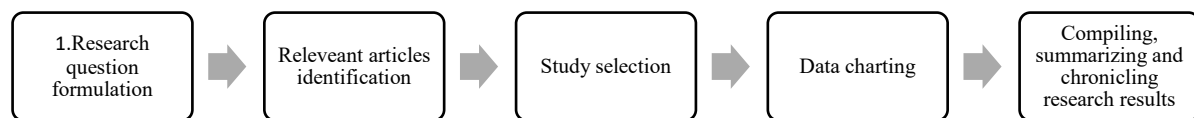
### **3.4 Methodology**

The study followed the methodological structure propounded by Arksey & O'Malley (2005) in conducting the scoping literature review on the roles of government, regulators, and investors in the implementation of ESG. The scoping review methodology was adopted because the study aimed to atlas the extent, array, and nature of ESG literature inscribed about South Africa (Akbarialiabab et al., 2021; Pham et al., 2014). In addition, through the scoping review methodology, the study identified possible research gaps that influence future research directions in ESG implementation specific to South Africa. For instance, the existing literature on ESG implementation in South Africa remains fragmented, with limited comprehensive reviews that systematically analyse the distinct and interconnected roles of government, regulators, and investors. There is a scarcity of synthesised evidence on how these three stakeholders influence ESG adoption within South Africa's unique socio-economic and regulatory context. In addition,

this study employs Arksey & O'Malley's (2005) framework, which captures diverse methodologies, thus offering a broader perspective on ESG discourse in South Africa (Tricco et al., 2016). Most importantly, the scoping review methodology mapped the existing ESG literature in South Africa (Hasselgren et al., 2020; Tricco et al., 2016). The scoping review incorporated various literature that used different research designs and methods. A scoping review was appropriate because the roles of government, regulators, and investors in South Africa are sophisticated and have not yet been expansively reviewed (Arksey & O'Malley, 2005; Hasselgren et al., 2020).

A methodological structure proposed by Arksey & O'Malley 2005 was used. The methodological structure consists of five stages highlighted in Figure 1 below.

**Figure 1 Five Stages of Scoping Review**



Source (Arksey & O'Malley, 2005)

### **3.4.1 Research question formulation**

The first stage was formulating a research question that would guide this methodology. This research question guides how the research plan is designed (Arksey & O'Malley, 2005). This scoping review answered the following research question: 'What are the roles of government, regulators, and investors towards ESG implementation?'

### **3.4.2 Relevant articles identification**

Articles that addressed the research question were pooled from Google Scholar, Research Gate, Science Direct, hand searching, and published reports only, to ensure reliability and consistency. The study's observation period was from 2000 to 2022 to capture the effect of the Global Reporting Initiative (GRI) in 1997, the Millennial Development Goals in 2000, the Global Financial Crisis 2007-2008, the Sustainable Development Goals in 2015, the Paris agreement in 2016 and the

Glasgow climate pact 2021 on government, regulators and investors roles and decision making. This period enabled the researcher to identify trends and the cause-and-effect relationships among the variables under study. A search strategy was created based on the research question.

A pilot search strategy was conducted to check on the effectiveness of the search strategy. A search strategy based on the research question yielded no results in all the web-based databases. Based on the outcomes, the search strategy was fine-tuned. The final search strategy included phrases that describe the roles of government, regulators, and investors and provide evidence on ESG implementation, such as ESG regulation, SRI in South Africa, ESG in South Africa, roles of investors in ESG, and ESG disclosure in South Africa. The final search strategy was first carried out on all three databases; the first 100 articles that appeared from the search engine were considered for the study. This was to ensure efficiency and quality were maintained in the search process (Arksey & O'Malley, 2005; Tricco et al., 2016). In addition, scoping reviews often involve screening large volumes of literature, and limiting the search results to the first top 100 articles was a practical way to ensure the review remains manageable while still capturing the most relevant studies. Google Scholar, Science Direct and Research Gate use different ranking algorithms, thus enabling the researchers to capture a broader range of relevant studies. For example, Google Scholar captures results based on citation counts and relevance, whereas Science Direct uses a combination of relevance and publication date, and Research Gate ranks results based on end-user engagement (Martín-Martín et al., 2018). Limiting the search to the top 100 articles helps balance the breadth of the review (covering a wide range of studies) with the depth of analysis (ensuring that the most relevant studies are included). This approach is particularly useful in scoping reviews, where the goal is to map the existing literature rather than conduct a comprehensive meta-analysis (Pham et al., 2014).

### **3.4.3 Study selection**

Peer-reviewed articles, professional reports, and published surveys in the public domain were included in the study. Articles in foreign languages other than English were excluded due to time and financial constraints (Arksey & O'Malley, 2005). To ensure rigour and transparency, a vetting process was obligatory, since scoping reviews pursue breadth as opposed to depth ( Arksey & O'Malley, 2005; Tricco et al., 2016; Akbarialiabad et al., 2021).

## **Vetting process**

In instances where titles and abstracts failed to address the research question, introductions and conclusions were considered. Where introductions and conclusions failed the vetting process, the whole article was reviewed to deliberate on their suitability in the review process (Pham et al., 2014). An integrated template was used to collate articles that had been vetted using titles and abstracts (Pham et al., 2014; Akbarialiabad et al., 2021) capturing article features such as authors, year, title, and suitability. The template was pretested and revised before use. (Hasselgren et al., 2020; Pham et al., 2014)

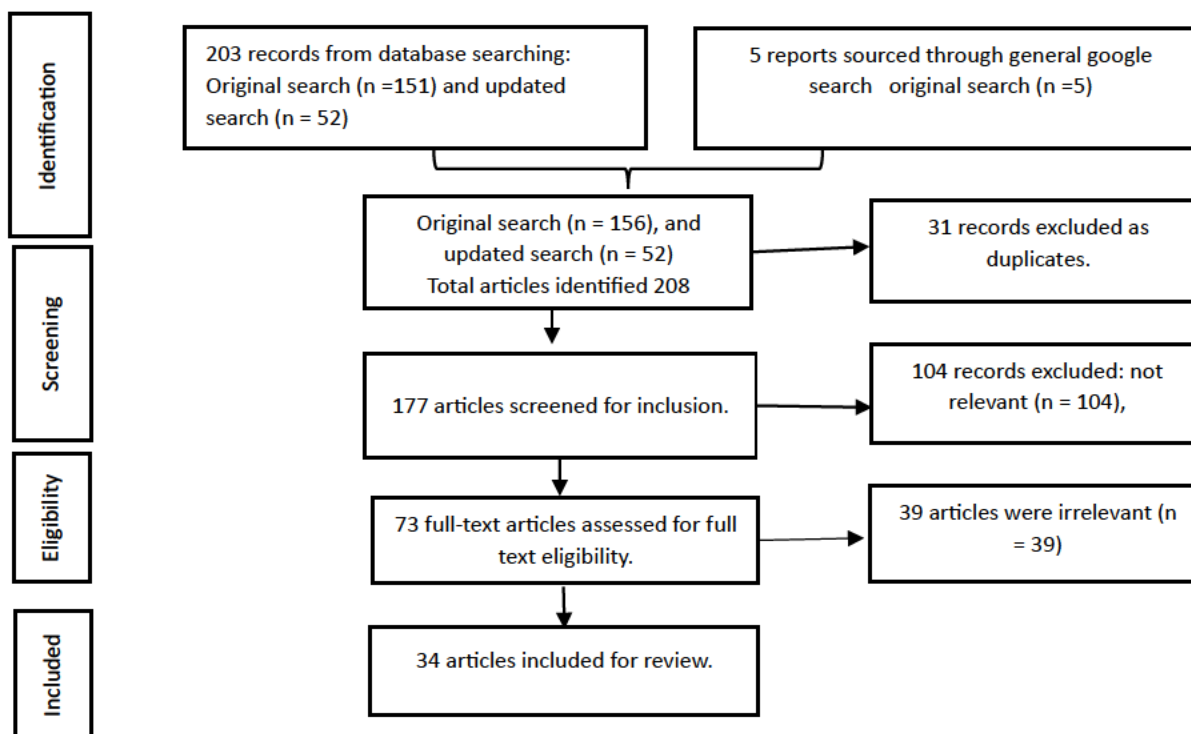
### **3.4.4 Data charting**

Information from reviewed research articles (Arksey & O'Malley, 2005; Pham et al., 2014) were interpreted and synthesised qualitative data by organising and examining materials concerning the main themes (Matenda et al., 2022). A descriptive-analytical technique that uses the same analytical structure for all selected articles was adopted in this review (Akbarialiabad et al., 2021; Arksey & O'Malley, 2005; Hasselgren et al., 2020). A data charting form was used for charting data. The charting form had the following information: recorded authors, publication year, title, the study aims, data sources, techniques implemented, and findings.

### **3.4.5 Compiling, summarising, and reporting results**

The final stage involved compiling, summarising, and broadcasting results. This review presented a synopsis of all reviewed articles. A descriptive account of the findings was presented, and the findings were expanded with discussions reinforced by the wide-ranging literature drawn (Matenda et al., 2022). Figure 2 below illustrates the summary details of the flow of data through the different stages of the scoping review process. The flow chart maps out the number of records that were identified, included, and excluded, and the reasons for their exclusion. A total of 208 articles were identified after the initial elimination of duplicates. Thirty-one duplicate articles were removed. One hundred and four articles were irrelevant after analysing the title, introduction, literature review, and conclusions. Seventy-four articles qualified for full-text analysis, and of these, thirty-nine were irrelevant. After this rigorous eligibility screening process, only thirty-four articles were finally included and reviewed.

**Figure 2: Study selection flow chart**



Source: authors' compilation

Below is a table with a list of articles that were included in this study

**Table 1 Summary Table of reviewed articles**

Article Title	Authors	Journal Type
Responsible investing in South Africa: past, present and future	Suzette Viviers and Gideon Els	Journal article
Key challenges facing the socially responsible investment (SRI) sector in South Africa	A Herring, C Firer and S Viviers	Journal article
DOES CONSIDERATION OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE ISSUES BY INSTITUTIONAL INVESTORS INFLUENCE SOCIAL RESPONSIBLE INVESTMENT DECISIONS IN SOUTH AFRICA?	Blessing Anwuri Ogbuka, Michael Fakoya	Journal article
An Index to Measure the Integrity of Investment Companies Investing Responsibility	Don Andrew	Journal article

Persistence in ESG and conventional stock market indices	Guglielmo Maria Caporale, Luis Gil-Alana, Alex Plastun Inna Makarenko	Journal article
SUSTAINABLE FINANCE PRACTICES IN SOUTH AFRICAN RETIREMENT FUNDS	IFC	REPORT
Environmental Social Governance (ESG) and its implications for medium-sized enterprises in Africa	ILO	REPORT
ESG Materiality Insights from the South African Investment Industry	Matthew Worthington-Smith, Stephanie Giamporcaro	book chapter
South African Banks' Footprint in SADC Mining Projects: Environmental, Social and Governance Principles	Michael Abinare Milazi	REPORT
Reflecting on the changing landscape of shareholder activism in South Africa	Nadia Mans-Kemp and Marilee van Zyl	Journal article
Encouraging Sustainable Investment in South Africa: CRISA and Beyond	Natania Locke	Journal article
Sustainability reporting patterns of companies listed on the Johannesburg Securities Exchange	Pat Maubane, Andre Prinsloo, Nadia Van Rooyen	Journal article
The state of responsible investment in South Africa	Professor Derick de Jongh, Raymond Ndlovu, Cas Coovadia, Justin Smith	REPORT
The evolution and alignment of institutional shareholder engagement through the King and CRISA reports	Richard Foster	Journal article
Assessing the business case for environmental, social and corporate governance practices in South Africa	Ruth Johnson, Nadia Mans-Kemp and Pierre D. Erasmus	Journal article
ESG and good corporate governance in relation to the use of pension funds: Comparison between the United Kingdom and South Africa (The Report)	Ruth Taplin	Journal article
Corporate social responsibility and artisanal mining: Towards a fresh South African perspective	Bester, V., & Groenewald, L	Journal article
Successful private investor activism in an emerging market.	Viviers, S., & Mans-Kemp, N.	Journal article
Institutional proxy voting in South Africa: Process, outcomes and impact	S. Viviers and E. vdM. Smith	Journal article
The ebbing hegemon? An evolutionary perspective on the emergence of holistic governance and the efficient role of Institutional Investors in Environmental, Social and Governance issues (ESG).	Sharif, K., & Atkins, J	Journal article

SRI IN SOUTH AFRICA: A MELTING-POT OF LOCAL AND GLOBAL INFLUENCES	Stephanie Giamporcaro and Suzette Viviers	Journal article
Sustainable and responsible investment in emerging markets: Integrating environmental risks in the South African investment industry	Stéphanie Giamporcaro	Journal article
Responsible Investment: A Vehicle for Environmentally Sustainable Economic Growth in South Africa.	Stéphanie Giamporcaro, Lise Pretorius, and Martine Visser	Journal article
21 YEARS OF RESPONSIBLE INVESTING IN SOUTH AFRICA: KEY INVESTMENT STRATEGIES AND CRITERIA	Suzette Viviers	Journal article
ESG Investing and Public Pensions: An Update.	Aubry, J. P., Chen, A., Hubbard, P. M., & Munnell, A. H	Journal article
Regulating non-financial reporting: Evidence from European firms' environmental, social and governance disclosures and earnings risk	Arif, M., Gan, C., & Nadeem, M.	Journal article
Integrated reporting in South Africa in 2012	Atkins, J., & Maroun, W.	Journal article
Financing a Sustainable Economy	National Treasury	REPORT
Mainstreaming environmental, social and governance integration in investment practices in South Africa	Marais, F., van der Lugt, C. T., & Mans-Kemp, N.	Journal article
<i>THE EMERGING IMPORTANCE OF THE TCFD FRAMEWORK FOR SOUTH AFRICAN COMPANIES AND INVESTORS</i>	Burival, Z	article
EXPERIENCE AND LESSONS FROM SOUTH AFRICA: An Initial Review	UNEP	enquiry paper
PUBLIC PENSION FUNDS AND SOCIALLY RESPONSIBLE INVESTMENT IN SOUTH AFRICA: A CASE STUDY OF THE PUBLIC INVESTMENT CORPORATION	Victor Luvhengo	PhD thesis
Is responsible investing ethical?	Viviers, S.; Bosch, J. K.; Smit, E. V.D.M.; Buijs, A.	Journal article
An Analysis of Trends in Shareholder Activism in South Africa	Cassim, R	Journal article

Author's compilation

### 3.4.6 Review of selected articles

Responsible investment started in the 1970s with the formulation of the Sullivan Principles, which was an anti-Apartheid movement that encouraged divestment from South Africa by companies. Companies that failed to comply with the principles were blacklisted by institutional investors. This was a form of investor activism (Viviers & Els, 2017). However, research shows that these boycotts did not affect the company's value (Aubry et al, 2020). The B-BBEE Act of 2003 was aimed at black empowerment and improving marginalised black people's social status through

supplier development, enterprise, skills development, and resource ownership (Viviers & Els, 2017). The B-BBEE Act was followed up with the Financial Sector Charter (FSC) in 2004, aimed at social and economic integration and enabling access to the financial sector by all demographics in South Africa equitably. Accordingly, giving access to financial services and investment opportunities to marginalised black people (Viviers & Els, 2017). The FSC was aimed at the economic integration and empowerment of the black population.

In 2006, the Johannesburg Stock Exchange (JSE) launched the South Africa Social Investment Exchange, aimed at matching donor funds with development projects with high returns. This was the second of its kind in the world. It was an online trading platform that assisted in sustainable development projects in the country. In 2008, a South African Network for Impact Investing was birthed, which was a dialogue platform for sustainable investment on the continent (Viviers & Els, 2017). However, South African institutional investor trustees were cautious about ESG investments due to major losses on SRI investments in the late 1990s. Thus, at first, investors believed that socially responsible investments underperformed, and they could not risk investing in such asset classes. This misconception continued even as institutional investors began to incorporate the Code of Responsible Investment in South Africa (CRISA) into their investment decisions. There was still a bias in the choice of investable companies due to the profit motive and unstandardised ESG reports. However, the demand for ESG information by institutional investors forced investee companies to improve their sustainable business practices (Herringer et al., 2009; Ogbuka & Fakoya, 2016).

The Institute of Directors South Africa (IoDSA) introduced the Code for Responsible Investment (CRISA) in 2011, and South Africa was the second country after the United Kingdom to formally mandate ESG consideration for investors in investment-making decisions. CRISA is governed by six principles aimed at ESG integration. This code was introduced on an apply-and-explain basis and is a form of soft regulation. The CRISA was developed from the United Nations Principles of Responsible Investment (PRI), which had been established in 2006, where South African institutional investors are members and signatories (Andrew, 2020). Andrew (2020) observed that most institutional investors considered ESG in their investment decisions and had ESG policies. Regardless of incorporating ESG in their investment decisions, most investors cannot measure the impact of ESG considerations on investment returns due to unstandardised ESG information.

The amendment of Regulation 28 in 2011 forced pension funds to include trustee education, the B-BBEE Act, and ESG in their investment decisions. The amended Regulation enabled pension funds to invest in alternative investments such as private equity and hedge funds, thus making it easier to channel funds towards ESG projects (Viviers & Els, 2017). The fiduciary duties of pension funds include considering factors that might materially distress the long-term sustainable performance of pension funds, and this entails considering ESG risks and opportunities in the investment selection process. Most institutional investors believed that a more stringent regulation could further improve ESG compliance by retirement and pension funds. South African institutional investors are signatories to CRISA and PRI, despite both being voluntary frameworks. However, Ogbuka & Fakoya, (2016), observed that institutional investors were not applying ESG considerations in their investment decisions despite being signatories of CRISA and PRI. The failure to comply with the principles could be attributed to the non-mandatory nature of the principles. Thus, institutional investors are not under pressure to comply with the principles and only offer lip service while investing in companies that are not environmentally friendly (Ogbuka & Fakoya, 2016). This was further supported by Pretorius et al. (2010) who observed that institutional investors' ESG investment criteria were mostly focused on socially inclined trends such as black empowerment, development and infrastructure; the environment criteria received minimal consideration from investors. The absence of long-term policy direction also affected the transition to greener investment choices among institutional investors, despite Regulation 28 and CRISA (UNEP, 2016).

Regulation 28 amendment was an essential step towards ESG implementation in South Africa as it strongly encouraged responsible investment, and it has managed to change the face of the retirement funds industry in South Africa (Viviers, 2014). With the new Regulation 28, pension fund trustees were expected to craft investment policy statements that include B-BBEE, ESG, and trustee education. Giamporcaro & Viviers (2014) concluded that investment managers believed that South Africa is facing more developmental challenges as an emerging economy and should be less worried about the environmental pillar, which is developed economies problem. The lack of ESG experts and failure to consult fund beneficiaries' expectations affected responsible investment in South Africa (Giamporcaro & Viviers, 2014). In 2019, a follow-up guidance to Regulation 28 was issued, which required all boards of trustees to consider ESG factors before investing in any asset. This additional guidance was aimed at ensuring investors' compliance with Regulation 28

(National Treasury, 2021). Regulation 28 requirements have forced institutional investors to demand improved integrated reports with detailed ESG reports from companies to assist in their decision-making. The King IV report was introduced in 2016 with an emphasis on value creation in a sustainable context. King IV further encouraged institutional investors to practice responsible investment, and was further adopted as a listing requirement by the JSE.

Most institutional investors embraced soft regulations such as King III (2009) and the Financial Sector Charter (2003) and were resistant to mandatory compliance, such as the amended regulation 28, which initially proposed that at least 5% of pension fund resources be invested in ESG assets. Only a minority of investors were fearful of losing beneficiaries' funds through implementing the proposed amended Regulation 28, and the rest were just fearful of the change. When Regulation 28 was finally amended in 2011, the 5% requirement had been scrapped due to the institutional investors' outcry and was more aligned with UNPRI regarding the fiduciary duties of institutional investors, which include value creation and impact on long-term sustainability (Giamporcaro, 2011; Giamporcaro & Viviers, 2014). However, Andrew, (2020), and Giamporcaro & Viviers (2014) observed an insignificant difference in returns between socially responsible investments and traditional investments in South Africa.

The increased demand for ESG firm performance in South Africa has forced listed companies to embrace and implement the JSE Socially Responsible Investment Index (SRI) guidelines (Maubane et al., 2014). The JSE SRI was launched in 2004, being guided by both the GRI and the King II report. The SRI aimed to identify firms that applied the triple bottom line principles and good corporate governance in their operations. The sustainability index enabled socially responsible investors to channel their resources to sustainable companies and offered sustainable reporting guidelines to listed South African companies. The SRI considers the economic sector in which companies operate, including the relative impact caused by the firm operating in that sector, and this brings discrepancies in ESG reports. The high-impact sectors (mining and material sectors) reported more on the environmental pillar of ESG (Maubane et al., 2014). The SRI index provides investors with sustainability ratings of firms annually and contributes to sustainable business practices in South Africa. South Africa introduced the King III report in 2009, which aligned with international standards and took cognisance of the complex nature of South African sustainability reporting. The King III report highlighted the importance of ESG reporting in

corporate governance as well as overall firm health. King III revealed the importance of sustainability in the 21<sup>st</sup> century as shown by the natural environment, social, and political systems. The report was on an “apply and explain basis” This forced firms to comply with the report to ensure credibility in the eyes of their investors (Maubane et al., 2014). The JSE, however, mandated compliance with the King III as a listing requirement. Listed firms tend to report on the bare minimum requirements of SRI to comply with the guideline; still, Maubane et al. (2014) concluded that the JSE SRI index should compel firms to disclose everything to ensure accountability and transparency in firms.

There was a total of R23.28 billion in SRI investments in 2009, which constituted 1.04% of gross investment in South Africa. Responsible investment during this period was driven by black empowerment policies aimed at redressing social inequality through the B-BBEE Act of 2003 (Giamporcaro, 2011). Interestingly, responsible investment was already in existence in South Africa in 1992, and it was estimated that 0.7% of assets were invested under Responsible investment in 2006 (Viviers et al., 2008). South Africa’s socio-political history affected how investors made ESG investment decisions. Responsible investors in South Africa were influenced by deontological ethics and ethics of care in their investment decisions, as opposed to the UNPRI, which downplayed the role of ethical and faith-based considerations (Viviers et al., 2008a). Thus, responsible investment funds were mostly channelled to Social and developmental goals, and little attention was given to environmental issues.

The South African Government Employee Pension Fund (GEPF) dominates the pension industry with assets approximately equal to one-third of the country’s GDP, and GEPF mandates the Public Investment Corporation (PIC) to invest and control its portfolio of assets. The Government can thus influence PIC to invest in ESG assets to follow its sustainability objectives. Considering this, in 2013, PIC mainly concentrated on poverty reduction, housing, educational financing, and infrastructure financing. PIC used minimal ESG considerations in investment decisions (Luvhengo, 2013). Interestingly, active share ownership was a strategy used by the GEPF to force companies they invested in to adopt ESG. The GEPF launched its principles of responsible investment charter in 2010, which aligned with the PRI. The pension fund has influenced institutional investors since 2007, when it adopted PRI by asking about investors’ PRI status as part of the tender application process. Thus, GEPF played a critical role in institutionalising PRI

in South Africa. In 2011, GEPF allocated approximately US\$7 billion towards ESG investments (Giamporcaro, 2011; Giamporcaro & Viviers, 2014; UNEP, 2016). Despite these initiatives, most of GEPF's investment portfolios are still exposed to industries with highly negative environmental impacts.

To ensure ESG implementation, directors should incorporate ESG indicators when assessing management risk-adjusted performance (Johnson et al., 2019). Institutional investors should use CRISA and King IV guidelines when dealing with investee firms. Investors perceive well-governed firms to be less risky and thus require a lower expected return than when investing in a poorly governed firm. Thus, institutional investors in South Africa emphasised the importance of corporate governance over ESG; however, this could be attributed to corporate scandals in South Africa during the period, such as the Steinhoff and Tongaat-Hulett scandals (Andrew, 2020; Johnson et al., 2019). Investors pursuing responsible investment can positively influence the socio-economic development of the country by engaging investee firms to incorporate their ESG preferences in investment decision-making.

Since 2000, the South African government has enacted legislation, such as Broad-Based Black Economic Empowerment (BBBEE) (2003), Unemployment Insurance Act (2001), Regulation 28 (2011), Amendment of the Companies Act (2008), and Integrated Reporting (2010), that incorporate ESG (Andrew, 2020). Mandatory Integrated reports improved the quality of ESG information disclosed by firms, which translated into improved earnings forecasts by analysts (Arif et al., 2022). In 1994, South Africa produced its first King Report, which was strongly influenced by the Cadbury Report from the UK. Despite this report being principle-based and not regulatory, the JSE adopted the report to become part of its listing requirements on a comply or explain basis in 1995. King II's report was introduced in 2002 with a full chapter on sustainability. Sustainability, being a company's ability to integrate the triple bottom line principles and sustainability was mirrored in the African concept of ubuntu. The report encouraged full disclosure of non-financial information. The King II report was further institutionalised in 2004 when the JSE introduced the SRI index, where all listed companies included in the FTSE/JSE share index were included in the SRI index. This index was the first of its kind by an emerging economy and a stock exchange. In 2007, to ensure transparency in listed company ESG evaluations, the JSE partnered

with the UK firm Ethical Investment Research Services (EIRIS) (Giamporcaro & Viviers, 2014). CRISA was introduced in 2011 to bind local investors to principles of responsible investment.

The first responsible investment fund was launched in South Africa in 1992, but growth in assets under responsible investment funds has been limited (Viviers, 2014). There is a preference for impact and social investing due to regulations such as B-BBEE. An increase in private equity investors interested in environmental, social, and materials investments has been observed (Viviers, 2014). Institutional investors increasingly incorporate ESG in their decisions; however, improved guidelines are needed for integrating ESG into the decision-making process to meet international standards. Additionally, there is inconsistency among South African investors regarding how and when to incorporate material ESG information (Marais et al., 2022). Institutional investors should create internal responsible investment policies and develop ESG data systems to assist in collecting material ESG data as per international standards like the PRI.

Investors should engage with investee firms on ESG issues. Marais et al. (2022) concluded that a standardised ESG integration framework using a top-down approach is needed for investors in South Africa. Forty Billion Rand was invested in green assets as of 2020, and a great chunk of institutional investors had incorporated ESG into their investment policies (IFC, 2020). The IFC expects R588 billion to be invested in climate-smart investments by 2030. Currently, there is an increased demand for sustainable assets in South Africa; however, there are limited green investment opportunities available that meet the requirements of pension funds in the South African market. More than half of retirement funds are willing to divest from coal; however, it is crucial to consider the social implications, such as unemployment, that may impact the country. Investors are open to divesting if there will be equivalent job creation in the green energy sectors of the economy.

Institutional investors currently have investments in both coal and renewable energy firms. (IFC, 2020). Pension fund trustees are regularly trained to ensure they can effectively integrate sustainable finance and ESG into their investment strategies. The Responsible Investment and Ownership Guide is updated regularly and is aimed at training trustees to carry out their fiduciary duties of ensuring long-term sustainable investments (IFC, 2020). However, trustees still have challenges in quantifying the impact of their green investments, and the regulator is not actively monitoring green finance. A majority of pension funds in South Africa do not have a specific policy

aimed at green finance, despite being active investors in sustainable products such as renewable energy (IFC, 2020). ESG integration in investments remains a challenge due to the poor quality of data received from assets, the lack of ESG risk management guidelines, and insufficient information on the ESG risk mitigation role of trustees (IFC, 2020).

South Africa is a member and signatory to the United Nations Framework Convention on Climate Change (UNFCCC) and has submitted its Nationally Determined Contribution (NDC) to affirm its commitment to addressing climate change issues. The country formally endorsed the Paris Agreement in 2016 through Parliament. To achieve sustainable development goals, the South African government launched the National Climate Change Response Policy (NCCRP), which aims to respond to and address climate change issues in the country. For example, fossil fuel combustion accounts for 80% of greenhouse gas emissions, with 45% contributed by the electricity sector. South Africa is ranked 11th globally in terms of high greenhouse gas (GHG) emissions. The government recognizes the significance of financial institutions in combating climate change through their resource mobilization function, ability to offer green deals, and regular engagement in the industry. (National Treasury, 2021).

The government is facilitating the transfer of new sustainable projects, such as Renewable Energy Independent Power Producer Programmes, to private sector funding, consequently liberating the Treasury's balance sheet and unlocking sustainable economic opportunities (National Treasury, 2021). This move enabled REIPPP to attract R202 billion from local and international private investors. The government intends to integrate ESG responsiveness into provincial and municipal planning by issuing ESG guidelines on provincial medium-term expenditure frameworks. In the same disposition, the South African government launched the investor map, aimed at engaging the private sector in achieving its SDG objectives, such as poverty reduction, unemployment, and inequality reduction. The map assists investors in identifying investment opportunities in various sectors, offering sector insight and economic conditions that can yield the highest returns and social impact. In addition, the map shows how investors can allocate capital in the various sectors efficiently (ILO, 2022).

In efforts to combat the negative ecological footprint, the South African government introduced the Carbon Tax Act (No. 15 of 2019). Under the Carbon Tax Act, large carbon emitters are required to report their greenhouse gas emissions and pay tax, which is a function of sector and rebates.

The government further issued regulations aimed at offsetting carbon emissions by taxpayers in November 2019, intended to encourage climate-positive ventures and drive financial institutions to orderly transition from high to low carbon investment financing. However, to effectively implement ESG, the government must develop an all-encompassing national green policy and stop the government's reliance on concessionary loans. Most sustainable projects are not commercially viable without government intervention in the form of subsidies due to their long payback period; thus, the government intervenes and, in the process, makes the price of renewable energy cheaper than fossil energy. The government has further implemented incentives such as research and development tax incentives on green innovations, biodiversity conservation, motor vehicle emissions tax, and fiscal allocations towards sustainable projects to various departments.

The City of Johannesburg was the first municipality to issue a green bond in South Africa, and the bond was listed on the JSE in 2014. This bond was aimed at financing biogas and solar geyser projects in Johannesburg. The City of Cape Town is following suit with an R1 billion green bond issuance aimed at financing the city's climate change strategy. In support of green financing, the JSE in 2017 opened a green bond segment on the stock exchange and later upgraded it to a sustainability segment in July 2020. To date, the JSE has facilitated green financing bond issuance to Growth Point (2017) and Nedbank (2019), with Nedbank listing its renewable energy ring-fenced green bond in 2019 (National Treasury, 2021). In support of ESG, the South African Reserve Bank became a member of the Network of Greening the Financial System in 2019, and registered banks are expected to report on their environmental and social risks, though in an unspecified manner. Unfortunately, this results in diverse reports and makes it difficult for the regulator to understand the underlying portfolio or transaction risks or exposures of failure to achieve SDGs. Traditionally, South African banks adopt the International Finance Corporation standards, which regrettably do not wholly support the valuation of climate risk (National Treasury, 2021).

The United Nations principles of responsible banking also guide banks in South Africa, with three South African banks being founding members of this UN initiative in 2019. In addition, the Banking Association of South Africa (BASA) adopted the principles. However, they are not mandatory conditions for membership in the association. South African banks are also governed by the Equator Principles, UN Global Pact, Dow Jones Sustainability Index, UNEP FI, UNEP

Positive Impact Manifesto, Principles for Responsible Banking, and various banks are members of these sustainability pacts. In line with the sustainability pacts, banks in South Africa have issued green bonds for renewable energy worth R18 billion and have opened green credit lines for investors (National Treasury, 2021). The Reserve Bank of South Africa, as the regulator, became a member of the Network for Greening the Financial System and has since published a working paper on climate change in 2020.

Banks, as lenders, play a critical role in financing mining operations and hence have a significant influence on mining companies' ESG policies. Banks require mining corporations to furnish them with ESG information before dispensing loans because mining has a negative ecological footprint on both people and the environment. Guided by bank ESG policies and as signatories to the PRI, banks are expected to finance operations that have minimal ESG footprints (Milazi, 2016). The Bankers Association of South Africa introduced a Code of Banking Practice in 2012 aimed at guiding banks to conduct their business in a fair, accountable, and transparent manner and avoid inflicting harm on society through lending operations. Mines in South Africa are guided by the mining charter with explicit ESG clauses. Section 2(8) of the mining charter deals with sustainable development and encourages mining corporations to implement kaizen environmental systems. The Charter is an enforceable regulation, and noncompliance is dealt with under the Minerals and Petroleum Resources Development Act (MPRDA). Failure to comply with this Act may result in the suspension or cancellation of mining permits (Milazi, 2016).

Despite these laws, in 2012, 44 miners were killed in a housing protest that took place in the Marikana Platinum mine owned by Lonmin. The company had failed to implement ESG pillars in its mining operations, especially the social aspects of ESG. In this instance, Lonmin was supposed to build a total of 5,500 houses for its workers and had only managed to build three houses yet, there were serious accommodation challenges within the mining area. Furthermore, Lonmin was being funded by four banks: IFC, Standard Bank, Investec, and First Rand Bank, listed on the JSE and members of BASA and the Equatorial Principles with clear ESG guidelines. Accordingly, Milazi (2016) recommended increased statutory regulations to counter the inadequacy of ESG implementation by mining corporations.

Nevertheless, Milazi (2016) observed that for successful statutory law implementation, there was a need for buy-in from all stakeholders to justify the need for regulation by the state. Banks, as

financiers, if they are ESG-regulated by hard laws, can then have ESG implementation cascade to the rest of the economic sectors. Milazi (2016) further recommended SADC standardised ESG regulations for banks financing mining operations within the region, punitive laws that impose fines for contradicting ESG principles, central banks to impose ESG policies and principles to be followed by banks, and governments to collaborate with ESG standard-setting bodies for bureaucrats' skills training to enhance capacity building and launch awareness campaigns spearheaded by governments.

King II (2002) identified investor inertia as the major reason behind the non-enforcement of breaches of obligations by managers and directors. There was a lack of shareholder activism in South Africa, and institutional investors and pension funds were largely dormant investors. King III (2009) further reiterated that the lack of institutional investor activism was attributable to global market failures. The need for institutional investor engagement stated in the King III report led to the creation Institutional Investors Code for Responsible Investment in South Africa (CRISA). While the King Code dealt with the duties and responsibilities of directors, the Code of Responsible Investment examined those who would invest in those companies and provided guidelines they should include in investment strategies (Foster, 2020). Thus, CRISA complemented the corporate governance codes. Furthermore, CRISA forced investor activism on institutional investors. CRISA required institutional investors to consider not only the short-term returns of their investments but also the long-term effects of incorporating environmental, social, and governance issues in investment strategies.

This requirement was further supported by Regulation 28 of the Pension Funds Act, which requires pension funds to seriously consider any factor that may materially affect the sustainable long-term returns of the fund, and those factors may include ESG issues. King IV further reiterated the powers that institutional investors had enshrined in the Companies Act to hold companies' boards accountable. Thus, institutional investors can act as a proxy for the greater stakeholders' interests (Foster, 2020). Institutional investors have a fiduciary duty to members of the retirement fund, their beneficiaries, and dependents. Thus, institutional investors have a fiduciary duty towards society, and, hence, their investment decisions have an impact on society and require due diligence (Foster, 2020). CRISA further states that sustainability entails managing the impact of investment decisions on communities, the economy, and the natural environment in which the firm operates.

Shareholder activism is low in South Africa, as most investors prefer private engagement with investee firms over confrontational strategies such as proxy voting. Thus, only 6.6% of proxy votes were against resolutions tabled by 347 firms listed in the JSE in 2013. Firms excluded from the JSE SRI index and firms with poor ESG disclosure faced more opposition from investors. Investor activism should be encouraged for successful regulatory reforms (Viviers & Mans-Kemp, 2021; Viviers & VdM. Smit, 2015). However, there is an increased use of social media in South Africa by investors as part of shareholder activism. Investors use the platforms to air their views and concerns about the companies in which they invest. Social media amplifies the voice of investors as it gives them extraordinary visibility. King IV acknowledged the power of social media in enhancing transparency in firms. Companies, for fear of losing their credibility and market share, are quick to respond to shareholder activism (Mans-Kemp & Van Zyl, 2021).

JSE in 2020, due to the COVID-19 pandemic, launched a platform to enable listed companies to hold virtual AGMs. The platform allowed for virtual voting to shareholders, and the system could hold a lot of participants concurrently. Such platforms allow minority shareholders to participate at minimal costs. However, Just Share, a South African investor activist organisation, believed that the use of technology was justifiable as long as listed companies did not infringe on investors' rights and the Companies Act. (Mans-Kemp & Van Zyl, 2021). Mans-Kemp & Van Zyl (2021) concluded that investor activism was gaining traction in South Africa due to CRISA and PRI, which forced institutional investors to consider ESG when scrutinising investee firms. However, to a greater extent, institutional investors in South Africa prefer to engage investee firms privately rather than engage in public activism. They viewed public investor activism as hostile and confrontational, and this could be attributed to the limited investment cosmos in the country; hence, the need for investors to maintain relations. Also, most institutional investors believe that the cost of public activism outweighs the benefits they will acquire from their actions. Investors equate the costs of public activism with fighting for the public good (Mans-Kemp & Van Zyl, 2021). However, some institutional investors, to ensure transparency and adherence to CRISA and PRI, disclose their private engagements with investee firms in reports that are uploaded on the firms' websites.

Legislation, especially Regulation 28, led to an improved understanding and discussions about ESG and responsible investments among investors. Investor engagements also increase due to

regulation. Thus, the South African government should craft more ESG legislation to curb ESG challenges in the country (Yamahaki & Frynas, 2016). CRISA recommends that institutional investors create investment policies that facilitate the adoption of sustainability considerations in their investment activities. Institutional investors are expected to further publicly disclose the extent to which they incorporated CRISA principles and explain where they failed to adopt the principles (Cassim, 2022). Institutional investors use various strategies in selecting their ESG investments. Some use the positive screening approach, others utilise the negative screening approach, and the negative screening approach is popular with Shariah-compliant funds, which exclude companies dealing with alcohol, high financial leverage, and interest income (Pretorius et al., 2010).

South Africa was one of the early ESG disclosure advocates. However, to date, the country has yet to mandate ESG legislation. ESG reporting relies mostly on private regulation, which revolves around the King Code currently in its fourth iteration. Thus, the King Code is mandatory for all listed firms on the JSE, and this was an indirect private ordering as a result of public-private interaction between the IoDSA and the JSE, a self-regulating entity (Ho & Park, 2019). The South African government is evident in having delegated the enforcement of the King Code to the JSE insofar as the government allowed the JSE to regulate ESG listing requirements without express statutory regulation that mandates that.

To improve ESG implementation, it was recommended to adopt a prescriptive regulatory approach, as the voluntary approach has culminated in training workshops and advocacy. Investors are faced with an ESG information asymmetry challenge due to unstandardised reports and the lack of a South African ESG rating agency (UNEP, 2016). Younger investors are more likely to drive the integration of ESG in their investments, and there has been an increase in demand for ESG information from institutional investors due to the Steinhoff corporate scandals that rocked the country in 2017 (Worthington-Smith & Giamporcaro, 2021). To improve ESG integration in investments, institutional investors should hire ESG analysts to conduct internal ESG research. Investors should utilise the wealth of information being released by PRI, CFA, TCFD, and other bodies to better understand and adopt ESG in their operations. Top management buy-in is critical for successful ESG integration by institutional investors, especially from renowned industry leaders with influence in the investment sector. The introduction of the mining charter, Regulation

28, and the Carbon Tax Act are clear tools that show the country's commitment to ESG implementation however, there is a need for a mandatory ESG integration framework to be used by institutional investors to enable industry-wide comparisons (Worthington-Smith & Giamporcaro, 2021).

The lack of demand for sustainable products by investors has been a major impediment to ESG implementation in South Africa. This lack of interest is worse for environmentally positive-driven products (Caporale et al., 2022). Institutional investors, despite membership in CRISA and PRI, have yet to start investing in long-term sustainable products on the JSE. This can be a reflection of the insufficiency of soft laws and the need for hard laws to effectively adopt ESG in the country (Ho & Park, 2019; Taplin, 2021). Caporale et al. (2022) further, observed that in the absence of strict statutory regulations, firms pretend to comply with ESG, yet their investment decisions are independent of the ESG guidelines. Thus, camouflaging, pinkwashing, bluewashing, and greenwashing are prevalent, and this results in stock exchange inefficiencies.

The Mining Charter was introduced in 2002 by the MPRDA. In 2010, the Charter was revised to include specific targets for the inclusion and participation of marginalised black South Africans. Charter III takes a step further in setting targets for social and economic justice of marginalised communities. Nevertheless, it is silent on environmental issues. However, the Charter has suffered from poor implementation. Bester & Groenewald (2021) observed that Mining Charter III was silent on ESG and sustainability issues and, interestingly, shifted the responsibility to the mining industry at the government policy level. Nevertheless, the Charter III has a radical stance on social transformation. The National Environmental Management Act (NEMA) No. 8 of 2004 assists in the protection of the environment. Section 28 of NEMA states the duty of care for the environment, where firms are prohibited from acts of environmental degradation and are required to protect the environment. Mines are encouraged to carry out an environmental impact assessment (EIA) before commencing mining operations or closures.

King IV and CRISA, supported by hard laws such as the Pension Act of 1956. CRISA was established to provide additional guidance for South African institutional investors, with over 30 institutions as signatories when it was introduced in 2011 (Locke, 2023). The CRISA encourages active investor share ownership. Pension funds are supervised by the Financial Sector Conduct Authority (FSCA), which promotes adherence to King IV and Regulation 28. However, it has been

noted that the FSCA struggles to effectively monitor ESG investments against Regulation 28 due to resource limitations (Locke, 2023). Regulations like the Insider Trading Act (1998) have helped the Financial Services Board (FSB) assert legal authority over rogue company management. King III is the only corporate governance code that recognises stakeholders as critical components in corporate governance and ESG implementation, emphasising institutional investors. Climate change, interestingly, is an investment opportunity for investors. Investors can invest in companies that will benefit from the transition to low-carbon economies. Such investments have positive environmental outcomes (Burival, 2021).

The TCFD disclosure guidelines empower investors and facilitate the shifting of funds into sustainable assets such as green bonds aimed at financing investment projects with positive climate or environmental effects. Regulation 28 encourages investors to consider ESG-related issues in investment decisions. Additionally, the Bankers Association of South Africa introduced the Climate Risk Steering Committee, chaired by the National Treasury of South Africa, aimed at giving ESG implementation support to the key recommendations of Financing a Sustainable Economy offered by the National Treasury (Burival, 2021). However, most South African companies, despite knowledge of the climate-related risks, do not incorporate these risks in their strategies; only ten companies in South Africa apply TCFD climate disclosure guidelines, with Sasol and Investec as part of the ten firms.

On the other hand, the sustainable finance initiative is driven by the private sector. Civic society organisation in South Africa, such as Just Share, have increased their ESG awareness campaigns. For example, Just Share reported that Pension fund trustees must consider climate risk in investment decision-making lest they face the legal consequences for losses incurred from poor investment decisions (Burival, 2021). Burival (2021) further recommended that the South African government enact regulations to assist the financial sector in identifying, monitoring, and mitigating ESG risks at investment selection and transactional levels. Pension funds, by adopting TCFD disclosure guidelines, can assess and comprehend climate risks specific to their investment portfolios, and thus be able to mitigate and make the best decisions for pensioners. The adoption of TCFD will assist the South African government, investors, and financial institutions in navigating transitional risks and shocks facing the country as it heavily relies on fossil fuels. A majority of pension funds have investment policies that integrate ESG. However, only an

insignificant number of pension funds have policies that support green or climate change investments (Burival, 2021). Risk management and pressures from stakeholders such as the media have forced firms to report on climate risk in South Africa.

Investors now consider ESG financial materiality in decision-making; this shift may lead to greater sustainability than when relying on traditional SRI practices. Responsible investment considers ESG issues at the heart of investment considerations. Regulation 28 demands that institutional investors consider ESG in their investment decisions, as opposed to the traditional SRI, where investments were screened based on their positive or negative ecological footprints. Trustees recognise that to account for all variables that influence financial value, ESG issues must be included. Focusing on ESG issues in pension fund investment decision-making diffuses the conflict between trustees' fiduciary duties and SRI activities. ESG materiality vests investors with the power to engage firms on ESG issues as long-term shareholders, as opposed to share traders. Jongh et al. (2007) observed that most investors believed that responsible investing meant taking increased investment risk with low returns, and only a third of pension funds were aware of PRI.

Institutional investors demanded RI than retail investors and pension fund members. Investors demanded consideration of Social and Governance issues more than Environmental issues in RI from asset managers. Despite the knowledge and understanding of ESG, most investors were not applying responsible investment or had limited funds invested in responsible investment assets. Asset managers also stated that there was little formal demand for responsible investment assets from institutional investors' mandates. Stringent regulation, evidence of increased returns from responsible investment, pressure from investors, civil society organisation actions, and responsible investment training were identified as important drivers in ESG implementation. In 2007, 11% of R2.3 trillion assets were invested in responsible investments, with a lack of demand for responsible investment assets as the major impediment to the expansion of responsible investment assets (Jongh et al., 2007). The demand from institutional investors could be attributed to the fiduciary duty of philanthropy, where pension funds are supposed to invest at least 2.5% in high-risk, low-return investments to give back to society or FSC empowerment targets.

### **3.5 Conclusions**

The South African government has signed many ESG global pacts to support ESG implementation. The country has adopted the Paris Agreement to achieve sustainability. The government, through

its treasury, has financed sustainable investment projects such as Renewable Energy Independent Power Producer Programmes (REIPPP). It introduced the National Climate Change Response Policy (NCCRP) to achieve its SDGs. Since 2000, the South African government has enacted laws supporting ESG, with early efforts focused on redressing social inequalities from the apartheid era through the B-BBEE Act (2003). In 2008, the country amended the Companies Act to include sustainable long-term growth as a duty of directors, followed by Regulation 28 in 2011, which mandated institutional investors to consider ESG in their investment decisions. In 2019, the government introduced the Carbon Tax Act to reduce GHG emissions, as South Africa is one of the highest global carbon emitters. Additionally, the government has produced several working papers aimed at educating various stakeholders on ESG. However, it has yet to adopt mandatory ESG laws as the EU has done, which is disappointing for a country that once led in advocating for ESG.

The ESG is mainly regulated through private ordering and private regulation in South Africa. This can be shown by the King Codes (I to IV) and CRISA, which are the brainchild of the Institute of Directors in South Africa. The JSE has also taken the watchdog role by making the King Code a mandatory listing requirement, thus all listed companies adhere to and implement the King Code in their operation. This has assisted in reducing issues related to governance in South Africa. However, the King Codes cannot be enforced by law. CRISA, inspired by the PRI, guides institutional investors in South Africa towards responsible investment and forces institutional investors to demand ESG information from companies. Thus, CRISA instilled investor activism in South Africa, which was traditionally known for investor apathy. CRISA and the King Code work hand in hand towards long-term sustainable development in the country. The mining sector, despite the existence of the Mining Charter, has been slow in adopting and implementing ESG. Failure to comply with the Charter can lead to mining licence termination. However, to date, no mining operation has lost mining rights due to a breach of the mining charter in South Africa.

In South Africa, the Social pillar of ESG is reported more extensively than the other two components of ESG. This contrasts with Cruz & Matos (2023) and Fairfax (2023), who concluded that the social pillar was the least reported ESG matrix. This difference could be attributed to social redressing initiatives embarked on by the South African Government since independence, such as

the B-BBEE Act (2003) and FSC. Hard laws that supported social equality forced South African firms to implement social policies that benefited marginalised members of society.

There is increasing investor activism, with investor activist organisations taking centre stage in South Africa. Most institutional investors prefer to privately engage with the companies rather than using confrontational methods. Investor activists are utilising their proxy voting rights to advocate for ESG adoption in the country. Just Share and Raith Foundation are examples of active investor groups that have been successful in lobbying for climate change resolutions. GEPEF, one of the biggest pension funds in the world, also successfully made other institutional investors join the UNPRI in a bid to do business with GEPEF. The Amended Companies Act, King Code and CRISA encourage and support investor activism. However, there is a need for continued and improved investor activism for greater ESG implementation and not fear of hostile actions from corporations. Social media is slowly being used by ESG advocates to fight for the implementation of ESG in South Africa.

The next chapter presents the use of impression management in ESG reports and the chairman's statement among JSE-listed firms. The chapter aims to see if there is impression management in ESG reporting among listed firms in South Africa. ESG implementation should be accompanied by genuine ESG reporting that supports and reflects the steps and initiatives that firms have implemented. Thus, the chapter shall investigate the ESG reports as well as the chairman's statements to see if there is any consistency as far as ESG implementation is concerned.

## **Chapter 4: The Chairman's Statement and Impression Management in ESG Reporting**

### **4.1 Introduction**

This chapter contributes to the discourse on impression management, emphasising how the chairman's statement corroborates environmental, social, and governance (ESG) reporting in the integrated reports of the Top 40 Johannesburg Stock Exchange (JSE) listed firms in South Africa. The existing literature shows that the chairman's statement in the integrated reports, which is among the unaudited disclosures, tends to manage impressions that provide signals to the investing public who use such reports for decision-making (Nel et al., 2022; Totowa & Mokoaleli-Mokoteli, 2021). However, with the ESG framework taking centre stage, it remains unclear how the chairman's statement validates ESG reporting and whether the former manages impressions on the three pillars of sustainability. The chapter begins with a brief discussion of theoretical arguments, followed by a review of the existing empirical evidence to identify the gaps and the study's contributions to the body of knowledge. This is followed by the methodology, analysis and discussion of the findings, drawing on relevant theories and discourses in impression management and ESG issues.

### **4.2 Brief review of the theoretical and empirical literature**

This section provides a brief discussion of theoretical arguments on impression management and ESG discourse. Stakeholder, signaling, and legitimacy theories were reviewed. These three theories are interconnected and assist in explaining ESG disclosure and accountability practices by firms.

The *stakeholder theory*, developed by Edward Freeman in 1984, postulates that a business has a relationship with its various stakeholders. This suggests that businesses do not exist solely to maximise profits for their shareholders but to create value for various stakeholders (Freeman, 1994). According to the stakeholder theory, management's role is to manage relationships between the business and its various stakeholders (Freeman, 1998; Laplume, Sonpar, & Litz, 2008). Such relationships can change over time, and conflicts can arise; thus, executives must find solutions that ensure business continuity and value creation for all stakeholders (Freeman et al., 2020). According to Freeman, the alignment of stakeholder relationships enables firms to avoid moral failures; the stakeholder theory is therefore considered an alternative to the shareholder theory.

However, Meutia et al. (2022) observed that stakeholders' involvement in resource allocation could translate into shareholder maximisation through new value-creation opportunities, which results in a blend of capitalism and ethics. In support of this notion, Parmar et al. (2010) assert that the stakeholder theory ensures that management is accountable to various constituencies in business deals, thereby reducing the threat of self-dealing.

According to the stakeholder theory, to maximize shareholder wealth, value must be created for all parties involved, including suppliers, consumers, employees, and society at large (Parmar et al., 2010). According to Barney & Harrison (2020), managers are supposed to be dedicated to creating value while adhering to specific standards, ethics, and values that improve corporate efficiency and benefit society. In order to assure ethical value generation, the stakeholder theory helps managers. Stakeholders are legally and economically bound to an organisation in exchange for a perceived and actual return on their contribution (McGahan, 2021). How a business treats some of its stakeholders can influence the level of trust others will have in the company (Barney & Harrison, 2020).

The *signaling theory* is concerned with the information asymmetry that exists between a signaler and the receiver. The theory was propounded by Spence in 1973. The theory addresses the challenges of information asymmetry that exist between the sender and the receiver. To reduce the information asymmetry, the signaler should send credible information (Kharouf et al., 2020). The theory addresses the core challenge of transparency in situations where the signaler has an interest but must convince the receiver of their sincerity (Yasar et al., 2020). This challenge is heightened by the inherent conflict of interest between the signaler and the receiver, as the signaler often holds insider information (Riley, 1979). Signals, which can be both intentional and unintentional, are sent to be interpreted by the receiver to reduce information asymmetry (Kharouf et al., 2020). For a signal to be effective, it must be credible, reasonably priced, and accurately reflect the capabilities of the signaller. It may also provide new or additional information previously held by the receiver (Yasar et al., 2020). Signaling theory has been applied to justify voluntary disclosures in ESG reporting (Barney & Harrison, 2020), Companies go beyond legal and regulatory requirements to signal to the market that they are superior to their competitors.

Signaling theory offers a valuable lens for understanding how firms use voluntary disclosure, such as sustainability or ESG reports, to reduce information asymmetry, build trust with stakeholders,

and improve their competitive position (Yasar et al., 2020). By sending credible, well-priced signals, companies aim to convey their superior qualities and secure a positive market perception, despite inherent conflicts of interest or information imbalances between themselves and their stakeholders (Huang, 2022).

Lastly, the *Legitimacy theory*, developed by Dowling and Pfeffer in 1975, offers a framework for understanding how organisations seek to align their activities with societal expectations to ensure their continued existence and access to resources. The theory is divided into two types: macro legitimacy and underlying organisational legitimacy (Deegan, 2002), with most organisations deriving their reporting styles and practices from the latter. At its core, legitimacy theory suggests that a firm has a right to operate if its values and actions align with the broader societal norms and expectations of the community in which it functions (Shehata, 2014). This alignment forms what is known as a social contract between the firm and society, which influences how, when, and why companies report to their stakeholders (Meutia et al., 2022). The main goal is often to enhance society's perception of the company, making it appear more acceptable or legitimate in the eyes of the public (Deegan, 2002).

According to Deegan (2019), organisations are part of a larger social system and must "earn" the right to resources. Only companies that are perceived as legitimate by society can sustain their right to operate and access the resources they need to survive and grow. Legitimacy is dynamic, meaning it can change over time and is influenced by the social context in which the business operates. As such, legitimacy is affected by both time and place. If an organisation's values and operations align with societal values, it achieves legitimacy. However, if a gap emerges between the organisation's actions and societal expectations, it risks losing its legitimacy, which can lead to sanctions or penalties from society (Deegan, 2019). In response, organisations that fail to meet societal expectations are often compelled to take remedial actions to re-align with societal values and restore their legitimacy.

Legitimacy theory underscores the critical importance of alignment between an organisation's values and societal expectations. Organisations must continuously work to maintain this alignment to ensure their legitimacy and, consequently, their continued access to resources and survival. Sustainability reporting is typically voluntary, meaning companies are not legally required to disclose non-financial information unless specified by regulation. Therefore, understanding the

motivations behind these disclosures is essential, as it can significantly influence the reliability and transparency of the information provided to stakeholders. Deegan (2002) identified legitimacy as the primary driver for ESG (Environmental, Social, and Governance) disclosure, with companies aiming to align their operations with societal expectations to enhance their legitimacy. However, there is limited empirical evidence on whether legitimising disclosures effectively impact society's perception of a company or which specific stakeholders influence such disclosures.

In addition to this, legitimacy theory explains the motivation behind voluntary ESG disclosures, highlighting how companies use reporting to maintain their legitimacy and align with stakeholder expectations, thus reducing regulatory pressures (Meutia et al., 2022; Schiopoiu Burlea & Popa, 2013). This theory provides valuable insight into the motivations behind sustainability reporting and the potential role of such disclosures in shaping a company's social legitimacy.

Legitimacy theory and signaling theory were adopted because corporate disclosure is influenced by environmental forces and aims to legitimise company actions (Deegan, 2019; Guthrie & Parker, 1989; Khan et al., 2021; Santamaria et al., 2021). Legitimacy theory is the basis for most companies to conduct materiality analysis in sustainability reports (Meutia et al., 2022). To attract investors and improve the company's reputation in the market, management signals certain information to the market, taking advantage of the problem of information asymmetry (Shehata, 2014). In impression management, a company signals to the market what various stakeholders expect of it to legitimise its existence in society.

### **4.3 Empirical literature**

#### **4.3.1 Impression Management**

Impression management is a social psychology concept that refers to individuals' desire to control others' perceptions of them (Hamza & Jarboui, 2022; Solomon et al., 2013). Firms use it in integrated financial reports to influence users' perceptions of the company (Hamza & Jarboui, 2022; Solomon et al., 2013). It is imperative to investigate the use of impression management by listed companies as they navigate ESG issues in their integrated reports. This concept deviates from traditional corporate social responsibility, which was mainly governed by morality and ethics and lacked consensus on reporting standards and legislation. Hamza and Jarboui (2022) concluded

that a lack of enforcement could lead to insincere sustainability reporting; hence the need to investigate impression management in the chairman's and ESG reports.

#### **4.3.2 Relationship between the chairman's statement and impression management**

Chairmen of JSE-listed businesses attributed negative news to the external factors while claiming responsibility for positive news (Bhana, 2009; Ozsozgun Caliskan et al., 2021). They emphasised positive outcomes to justify the company's performance (Ozsozgun Caliskan et al., 2021). But management's reporting style was self-seeking and not objective (Ozsozgun Caliskan et al., 2021). This may be because the chairman's statement is not audited; auditors only review it for consistency with the annual integrated reports. The sections on voluntary disclosure in integrated reports are stage-managed to give credibility to management, especially in poorly performing companies (Bhana, 2009; Melloni et al., 2017). Impression management is prevalent in financial reporting, as management acts as gatekeepers and custodians of information, aiming to influence stakeholders' opinions, behaviours, and attitudes. Annual reports have been reduced to a management self-serving tool (Melloni et al., 2017). Stakeholder power asymmetry determines the level of attention and impression management. Pressure from external stakeholders, such as the United Nations and its Sustainable Development Goals, has led to an increase in companies reporting on their ESG operations. Some companies have produced an exclusive report on these operations to demonstrate their responsibility. However, Michelon et al. (2015) observed that such sustainability reports were symbolic and lacked depth in terms of quality. The emphasis on qualitative performance in sustainability reports limits their effectiveness as accountability instruments (Ozsozgun Caliskan et al., 2021).

On the other hand, companies affected by disasters changed their reporting to legitimise their operations by managing stakeholders' impressions (Corraza et al., 2020). Poorly performing companies have long produced ambiguous annual reports with little information on non-financial performance (Melloni et al., 2017). Ozsozgun Caliskan et al. (2021) observed a decline in the use of impression management in CEOs' sustainability reports, attributing it to management intentionally closing the gap through actions that align with their statements. This finding aligned with Hamza and Jarboui (2022), who concluded that socially responsible firms in France were more transparent and that their sustainability activities reflected moral, ethical management. Impression management was less prevalent in countries with mandatory environmental disclosure, and the reports employed impartial language. Transparent ESG reports signal management's

integrity and influence future firm performance. A firm's commitment to ESG issues is positively influenced by the ESG committee and the firm's size and negatively affected by company growth opportunities (Hamza & Jarboui, 2022).

However, impression management is more prevalent and varied in management annual reports than in CEOs' statements in sustainability reports. The difference in the use of impression management strategies between the two reports may be attributed to management conforming to external pressures and expectations. For example, sustainable performance is difficult to quantify and evaluate, leading to sustainability reports emphasising commitment rather than actual performance (greenwashing) (Ozsozgun Caliskan et al., 2021).

Yasseen et al. (2019) found that impression management was influenced by performance in the chairman's statement, and readability was not used as an impression management strategy by listed South African companies, despite being an issue chairman. This aligns with Totowa and Mokoaleli-Mokoteli (2021), who noted that management employed optimistic language for impression management, while poorly performing listed companies used less optimistic language in their reports.

### **Impression Management and ESG Reports**

Companies that performed poorly in ESG issues used more soft than hard skills in their ESG reports, and that soft skills were less predictive of future ESG performance as they lacked accountability and failed to improve stakeholders' perceptions (Anantharaman et al., 2021). The soft skills employed were forward-looking and relied on boilerplate language, whereas hard skills were more quantitative. Hard information led to the company receiving third-party awards and reduced stakeholder activism. Regulated ESG reporting can result in better quality disclosure. Chong and Rahman (2020) and Momin et al. (2023) found widespread use of visuals in sustainability reports by listed companies. Tables and numbers in ESG reports appealed to stakeholder logic and conveyed a positive sustainability message, while visuals created a positive symbolic sustainability message. Visuals and structural emphasis in reports could improve investor perceptions and influence their decision-making, potentially leading to increased share turnover (Chong & Rahman, 2020).

Impression management undermines transparency in ESG reporting. The reports lack accountability and tend to be selective and biased (Martins et al., 2020). The gap between what is reported and reality can misinform stakeholders regarding the company's intangible assets and global citizenship, creating a false impression of the company's future financial position (Martins et al., 2020). These findings align with Ramić (2019), who found a positive relationship between return on equity and ESG performance. Social performance also positively influenced return on equity, environmental performance, and governance.

Using a descriptive statistical method, Tamimi and Sebastianelli (2017) observed discrepancies in ESG disclosure levels in sustainability reports. Most S&P 500 companies reported more on governance issues than on environmental aspects. Reporting on ESG issues varied among sectors, with some reporting more on specific social policies. Overall, ESG disclosure lacked homogeneity among S&P 500 companies. Large-cap companies had greater ESG disclosure than mid-cap counterparts, and a large board of directors had a positive impact on ESG disclosure (Tamimi & Sebastianelli, 2017). In contrast, Alareeni and Hamdan (2020) and Buallay (2018) found that ESG disclosure positively influenced the performance measures of S&P 500 companies. Companies with high asset levels and leverage also tended to have greater ESG disclosure. However, when analysed individually, the components of ESG had varying effects on performance measures.

### **4.3.3 Evaluation of Impression management strategies used in ESG reports**

The purpose of a report has been found to determine the type of impression management used (Ozsozgun Caliskan et al., 2021). National regulations and the social context determine impression management tactics employed in sustainability reports by listed companies; this could result in multinational companies (MNCs) adopting a different mix of impression management strategies from domestic companies. Boiral et al. (2020) observed that mining companies used the neutralisation technique to legitimise their impact on the environment. They defended their operations using strategies such as showing self-proclaimed brilliance and a net positive impact on biodiversity, distancing themselves from the effects of their operations, and denying or playing down their impact on the environment. This enabled them to legitimise and rationalise their unethical and negative effects on the environment. Instead of taking significant action to legitimise their operations, companies tend to resort to a low-cost impression management strategy to improve their societal legitimacy (Boiral, 2016).

The Global Reporting Initiative (GRI) framework has been adopted by most companies since 2006; however, there is a lack of international financial reporting standards (IFRS) on ESG issues. Reporting is not standardised and is voluntary. South Africa's JSE does not have a mandatory regulatory framework for ESG reporting. Hamza and Jarboui (2022) concluded that the government, investors, and other stakeholders have a role to play in ensuring compliance and adherence to reporting procedures to eradicate the greenwashing of reports. Companies have traditionally used attention deflation and selective disclosure strategies to deflect investors' and other stakeholders' attention; yet, in recent times, the sustainability report has come to be considered a symbolic strategy (Hamza & Jarboui, 2022). Tone management and reading between the lines are strategies that investors can use to counter impression management in reports (Hamza & Jarboui, 2022).

Many companies adopt assertive and defensive impression management strategies. Assertive strategies, such as self-promotion, are performance-oriented strategies that are more widely used in impression management than defensive strategies that focus on justification (García-Sánchez & Araújo-Bernardo, 2020; Ozsozgun Caliskan et al., 2021). Quantitative references, syntactical reading ease manipulation, verbal tone management, and thematic content impression management strategies are prevalent in listed companies' annual reports (Melloni et al., 2017)

#### **4.4 Methodology**

The empirical analysis was conducted using content analysis, a favoured method in disclosure investigations (Bruno & Lagasio, 2021; García-Sánchez & Araújo-Bernardo, 2020; Silva, 2021). The study drew on the ESG reports and chairman's reports in the published financial statements of the JSE Top 40 companies. Content analysis enabled the study to obtain valuable historical insights over time (Silva, 2021; García-Sánchez & Araújo-Bernardo, 2020). Codes and categories aimed to reduce bias and improve the study's objectivity were used. The use of impression management in the sustainability reports and chairman's reports was examined in terms of the use of the passive voice, quantitative references, time references, the number of pages, the use of positive tones, and the reports' readability.

The study analysed passive voices in chairman reports and sustainability reports using the Kruskal-Wallis test because they are used as a writing strategy to appear neutral or neutralise complex issues in management reports (Hamza & Jarboui, 2022). Quantitative references enabled the study

to evaluate the materiality concept as well as the measurability of companies' actions and goals in ESG and the chairman's reports. Time references such as forward-looking and backwards-looking were analysed to understand what the listed companies have done and intend to do in future towards the ESG (Silva, 2021). The number of pages enabled the study to check if the length of reports was being used as an impression management strategy. The use of positive and negative tones was also analysed to further assess the readability of reports (Hamza & Jarboui, 2022). These variables enabled the study to investigate the use of impression management both qualitatively and quantitatively (Silva, 2021).

The current approaches of JSE Top 40 companies include the financial sector, consumer sector and material sectors. The JSE Top 40 companies constitute 80% of trade on the JSE (Chininga et al., 2023). Some of the listed companies are multinationals that are listed on more than one stock exchange and are more visible, causing them to be forced to maintain their legitimacy (Deegan, 2019). The study focused on the period 2018 to 2022 to capture the current picture and past trends since the introduction of the FTSE responsible investment index, which was introduced on the JSE in 2015. Sustainability reports and chairman's reports from 2018 to 2022 were included. The year 2022 was used as the base year in selecting the 40 companies because the Top 40 index changes regularly, thus stabilising the counters under investigation. This sample was maintained regardless of the companies' position in previous years to ensure reliability and consistency. Such an approach also enabled an analysis of the behaviour of listed companies' reports and reporting when not in the limelight. A sample of 200 chairman's statements and 200 sustainability reports for 40 companies in three sectors that were part of the JSE Top 40 was used (García-Sánchez & Araújo-Bernardo, 2020).

Classification codes were developed to systematically analyse impression management in ESG reporting. The classification scheme was informed by the legitimacy and signaling theories, as companies are under pressure from institutional investors and other stakeholders to disclose sustainability information and maintain legitimacy (García-Sánchez & Araújo-Bernardo, 2020; Silva, 2021). The classification scheme focused on what was disclosed about ESG issues (content) and how the information was reported (quality of information). Classification codes bring rigour, objectivity, and intersubjective verifiability to the analysis. The ESG target levels were observed and compared with what had been achieved. To measure the quality of information, the study

focused on what had been done in the past and future ESG plans as well as the level of financial and non-financial investment in each ESG component in the past and that planned for the future (Silva, 2021; Parmar et al., 2010). The accuracy of disclosure was further established by differentiating the quantitative and qualitative information and separating financial and non-financial information. The time orientation was used to check the quality of the reports and measure adherence to company plans or plans for future ESG standards (Silva, 2021). This was important to understand the company's past and future direction.

A Kruskal-Wallis test and Mann-Whitney test were used to further analyse impression management in sustainability reports and chairman's statements across and within sectors. The Kruskal-Wallis test was used as it enabled the study to compare three different sectors for impression management (McKight & Najab, 2010; Ostertagova et al., 2014; Pentz et al., 2021). In addition, as a non-parametric test, the Kruskal-Wallis test does not consider the distribution of the data. Kruskal-Wallis tests were used in sectoral analysis (García-Sánchez & Araújo-Bernardo, 2020; Pentz et al., 2021). A Dunn pairwise comparison was conducted after the Kruskal-Wallis test to establish how the sectors influenced each other outside the Kruskal-Wallis test (Bensken et al., 2021; Pohlert, 2014). The Dunn pairwise test enabled multiple pairwise comparisons among the sectors (Barnett et al., 2022; Elliott & Hynan, 2011). The Dunn pairwise test was conducted to determine whether the mean difference between the groups was statistically significant. A Mann-Whitney test was used to analyse impression management within sectors by analysing the chairman's statements and the ESG reports (Bensken et al., 2021). The Mann-Whitney U test was appropriate to compare the chairman's statement and the ESG reports, as it is used to compare two sample means from the same population.

#### **4.5 Findings**

The analysis of ESG reports and chairman's statements across the consumer goods, resources, and financial sectors reveals distinct patterns in reporting practices, influenced by industry-specific factors and regulatory environments. Companies in the consumer goods sector often distanced themselves from the harmful effects of their products, emphasising social and environmental initiatives to enhance their reputation, while quantitative disclosures remained limited. In contrast, firms in the resources sector focused on neutralising their environmental impact through extensive sustainability narratives, with reporting quality improving over time. The financial sector, acknowledging its role as a financier of ESG initiatives, demonstrated strong governance reporting

due to regulatory pressures like the King Codes, though inconsistencies persisted in ESG integration across investment strategies. Statistical tests, including Kruskal-Wallis and Dunn pairwise analyses, indicated varying levels of impression management, particularly in the materials sector, where word count and readability were strategically employed. These findings underscore the role of ESG reporting as both a legitimisation tool and a reflection of sector-specific priorities. Below are the detailed findings from the study.

#### **4.5.1 Consumer goods sector**

The ESG reports and chairman's statements of companies in the consumer goods sector were influenced by the type of product they produce or sell. Companies that produce harmful products, such as alcohol and oils, tried to distance themselves from the products they produced and concentrated on their initiatives in communities and concerning the environment. FMCG companies focus on social and community engagement to ensure a good reputation with their customers because their business depends on society. The selection of ESG issues to focus on was mainly influenced by their line of business, and reporting was an act of self-promotion or being exemplary in the eyes of the target audience. The chairman's statements generally sought to show that their companies were qualitatively achieving their sustainability goal targets and used less quantitative data. Where quantitative data was used in the chairman's statement, the information was mostly in percentage form, making it difficult to decipher the magnitude of the achievement. Reporting on ESG issues in the chairman's statements mainly took the form of self-promotion by management through an emphasis on achievements, although these were largely qualitative and general. This aligns with Boiral et al. (2020), who observed that companies that produce environmentally unfriendly products tend to self-promote and seek to neutralise the harmful nature of their products in their reports. However, In Bev showed its commitment to achieving its ESG goals that it adopted in 2017 by obtaining a loan for this specific purpose in 2021.

*“On 18 February 2021, we announced the successful signing of a new 10.1 billion USD Sustainable-Linked Loan Revolving Credit Facility.”*

In the consumer goods sector, only one company, AD In Bev, lacked a separate sustainability report, which was introduced in 2021 after the company employed a sustainability CEO (Ozsozgun Caliskan et al., 2021). The reports were not standardised, and each company reported according to the statutes

of the country hosting the parent company. For example, South African companies' chairman's statements carried more detailed governance reports than MNCs. However, the chairman's statements of MNCs in the sector reported better on environmental issues (Boiral, 2016). The 2020 reports were awash with COVID-19 initiatives, and there was a significant decline in reporting on other ESG matters in both the chairman's and ESG reports (Lee & Suh, 2022). This created the impression that both reports are public relations documents that aim to legitimise the business to various stakeholders. Companies change their reporting styles following a disaster to appeal to various stakeholders (Deegan, 2002; Corraza et al., 2020).

All the initiatives reported in the ESG reports aimed to improve the companies' operations and profitability rather than the environment and society. Furthermore, the ESG reports were mainly qualitative. In both the chairman's statements and the sustainability reports, companies distanced themselves from the harmful effects of their products and instead emphasised initiatives such as human rights provisions, anti-bribery and corruption initiatives, smart agriculture programmes, smart drinking initiatives, efficient water and energy utilisation (Ozsozgun Caliskan et al., 2021). As the following example illustrates, the reports primarily hinged on sustainable company operations and accolades in the industry:

*“...and I am proud to report that we are once again the only company in the industry to have been included in the Dow Jones Sustainability Indices' prestigious World Index in 2019.*

*This is our 18th consecutive year of inclusion in the Index series, which reflects BAT's long-standing commitment to delivering against ESG measures.”*

There was an exponential increase in the use of quantitative data in sustainability reports from 2018, although the reports remained largely qualitative and forward-looking. The number of pages and use of images also increased over the study period. BAT was the only company in the consumer staples sector that changed its sustainability report to an ESG one that covered all three ESG issues, while the rest focused on environmental and social reporting. In general, the governance report was part of the integrated report. However, Remgro's chairman's statement on social responsibility was copied and pasted from 2018 to 2021 and appeared to have been included for impression management purposes.

Despite being listed on the JSE, MNCs mainly reported on environmental and social projects in countries other than South Africa. This could be attributed to the lack of enforceable regulations within South Africa, or MNCs concentrating on their cash cows (Hamza & Jarboui, 2022). In contrast, South

African companies reported well on governance issues; this could be due to the King Codes, which they adhere to and are a mandatory listing requirement. Standardisation was lacking among the social responsibility reports within the sector.

Companies in the consumer discretionary sector were the least responsive in terms of ESG reporting, with Richemont still reporting corporate social responsibility in 2020. Richemont and Steinhoff's chairman's statements mainly reported on governance issues, with nothing about ESG issues during the period under review (Lee & Suh, 2022). This could be attributed to the nature of the goods they supply. Bidcorp was the leader in ESG reporting in this sector, although its reports were biased in favour of countries other than South Africa, which was grouped with other countries and reported under emerging markets. This could be due to the lack of enforceable regulations in South Africa and the fact that, as highlighted in the Bidcorp chairman's report in 2017, 90% of its business was outside South Africa.

#### **4.5.2 Resources sector**

Glencore Plc, BHP Group Ltd, and Anglo-American Plc are dual-listed on the London Stock Exchange and have their secondary listing on the JSE. Mining companies sought to neutralise their effect on the environment by focusing on safety, community, and environmental engagement. The sustainability reports present success stories (Martins et al., 2020; Ozsozgun Caliskan et al., 2021), with the number of pages and images increasing over the study period. The quality of the reports also improved over time. In 2018, the reports were inclined to inform, but from 2020, they were more interactive, and enabled stakeholders to compare reports. Glencore, in 2018, was embroiled in corruption legal battles with the US legal justice department, Brazilian authorities, and the United Kingdom Serious Fraud Office, and in 2022, the case was finalised with the company pleading guilty and agreeing to pay over \$ 1.1 billion in fines. Glencore improved its environmental and social disclosures after being sued, but its negative ecological footprint from operations was still on the rise. In 2021, the company conducted a biodiversity risk assessment on 70% of its industrial assets it aims to reduce its physical footprint. Forty-five per cent were identified as lacking biodiversity management plans. In addition, the company revised its closure planning standards in 2022 and aims to restore and rehabilitate areas that have ceased mining activities and comply with relevant regulations. The company also engages in responsible sourcing that incorporates ethical, social, and environmental considerations when choosing a

supplier. Since implementing this new policy, there has been a decline in the number of new suppliers in 2022 (6,663 from 8,607 in 2021). The year 2020 saw the company produce its first climate change policy aimed at achieving carbon net zero by 2050, with short-term goals such as a 15% carbon reduction by 2026 and a medium-term target of a 50% carbon reduction by 2035. To ensure the successful implementation of the climate change strategy the CEO was appointed as the driving force behind its successful implementation and shall have an annual variable compensation, where 30% is for KPIs relating to HSEC matters, 15% for safety performance and 15% for progress towards short- and medium-term absolute emission reduction targets.

On the other hand, BHP decided to integrate its sustainability reports into the Annual Reports. This move was aimed at showing the firm's belief that sustainability performance is an integral driver of long-term shareholder value, social value, and other stakeholders' value. The company set aside \$400 million toward the Climate Investment Program. In 2020, the company set targets to reduce its carbon emissions by 30% by 2030. To support that, in 2020, the board approved four power purchase agreements for operations at Escondido and Spence. To hold the board accountable on ESG issues, executive remuneration was linked to emissions performance. Interestingly, BHP's ESG reporting is guided by the ICMM Sustainable Development Framework and is prepared based on the GRI Standards' comprehensive-level reporting. At the same time, sustainability targets align with the SDGs and the Paris Agreement. The company has a social investment target of investing not less than one percent of pre-tax profits set in 2000, which guides the company's social investments. The produced its first environmental report in 1997. Despite all this, BHP does not disclose the ecological impacts of its operations, and the choice of words in reporting aims to neutralise the negative ecological footprint of its operations. In 2017, the company was one of the first to adopt TCFD guidelines. To achieve scope 1 and 2 targets and regulatory compliance, the company must invest in external carbon offset projects considered complementary to the firm's operations. This can indeed give a mirage of climate neutrality, yet the company's carbon emissions can be rising. With carbon offsetting, the company does not have to alter its GHG-emitting operations, and it is a cheaper alternative to genuine ESG adoption and implementation. The report is highly qualitative.

The chairman's statements were used to legitimise and signal that their mined products would assist in decarbonising the environment and feeding nations (Martins et al., 2020). Companies

distanced themselves from their impact on the environment in their sustainability report and instead focused on environmental and safety issues while excluding the governance report (García-Sánchez & Araújo-Bernardo, 2020).

Companies in the materials sector were the best in terms of reporting on ESG issues. This could be attributed to their need to legitimise and self-promote their operations because they are the worst producers of toxins (García-Sánchez & Araújo-Bernardo, 2020; Ozsozgun Caliskan et al., 2021). They emphasised safety and reported on human injuries and deaths, but failed to report on the harm they were doing to the environment. They reported on experimental smart mining initiatives. Few initiatives were reported in the sustainability reports, and the reports were mainly qualitative, with an increase in the number of pages as the years progressed (Martins et al., 2020). The level of impression management, reporting style and number of pages in the chairman's statements changed with changes in the board chairman. This was a trend in all sectors.

### **Financial sector**

Companies in the financial sector acknowledged their minimal ecological footprint and, importantly, recognised their role as financiers in the mitigation of negative ESG footprints. All eight financial institutions for the study period recognised and disclosed their role as financiers in ESG implementation by reporting on the ESG financing the institutions undertook through public-private projects such as REIPPP, the agricultural development agency aimed at supporting emerging black farmers, and the creation of the renewable energy investment platform, issuing green bonds and sustainability linked loans. For example, ABSA in 2018 financed 12 renewable energy projects worth R12 billion and in 2020 refinanced Bokpoort's solar project to the tune of R958 million. Furthermore, ABSA was the first bank in South Africa to issue green home loans, and in the same vein, Nedbank was the first commercial bank to issue a green bond in 2019 and has raised over R6.8 6.8billion in the green bonds market. Nedbank remains a leader in the green bond market. First Rand issued 165 sustainable loans in 2022, up from 69 loans in 2019. In addition, the bank issued its inaugural sustainability bond in 2022, which raised approximately R2 billion and was 2.1 times oversubscribed. Investec, not to be outdone, raised R1 billion for renewable energy projects through the bank's first green bond in 2022, which was 3.8 times oversubscribed. The over-subscription shows an increased demand for ESG products from both institutional and private investors. The financial sector has increased its focus and appetite for

sustainability and ESG-related products. The First Rand group was the pioneer in the green bond market in 2017 by being a lead arranger in the first R1 billion bond issued to the city of Cape Town to upgrade its water systems after being affected by climate-induced drought. In 2018, the bank auctioned the first corporate green bond to be listed on the JSE green bond segment for Growthpoint Properties, worth R1.1 billion. Proceeds from this initiative were to be used to finance green projects and initiatives. This auction was 2.9 times oversubscribed with bidders from ESG-specific funds and international investors looking for green investment opportunities in emerging markets.

First Rand Group went on to arrange the first sustainability-linked syndicated loan worth R8.45 billion for Mediclinic in 2021. This is the largest sustainability-linked loan in Africa to date and the first syndicated loan arranged by an African bank. In addition, Nedbank in 2018 purchased carbon credit offsets that totalled about nine million rands in 2018 and nine million two hundred thousand rands in 2017, respectively.

The financial institutions in South Africa have been awarded various ESG accolades and improved ESG ratings. The institutions are members of various ESG-aligned organisations such as UNPRI, CDP, and the Equator Principles, and disclose their Equator Principles lending activities. Interestingly, all financial institutions are actively engaged in the eradication of financial illiteracy and financial inclusion and invest considerable sums of money in such activities. However, such initiatives are aimed at increasing awareness of the financial institution's products and expanding the customer base. Despite this, the financial institutions are meeting and achieving their SDG goals. This finding supports (Lee & Suh, 2022; Silva, 2021), who concluded that listed firms superimposed their existing firm operations onto ESG. , Nedbank, in its 2018-2022, indicated that the company aligned its corporate social responsibilities with SDGs, such as clean-up campaigns, and the bank had independent ESG ratings in 2018. In addition, as part of the social disclosure, financial institutions reported mostly on their workforce statistics and black economic empowerment activities, such as procurement from black-owned businesses, and finances awarded to black-owned businesses. This could be attributed to the B-BBEE Act and the FSC, which drives most companies to report on such activities to improve their BEE rating. This B-BBEE Act and FSC disclosures are, in turn, superimposed and aligned with the SDGs (Lee & Suh, 2022; Silva). In 2019, Capitec superimposed its Capitec Foundation initiative to SDG 4, yet the

company was not reporting according to the SDGs. The financial sector code and the B-BBEE Acts have managed to make financial institutions adopt ESG, especially the social aspect of their operations, due to their punitive nature. The governance reports for JSE-listed financial sector firms are well developed, and reported that this could be attributed to the JSE's adherence to the King Code. The JSE made compliance with the King Code mandatory since 2004. Hence, the mandatory nature enables improved reporting on governance issues. First Rand, in 2018, disclosed case studies aligned towards BEE, with the institution funding R9.6 billion towards BEE transactions, regardless of their ecological footprints. The choice of case studies in 2018 included ecologically unfriendly lending initiatives. However, by 2022, the bank highlighted only environmentally and socially friendly initiatives. Lending to black-owned agricultural companies increased by 480% since 2018, where R1,080 million was dispatched in 2018, and R5,186 million in 2022. A total of R929 million was lent to black-owned companies. First Rand continued with its financial inclusion mandate, launching new products such as FNB Shares Zero, aimed at making investing in global companies easily accessible to marginalised people. There are also three ESG and climate-related Exchange Traded Notes (ETNs) that marginalised investors could invest in as little as R10. Such products are targeted at marginalised impact investors who want returns and positive societal and environmental impact. In addition to such initiatives, First Rand maintained a level 1 BEE rating by implementing preferential procurement, supplier development programmes, empowerment financing towards black businesses, employment equity, diversity, and inclusion. In the year 2022, it spent over R17.5 billion to finance black-owned business growth. By meeting the B-BBEE Act-backed FSC requirements, firms will be redressing social inequalities and achieving the social aspect of ESG.

The introduction of the ESG disclosure guideline by the JSE significantly improved the level of sustainability reporting in 2022 by most listed companies. Sanlam produced its first independent sustainability report in 2022; before that, ESG issues were reported in the integrated report. This is a positive sign, as sustainability reporting is the first stage of ESG implementation. Despite reporting on stakeholder engagement, most financial companies qualitatively reported on the metric without delving into the satisfaction score, engagement level, and the influence impact. However, they all claim to regularly communicate with their stakeholders. However, Discovery in 2019 reported that it had conducted nine consumer surveys, which is a critical aspect of stakeholder engagement.

Investment firms in the sector are encouraged to consider ESG in their investment strategies as signatories to CRISA and UNPRI, and since 2020, there has been an increase in the number of companies that consider ESG in their investment decisions through active ownership. This has entailed conducting ESG surveys in investee firms, ESG sell-side research, and proxy voting rights analysis. However, there is still a lack of ESG targets in institutions' operations and a lack of a prescribed format for ESG incorporation in firms, except for due diligence in research. This is further worsened by firms utilising a wide array of ESG reporting frameworks such as GRI, SASB, TCFD, and SDGs in their reporting. However, all institutions have managed to adopt the TCFD framework for their climate disclosures, climate policies, and most institutions produced their TCFD-aligned climate policies from the year 2020. For example, in 2022, 9598 loan transactions were screened for environmental and social risk. This was an increase from 9309 in 2021 by First Rand.

The financial institutions in the JSE top 40 produced their Climate Change policies in 2020, inspired by the TCFD, with Standard Bank going the extra mile by producing its coal-fired power policy, fossil fuel financing policy, and thermal coal mining policy in 2019 and 2020 to show the bank's commitment to the environment. This improved disclosure by banks emanated from increased scrutiny from shareholders. Raith Foundation and others proposed a climate change resolution for Standard Bank, which was adopted at the AGM in 2019, and the bank, in compliance, produced its coal-fired power policy in 2019 (Cassim, 2022). The climate policies adopted by the African environment, as well as social and economic issues, as the foundation upon which they are built. Such a foundation enables the bank to achieve a just energy transition to lower carbon emissions and achieve access to reliable and sustainable energy sources, which is critical to African economic growth and poverty reduction. The climate policies enabled banks to include climate change in their strategy. Standard Bank aims to have net-zero financed emissions by 2050 and net-zero direct emissions in new and old buildings by 2030 and 2040, respectively. Nedbank's climate change resolutions were passed in 2020 with 100% approval votes. This landslide agreement revealed investors' commitment to ESG implementation in their investment decisions. The bank went on to adopt its energy policy in 2021. The bank reported on its financed emissions from its Corporate and Investment Banking (CIB) fossil fuels portfolios in 2022.

The finance ministry launched its first National Green Finance Taxonomy in 2022 to support national priorities and align with international trends. Sanlam was chosen to participate in the beta test of the initiative. This participation will enable the financial institution to strengthen its internal capacity and build technical support in climate transition. Coming up with a national green finance taxonomy will go a long way in standardising South African companies' sustainability operations. Investec created its sustainable finance framework, which outlines the methodologies and supporting policies and procedures to support sustainable finance practices. This framework hinged on and borrowed from SDG10 and SDG13, and aligns with the global best practices such as the Sustainable Finance Taxonomy issued by the European Union in 2020.

All banks disclosed their third-party ratings from institutions such as CDP, Sustainalytics, and MSCI, Nedbank maintained its MSCI AA rating from 2019 to 2021 and is in the top 34% of global banks, and Sanlam achieved the following ratings in 2022: CDP rating B, S&P corporate sustainability assessment 51, MSCI rating AA, Sustainalytics rating medium, and ClimateWise rating 66. Sanlam has been a member of CDP since 2007 and CRISA since 2012. Sanlam was the first private sector asset owner in South Africa to become a signatory to UNPRI. The company integrates ESG into its investment activities. First Rand became a signatory to the United Nations principles of responsible banking in October 2020, designed to guide sustainable banking activities. The bank follows and is guided by the SDGs; the bank's long-term climate change objective is to achieve carbon net zero by 2050 in both scopes 1 and 2. Old Mutual has been considering ESG in its investment activities since 2013 and is a founding participant of CRISA.

The financial institutions' use of energy in their office space is their main source of direct environmental impact. Standard Bank has reduced its electricity consumption by 45% and has installed a 2MW trigeneration plant and solar PV rooftop, and carport installations. The company has a target of reducing scope 1 and 2 emissions by 4.2% per year, and to date, the bank has surpassed this target yearly since 2018. As of 2022, the firm had achieved targets set for 2026, placing the firm 5 years ahead of its schedule due to energy and operational efficiency. In the same light, Nedbank has been carbon neutral since 2010 and follows a reduce first and offset approach. Investec is investing in the largest roof solar power plant in Africa on its property in South Africa. In addition, the bank is supporting its clients towards carbon neutrality. For example, the bank issued a sustainability-linked loan to Oceana in 2022. Capitec only addresses electricity

management as it is believed to be its biggest carbon footprint contributor, based on the nature of its services. From 2018 to 2020, the company examined only this aspect and overlooked the bank's ecological footprint as a financier.

There were increased trends in sustainable finance lending in all financial institutions. Standard Bank increased its sustainable lending from US\$2.38 billion from 2012 to 2018 to R54.5 billion in 2022 alone. With increased ESG implementation, lending institutions are setting ESG lending targets. Nedbank, in 2021, set targets of R2 billion towards sustainable finance credit facilities such as REIPPP power generation projects. However, the bank managed to finance over R1.2 billion, and this was increased to R11.7 billion in 2022. Investec financed 13 new renewable energy projects in 2022. This was up from 12 in 2021; however, there was an increase in natural gas investments to £678 million from £398 million in 2021, and this could be attributed to the Ukraine war. There was a significant decline in investments in coal and oil from £242 million to £55 million in 2022. Sanlam, in 2022, stated that from 2023, 5% of the executive committee's short-term incentive shall be linked to ESG. The firm intends to improve its metrics and targets to science-based targets from 2023.

Board diversity is an issue that these institutions take seriously, with all institutions increasing both the number of women board members and the number of black board members. In 2019, Capitec exceeded its board diversity targets of 10% females, having 15% female board members. Board diversity improved from 15% to 31% females; however, there was still zero female representation in top management in 2022, despite women constituting 61% of the workforce. In the same vein, Discovery increased board diversity to 18% women in 2019, but there were still no women in top management. Interestingly, Capitec did not disclose its adherence to any sustainability reporting guidelines in 2019. Only in 2021 did the company engage specialists to assist in drafting its Climate-related financial disclosure policy, inspired by TCFD, which was published in 2022. In 2022, ESG targets were set at 10% as a key performance indicator of the overall firm performance. Capitec's engagement with other stakeholders, such as suppliers, employees, empowerment financing, and socio-economic development, is governed and influenced by the Financial Services Code and B-BBEE Act. Adherence to FSC enables equality in society.

There is a lack of consistency in the ESG reporting by banks as their reports are guided by different ESG frameworks. Within the financial sector, ESG reports are guided by the SDGs, TCFD, SASB, GRI, King IV, and FSC. Despite these variances in reporting approaches, all institutions adhered to the FSC and King IV codes. Due to the mandatory nature of King IV as a listing requirement, the corporate governance reports were detailed and informative. Investec, in 2018, only reported on risk and governance. This applied to the FSC, backed by the B-BBEE Act. All banks in the JSE top 40 are BEE level 1, except for Capitec, which has maintained its level 4 position during the period. Sanlam used an independent third party to verify GHG emissions as well as its B-BBEE status in its sustainability reports. Institutions such as Sanlam have been awarded FTSE for Good certificates due to their good sustainability practices and have consistently had an independent third party verifying their greenhouse gas emissions, as well as the B-BBEE issues reported in their sustainability reports. This act increased the reliability of results produced in the reports and revealed that the company was implementing ESG in its operations. In 2018, First Rand Group reported that it had funded approximately R1 billion from 2014 to 2017 towards the PEIPPP programme, with five BEE shareholding groups benefitting. The institution was able to show how it had improved financial inclusion with various initiatives such as eWallets, ATMs, and FNB Nav to assist customers in managing their money. In addition to financial literacy programmes where the group targeted the rural population using radio, Westbank spent R7.3 million on an interactive consumer education campaign, and this campaign was part of a finalist in the Loerie Awards of Creativity. First Rand achieved a level I BEE rating, the same year, with a 60% female workforce. R243 million was spent on education, this is the company's strategy to address social inequality in the country. In 2018, the report was inspired by TCFD and SDGs but was mostly influenced by the FSC, aimed at bringing social and financial equality to the marginalised black communities.

#### **4.6 Kruskal-Wallis tests and Dunn pairwise Data analysis**

This section presents the results of the Kruskal-Wallis tests and Dunn pairwise data analysis, which were conducted to examine impression management in ESG reports and chairman's statements among companies listed on the Johannesburg Stock Exchange (JSE). The goal of this analysis was to identify whether there were significant differences in the use of impression management strategies across different sectors, and to understand the extent to which companies used these strategies in their reporting on environmental, social, and governance (ESG) matters.

**Table 2 Sample Description**

Code	Sector	Frequency
1	Consumer staples	7
2	Materials Sector	9
3	Consumer discretionary	3
4	Communication sector	3

Source: Author's computation

Table 1 shows the distribution of the data that was used to carry out the Kruskal-Wallis test and its post hoc test, the Dunn pairwise test, to evaluate and check the extent of impression management that was being used by JSE-listed companies. Seven companies from the consumer staple sector were included. Nine firms were selected from the materials sector, three firms from the consumer discretionary sector were included, and 3 from the communication sector. These sectors were included as they represent the major sectors with direct environmental and social implications in South Africa. The financial sector was excluded as it has a critical role to play as the financier. However, they have the least direct ecological and physical footprints.

#### 4.7 Responsibility Reports Analysis for 2018

**Table 3 Use of word count in responsibility reports across sectors in 2018**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank Sum
Word count	1	16843.14	7188.09	0.427	7	70
Word count	2	35283.22	29234.7	0.829	9	122
Word count	3	16927.67	10157.7	0.6	3	31
Word count	4	16569.33	10545.1	0.636	3	30

#### Kruskal-Wallis test results

Chi-squared = 1.532 with 3 d.f.

Chi-squared with ties = 1.532 with 3 d.f.

Probability = 0.6748

probability = 0.6748

Source: Author's computation

**Table 2.1 Dunn's pairwise comparison of responsibility report word count by sector in 2018**

Col Mean	1	2	3
Row Mean			
2	-1.086508		
	0.1386		
3	-0.074388	0.744224	
	0.4704	0.2283	
4	0	0.821323	0.062869
	0.5	0.2057	0.4749

Source: Author's computations

The Kruskal-Wallis test results in Table 2 above show a p-value of 0.6748, which is greater than the *p*-critical level of 0.05. This reveals that there was no significant difference in the word count among the four sectors' responsibility reports in 2018. Hence, there is no impression management among the sectors in terms of word count. A Dunn pairwise test was carried out to further analyse how the sectors influenced one another, and it shows that there is no significant difference in the word count between the sectors. The Dunn pairwise *p* values ranged from 0.1326 to 0.5000, and all were above the *p*-critical 0.05. Hence, there is no pairwise impression management among the four sectors.

**Table 4 Use of passive voice in responsibility reports across sectors in 2018**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Passive sentences	1	0.049	0.026	0.523	7	76
Passive sentences	2	0.047	0.016	0.333	9	97
Passive sentences	3	0.076	0.038	0.495	3	49
Passive sentences	4	0.043	0.013	0.307	3	31

**Kruskal-Wallis test**

Chi-squared = 1.939 with 3 d.f.

Chi-squared with ties = 1.942 with 3 d.f.

Probability = 0.5852

probability = 0.5845

Source: Author's computations

**Table 3.1 Dunn's pairwise comparison of responsibility report passive sentences by sector in 2018**

Col Mean- Row Mean	1	2	3
2	0.024273 0.4903		
3	-1.223127 0.1106	-1.284406 0.0995	
4	0.116995 0.4534	0.102752 0.4591	1.13261 0.1287

Source: Author's computations

Table 3 and 3.1 results reveal no significant difference in the use of the passive voice among the four sectors' responsibility reports in 2018. This is shown by a Kruskal-Wallis  $p$ -value of 0.5852, which is above the  $p$ -critical value of 0.05. Thus, reject the null hypothesis and conclude that there is no use of passive voices in responsibility reports. Hence, there is no impression management. A Dunn pairwise test further confirmed that there was no significant difference in passive voice usage between the sectors. The Dunn pairwise results ranged from 0.0995 to 0.4903, and all the  $p$ -values were above the  $p$ -critical value of 0.05, nullifying the hypothesis that there is impression management among the sectors using the passive voice in responsibility reports.

**Table 5 Use of ease of reading in responsibility reports across sectors in 2018**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Flesch's reading ease	1	30.229	5.993	0.198	7	89
Flesch's reading ease	2	26.978	9.02	0.334	9	87
Flesch's reading ease	3	31.333	7.778	0.248	3	41
Flesch's reading ease	4	30.833	2.079	0.067	3	36

**Kruskal-Wallis test**

Chi-squared = 1.314 with 3d.f.

Probability = 0.7258

Source: Author's computation

Chi-squared with ties = 1.314 with 3 d.f.

probability =0.7258

**Table 4.1 Dunn's pairwise comparison of responsibility report reading ease by sector, 2018**

Col Mean- Row Mean	1	2	3
2	0.931293 0.1759		
3	-0.212538 0.4156	-0.923969 0.1777	
4	0.159403 0.4367	-0.538993 0.2949	0.314347 0.3766

Source: Author's computation

The Kruskal-Wallis test results in Table 4 show that there is an insignificant difference in the means of the four sectors. Hence, with the high  $p$ -value of 0.7258, which is greater than the  $p$ -critical 0.05, the results showed that there was no impression management in terms of readability using Flesch's reading ease index among the four sectors. This result is further supported by the Dunn pairwise comparison test in Table 4.1, which reveals a lack of significant differences in ease of reading among the sectors. The Dunn pairwise comparison results had  $p$  values ranging from 0.1759 to 0.4367, with sectors 1 and 2 recording the lowest  $p$  value of 0.1759 and sectors 4 and 1 recording the highest  $p$  value of 0.4367. These findings were greater than  $p$ -critical 0.05, nullifying the hypothesis that there is impression management using the ease of reading between the sectors.

## 4.8 Chairman's Statement Analysis for 2018

**Table 6 Use of word count in chairmans' statements across sectors in 2018**

Variable	Sector	Mean	Standard Dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Word count	1	1316.429	681.779	0.518	7	93
Word count	2	909.333	600.797	0.661	9	98
Word count	3	1090	311.174	0.285	3	34
Word count	4	989	296.582	0.3	3	28

### Kruskal-Wallis results

Chi-squared = 0.945 with 3d.f.

Probability = 0.8145

Source: Author's computation

chi- squared with ties = 0.946 with 3d.f.

probability = 0.8144

**Table 5.1 Dunn's pairwise comparison of chairman's statement word count by sector 2018**

Col Mean- Row Mean	1	2	3
2	0.72263 0.2319		
3	0.435825 0.3315	-0.102694 0.4591	
4	0.88228 0.1888	0.35943 0.3596	0.377323 0.353

Source: Author's Computation

The Kruskal-Wallis test results in Table 5 show a  $p$ -value of 0.8145, which is higher than the critical value of 0.05, meaning there is no significant difference in the word count among the four sectors in the chairmans' statements in 2018. There was no impression management using the word count among the sectors. This result is further cemented by the Dunn pairwise comparison test, which showed a lack of differences in the word count among the four sectors, with sectors 2 and 3 having the highest Dunn pairwise  $p$ -value of 0.4591 and sectors 4 and 1 the lowest pairwise value of 0.1888. The rest fall between the highest and lowest  $p$ -values, which were all above  $p$ -critical 0.05. These results showed that there were no significant differences in the word count in the pairwise comparisons in the chairman's statements. Hence, there is no impression management using word count on JSE-listed companies in 2018.

**Table 7 Use of passive voice in chairmans' statements across sectors in 2018**

Variable	Sector	Mean	Standard Dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Passive sentences	1	0.041	0.042	1.031	7	94
Passive sentences	2	0.011	0.023	2.035	9	75
Passive sentences	3	0.053	0.009	0.166	3	52
Passive sentences	4	0.02	0.019	0.946	3	31

**Kruskal-Wallis results**

Chi-squared = 5.341 with 3 d.f.

Probability = 0.1484

Source: Author's computation

chi-squared with ties = 6.103 with 3 d.f

probability = 0.1067

**Table 6.1 Dunn's pairwise comparison of chairman's statement passive sentences by sector in 2018**

Col Mean- Row Mean	1	2	3
2	1.646161 0.0499		
3	-0.971215 0.1657	-2.249683 0.0122	
4	0.73835 0.2302	-0.480115 0.3156	1.444846 0.0743

Source: Author's computation

The Kruskal-Wallis test results in Table 6 show a *p*-value of 0.1484, which is greater than the *p*-critical 0.05. This finding reveals that there are no significant differences in the use of the passive voice in the chairman's statements among the four sectors in 2018. However, the Dunn pairwise comparison test revealed significant use of the passive voice between sectors 2 and 3 (material sector and consumer discretionary sector) with a pairwise *p*-value of 0.0122. The consumer staple sector and the materials sector showed a pairwise *p*-value of 0.0499 in 2018. These two significant pairwise results show that impression management was employed using the passive voice in the chairman's statements in these sectors, with sector 2, which is the materials sector, influencing these significant results (Ozsozgun Caliskan et al., 2021). There is impression management in the chairman's statements of companies in the materials sector.

**Table 8 Use of ease of reading in chairmans' statements across sectors in 2018**

Variable	Sector	Mean	Standard Dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Flesch's reading ease	1	33.857	10.544	0.311	7	71.5
Flesch's reading ease	2	31.711	22.477	0.709	9	101
Flesch's reading ease	3	43.933	6.573	0.15	3	51
Flesch's reading ease	4	30.5	14.496	0.475	3	29

**Kruskal-Wallis test results**

Chi-squared = 2.676 with 3 d.f.

chi- squared with ties = 2.681 with 3 d.f.

Probability = 0.4443

probability = 0.4435

Source: Author's computation

**Table 7.1 Dunn's pairwise comparison of chairman's statement reading ease by sector 2018**

Col Mean	1	2	3
Row Mean			
2	-0.325258 0.3725		
3	-1.515614 0.0648	-1.322938 0.0929	
4	0.122313 0.4513	0.372478 0.3548	1.384301 0.0831

Source: Author's computation

The Kruskal-Wallis test in Table 7 shows insignificant use of ease of reading in impression management among the four sectors' chairman's statements in 2019. The test result was a  $p$ -value of 0.4443, greater than 0.05. The Kruskal-Wallis test result was supported by a Dunn pairwise comparison test in Table 7.1, which revealed insignificant relationships among the variables at the 0.05 critical  $p$ -value. Sectors 1 and 3 show the lowest pairwise  $p$ -value of 0.0648, and Sectors 1 and 4 have the highest pairwise  $p$ -value of 0.4513, which means that there were no significant differences in readability among the four sectors. This is further supported by three sectors having similar means, with sector 3 showing the highest mean of 43.933. Hence, there is no reading ease impression management in the chairman's statements in 2018.

#### 4.9 Responsibility Reports Analysis for 2019

**Table 9 Use of Word count in impression management in responsibility reports across sectors in 2019**

Variable	Sector	Mean	Standard Dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Word count	1	25279.429	11548.309	0.457	7	63
Word count	2	52855.286	20603.943	0.39	7	109
Word count	3	16499.667	11498.077	0.697	3	17
Word count	4	20508.333	10975.956	0.535	3	21

**Kruskal-Wallis test results**

Chi-squared = 8.646 with 3 d.f.

chi- squared with ties = 8.646 with 3 d.f.

Probability = 0.0344

probability = 0.0344

Source: Author's computation

**Table 8.1 Dunn's pairwise comparison of responsibility report word count by sector.**

Col Mean- Row Mean	1	2	3
2	-2.078068 0.0189		
3	0.816497 0.2071	2.426161 0.0076	
4	0.488989 0.3121	2.099563 0.0179	-0.276026 0.3913

Source: Author's computation

A Kruskal-Wallis test result of  $p = 0.0344$  in Table 8 revealed that there is a significant difference in the word count of the 2019 responsibility reports among the four sectors. This implies that there is a use of word count impression management among JSE's top 40 listed firms. This finding is further supported by all four sectors having very different average word counts. The Kruskal-Wallis test results are further supported by the Dunn pairwise comparison test in Table 8.1, which revealed significant relationships among the four sectors with sectors 2 and 3 showing the strongest word count pairwise relationship with a  $p$ -value of 0.0076, followed by sectors 1 and 2 with a  $p$ -value of 0.0189, and lastly, sectors 2 and 4 with a  $p$ -value of 0.0179. However, sectors 1 and 3 (0.2071), 1 and 4 (0.3121) and 3 and 4 (0.3913) had insignificant word count pairwise relationships, which were greater than  $p = 0.05$ . These results reveal that there was a significant difference in the word count in sector 2 (material sector) responsibility reports, unlike the other three sectors in the 2019 responsibility report, which means that there was impression management using the word count in the material mining sector (Boiral et al., 2020).

**Table 10 Use of passive voice in responsibility reports across sectors in 2019**

Variable	Sector	mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Passive sentences	1	0.053	0.033	0.624	7	80.5
Passive sentences	2	0.04	0.015	0.368	7	61
Passive sentences	3	0.064	0.025	0.386	3	43
Passive sentences	4	0.043	0.018	0.414	3	25

**Kruskal-Wallis test results**

Chi-squared = 2.440 with 3 d.f.

Probability = 0.4862

Source: Author's computation

Chi-squared with ties = 2.447 with 3 d.f.

probability = 0.4849

**Table 9.1 Dunn's pairwise comparison of responsibility report passive sentences by sector.**

Col Mean-Raw Mean	1	2	3
2	0.882248 0.1888		
3	-0.695068 0.2435	-1.378454 0.084	
4	0.735954 0.2309	0.052568 0.479	1.209435 0.1132

Source: Author's computation

The results in Table 9 above showed that there were no significant differences in the use of the passive voice in impression management among the four sectors' responsibility reports in 2019. This is revealed by a Kruskal-Wallis test result of  $p = 0.4862$ , which is greater than  $p$ -critical 0.05. This finding was supported by a Dunn pairwise comparison test in Table 9.1, which showed a lack of significant pairwise differences in the use of the passive voice among the four sectors. Sectors 2 and 3 had the lowest Dunn pairwise result of  $p = 0.0840$ , and Sectors 4 and 2 had the highest of  $p = 0.4790$ . All the Dunn pairwise results were above  $p$ -critical = 0.05. There was no use of passive voice as an impression management strategy in the ESG reports in 2019.

**Table 11 Use of ease of reading in responsibility reports across sectors in 2019**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Flesch's reading ease	1	30.214	5.77	0.191	7	86.5
Flesch's reading ease	2	26.657	5.079	0.191	7	62
Flesch's reading ease	3	29.8	3.081	0.103	3	35.5
Flesch's reading ease	4	27	7.641	0.283	3	26

**Kruskal-Wallis test results**

Chi-squared = 1.670 with 3 d.f.

Chi-squared with ties = 1.671 with 3 d.f.

Probability = 0.6436

probability = 0.6433

Source: Author's computation

**Table 10.1 Dunn's pairwise comparison of responsibility report reading ease by sector in 2019**

Col Mean- Raw Mean	1	2	3
2	1.107214 0.1341		
3	0.128355 0.4489	-0.729289 0.2329	
4	0.904318 0.1829	0.046674 0.4814	0.655809 0.256

Source: Author's computation

The Kruskal-Wallis test results in Table 10 show that there were no significant differences in readability among the four sectors' responsibility reports in 2019. The Kruskal-Wallis test result of  $p = 0.6436$  was greater than the critical value of 0.05, revealing no significant difference in readability among the sectors. There was no use of readability impression management in the ESG reports. This was supported by the Dunn pairwise test results in Table 10.1 revealed that there were no significant differences in pairwise comparisons between the sectors. Sectors 1 and 2 have the lowest  $p$ -value of 0.1341, whereas sectors 1 and 3 have the highest  $p$ -value of 0.4489 and all pairwise comparisons were greater than  $p$ -critical of 5%, which showed that there were no significant pairwise differences in readability among the four sectors' responsibility reports, the readability impression management strategy was not applied by JSE-listed firms in 2019.

#### 4.10 Chairman's Statement Analysis 2019

**Table 12 Use of word count in impression management in chairmans' statements across sectors in 2019**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Word count	1	1229	668.109	0.544	7	74
Word count	2	1122	590.928	0.527	7	71
Word count	3	882	266.76	0.302	3	24
Word count	4	1299	146.079	0.112	3	41

#### Kruskal-Wallis results

Chi-squared = 1.4422 with 3 d.f.

chi- squared with ties = 1.422 with 3 d.f.

Probability = 0.7004

probability = 0.7002

Source: Author's computation

**Table 11.1 Dunn's pairwise comparison of the chairman's statement word count by sector**

Col Mean- Raw Mean	1	2	3
2	0.135577 0.4461		
3	0.630106 0.2643	0.525068 0.2998	
4	-0.758461 0.2241	-0.863478 0.1939	-1.173553 0.1203

Source: Author's computation

The Kruskal-Wallis test results in Table 11 reveal that there were no significant differences in the word count among the four sectors in their chairman's statements in 2019. This was shown by a Kruskal-Wallis result of  $p = 0.7004$ , which was greater than the  $p$ -critical of 0.05. There is no word count impression management strategy applied in the chairman's reports. This result was cemented by the Dunn pairwise comparison test in Table 11.1, which shows that all pairwise relationships had  $p$  values greater than  $p$ -critical of 0.05, which implies that all sectors did not use a word count impression management strategy in their reporting. There were no significant pairwise differences in the use of the word count in the chairman's statements between the sectors. The Dunn pairwise results ranged from  $p = 0.1203$  to  $p = 0.4461$ .

**Table 13 Use of passive voice in chairmans' statements across sectors in 2019**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank Sum
Passive sentences	1	0.028	0.027	0.975	7	74
Passive sentences	2	0.02	0.026	1.252	7	61.5037
Passive sentences	3	0.048	0.05	1.036	3	37
Passive sentences	4	0.039	0.036	0.923	3	37

**Kruskal-Wallis results**

Chi-squared = 1.168 with 3 d.f.

Chi-squared with 2 ties = 1.285 with 3 d.f.

Probability = 0.7607

probability = 0.7327

Source: Author's computation

**Table 12.1 Dunn's pairwise comparison of chairman's statement passive sentences by sector 2019**

Col Mean- Raw Mean	1	2	3
2	0.615968 0.269		
3	-0.434308 0.332	-0.911434 0.181	
4	-0.434308 0.332	-0.911434 0.181	0 0.5

Source: Author's computation

The Kruskal-Wallis test results in Table 12 above show that there were no significant differences in the use of the passive voice in the chairman's statements among the sectors in 2019. This is shown by the Kruskal-Wallis test result of  $p = 0.7607$ , which was greater than the  $p$ -critical of 0.05. The JSE-listed firms did not employ the use of passive voices as an impression management strategy. This result was confirmed by Dunn's pairwise test results in Table 12.1, which showed that there were no significant differences in the use of the passive voice in the pairwise comparisons among the sectors' chairman's statements in 2019. All Dunn pairwise relationships have  $p$ -values that are greater than  $p$ -critical 0.05. Hence, there is no use of passive voice as an impression management strategy in the chairman's reports in 2019, in all four sectors.

**Table 14 Use of ease of reading in chairmans' statements across sectors in 2019**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Flesch's reading ease	1	33.771	13.128	0.389	7	66
Flesch's reading ease	2	44.957	7.785	0.173	7	104
Flesch's reading ease	3	26	10.653	0.41	3	14
Flesch's reading ease	4	31.967	11.511	0.36	3	26

**Kruskal-Wallis results**

Chi-squared = 7.231 with 3 d.f.

Chi-squared with ties = 7.231 with 3 d.f.

Probability = 0.0649

probability = 0.0649

Source: Author's computation

**Table 13.1 Dunn's pairwise comparison of chairman's statement reading ease by sector 2019**

Col Mean- Raw Mean	1	2	3
2	-1.716665 0.043		
3	1.166424 0.1217	2.496147 0.0063	
4	0.186628 0.426	1.516351 0.0647	-0.828079 0.2038

Source: Author's computation

The Kruskal-Wallis test results show a *p*-value of 0.0649, which is slightly above the *p*-critical value of 0.05; this reveals that there is no significant difference in readability among the four sectors' chairman's statements in 2019. The null hypothesis is rejected, and it concludes that there is no readability impression management in the chairman's reports. However, the Dunn pairwise comparison in Table 13.1 shows that there is a significant difference in readability between sectors 2 and 3, with a *p*-value of 0.0063, and sectors 1 and 2, with a pairwise *p*-value of 0.0430. These pairwise results reveal that impression management is employed using readability among these sectors. Unlike the other three sectors, companies in sector 2, which is the material mining sector, make use of readability impression management in their chairman's statements. This is further supported by sector 2, having the highest mean, far above the other three sectors. Chairmans in the material sector employs the readability impression management strategy in their reports to appeal to various stakeholders.

#### 4.11 Responsibility Reports Analysis for 2020

**Table 15 Use of word count in impression management in responsibility reports across sectors in 2020**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Word count	1	30703.14	19648.89	0.64	7	63
Word count	2	58892	26340.238	0.447	7	105
Word count	3	16769.667	9819.772	0.586	3	13
Word count	4	29582	4415.507	0.149	3	29

**Kruskal-Wallis test results**

Chi-squared = 7.819 with 3 d.f.

Chi-squared with ties = 7.819 with 3 d.f.

Probability = 0.0499

probability = 0.0499

Source: Author's computation

**Table 14.1 Dunn's pairwise comparison of responsibility report word count by sector.**

Col Mean- Raw Mean	1	2	3
2	-1.897367 0.0289		
3	1.143095 0.1265	2.612789 0.0045	
4	-0.163299 0.4351	1.306395 0.0957	-1.104105 0.1348

Source: Author's computation

The Kruskal-Wallis test results in Table 14 show a  $p$ -value of 0.0499, which is slightly less than or equal to the critical value of 0.05. This reveals that there is impression management using the word count among the four sectors. Since the  $p$ -value =  $p$ -critical = 0.05, the Dunn pairwise comparison revealed the relationship between the word count in the sectors. The Dunn pairwise comparison in Table 14.1 shows that there is a significant difference in the use of the word count between sectors 2 and 3 at  $p = 0.0045$  and sectors 1 and 2 with pairwise  $p = 0.0289$ . These pairwise results reveal that impression management is employed using the word count among these sectors. Sector 2 made use of the word count in impression management in its sustainability report in 2020. This is further cemented by the fact that sector 2 has the highest mean word count when compared to the other sectors (Martins et al., 2020). Sustainability reports in the material sector were longer and more qualitative than reports in other sectors, despite the COVID-19 lockdowns.

**Table 16 Use of passive voice in responsibility reports across sectors in 2020**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
Passive sentences	1	0.05	0.033	0.662	7	73
Passive sentences	2	0.038	0.014	0.362	7	64
Passive sentences	3	0.085	0.024	0.289	3	53
Passive sentences	4	0.032	0.008	0.237	3	20

**Kruskal-Wallis results**

Chi-squared = 6.031 with 3 d.f.

chi-squared with ties = 6.040 with 3 d.f.

Probability = 0.1101

probability = 0.1097

Source: Author’s computation

**Table 15.1 Dunn’s pairwise comparison of responsibility report passive sentences by sector.**

Col Mean- Raw Mean	1	2	3
2	0.406885		
	0.342		
3	-1.774299	-2.08947	
	0.038	0.0183	
4	0.922168	0.606997	2.27893
	0.1782	0.2719	0.0113

Source: Author’s computation

The Kruskal-Wallis test results in Table 15 show a *p*-value of 0.1101, which is above the *p*-critical value of 0.05, pointing to no significant differences in the use of the passive voice among the four sectors’ responsibility reports. Hence, there is no impression management using passive voices in the responsibility reports in all 4 sectors. However, the Dunn pairwise comparison in Table 15.1 shows that there is a significant relationship between sectors 2 and 3 with a *p*-value of 0.0183, sectors 1 and 3 with a pairwise *p*-value of 0.0380, and sectors 3 and 4 with a *p*-value of 0.0113. These pairwise results reveal the use of impression management using passive voices among these sectors. Unlike the other three sectors, Sector 3 makes use of passive sentences as an impression management strategy in its responsibility report and has the highest mean of 0.085. This implies that there is impression management in the consumer discretionary industry ESG reports. This could be attributed to the COVID-19 pandemic, where the companies were shut down for a greater part of the time, but still wanted to appear to be doing something to legitimise their social contract.

**Table 17 Use of ease of reading in responsibility reports across sectors in 2020**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Flesch's reading ease	1	32.271	4.233	0.131	7	96
Flesch's reading ease	2	25.6	4.42	0.173	7	46.5
Flesch's reading ease	3	29.5	5.603	0.19	3	32.5
Flesch's reading ease	4	31.333	6.543	0.209	3	35

**Kruskal-Wallis results**

Chi-squared = 5.168 with 3 d.f.

chi – squared with ties = 5.172 with 3 d.f.

Probability = 0.1599

probability = 0.1596

Source: Author's computation

**Table 16.1 Dunn's pairwise comparison of responsibility report reading ease by sector**

Col Mean- Raw Mean	1	2	3
2	2.237023 0.0126		
3	0.705952 0.2401	-1.026839 0.1522	
4	0.501751 0.3079	-1.23104 0.1092	-0.172581 0.4315

Source: Author's computation

The Kruskal-Wallis test results in Table 16 show a *p*-value of 0.1599, which is greater than 0.05, suggesting no significant difference in the readability of responsibility reports among the four sectors. Hence, there is no readability impression management. However, the Dunn pairwise comparison results in Table 16.1 displayed a significant readability relationship between sectors 1 and 2, with a *p*-value of 0.0126. This illustrates that readability was used in impression management by Sector 2 and Sector 1 in 2020.

#### 4.12 Chairman's Statements Analysis for 2020

**Table 18 Use of word count in impression management in chairmans' reports across sectors in 2020**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Word count	1	1417.571	567.167	0.4	7	78
Word count	2	1299.286	459.29	0.353	7	76
Word count	3	1234.667	115.932	115.932	3	25
Word count	4	1289.667	696.012	696.012	3	31

**Kruskal-Wallis results**

Chi-squared = 0.513 with 3 d.f.

chi – squared with ties = 0.513 with 3 d.f.

Probability = 0.9160

probability = 0.9160

Source: Author's computation

**Table 17.1 Dunn's pairwise comparison of the chairman's statement word count by sector**

Col Mean- Raw Mean	1	2	3
2	0.090351 0.464		
3	0.68819 0.2457	0.618205 0.2683	
4	0.198292 0.4214	0.128307 0.449	-0.414039 0.3394

Source: Author's computation

The Kruskal-Wallis test results in Table 17 show that there were no significant differences in the word count of the chairman's statements among the four sectors in 2020. This is shown by a Kruskal-Wallis  $p$ -value = 0.9160, which is greater than  $p$ -critical = 0.05. Hence, there is no word count impression management. The lack of a relationship between impression management and word count is supported by the Dunn pairwise test in Table 17.1, which illustrates that there was no significant difference in the word count on pairwise comparison within the sectors. The pairwise results ranged from 0.2457 to 0.4640, and all pairwise  $p$ -values were above the  $p$ -critical of 0.05. There were no significant differences in the word count among the sectors, and hence no impression management. This is further supported by all four sectors having similar mean values.

**Table 19 Use of Passive voice in chairmans’ reports across sectors in 2020**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Passive sentences	1	0.046	0.038	0.823	7	87.5
Passive sentences	2	0.031	0.031	0.985	7	69
Passive sentences	3	0.036	0.041	1.128	3	31
Passive sentences	4	0.018	0.017	0.941	3	22.5

**Kruskal-Wallis results**

Chi-squared = 1.656 with 3 d.f.

chi – squared with ties = 1.731 with 3 d.f.

Probability = 0.6467

probability = 0.6301

Source: Author’s computation

**Table 18.1 Dunn’s pairwise comparison of the chairman’s statement passive sentences**

Com Mean- Raw Mean	1	2	3
2	0.854251 0.1965		
3	0.542475 0.2937	-0.119225 0.4525	
4	1.251864 0.1053	0.590165 0.2775	0.599544 0.2744

Source: Author’s computation

The Kruskal-Wallis test results in Table 18 showed that there was no significant difference in the use of the passive voice among the four sectors’ chairman’s statements in 2020. This is shown by a *p*-value of 0.6467, which is greater than the *p*-critical of 0.05. The lack of a relationship between impression management and passive sentences was supported by the Dunn pairwise test results, which displayed no significant differences in passive voice usage in pairwise comparisons. The Dunn pairwise results had *p*-values ranging from 0.1053 to 0.4525 and were all above the *p*-critical of 0.05. There is no significant difference in the use of the passive voice among the sectors, and impression management could hence not be ascertained.

**Table 20 Use of ease of reading in chairmans’ statements across sectors in 2020**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Flesch’s reading ease	1	39.243	8.128	8.128	7	68.57
Flesch’s reading ease	2	44.4	14.62	0.329	7	81
Flesch’s reading ease	3	38.067	38.067	0.37	3	29.5
Flesch’s reading ease	4	39.3	12.657	0.322	3	31

**Kruskal-Wallis results**

Chi-squared = 0.372 with 3 d.f.  
probability = 0.9459

chi- squared with ties = 0.372 with 3 d.f.  
probability = 0.9459

Source: Author’s computation

**Table 19.1 Dunn’s pairwise comparison of chairman’s statement reading ease by sector**

Col Mean- Raw Mean	1	2	3
2	-0.564905 0.2861		
3	-0.011669 0.4953	0.425905 0.3351	
4	-0.134189 0.4466	0.303384 0.3808	-0.103549 0.4588

Source: Author’s computation

The Kruskal-Wallis test results in Table 19 show that there is no significant difference in readability in the four sectors’ chairman’s statements in 2020. This is shown by a Kruskal-Wallis *p*-value of 0.9459, which is greater than the *p*-critical of 0.05. The lack of a significant readability impression management in the 2020 chairman’s statements is supported by the Dunn pairwise comparison test in Table 19.1, which revealed that there was no significant difference in readability between the sectors in their pairwise comparisons. The Dunn pairwise comparison test results ranged from *p* = 0.2861 to *p* = 0.4953. All the Dunn pairwise results were above *p* = 0.05, meaning there were no significant differences in readability among the sectors and hence no readability impression management in the chairman’s statements in 2020.

### 4.13 Responsibility Reports Analysis for 2021

**Table 21 Use of word count in impression management in responsibility reports across sectors in 2021**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Word count	1	30684.714	15646.22	0.51	7	55
Word count	2	57693.714	22422.577	0.389	7	106
Word count	3	25047	20016.182	0.799	3	19
Word count	4	34,352.67	3,487.30	0.102	3	30

**Kruskal-Wallis results**

Chi-squared =7.218 with 3 d.f.

Chi-squared with ties = 7.218 with 3 d.f.

Probability = 0.0653

probability = 0.0653

Source: Author's computation

**Table 20.1 Dunn's pairwise comparison of responsibility report word count by sector.**

Col Mean- Raw Mean	1	2	3
2	-2.303945 0.0106		
3	0.373256 0.3545	2.157884 0.0155	
4	-0.524891 0.2998	1.239738 0.1039	-0.759072 0.2239

Source: Author's computation

The Kruskal-Wallis test results in Table 20 show a *p*-value of 0.0653, which is slightly above the *p*-critical value of 0.05. There was no significant difference in the word count in the responsibility reports among the sectors in 2021. However, the Dunn pairwise comparison test results in Table 20.1 revealed significant pairwise differences in the word count between sectors 1 and 2, with a *p*-value of 0.0106, and sectors 2 and 3, with a pairwise *p*-value of 0.0155. These pairwise results point to the use of word count impression management among these sectors. Unlike the other sectors, Sector 2 made use of word count impression management in its ESG reports; this was further confirmed by this sector having the highest average number of words at 57693.714.

**Table 22 Use of Passive voice in responsibility reports across sectors in 2021**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Passive sentences	1	0.055	0.033	0.595	7	78.5
Passive sentences	2	0.041	0.011	0.277	7	63.5
Passive sentences	3	0.076	0.034	0.44	3	47
Passive sentences	4	0.036	0.012	0.328	3	21

**Kruskal-Wallis results**

Chi-squared = 3.848 with 3 d.f.

chi- squared with ties = 3.863 with 3 d.f.

Probability = 0.2783

probability = 0.2767

Source: Author's computation

**Table 21.1 Dunn's pairwise comparison of responsibility report passive sentences by sector.**

Col Mean- Raw Mean	1	2	3
2	0.678908		
	0.2486		
3	-1.092662	-1.618542	
	0.1373	0.0528	
4	1.034231	0.508351	1.797552
	0.1505	0.3056	0.0361

Source: Author's computation

The Kruskal-Wallis test result of  $p = 0.2783$  is above the  $p$ -critical of 0.05, revealing no significant use of the passive voice in impression management among the four sectors' responsibility reports in 2021. However, the Dunn pairwise comparison showed that there was a significant pairwise difference in the use of the passive voice between sectors 3 and 4, which had a  $p$ -value of 0.0361. This revealed the use of passive voice impression management between these sectors. Sectors 3 and 2 have a slightly higher than the  $p$ -critical value of 0.0528. The pairwise finding is somewhat inconclusive on the use of passive sentences in impression management between these sectors. Sector 3 made use of passive voice in impression management in its ESG reports.

**Table 23 Use of ease of reading in responsibility reports across sectors**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank Sum
Flesch's reading ease	1	30.557	5.063	0.166	7	90
Flesch's reading ease	2	25.157	4.955	0.197	7	51
Flesch's reading ease	3	30.467	5.525	0.181	3	37
Flesch's reading ease	4	29.433	6.264	0.213	3	32

**Kruskal-Wallis results**

Chi-squared = 3.468 with 3 d.f.

chi- squared with ties = 3.468 with 3 d.f.

Probability = 0.3249

probability = 0.3249

Source: Author's computation

**Table 22.1 Dunn's pairwise comparison of responsibility report reading ease by sector**

Col Mean- Raw Mean	1	2	3
2	1.76184 0.039		
3	0.128307 0.449	-1.236409 0.1082	
4	0.536555 0.2958	-0.828161 0.2038	0.345033 0.365

Source: Author's computation

The Kruskal-Wallis test in Table 22 reveals a  $p$ -value of 0.3249, which is above a  $p$ -critical of 0.05, pointing to no significant difference in readability in responsibility reports among the four sectors. There is no readability impression management in all four sectors. However, the Dunn pairwise comparison showed that there was a significant pairwise difference in readability between sectors 1 and 2, with a  $p = 0.0390$ . The pairwise results revealed that there was readability impression management between these sectors.

#### 4.14 Analysis of the chairman's statements in 2021

**Table 24 Use of word count in impression management in the chairman's statements across sectors in 2021**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Word count	1	1232.857	464.784	0.377	7	66
Word count	2	1289.143	390.424	0.303	7	72
Word count	3	1452	617.719	0.425	3	33
Word count	4	1,429.33	199.29	0.139	3	39

**Kruskal-Wallis results**

Chi-squared = 0.796 with 3 d.f.

chi- squared with ties = 0.796 with 3 d.f.

Probability = 0.8504

probability = 0.8504

Source: Author's computation

**Table 23.1 Dunn's pairwise comparison of the chairman's report word count by sector**

Col Mean- Raw Mean	1	2	3
2	-0.271052 0.3922		
3	-0.38492 0.3501	-0.174964 0.4306	
4	-0.874818 0.1908	-0.664862 0.2531	-0.414039 0.3394

Source: Author's computation

The Kruskal-Wallis test results in Table 23 demonstrate that there is no significant difference in the word count in the chairman's reports among the four sectors. This is shown by a *p*-value of 0.8504, which is greater than the *p*-critical value of 0.05. There is no word count impression management strategy in all four sectors. This finding is further supported by the Dunn pairwise test results in Table 23.1, which displayed no significant differences in sector pairwise results, with *p*-values ranging from 0.1908 to 0.4306. These *p*-values were all above the *p*-value of 0.05. There is no significant difference in the word count among the sectors, and hence no impression management. This is further supported by all four sectors having similar mean values.

**Table 25 Use of passive voice in chairmans’ statements across sectors in 2021**

Variable	Sector	Mean	Standard dev	CV	Kruskal-Wallis	
					Obs	Rank sum
Passive sentences	1	0.042	0.037	0.873	7	87.5
Passive sentences	2	0.031	0.043	1.368	7	69
Passive sentences	3	0.047	0.06	1.296	3	31
Passive sentences	4	0.031	0.028	0.908	3	22.5

**Kruskal-Wallis results**

Chi-squared = 0.572 with 3 d.f.

chi- squared with ties =0.611 with 3 d.f.

Probability = 0.9028

probability = 0.8940

Source: Author’s computation

*Table 24.1 Dunn’s pairwise comparison of chairman’s report passive sentences by sector*

Col Mean- Raw Mean	1	2	3
2	0.746773 0.2276		
3	0.102434 0.4592	-0.476015 0.317	
4	0.355505 0.3611	-0.222944 0.4118	0.213884 0.4153

Source: Author’s computation

The Kruskal-Wallis test results in Table 25 reveal that there was no significant difference in the use of the passive voice among the four sectors’ chairman’s statements in 2021. This is shown by a *p-value* of 0.9028, which is greater than the *p-critical* of 0.05. The lack of a significant passive voice impression management is supported by the Dunn pairwise test, which showed that there were no significant pairwise differences in the use of the passive voice between sectors. The Dunn pairwise comparison had *p* values ranging from 0.2276 to 0.4592, all above the *p-critical* of 0.05. Therefore, there are no significant differences in the use of the passive voice among the sectors and hence no impression management.

**Table 26 Use of ease of reading in chairmans' statements across sectors in 2021**

Variable	Sector	Mean	Standard dev	CV	Kruskal–Wallis	
					Obs	Rank sum
Flesch's reading ease	1	36.014	5.768	0.16	7	68.5
Flesch's reading ease	2	40.157	14.664	0.365	7	75
Flesch's reading ease	3	35.8	6.3	6.3	3	29.5
Flesch's reading ease	4	37.2	16.078	0.432	3	37

**Kruskal-Wallis test results**

Chi-squared = 0.437 with 3 d.f.

chi- squared with ties = 0.438 with 3 d.f.

Probability = 0.9324

probability = 0.9323

Source: Author's computation

**Table 25.1 Dunn's pairwise comparison of chairman's reading ease by sector**

Col Mean- Raw Mean	1	2	3
2	-0.293751 0.3845		
3	-0.011669 0.4953	0.21587 0.4145	
4	-0.624271 0.2662	-0.396733 0.3458	-0.517744 0.3023

Source: Author's computation

The Kruskal-Wallis test results in Table 25 show that there were no significant differences in readability among the chairman's statements in the four sectors in 2021. This is shown by a  $p$ -value of 0.9324, which is greater than the critical value of 0.05. The lack of a relationship between impression management and readability is supported by the Dunn pairwise test in Table 25.1, which reveals that there were no significant pairwise differences in readability between sectors. The Dunn pairwise results had  $p$ -values ranging from 0.2662 to 0.4953, all above the  $p$ -critical of 0.05. There were no significant differences in readability among the sectors, and hence, there is no impression management in the chairmans' statements in 2021.

## 4.15 Mann-Whitney tests

### 4.15.1 Chairman's statement vs sustainability report Mann-Whitney tests

**Table 27 Use of passive voice in chairmans' statements and Sustainability reports**

Variable	Sector	2018	2019	2020	2021
Passive voice	1	Z = -0.5140	Z = - 1.476	Z = - 0.192	Z = - 0.578
		P = 0.6073	P =0.1400	P = 0.8477	P = 0.5631
Passive voice	2	Z = -2.776	Z = -1.423	Z = - 0.064	Z = - 0.840
		P = 0.0055	P = 0.1548	P = 0.9488	P =0.4010
Passive voice	3	Z = - 0.655	Z = - 0.218	Z = - 1.528	Z = - 0.655
		P = 0.5127	P= 0.8273	P = 0.1266	P = 0.5127
Passive voice	4	Z = -1.528	Z = 0.218	Z = - 1.091	Z = 0.218
		P =0.1266	P = 0.8273	P = 0.2752	P = 0.8273

Author's computations

The results showed that there is no significant difference in the use of the passive voice in the chairman's statements and responsibility reports from 2018 to 2021. However, in 2018, sector 2 showed a significant difference in the use of the passive voice between the chairman's statements and the sustainability reports, with a z-score of -2.776 and a p-value of 0.0055.

**Table 28 Use of ease of reading in chairmans' statements and sustainability reports**

Variable	Sector	2018	2019	2020	2021
Flesch's reading ease	1	Z = 0.256	Z = 0.575	Z = 1.597	Z = 1.597
		P =0.7981	P = 0.5653	P =0.1102	P =0.1102
Flesch's reading ease	2	Z = 0.839	Z = 3.130	Z = 2.492	Z = 2.364
		P = 0.4013	P =0.0017	P = 0.0127	P = 0.0181
Flesch's reading ease	3	Z = 1.528	Z = - 0.655	Z = 0.655	Z = 0.218
		P = 0.1266	P = 0.5127	P = 0.5127	P = 0.8273
Flesch's reading ease	4	Z = 0.655	z = 0.218	Z = 0.655	Z = 0.655
		P = 0.5127	P =0.8273	P = 0.5127	P = 0.5127

Author's computation

The results showed that there was no significant difference in the use of readability in the chairman's statements and responsibility reports in all the sectors for all the years except for sector 2 in 2019, 2020, and 2021, when there was a significant difference in readability between the chairman's statements and responsibility reports, with *p*-values of 0.0017, 0.0127, and 0.0181, respectively. These Mann-Whitney results show that, in general, there was readability impression management in sector 2 but not in the other sectors.

#### **4.16 Conclusions**

There is a lack of standardisation in ESG reporting, with most companies still reporting on CSR instead of ESG issues. Additionally, listed companies' ESG reporting is guided by various frameworks, making it difficult to compare reports from different companies. The introduction of a standardised reporting framework would help bridge the gap in reporting styles between MNCs and local companies. Tamimi and Sebastianelli (2017) found that 90% of the JSE Top 40 companies excluded governance matters in their responsibility reports, except for ethical aspects. The absence of a reporting framework has led companies to report information aimed at signaling certain messages to influence stakeholders' perceptions or to legitimise the company's existence in society. The top 40 companies reported well on corporate governance, likely due to the King Code, which is a listing requirement. Furthermore, the highly regulated financial sector had detailed ESG reports, adhering to and reporting on trending sustainability concerns. Most listed firms produced climate change policies from 2020, guided by the TCFD guidelines. This study found evidence of greenwashing in reports, indicated by the increase in the number of pages across all sectors, and the use of images and large fonts. The reports remained qualitative, with case studies occupying more pages in sustainability reports. The Kruskal-Wallis tests showed traces of impression management in the word count of responsibility reports from 2019 and 2020. This was supported by Dunn's pairwise findings, which revealed that sector 2, the materials and mining sector, had a significantly different word count from other sectors. This sector used word count for impression management in 2019, 2020, and 2021. Additionally, the Dunn pairwise findings indicated that Sector 2 employed readability impression management in its ESG reports in 2020 and 2021. The Dunn test showed that sector 3, the consumer discretionary sector, used passive voice impression management in their responsibility reports in 2020 and 2021; however, the Kruskal-Wallis results were insignificant for these years. The chairman's statements for the mining and materials sector utilised readability impression management in 2018 and 2019, as indicated by

significant Dunn pairwise findings. The Mann-Whitney test also showed readability impression management between the chairman's report and sustainability reports within the mining and materials sector from 2019 to 2021. In conclusion, there was significant use of impression management by the mining and materials companies listed on the JSE. However, the study did not observe significant use of impression management in the other sectors using the Kruskal-Wallis tests, Dunn pairwise comparison and the Mann-Whitney U test.

All the chairman's statements emphasised the company's financial performance rather than ESG issues. Furthermore, only a few chairman's statements tackled all three ESG issues in their reports. This lack of reporting on ESG matters in the chairman's statements suggests that ESG reports are merely for impression management purposes. The chairman's statements show the direction of the company, and the failure to effectively include ESG issues undermines the sustainability report. However, the chairmen of mining companies and those that manufacture beer and tobacco focused on ESG issues to signal and legitimise their social contract with the market that they were responsible investors, although their environmental and social campaigns were outweighed by the harm they caused to the environment and society.

The use of qualitative achievements in the chairman's statements and sustainability reports indicates a lack of tangible accomplishments and knowledge on effectively reporting environmental and social issues, which are new concepts compared to governance aspects that have a reporting framework. All companies changed their sustainability reporting in 2020 to demonstrate their responses to the global COVID-19 pandemic. This shift to legitimise their operations to various stakeholders aligns with Corraza et al. (2020), who observed that companies altered their reporting when faced with disaster to appeal to their business environment. This suggests that sustainability reports are primarily public relations documents.

The next chapter presents the impact of ESG on the financial performance of JSE-listed firms. This study shows the relationship between ESG and financial performance. A relationship between these variables will lead to firms genuinely embracing and implementing ESG in their decision-making process.

## **Chapter 5: Impacts of ESG on the financial performance of JSE-listed companies.**

### **5.1 Introduction**

This chapter analyses the impacts of ESG on the performance of listed companies on the JSE for the period spanning 2002 to 2022 using a dynamic panel model proposed by Arellano and Bond (1991) and Blundell and Bond (1998). The relationship between ESG and firm performance has remained largely inconclusive, with research still unsure of the reasons behind this phenomenon. Institutional investors are shifting towards sustainable and ethical investments due to pressure from the United Nations SDGs, and firms that disclose ESG tend to have reduced risks and outperform firms that do not disclose ESG reports, though in varying proportions (Khan, 2022; Pastor et al., 2022; Saini et al., 2022). On the other hand, Chen & Xie (2022) and Khan (2022) observed that the ESG and financial performance relationship was more pronounced in mature companies, companies with high media attention, and ESG investors. The improved returns on green investments reflected increased unanticipated environmental concerns by investors. Therefore, green investments are a better hedge against climate risk (Pastor et al., 2022). ESG preferences, conversely, had a moderating effect on financial performance and ESG disclosure. This finding is similar to Lee & Suh (2022), who observed that incorporating greenwashing in a process or model had an influence on the ESG and financial achievement relationship. Weak internal control systems have an adverse controlling consequence on ESG ratings and firm performance. On the other hand, the relationship between ESG scores and firm performance is inconclusive due to different approaches and methodologies that are used by different rating agencies in coming up with ESG scores (Dobrick et al., 2023; Lee et al., 2023).

### **5.2 Empirical Literature Review**

#### **5.2.1 Firm Performance and ESG**

A bidirectional relationship exists between ESG performance, financial performance, and risk. This implies that sensitive and profitable firms tend to invest in ESG activities to yield superior returns in the future (M. A. Khan, 2022; N. Naeem et al., 2022). Sensitive industries such as mining and oil tend to disclose more ESG information to legitimise and send signals to the market and to defend their reputation (Khan, 2022). ESG disclosure positively affects firm performance even after moderating effects on competitive advantage in Malaysia. A unit increase in ESG disclosure

translated into a 4% increase in firm performance. Furthermore, firms with high ESG disclosure ratings have a greater competitive advantage than their counterparts (Mohammad & Wasiuzzaman, 2021a). In China, ESG ratings have significantly increased the quantity and quality of green innovations (Tan & Zhu, 2022). IT companies were the lowest in terms of ESG rating; however, they had the potential to develop their own ESG practices since ESG affects performance. Interestingly, Egorova et al. (2022) advocated for market value as the best measure to test ESG factors when analysing the relationship between ESG and firm performance.

A study of Italian top 100 firms revealed that ESG disclosure had a positive impact on Earnings Before Interest and Tax (EBIT), and this was attributed to the EU Directive 2014/95, which was later adopted in Italy under Legislative Decree 254/2016, becoming effective in 2017 (Pulino et al., 2022). Environmental and social scores had a positive effect on EBIT, and this was credited to customers rewarding the firm's environmental and social activities through increased sales; however, there was no relationship between Governance and EBIT. On the contrary, corporate governance for chaebol firms had a positive effect on firm value in South Korea. The positive effect of the governance score in chaebol firms was ascribed to size and government-led firm structure reforms in these family-run firms (Yoon et al., 2018). There was a negative relationship between environmental score and Return on Assets (ROA), and this was attributed to an increase in low-carbon emission investments, which had a low return on investments in the short run (Pulino et al., 2022). In addition, environmentally sensitive firms had a negative relationship with the environmental score (Yoon et al., 2018). Despite the positive relationship between ESG and EBIT, the return on revenue was still lower than the increase in capital investment in the short run (Pulino et al., 2022). These findings reveal that large firms are highly leveraged and tend to invest more in ESG activities to meet the ESG disclosure conditions of debt obligations (Ahmad et al., 2021; Khan, 2022).

On a different note, a study consisting of Malaysia, Indonesia, Thailand, and Singapore found no relationship between ESG scores and both market and firm performance indicators. An increase or decrease in a firm's sustainability investments had no profound effect on firm performance. This result reflected the non-inclusion of sustainability indicators and ESG research in firm performance measurement within these ASEAN countries (Junius et al., 2020). However, in light of this, Singapore, due to its mandatory ESG disclosure regulations, had a positive significant

relationship between ESG and firm performance (Junius et al., 2020). Narula et al. (2024) revealed that there was no significant relationship between ESG and firm performance despite India being the 5<sup>th</sup> largest growing economy in the world. These indifferent findings can be attributed to the cost burden of ESG disclosure, which reduces profitability.

A study of 57 non-financial companies that are part of the S&P 500 revealed a positive relationship between ESG and firm financial performance using a Two-Stage Least Squares estimation method. There was a significant relationship between ESG and Tobin's Q, which implied that investors viewed ESG activities by firms positively and hence improved market value. There was also a positive relationship between ESG and accounting performance indicators: Return on Assets (ROA) and Return on Equity (ROE), though to a lesser magnitude than Tobin's Q in the long run (Nguyen et al., 2022). Similarly, Alareeni & Hamdan (2020); and Rahman et al., (2023) observed a positive connection between ESG disclosure and monetary performance. Nevertheless, environmental and corporate social responsibility had a negative association with return on assets and return on equity. Environmental and corporate social responsibility had a positive relationship with Tobin's Q. Tobin's Q and ROA were positively correlated with governance, whereas ROE was negatively correlated with governance. These findings are in contrast to Shaikh, (2022), who observed an adverse relationship between ESG and firm performance. This negative relationship was ascribed to increased CAPEX during the preliminary years of ESG implementation, which in turn affected ROA and ROE. ESG investment in the formative adoption stages gradually diminished the firm's financial performance until it became negative.

Environmental disclosure had a weak link to Tobin's Q and a negative relationship with ROA. Corporate governance had an encouraging relationship with firm performance. Improved board diversity, transparency, and governance structure improved companies' operational and market performances. Environmental and social scores had an adverse relationship with market and operational performances. However, surprisingly, firms implementing sustainability measures were getting more attention from stakeholders, which implied improved market and operational performances in the long run. In the same vein, ESG research and development significantly improved Tobin's Q (Shaikh, 2022).

Similarly, Alareeni & Hamdan (2020) and Aydoğmuş et al. (2022) found an overall positive relationship between ESG and firm financial performance. However, Alareeni & Hamdan (2020)

and Chen et al. (2022) observed that environment and CSR disclosures had a negative rapport with ROA and ROE. Furthermore, environmental and CSR disclosure had a positive effect on Tobin's Q. Corporate governance hurt ROE and was positively related to Tobin's Q and operational performance (ROA). Large firms with huge assets and leverage tend to have high ESG, E, S, and G scores, and these high scores translate to high operational (ROA) and financial performance (ROE) (Alareeni & Hamdan, 2020). Aydoğmuş et al. (2022), in contrast, found social and governance scores to have positive and significant effects on firm performance, while the environmental score had an insignificant relationship with firm performance. The lack of relationship between the environmental pillar and firm performance was attributed to the long turnover period before environmental investments could yield returns. The overall positive relationship between ESG and firm performance supports stakeholder theory, which shows that companies' investments in ESG activities are rewarded by the government, investors, shareholders, and other stakeholders. These inconclusive results on individual ESG components and financial performance align with Ahmad et al. (2021), who found a positive correlation between ESG and firm performance but mixed results between financial performance and individual ESG elements.

European countries have significantly adopted the GRI ESG disclosure guideline and established sustainability committees aimed at addressing ESG issues. Asian countries are more sustainability-disciplined in the energy sectors, and Asian Pacific countries are more inclined towards technology firms (Shaikh, 2022). Pressure and demands from investors and other stakeholders have led to ESG investment in the US, and interestingly, management with an unvested interest in companies tends to over-invest in ESG and negatively affect firm value (Nguyen et al., 2022). In light of this, Nguyen et al. (2022) concluded that firms that desire to improve firm value should invest in ESG activities and publicly disclose ESG activities to strengthen investors' and other stakeholders' commitment to the firm. In the same vein, Yoon et al. (2018) resolved that ESG significantly improved the market value of Korean firms. Climate change reporting and disclosure significantly improve firm performance among private manufacturing firms (Chen et al., 2022).

Firm size had a moderating effect on the relationship between ESG and market performance (Ahmad et al., 2021; Pastor et al., 2022). Small-capital stocks are slow to react to climate change shocks in the news (Pastor et al., 2022). The ESG pillar positively influenced firm performance for FTSE350 listed firms, and high ESG firms outperformed low ESG firms. Transparent ESG

information reduces information asymmetry between the firm and investors, and firms can predict the intrinsic value of shares. Large firms tend to invest in ESG due to economies of scale and to meet the ESG demands of various stakeholders. Similarly, firms with significant debt and assets tend to perform better in terms of ESG score, E score, S score, and G score (Ahmad et al., 2021). Firms with huge media attention can eliminate stakeholder ESG investment information asymmetry by taking advantage of the media (Bissoondoyal-Bheenick et al., 2023). Negative ESG news hurts firm performance. Firm reputation has a signaling effect on investors; however, on the contrary, firms in sin industries were not affected by negative publicity (Wong & Zhang, 2022). Firm characteristics, industry and reputation influenced how investors reacted to negative media coverage.

In the same light, Bissoondoyal-Bheenick et al. (2023) and Rahman et al. (2023) found a positive relationship between ESG and Tobin's Q, which was highly driven by the social pillar, and this positive social pillar outweighed the positive Environmental and Governance pillars among the G-20 nations. These findings reveal that the Environmental and Governance pillars affect a firm's internal operations, while the social pillar, on the contrary affects the external aspects of the firm. The social scope includes business risk, which affects business reputation. A firm is a subset of society, and firm value is derived from meeting society's expectations (Bissoondoyal-Bheenick et al., 2023). A firm's reputation is dependent on the social pillar, and the social pillar has grown progressively over the years to include human rights, health and safety, product safety, labour issues, and quality. Consequently, the social pillar measures the company culture and the firm's shared values with society. In a similar vein, corporate scandals are a function of the disintegration of the social pillar (Bissoondoyal-Bheenick et al., 2023). These findings are in congruence with the stakeholder and legitimacy theory.

The same study by Bissoondoyal-Bheenick et al. (2023) using excess returns as a measure of performance found conflicting results from those found using Tobin's Q. There was an adverse relationship between ESG and excess returns. The negative relationship was driven by the governance pillar, which outweighed the environmental and social pillars. To illustrate, a unit decrease in governance score led to a 15.1% decline in annual returns. This result displayed investors' sensitivity to corporate governance information, and this susceptibility emanates from corporate governance scandals that have rocked the G20 nations since 2000 (Bissoondoyal-

Bheenick et al., 2023). In contrast, [Shakil et al. \(2019\)](#) observed that corporate governance did not affect financial performance in emerging markets; yet, the environmental and social aspects of ESG had a positive effect on firm performance in emerging markets. In sectoral analysis, the environmental score had a significant effect in the mining sector, and the three ESG pillars were significant in the retail sector using Tobin's Q. However, only the transport sector had significant financial performance for all three ESG pillars using excess returns ([Bissoondoyal-Bheenick et al., 2023](#)). These findings were in line with [Yoon et al. \(2018\)](#), who posited that firm and industry characteristics significantly influenced the effect of ESG on share prices. Environmentally sensitive firms had a lower relationship between ESG and firm value.

In a study that utilised ESG data relevant to financial materiality and the United Nations Global Compact (GC) score to measure reputation from adherence to the UNGC. [Yoo et al., \(2021\)](#) observed that an increase in ESG score, especially the environmental pillar, led to increased stock price returns and lower stock price volatility. Conversely, corporate governance led to lower returns and increased volatility ([Bissoondoyal-Bheenick et al., 2023](#)). Non-energy sectors benefited extensively from the improved environmental pillar compared to companies in the energy sector. However, interestingly, companies in the energy sector benefited from reduced stock price volatility due to improved environmental performance during crisis periods ([Yoo et al., 2021](#)). Firms in the lower ESG band benefited more from ESG implementation than firms in the high ESG band ([Ahmad et al., 2021](#); [Yoo et al., 2021](#)). These findings revealed that ESG investments during financial crisis periods reduced stock volatility and the probability of a stock price crash ([Feng et al., 2022](#); [Yoo et al., 2021](#)).

Furthermore, ESG upgrades led to optimistic yet inconsistent significant abnormal returns of 0.5% per month, while ESG downgrades negatively affected stock returns by a magnitude of 1.2% per month. These findings are more pronounced in ESG-leading firms than in laggard firms ([Shanaev & Ghimire, 2022](#)). ESG efficiencies were observed to be greater than traditional efficiencies in the automotive industry. Firm size, geographical location, and level of innovation significantly affected ESG efficiencies in the automotive industry. The European automakers outperformed their American and Asian counterparts ([Ahmad et al., 2021](#); [Shanaev & Ghimire, 2022](#); [Stefanoni & Voltes-Dorta, 2021](#)). Corporate governance yielded the highest efficiencies, followed by the environmental and lastly the social pillars. Interestingly, in China, the relationship between ESG

and firm performance is U-shaped, implying that there is a positive relationship between ESG and firm performance up to a certain point, and any additional ESG activities after the threshold will yield negative firm performance (Pu, 2023).

In Germany, green bonds have a lower yield, which translates to lower returns than brown bonds. The 'greenium' over the last decade has experienced a four-fold widening, showing increased environmental concern among investors. This, in turn, led to green bonds outperforming brown bonds during the same period. However, Pastor et al. (2022) attributed the outperformance to climate-related shocks. The spread between the green bond and the brown bond is known as 'greenium', and reflects an investor's willingness to forego higher returns in exchange for having an investment more aligned with their ESG values (Pastor et al., 2022). Green stocks have a lower cost of capital than conventional stocks, and this is good for ESG investors, as reduced cost of capital equates to social impact (Pastor et al., 2022). ESG investments lead to greener firms and a decline in brown investments. However, larger firms, European firms, and UNPRI signatories are the ones mostly becoming greener. Banks, households, and smaller firms, on the other hand, are becoming browner (Pastor et al., 2022). Pastor et al. (2024) observed that there was a significant overstatement of reported ESG assets under management by institutional investors. Political uncertainty attracts a risk premium, which increases with weaker economic conditions. This political uncertainty erodes the implicit protection that a government provides to a financial market (Pastor & Veronisi, 2011). On the other hand, Breedt et al. (2019) and Curtis et al. (2021) observed that ESG investing neither reduces returns nor increases costs. However, ESG investments offered increased ESG exposure to investors, and ESG investors voted differently from non-ESG investors. There was nothing peculiar about ESG factors.

### **5.2.2 ESG and firm performance in South Africa**

Using a two-stage least squares instrumental analysis, Chininga et al. (2023) observed that improved ESG actions positively affected both return on equity and market-grounded performance gauges (Tobin's Q). Environmental initiatives significantly influenced the market and accounting performance indicators more than the social and governance initiatives for the JSE top 40 companies, and this is attributed to the majority of the top 40 companies being in the materials and mining industries. Magubane & Wesi (2023), using PNARDL, found a positive relationship between ESG investing and financial performance in the financial sector. A one percent increase in ESG investing led to a five percent increase in bank financial performance. ESG investing was

crucial in influencing stock performance in the South African financial sector during the COVID-19 pandemic. During crisis periods such as COVID-19, it is paramount for the financial sector to embark on ESG investing to improve financial resilience. On the contrary, Chininga (2022) observed that the overall ESG rating negatively affected market performance, and this implies that investors in South Africa do not value a firm's ESG investing activities.

## **Hypothesis 1**

*Individual and total ESG score has a positive effect on firm financial performance.*

Firm size and firm performance have a complex relationship. As firms mature, they benefit from economies of scale, and their public scrutiny and exposure to media coverage increase as well (Bissoondoyal-Bheenick et al., 2023; Khan, 2022; Wong & Zhang, 2022). Firm size is not merely a control variable but plays a significant role as a moderator in the relationship between ESG and firm financial performance (Ahmad et al., 2021). A moderating variable is unique as it amplifies the strength or direction of an effect in the relationship between a dependent variable and the independent variable. To date, only a handful of studies show the effect of firm size on ESG and financial performance separately, notably. Ahmad et al., 2021; Graves & Waddock, 1994; Ullmann, 1985. Large firms have a positive effect on social performance due to pressure from various stakeholders and have the resources to meet the demands of the stakeholders (Bissoondoyal-Bheenick et al., 2023; Ullmann, 1985). Further, Ahmad et al. (2023) observed that firm size and ESG had a moderating effect on the 2007-2010 global financial crisis and company performance. ESG and corporate governance are strategic tools that can be utilised by firms in times of financial crisis. In addition, Zaiane & Ellouze (2023) observed a moderating effect of firm size on environmentally sensitive firms and environmentally non-sensitive large firms engaged in symbolic CSR, unlike their counterparts. Smaller firms, by size, found CSR to be expensive to implement and hence discarded CSR despite the pressure from the industry. On the contrary, Gregory (2024) failed to find a significant relationship between firm size and ESG rating, and only outlier states positively influenced the relationship between firm size and ESG ratings. This study utilised firm size as both a moderating and control variable in analysing the relationship between ESG and market performance.

## **Hypothesis 2**

*Firm size has a moderating effect on the firm performance of listed firms in South Africa.*

### **5.3 Methodology**

#### **5.3.1 Data Description and Data Sources**

The research sample was from all the JSE's listed companies from 2002 to 2022. The study used secondary data. ESG data was collected from the Bloomberg research domain. This database uses publicly available information in its ratings. The Bloomberg ratings are transparent. The database was used to provide separate scores for the four variables: environmental, social, governance, and ESG. The Bloomberg database is widely used in ESG and firm performance research. Financial and accounting information will be collected from the Bloomberg Library database, and where data was missing, financial statements were used to collect financial data for the listed companies (Fain, 2020). The financial statements were collected from the listed companies' websites.

This empirical investigation on the impact of ESG on the financial performance of JSE-listed companies is based on a sample of JSE-listed companies in the following sectors: materials, financials, telecommunications, consumer goods, and consumer discretionary. The goal of this study is to determine how ESG and firm success are related. The study uses JSE-listed firms because the listed companies include both local and multinational companies and cover all sectors of the South African economy. The investigation spans 20 years, from 2002 to 2022, with all variables captured on an annual basis using panel data comprising JSE-listed companies from 2002 to 2022. The Bloomberg database has data starting from 2002. Hence, the study period is from 2002.

#### **5.3.2 Definition and Justification of Variables**

Following Ahmad et. al. (2021) and Chen & Xie (2022), the dependent variables are market value (MV) and earnings per share (EPS). EPS reflects changes in profitability and shares since it is calculated from net profit and shares. Qiu et al. (2016) observed that earnings per share were an important determinant of stock prices (Ahmad et al., 2021). The study used stock market-based performance measures to ensure that the research captures stock market investors' perceptions, which influence share prices and market values (Ahmad et al., 2021). Market-based measures are forward-looking and can show a firm's ability to make future profits. Accounting-based measures are affected by the use of various accounting standards, managerial manipulations, and are

backward-looking; yet, value investors view EPS growth and the discrepancy between market value and perceived value as important factors when buying securities (Ahmad et al., 2021). On the other hand, accounting-based measurements, according to Ullmann (1985), demonstrate organisational skills, but they must be modified to account for risk and industry-specific traits.

The independent variables were the ESG score, ENV score, SOC score, CG score, ESGH score, ESGL score, and firm size (Ahmad et al., 2021; Saini et al., 2022). The key variable in these models will be the ESG score. The study considered environmental, social, and governance scores as equally weighted (Ahmad et al., 2021). The ESG scores measure a firm's ESG performance. The ESG score ranges from 0 to 100, where higher scores mean good performance (Ahmad et al., 2021; Chen & Xie, 2022; Saini et al., 2022). Firm size is important because larger firms have more resources and benefit from economies of scale. This study will use total assets as an approximation of firm size. To alleviate misleading results from omitted variables, financial performance independent variables were incorporated into the Model (Ahmad et al., 2021; Chen & Xie, 2022). Total revenue, financial leverage, capex as a fraction of sales, and actual tax charges are the control variables. Total revenue was used as a control variable due to its positive relationship with firm profitability. Total sales, including other operating revenue, will represent the total revenue (Ahmad et al., 2021; Fain, 2020). Financial leverage was included in the model due to its negative effect on cash flow and returns. The debt-to-asset ratio was used as a proxy for financial leverage (Ahmad et al., 2021; Saini et al., 2022). Capital expenditure is a source of long-term investment and indicates long-term growth potential (Ahmad et al., 2021; Saini et al., 2022). The effective tax rate has a direct effect on the financial performance of a company. Hence, it was included in the model (Ahmad et al., 2021). The portrayal and meaning of the variables employed are shown in Table 28 below.

**Table 29 Description and definition of variables**

<b>Variable</b>		<b>Expected sign</b>	<b>Description</b>
LMV			A log of a company's market value. Share price times the quantity of common shares equals market value (Ahmad et al., 2021; Saini et al., 2022).

LEPS			A log of income per share for a company. Earnings per share (EPS) is net profit divided by the total number of ordinary shares. EPS is viewed as an annualised rate, and it may reflect the previous financial year (Ahmad et al., 2021; Lee & Suh, 2022).
LESG		+/-	The log of the environmental, social, and governance (ESG) scores for companies based on equal-weighted rating illustrates how a company's financial and additional monetary well-being can be similarly weighted based on the information in the IRESS's economic, environmental, social, and corporate governance pillars. According to Ahmad et al. (2017), Alareeni & Hamdan (2020), Chen & Xie (2022), and Fain (2020), it replicates a balanced view of a company's performance in these four areas.
LENV		+/-	Log of the environment (ENV) score. This variable shows the environmental performance of a firm, it shows how well the company utilised environmental opportunities and avoided environmental risks that negatively impact living and non-living natural systems to generate long-term shareholder value (Ahmad et al., 2021; Saini et al., 2022).
LSOC		+/-	Log of social (SOC) score. This shows the ability of a company to generate loyalty and trust from customers, employees, and society at large. This variable reveals a company's reputation and its social contract to operate, which are key determinants in long-term shareholder value creation (Ahmad et al., 2021; Saini et al., 2022).
LCG		+/-	Log of corporate governance (CG) score. This variable quantifies a firm's systems, processes, and checks and balances aimed at ensuring the board and executives work

			in the best interest of long-term shareholders' value (Ahmad et al., 2021).
LTA		+	Log of total assets (total assets) score. This is a proxy for firm size and is a summation of fixed assets, current assets, and long-term receivables (Ahmad et al., 2021; Chen & Xie, 2022; Saini et al., 2022).
LDA		+/-	A proxy for a company's financial leverage is the log of the debt-to-assets ratio (Ahmad et al., 2021; Fain, 2020; Saini et al., 2022).
LREV		+	Log of revenue (REV), this variable includes gross sales and other operating revenues of a company (Ahmad et al., 2021; Fain, 2020).
CAPS		+/-	Capital expenditure as a fraction of sales (CAPS). This variable is obtained by dividing capital spending by net sales or revenue multiplied by 100 (Ahmad et al., 2021; Saini et al., 2022).
ETR		-	Effective tax rate (ETR). This is formulated as income tax divided by profit before tax multiplied by 100 (Ahmad et al., 2021).
ESGH		+	This dummy parameter of high ESG accomplishing companies is derived from counters with ESG scores above 50% (Ahmad et al., 2021).
ESGL		+	This dummy parameter for low ESG companies shall be calculated from counters with ESG scores below 50% (Ahmad et al., 2021).

Author's computation

To reveal the impacts of ESG on the financial performance of JSE-listed companies, the study employs a dynamic panel model in the form of a system generalised method of moments (System GMM) that is more powerful and able to deal with endogeneity problems than OLS (Kwenda, 2014, Nyeadi, et al, 2018). A different GMM and system GMM were used to eliminate the correlation between the regressor and the error arising from the demeaning process of subtracting

everyone's mean value of  $y$  and each  $X$  from the respective variable. The ordinary least squares (OLS) method's endogeneity and simultaneity bias will be fixed by a differenced GMM. The approach will make use of instrumental variables and each variable's initial difference lag levels (Arellano and Bond, 1991). The bias caused by leaving variables out of the cross-sectional data will be eliminated as a result. To capture moment conditions in addition to differential form moment conditions, a system GMM was implemented because lagged level regressors may be poor instruments for the differenced variables. The system GMM model will be employed to scrutinise the impact of ESG on the financial capabilities of JSE-listed companies (Shakil et al., 2019). Following Ahmad *et al.* (2021), the reduced GMM model can be stated as follows.

$$Y_{it} = \alpha Y_{it-1} + \beta X_{it} + Z_t + \mu_i + \vartheta_i \quad \text{equation 1}$$

Where  $Y_{it}$  is the company's monetary performance (measured in MV or EPS) for the financial year  $t$ .  $Y_{it-1}$  is the financial capability of the company for the year  $t-1$ ; In terms of environmental, social, or governance performance of firm  $I$  at year  $t$ ,  $X_{it}$  is a vector of present values;  $Z_t$  captures time-specific effects;  $\mu_i$  is a detected independent variable with time-invariant effects, allowing for heterogeneity in the means of  $Y_{it}$  series across companies, and  $\vartheta_{it}$  is a disturbance term that is independent across company boundaries.

Equation (1), as a difference GMM estimate, is denoted by the following:

$$y_{it} - y_{it-1} = (y_{it-1} - y_{i,t-2}) + \beta(X_{it} - X_{i,t-1}) + (\varepsilon_{it} - \varepsilon_{i,t-1}) \quad \text{equation 2}$$

Where  $Y_{it-2}$  is firm  $i$ 's financial capabilities in year  $t-2$ ;  $X_{i,t-1}$  is a vector of present standards of the independent variable at  $t-1$ ;  $\varepsilon_{i,t-1}$  is the error term at year  $t-1$ .

The system GMM partakes of conditions articulated in Equations (3), (4), (5), and (6) for Equation (2); the difference GMM has criteria indicated in Equations (3) and (4) as shown below:

$$[y_{it} - (\varepsilon_{it} - \varepsilon_{i,t-1})] = 0, \text{ for } l \geq 2, = 3, \dots, T \quad \text{equation 3}$$

$$[X_{i,t-l} - (\varepsilon_{it} - \varepsilon_{i,t-1})] = 0, \text{ for } l \geq 2, = 3, \dots, T \quad \text{equation 4}$$

$$[(y_{it-l} - y_{i,t-l-1})(\mu_i + \varepsilon_{it})] = 0, \text{ for } l = 1 \quad \text{equation 5}$$

$$[(X_{i,t-l} - X_{i,t-l-1})(\mu_i + \varepsilon_{it})] = 0, \text{ or } l = 1 \quad \text{equation 6}$$

System GMM is superior in instances where there is unbalanced panel data and instances where N is larger than T, also the auto-regressive parameter is low (Arellano and Bond, 1991). On the other hand, Shakil et al., (2019) observed that the standard GMM has the challenge of magnifying gaps.

### 5.3.3 Model specification

To comprehend the influence of ESG on the financial performance of JSE-listed companies, the study adopted a dynamic effects model. Linear regression models will be estimated based on the following general equations used by Ahmad et al., (2021); and Chen & Xie, (2022). The model will be based on two equations listed below:

In line with Ahmad *et al.*, (2021) and Chen and Xie, (2022), the impact of ESG on the financial performance of JSE-listed entities can be represented by the following regression equations.

equation 7

$$LMV_{it} = \beta_0 + \beta_1 MV_{it-1} + \beta_2 lESG_{it} + \beta_3 lenv_{it} + \beta_4 lsoc_{it} + \beta_5 lcg_{it} + \beta_6 ESGH_{it} + \beta_7 ta_{it} + \beta_8 lda_{it} + \beta_9 lrev_{it} + \beta_{10} capex_{it} + \beta_{11} etr_{it} + e_{it}$$

equation 8

$$lEPS_{it} = \beta_0 + \beta_1 EPS_{it-1} + \beta_2 lESG_{it} + \beta_3 lenv_{it} + \beta_4 lsoc_{it} + \beta_5 lcg_{it} + \beta_6 ESGH_{it} + \beta_7 ta_{it} + \beta_8 lda_{it} + \beta_9 lrev_{it} + \beta_{10} capex_{it} + \beta_{11} etr_{it} + e_{it}$$

Where:

*it* represents the company *I* on time *t*.

MV and EPS are the dependent variables.

ESG, env, soc, cg, eco, and ESGH, a are the independent variables.

ta, da, rev, caps, and etr are the control variables.

*e* is the error term.

The model examines the relationship between total ESG, specific ESG factors, and high- and low- ESG-achieving corporations in terms of their financial performance as measured by market value (MV) and earnings per share (EPS) (Ahmad et al., 2021).

### 5.3.4 Moderating effects model

A moderating effects model was employed to examine the relationship between the dependent variable and the independent variables, influenced by a third variable. This test was significant as it assessed the boundary conditions under which the findings from equations 7 and 8 were valid. Therefore, to evaluate the effects of company size on the connection between ESG and financial performance for JSE-listed firms, a moderating effects model was constructed (Ahmad et al., 2021; Chen & Xie, 2022).

equation 9

$$\begin{aligned}
 LMV_{it} = & \beta_0 + \beta_1 lESG_{it} + \beta_2 lenv_{it} + \beta_3 lsoc_{it} + \beta_4 lcg_{it} + \beta_5 ESGH_{it} + \beta_6 ESGL_{it} + \beta_7 lESG_{it} \\
 & * lta_{it} + \beta_8 lenv_{it} * lta_{it} + \beta_9 lsoc_{it} * lta_{it} + \beta_{10} lcg_{it} * lta_{it} + \beta_{11} lESGH_{it} \\
 & * lta_{it} + \beta_{12} lda_{it} + \beta_{13} lrev_{it} + \beta_{14} capex_{it} + \beta_{15} etr_{it} + e_{it}
 \end{aligned}$$

equation 10

$$\begin{aligned}
 lEPS_{it} = & \beta_0 + \beta_1 lESG_{it} + \beta_2 lenv_{it} + \beta_3 lsoc_{it} + \beta_4 lcg_{it} + \beta_5 ESGH_{it} + \beta_6 ESGL_{it} + \beta_7 lESG_{it} \\
 & * lta_{it} + \beta_8 lenv_{it} * lta_{it} + \beta_9 lsoc_{it} * lta_{it} + \beta_{10} lcg_{it} * lta_{it} + \beta_{11} lESGH_{it} \\
 & * lta_{it} + \beta_{12} lda_{it} + \beta_{13} lrev_{it} + \beta_{14} capex_{it} + \beta_{15} etr_{it} + e_{it}
 \end{aligned}$$

The moderating effects model equations 3 and 4 are similar to equations 1 and 2. If the coefficients in questions 3 and 4 are significant and same sign as equations 1 and 2, it means that firm size has a magnifying effect on the relationship between ESG disclosure and financial performance (Ahmad et al., 2021).

## 5.4 Diagnostic Test for System GMM

### 5.4.1 Sargan Hansen Test

The Sargan-Hansen test was utilised to examine the system GMM model's ability to identify restrictions (Roodman, 2009; Kiviet and Kripfganz, 2021). The Sargan model was appropriate

under the assumption of homoskedasticity and no serial correlation of the idiosyncratic error term. However, if additional instruments are utilised over and above the time dummies and intercept, then the Hansen test will be appropriate because the Hansen test uses the optimal weighting matrix and does not rely on homoskedasticity and the absence of correlation in the error term (Roodman, 2009). The Hansen test was conducted under the null hypothesis that the instruments are not connected with the error term and that the omitted variables were correctly left out of the calculated equation.

#### **5.4.2 First-order and second-order serial (autocorrelation) tests**

The autocorrelation in the idiosyncratic disturbance term " $v_{it}$ " was examined for abnormalities that would make lags invalid as tools using the Arellano and Bond test. The Arellano and Bond test is applied to the residuals in differences. First-order serial correlation in differences is expected to be negative given the shared  $v_{i,t-1}$  term between  $\Delta v_{it}$  and  $\Delta v_{i,t-1}$ . As a result, to test for first-order serial correlation in levels, the study first looks for second-order correlation in differences, believing that doing so will reveal any connection between the variables  $v_{i,t-1}$  in  $\Delta v_{it}$  and the variables  $v_{i,t-2}$  in  $\Delta v_{i,t-2}$  (Roodman, 2009). The Arellano and Bond (1991) test allowed the research to look for serial correlation of order 1 by looking at the correlation of order 1 + 1 in differences.

#### **5.5 Estimation procedure**

Stationarity and multicollinearity tests were conducted on the variables before building regression models. Multicollinearity tests were conducted to eliminate highly correlated variables from the regression model to avoid erroneous and misleading inferences (Gujarati, 2003). A pairwise correlation matrix and variance inflation factor were conducted to check for multicollinearity (Ahmad et al., 2021). Dynamic panel data techniques were employed. The dynamic panel technique enabled the study to identify both the long-run and short-run effects of independent variables on dependent variables; hence, the use of lagged variables (Ahmad et al., 2021). Consideration of cross-section and time in time series dimensions reduced the possibility of chronological mistakes in statistics from generalised results (Ahmad et al., 2021). Cross-sectional firm parameters were estimated using the fixed effects model and the random effects model to consider explicit company terms that are arbitrarily distributed. The random effects estimator was inconsistent in the correlation between independent variables and fixed effects. The model gained efficiency without estimating each parameter for each firm. If there was a significant fixed and

random effect, a Hausman test was used to decide between the use of the random effects model and the fixed effects model. The random effects model was used to calculate the influence of ESG on a company's financial performance if the Hausman test was significant.

To approximate the connection between environmental, social, and governance factors with company monetary performance, a dynamic panel data approach was utilised (Ahmad et al., 2021; Elsayed & Paton, 2005). This method was employed to gauge the relationship between ESG and corporate financial performance. A dynamic variant of the static model was created to solve the issues of serial correlation and endogeneity of the explanatory variables. On the other hand, standard estimators could be inconsistent due to the inclusion of lagged dependent variables. To create trustworthy estimators, a GMM technique was used (Ahmad et al., 2021; Arellano & Bond, 1991; Arellano & Bover, 1995; Blundell & Bond, 2000). The GMM technique turned the equation into first differences using the lagged values of the endogenous variables as instruments. The results of this study's dynamic panel statistics analysis are based on Arellano-Bover and Blundell-Bond.

## 5.6 Findings and Discussions

### 5.6.1 Descriptive statistics

**Table 30 Summary Descriptive Statistics of Variables**

	N	Mean	SD
Lnmcap	501	25.577	.987
Lnrevenue	496	23.985	1.367
ln total assets	499	24.946	1.533
LnESG	501	3.86	.31
LnENV	489	3.157	1.02
LnSOC	500	3.408	.478
LnCG	501	4.401	.238
Capex	496	-8.564	11.088
eff tax rate	501	41.284	248.332
debt asset ratio	501	18.295	12.638

The mean was used to measure the central tendency of the data, and the standard deviation was used to measure the dispersion of the data around the mean. Market capitalisation, which measures the financial performance of a firm, is 25.577%, and a low standard deviation of 0.987 indicates

homogeneity in financial performance between firms (Alfalih, 2023). The average values of the ESG dimension show corporate governance with the highest of 4.401, followed by social performance with 3.408, and environment having the lowest score of 3.86 among the JSE-listed firms. This implies that JSE-listed firms consciously disclose corporate governance practices in their reports, and this could be attributed to the adherence to the King Code as a mandatory listing requirement. ESG score, market capitalisation, social score, corporate governance score, environment score, total assets, and revenue have low standard deviations ranging from as little as 0.238 to 1.533. This implies that the variables' data is clustered around the mean. The effective tax rate has the highest standard deviation of 248.332 and the highest mean of 41.284. This implies that effective tax rate data is scattered over a wide range. The data is normally distributed because 70% of the data falls within the 1.533 standard deviation. The total number of observations was 4985.

### 5.6.2 Variance Inflation Factor of independent variables

**Table 31 Variance Inflation Factor (VIF)**

Variable	VIF	1/VIF
InESG	16.78	0.059604
IneEnv	4.66	0.214635
InSoc	4.63	0.215971
InCG	4.34	0.230584
lnRevenue	2.77	0.361481
lnTot Assets	2.01	0.497253
lnEPS	1.75	0.570196
Debt-Asset ratio	1.25	0.801581
Effective tax rate	1.12	0.892188
Capex	1.08	0.928588
Mean VIF	4.04	

The variance inflation factor (VIF) measures how much of the variance of a regression coefficient is inflated due to multicollinearity in the model. VIF results above 10 shows severe multicollinearity and variables with above 10 scores should be excluded from the model. VIF results between 5 and 10 shows high multicollinearity in the variables. VIF results below 5 reveal moderate multicollinearity and should be accepted in the model.

Table 30 above shows the VIF results of the variables in the model. The composite ESG variable has the highest VIF of 16.78, which shows serious multicollinearity. This serious multicollinearity emanates from the fact that the ESG score value is a combination of the environmental score, social score and corporate governance performance of a firm. Thus, to ensure that the models are not inflated due to multicollinearity, where the ESG score variable is included in the model, the environment score variable, social score variable and corporate governance score variable are excluded from that model as shown in Table 31 below. The environment score variable, social score variable and corporate governance score variable had moderate VIF results of 4.66, 4.63 and 4.34. These results were a bit high but were within the acceptable levels of VIF. Revenue (2.77) and total assets (2.01) have low VIFs, which are acceptable. Debt to asset ratio (1.25), effective tax rate (1.12) and capex (1.08) have negligible multicollinearity in the model. The overall model has a mean VIF of 4.04, which shows an average multicollinearity and is acceptable. However, this average 4.04 VIF is skewed by the high ESG score VIF of 16.78.

### 5.6.3 Correlation Matrix of Independent Variables

**Table 32 Pairwise Correlation**

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) lnmcap	1.000										
(2) lnEPSY	0.058	1.000									
(3) lnrevenue	0.184*	0.565*	1.000								
(4) ln_total_assets	0.231*	0.359*	0.660*	1.000							
(5) lnESG	0.282*	0.054	0.110*	0.054	1.000						
(6) lnENV	0.210*	-0.004	0.089	-0.053	0.748*	1.000					
(7) lnSOC	0.210*	0.073	0.173*	0.126*	0.759*	0.507*	1.000				
(8) lnCG	0.137*	0.083	0.102*	0.117*	0.785*	0.218*	0.239*	1.000			
(9) capex	-0.054	0.016	0.071	0.067	-0.066	-0.120*	-0.109*	0.004	1.000		
(10) eff_tax_rate	-0.067	-0.187*	-0.061	-0.070	0.062	0.055	0.059	0.024	-0.071	1.000	
(11) debt_asset_ra~o	0.114*	-0.202*	-0.037	-0.186*	0.221*	0.189*	0.159*	0.144*	-0.235*	0.046	1.000

\* shows significance at  $p < 0.05$

A pairwise correlation matrix was conducted after the variance inflation as a diagnostic and robustness test. Table 31 above shows that environment score (0.748), social score (0.759) and corporate governance (0.785) have a highly significant and correlated relationship with ESG score.

This finding helps explain the high ESG score VIF of 16.78, which is heavily influenced by the environment score. Social score and corporate governance score variables.

#### 5.6.4 Impact of ESG performance on firm financial performance using a two-step system GMM

**Table 33 Impact of ESG performance on firm financial performance using a two-step system GMM results**

Models	(1) Lnmcap	(2) lnmcap	(3) lnEPSY	(4) lnEPSY
L.lnmcap	.847*** (.086)	.978*** (.13)		
Lnrevenue	.194 (.154)	.397* (.233)	.232 (.292)	.314 (.27)
ln_total_assets	-.198** (.09)	-.386** (.18)	.174 (.219)	.277 (.175)
LnENV	-.06 (.051)			-.042 (.049)
LnSOC	.227** (.1)			-.39** (.198)
LnCG	.827*** (.263)			-.09 (.285)
Capex	.001 (.007)	.001 (.007)	-.012 (.013)	-.018** (.009)
eff_tax_rate	0.00 (.001)	.002 (.003)	-.008*** (.001)	-.007*** (.001)
debt_asset_ratio	-.011** (.005)	-.015* (.008)	-.012 (.008)	-.018** (.008)
ESGH	-.08 (.081)	-.439*** (.169)	.245 (.228)	.169 (.154)
LnESG		1.1** (.498)	-.066 (.838)	
L.lnESPY			.32** (.149)	.387** (.163)
_cons	.261 (2.257)	-3.078 (3.629)	-8.313 (5.225)	-11.31** (4.466)
Observations	407	410	396	393
Instruments	32	18	33	41
Counter Effects	No	No	No	No
Time Effects	No	No	No	No
Hansen's j test	[0.633]	[0.225]	[0.314]	[0.518]

AR[1]	[0.001]	[0.012]	[0.019]	[0.024]
AR[2]	[0.633]	[0.782]	[0.890]	[0.615]
Counters	48	48	48	48

*Standard errors are in parentheses*

\*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

### **Interpretation of results**

Model 1 shows a significant positive relationship between social performance, corporate governance performance, and market value. However, environmental performance has a negative, insignificant relationship with market value, *ceteris paribus* (Pulino et al., 2022). Model one further shows a significant and positive relationship between social performance and market value of 0.227 at the 5% significance level (Aydoğmuş et al., 2022; Alfalih, 2023). This implies that a 1% increase in social investment in the short run will translate to a 22.7% increase in market value. This finding aligns with Ahmad et al. (2021) who observed a positive and significant relationship between social performance and market capitalisation. Interestingly, corporate governance has a significantly high positive effect on market value at the 1% significance level for JSE-listed firms in the short run. A 1% increase in the corporate governance performance of a firm will lead to an 82.7% increase in the market value of a JSE-listed firm (Ahmad et al., 2021; Pu, 2023; Aydoğmuş et al., 2022). This significant relationship between corporate governance and market value can be attributed to the mandatory adherence to the King Code as a listing requirement for all JSE-listed firms (Maubane et al., 2014; Yoon et al., 2018). In addition, from the data analysis, JSE-listed firms have consistently scored the highest in corporate governance compared to other ESG scores. There is also a significant negative relationship between total assets, the debt-to-assets ratio, and market value at the 5% significance level. The environment has a weak, negative, insignificant relationship with market performance. This finding aligns with Rahman et al., (2023) and Aydoğmuş et al., (2022), who observed a negative relationship between environmental scores and return on assets.

Model 2 shows a significant and positive relationship between the composite ESG performance and market value of 1.1 at the 5% significance level (Ahmad et al., 2021; Junius et al., 2020; Chininga et al., 2023). Similarly, Nguyen et al. (2022) observed a positive relationship between the ESG score and accounting performance indicators. A percentage increase in ESG performance will lead to a 1.1 increase in market value. The high positive relationship between ESG and market

value can be attributed to the strong positive corporate governance pillar, as shown in Model 1. On the other hand, high-performing ESG companies had a negative significant relationship with the market performance of -0.439 at the 1% significance level. This negative relationship is supported by the literature, which states that the impact of ESG on firm performance depends on the level of ESG maturity. In the short run, when ESG is still a new phenomenon in the firm, it negatively affects firm performance due to high implementation costs (Yoon & Chun, 2022). The debt-to-assets ratio has a weak, negative, significant relationship with a market capitalisation of -0.15 at the 10% significance level. Total assets have a weak negative relationship with a market capitalisation of -0.386 at the 5% significance level, and revenue has a positive significant relationship with a market value of 0.397 at the 1% significance level.

Model 3 reveals that composite ESG performance has a weak, insignificant negative relationship with earnings per share of -0.066. This finding is in contrast to the findings of Chininga et al. (2023), who observed a positive effect of ESG on return on equity. In the same light, the effective tax rate has a very weak, negative, significant relationship with earnings per share of 0.008 at a 1% significance level. This could be attributed to the negative effect taxation has on the earnings of a company.

Model 4 presents interesting results between individual ESG scores and earnings per share. The environmental score has a negative, insignificant relationship with earnings per share of -0.042. This finding is similar to Pulino et al. (2022) and Yoon et al. (2018), who observed a negative relationship between the environment scores and return on assets. However, the social score has a significant negative relationship with earnings per share of -0.39 at a 5% significance level. This implies that a percentage increase in social investments will translate into a 39% decline in earnings per share. JSE's top 40 firms are socially sensitive to the social score. This finding is contrary to the positive effect of social performance on the market value of a firm found in Model 1. Corporate governance has a negative, insignificant relationship with earnings per share of -0.09. This insignificant relationship is contrary to the positive significant relationship between corporate governance and the market value of a firm. Interestingly, capital expenditure has a significant negative relationship with EPS of -0.018 at a 5% significance level. This is the only significant relationship in all four models. The effective tax rate has a significant negative relationship with EPS of -0.007 at a 1% significance level. This significant negative relationship is consistent for

the two models related to EPS. This could be attributed to the negative effect tax has on earnings. Debt-to-assets ratio also has a significant negative relationship with EPS of -0.018 at a 5% significance level. This negative significant relationship is consistent in all the models except for Model 3.

### **5.6.5 Diagnostic Tests for System GMM**

The study comprised JSE's top 40 counters from 2002 to 2022. The top 40 counters change regularly and are not static; hence, the study had a total of 88 counters from 2002 to 2022. The data is comprised of rotating panels and is unbalanced. The study sought to conduct a GMM estimation from incomplete and rotating panel data (Albarran & Arellano, 2019). In addition, stationarity tests such as Levin et al. (2002) which requires strongly balanced data, could not be conducted because the study used unbalanced data. Furthermore, the study used micro panel data since the time is less than the number of cross sections. To effectively conduct a two-step system GMM, a total of 40 counters were dropped from the analysis because they appeared in the JSE top 40 only three times or fewer. A two-step GMM was conducted to estimate parameters in the four models with potentially endogenous regressors. The first step in the two-step system GMM estimates the model using instruments, and the second step in the two-step corrects for heteroscedasticity. The study successfully conducted a two-step system GMM as the number of instruments that were used was less than the number of observations in the study. In Model 1, 32 instruments were used, and the total number of variables is 48; in Model 2, there are 18 instruments, which is less than 48; Model 3 has 33 instruments and Model 4 has 31 instruments, all of which are less than 48, the total number of counters.

#### **5.6.5.1 Hansen Test**

A Hansen test was conducted to test for overidentifying restrictions (Hansen, 1982). The test was conducted to determine whether the instruments used in the model were valid, that is, to test if they were uncorrelated with the error term. The null hypothesis is that instruments are valid, and instruments are valid if the  $p$ -value is greater than 0.05 (Roodman, 2009). All the models passed the Hansen test, with model 1 having a  $p$ -value of 0.633, and model 2 having a  $p$ -value of 0.225, and accepted the null hypothesis. Model 3 had a  $p$ -value of 0.314, and model 4 had a  $p$ -value of 0.518; the study accepted the null hypothesis and concluded that the instruments used in the 4 models in the study were likely to be valid. Roodman (2009) further stated that to successfully

eradicate the overidentification of restrictions in a system GMM, the  $p$ -values should be greater than 0.25, and Model 1 (0.633), Model 3 (0.314), and Model 4 (0.518) surpass this requirement, with Model 2 within the range (0.225). This two-step system, GMM, was the best-fit methodology.

#### **5.6.5.2 Arellano Bond Test for autocorrelation**

The Arellano and Bond test was used to test for autocorrelation in the residuals of the first differenced Model AR (1) and the second differenced Model AR (2). The study, being a two-step system GMM, used the second differenced model AR (2) results to accept or reject the null hypothesis. The decision criteria are that if the  $p$ -value is greater than 0.05, the study fails to reject the null hypothesis, meaning that there will be no evidence of second-order correlation (Roodman, 2009). Model 1 has an AR (2)  $p$ -value of 0.633, which is above 0.05; the study accepts the null hypothesis and concludes there is no autocorrelation in the error terms in model 1. Model two has an AR (2)  $p$ -value of 0.782, accepting the null hypothesis. Model 3 and Model 4 have equally significant AR (2)  $p$ -values of 0.890 and 0.615, respectively, failing to reject the null hypothesis for all 4 models. To further show the reliability of the AR (2) results, all models must fail the AR (1) results.

### 5.6.6 Firm Size Moderating Effects Model Using a 2-step system GMM

Table 34 Firm size moderating Effects Model Using a 2-step system GMM results

	(1)	(2)	(3)	(4)
	Lnmcap	Lnmcap	lnEPSY	LnEPSY
L.lnmcap	.91*** (.023)	.951*** (.055)		
Lnrevenue	.017 (.013)	.012 (.019)	.366*** (.075)	.186 (.114)
ln_total_assets	-.369** (.181)	-1.972** (.98)	-.247 (.571)	4.595*** (1.576)
lnESG	-2.453** (1.198)		-5.626* (3.287)	
lnESG_TA	.101** (.047)		.17 (.133)	
Capex	0 (.002)	-.003 (.003)	-.023*** (.003)	-.014*** (.003)
eff_tax_rate	-.001*** (0)	-.001** (0)	-.008*** (0)	-.008*** (0)
debt_asset_ratio	-.01*** (.002)	-.008*** (.002)	-.015*** (.005)	-.006 (.007)
ESGH_TA	-.009*** (.003)	-.016*** (.004)	.027*** (.004)	.041*** (.009)
lnENV		1.233*** (.341)		-.924 (.904)
lnSOC		.362 (.842)		-4.671* (2.452)
lnCG		-11.477** (5.435)		28.214*** (9.834)
lnENV_TA		-.051*** (.014)		.036 (.038)
lnSOC_TA		-.014 (.036)		.162 (.101)
lnCG_TA		.492** (.217)		-1.139*** (.397)
L.lnESPY			.228*** (.013)	.174*** (.037)
_cons	11.213** (4.446)	47.081** (23.935)	3.706 (12.829)	-114.916*** (38.878)
Observations	410	407	396	393
Instruments	41	37	41	37
Counters	48	48	48	48
AR(1)	0.000	0.000	0.005	0.008
AR(2)	0.496	0.340	0.764	0.34
Hansen's j test	0.249	0.116	0.124	0.233

*Corrected standard errors are in parentheses*

\*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

## Interpretation of results

In Model 1, firm size has a weak, positive, significant moderating effect on ESG of 0.101 at a 5% significance level. However, under the firm size moderating effects, ESG has a strong significant negative relationship with market capitalisation of -2.453 at a 5% significance level (Zaiane & Ellouze, 2023). This implies that firm size has a negative magnifying effect on the relationship between ESG and financial performance. This negative relationship between ESG and financial performance could be attributed to increased public scrutiny from various stakeholders that accompany large firms (Bissoondoyal-Bheenick et al., 2023; Khan, 2022; Wong & Zhang, 2022). Model 1 equally reveals firm size having a weak negative significant magnifying effect in high-performing ESG firms of -0.009 at a 1% significance level. This negative relationship is also shown in Table 6, where high-performing ESG firms had a negative significant relationship with market performance of -0.439 at a 1% significance level. Firm size has a weak, significant magnifying effect on ESG in high-performing ESG firms. The effective tax rate has a very weak, negative, significant relationship with the market performance of -0.001. This finding is almost similar to the dynamic panel data analysis in Table 6, where the effective tax rate was neutral and had no effect on market performance. Leverage, represented by the debt-to-asset ratio, observed a weak negative magnifying effect of firm size on the market capitalisation of -0.01 at a 1% significance level. This aligns with the findings in Table 6 of -0.011 at a 5% significance level.

Model 2 presents interesting results that are unique and different from the findings from Table 6. Under the firm size moderating effects, the environment has a significant positive effect on market capitalisation of 1.233 at a 1% significance level (Zaiane & Ellouze, 2023). This strong positive significant environment score on market performance could be attributed to large firms being sensitive to environmental issues such as global warming and being forced to engage in both symbolic and actual CSR activities, unlike their SME counterparts. The JSE-listed financial institutions created and adopted climate change policies from 2020 onwards after NGO investor activists requested such disclosure at the Standard Bank AGM (Cassim, 2022; Zaiane & Ellouze, 2023). Conversely, the firm size moderating effect on the environment has a negative effect on the market performance of -0.051 at a 1% significance level. This could be attributed to the increased costs associated with implementing environmental programmes (Alfalih, 2023). On the other hand, under firm size moderation effects on social performance, both the interacting variable and the

social score have insignificant effects on market performance. The moderator is different in sign and magnitude from the social performance in this equation, and this implies that firm size does not influence the relationship between social performance and market performance. This insignificant social performance finding is attributed to legislation such as the FSC and B-BBEE Act (2003), which mostly governs the social investment practices of firms in South Africa, regardless of size (Viviers & Els, 2017). Corporate governance has a strongly negative significant relationship with market capitalisation of -11.477 at a 5% significance level under firm size moderating effects. Bissoondoyal-Bheenick et al. (2023) observed that a decline in corporate governance led to a decline in excess returns. This strong negative effect of corporate governance on market capitalisation under firm size moderating effects implies that for JSE-listed firms, slacking on corporate governance issues translates to a serious decline in share prices. Adherence to good corporate governance practices and the King Code IV is a mandatory listing requirement for JSE-listed firms. Failure to adhere to the King Code can lead to the delisting of a firm (Ho & Park, 2019; Taplin, 2021). This finding contrasts with the positive significant firm size interacting variable of corporate governance of 0.492 at a 5% significance level on market performance. This implies that large firms boost the positive effects of corporate governance disclosure.

Model 3 shows that revenue has a significant positive effect on earnings per share of 0.366 at a 1% significance level. In addition, firm size moderates the relationship between ESG and earnings per share. ESG has a strong negative significant relationship with EPS of -5.626 at a 10% significance level (Shaikh, 2022). On the other hand, the firm size moderator on ESG has an insignificant effect on earnings per share. This implies that the firm size effect on ESG does not influence the earnings per share of JSE-listed companies. Capital expenditure (-0.023), effective tax rate (0.008), and debt-to-asset ratio (-0.015) have a very weak, negative, significant relationship at a 1% significance level with EPS when firm size is a moderating factor. This finding is relevant to capital expenditure, effective tax rate, and leverage, which reduce the earnings of a firm and ultimately the EPS of a firm. In addition, large firms tend to be highly leveraged and have larger tax obligations than smaller firms. The firm size moderating effect of high-performing ESG firms has a weak, significant effect on EPS of 0.27 at a 1% significance level.

Under Model 4, social performance has a strong negative relationship with earnings per share of -4.671 at a 10% significance level. However, these findings differ in sign and level of significance

from the firm size moderator of social performance, which has an insignificant effect on earnings per share. In addition, corporate governance has a strong and significant effect on earnings per share of 28.214 at a 1% significance level under firm size moderating effects (Ahmad et al., 2021; Pu, 2023; Aydoğmuş et al., 2022). This implies that good corporate governance practices can seriously improve the earning power of a firm (Alfalih, 2023). This is in contrast in both sign and magnitude to the firm size corporate governance moderator, which has a strong negative significant effect on earnings per share of -1.139 at a 1% significance level (Bissoondoyal-Bheenick et al., 2023). The strong effect of corporate governance on earnings per share shows the importance of good corporate governance practices on the earnings ability of a company (Alfalih, 2023). Poor corporate governance practices can lead to both closure and delisting from the JSE stock exchange. Under firm size moderating effects, capital expenditure (-0.014) and effective tax rate (-0.008) continued to have a weak negative relationship with EPS. These findings signify the negative effect that capital expenditure and effective tax rate have on the earnings of a company. Total assets, interestingly, have a strong positive significant effect on EPS of 4.595 at a 1% significance level under firm size moderating effects. This implies that total assets, when efficiently utilised, can lead to increased earnings in a listed firm. High ESG-performing firms have a weak and significant moderator of 0.041 at a 1% significance level to earnings per share.

## **5.6.7 Diagnostic tests for Firm size moderating effects System GMM**

### **5.6.7.1 Hansen Test**

A Hansen test was conducted to test for overidentifying restrictions (Hansen, 1982). The test was conducted to determine whether the instruments used in the model were valid, that is, to test if they were uncorrelated with the error term. The null hypothesis is that instruments are valid, and instruments are valid if the  $p$ -value is greater than 0.05 (Roodman, 2009). All the models passed the Hansen test, with Model 1 having a  $p$ -value of 0.249 and Model 2 having a  $p$ -value of 0.116, and accepted the null hypothesis. Model 3 had a  $p$ -value of 0.124, and Model 4 had a  $p$ -value of 0.233. The study accepted the null hypothesis and concluded that the instruments used in the four models in the study were valid and uncorrelated with the error term.

### **5.6.7.2 Arellano Bond Test for autocorrelation**

The Arellano and Bond test was used to test for autocorrelation in the residuals of the first differenced model AR (1) and the second differenced model AR (2). The study, being a two-step

system GMM, used the second differenced model AR (2) results to accept or reject the null hypothesis. The decision criteria are that if the P value is greater than 0.05, the study fails to reject the null hypothesis, meaning that there will be no evidence of second-order correlation (Roodman, 2009). Model 1 has an AR (2) value of 0.496, which is above 0.05, thus, we accept the null hypothesis and say there is no autocorrelation in the error terms in Model 1. Model two has an AR (2) *p*-value of 0.340, accepting the null hypothesis. Model 3 and Model 4 have equally significant AR (2) *p*-values of 0.764 and 0.34, respectively, failing to reject the null hypothesis for all 4 models. To further show the reliability of the AR (2) results, all models must fail the AR (1) results, and all models had AR (1) results below a *p*-value of 0.005.

### **5.7 Discussion of findings**

The study found a positive relationship between the ESG pillar, social pillar, corporate governance pillar, and market capitalisation, which represented market performance among the JSE top 40 listed firms (Ahmad et al., 2023; Aydoğmuş et al., 2022). Firm market performance was represented by market capitalisation and earnings per share. The study found interesting results using a two-step system GMM. Market value was positively and statistically influenced by corporate governance at a 1% significance level (Aydoğmuş et al., 2022). A percentage increase in corporate governance will lead to an 82.7% increase in the market capitalisation of a firm. Good corporate governance practices had a significant positive effect on firm value. In South Africa, adherence to the King Code is a mandatory listing requirement on the JSE. In addition, good corporate governance practices are essential for business continuity. Social performance, in the same line, had a significant positive relationship at 5% with the market value of JSE's top 40 firms (Aydoğmuş et al., 2022). A percentage increase in social performance would translate into a 22.7% increase in the market value of a JSE-listed firm. This positive relationship between social performance and firm value could be attributed to acts such as the B-BBEE Act (2003), and the FSC, which force firms to address social and economic inequalities in the marginalised black communities. Each year, the firms are given a BEE rating where 1 is the highest rating, indicating that the firm is seriously considering social and economic redressing of the marginalised black population in its decisions. Furthermore, the social pillar reflects the firm's core values, which are linked to the well-being of the community (Alfalih, 2023). The environment score had a negative, insignificant relationship with market value. This negative effect could be attributed to increased costs associated with environmental investments, as well as perceived potential costs or penalties

associated with environmental initiatives by South African investors. The total ESG score had a strong positive significant relationship of 1.1 with the market performance at a 5% significance level. This strong positive relationship between ESG and market performance is mostly driven by corporate governance. This result aligns with Alfalih (2023) and Chininga et al. (2023), who concluded that firms that engage in ESG activities that positively affect communities experience a decline in earnings when they start to engage in environmental and social investments. However, the decline in earnings is compensated by increased share price and ultimately firm value.

In addition, the interaction between firm size, the ESG pillars, and total ESG presented fascinating and conflicting results. The environment score (1.233) had a positive significant relationship with market capitalisation, whilst corporate governance (-11.477) and total ESG (-2.453) had a negative significant relationship with market capitalisation. A percentage decrease in corporate governance practices will lead to 11.477 times decrease in market capitalisation. For example, the recent Steinhoff and Tongaat-Hulett scandals led to a serious plunge in their respective stock prices and eventually negatively affected the market performance of these companies (Andrew, 2020; Rossouw & Styan, 2021). This implies that firm size encourages ESG and corporate governance implementation, and failure to implement ESG has serious negative consequences on share price and ultimately market value. The strong negative corporate governance effect influenced the overall ESG score impact on market capitalisation. Conversely, firm size encourages environmental initiatives as it positively affects market capitalisation. This could still be attributed to increased public scrutiny that follows large firms. Hence, forcing the firms to consider environmental issues in their investment and operational activities. In addition, this relationship can be explained by an increase in green investors who are considering environmental issues in their investing activities, with environmentally friendly firms being considered attractive investment opportunities. Firm size has a positive moderating role in the relationships between ESG, corporate governance, and market capitalisation. On the other hand, firm size has a negative moderating role in the relationship between the environment and market capitalisation. In the same disposition, firm size has a negative moderating role in the relationship between corporate governance and earnings per share. In contrast, corporate governance has a strong positive and significant relationship with earnings per share under firm size moderating effects. This could be attributed to the effects of strong corporate governance practices on business continuity and earning ability. Poor corporate governance practices can lead to the closure of listed firms. Firm

size had an insignificant moderating effect on individual ESG pillars and total ESG performance as far as earnings per share are concerned.

## 5.8 Robustness Test using Tobin's Q

**Table 35 Robustness test using Tobin's Q**

VARIABLES	(1) Model	(2) Model
L.Intq	0.406*** (0.0748)	0.481*** (0.0517)
Lnrevenue	0.246*** (0.0507)	0.0468*** (0.00593)
Intotal_assets	-0.598*** (0.0905)	-0.624*** (0.0666)
lnENV	0.477*** (0.0987)	
lnSOC	-0.377* (0.214)	
lnCG	1.549*** (0.466)	
Capex	-0.00170 (0.00312)	0.00302 (0.00435)
eff_tax_rate	0.00115 (0.000731)	0.000492 (0.000518)
debt_asset_ratio	-0.00145 (0.00492)	-0.00559 (0.00394)
ESGH	-0.209* (0.114)	0.00538 (0.123)
lnESG		0.960*** (0.352)
Constant	14.24*** (2.242)	13.42*** (1.704)
Observations	414	417
Instruments	32	32
Counter Effects	No	No
Time Effects	No	No
Hansen's J test	0.102	0.646
AR[1]	0.006	0.001
AR[2]	0.637	0.211
Number of counters	48	48

A robustness test was conducted to discover the stability of main estimates in the model using the Tobin's Q. This test enabled the study to test for the ability of a model to perform well with new

and different data and not only the model specification data. The results from the robustness test show significant results on the relationship between ESG and firm performance. In addition, the model was able to meet both Hansen's test and the Arellano-Bond AR1 and AR2 tests.

## **5.9 Conclusions**

Corporate governance has the strongest positive impact on market performance. A percentage increase in corporate governance leads to a significant increase in market capitalisation (82.7%). This underscores the importance of good corporate governance practices, which are critical for business continuity and shareholder value. The mandatory adherence to the King Code in South Africa, which enforces strong corporate governance standards, further highlights its role in enhancing market value.

Social performance also has a positive effect on market value (22.7%), likely due to the B-BBEE Act (2003) and FSC, which promote social and economic redress in marginalized communities. This highlights the importance of a firm's social impact and its ability to demonstrate commitment to societal values, positively influencing investor perception.

Environmental performance showed a negative and insignificant relationship with market capitalisation. This may be due to higher environmental costs associated with environmental investments or concerns over potential penalties, leading South African investors to perceive these activities as burdensome or unprofitable in the short term.

The total ESG score has a strong positive relationship with market performance, particularly driven by the corporate governance pillar. This suggests that firms engaged in ESG practices often face initial declines in earnings due to social and environmental investments, but these are compensated by increased share price and ultimately improved firm value. Thus, the total ESG score appears to significantly contribute to firm value, particularly when corporate governance is strong.

Firm size plays a crucial role in moderating the relationship between ESG and market capitalisation. Larger firms benefit more from ESG initiatives, particularly in terms of environmental issues, likely due to increased public scrutiny and green investment interest. As a result, larger firms are encouraged to implement environmental initiatives that boost market value.

However, corporate governance and total ESG have a significantly negative relationship with market capitalisation when firm size is factored in. This could suggest that, despite larger firms'

ability to implement better ESG practices, poor corporate governance can have a detrimental effect on firm value, as evidenced by the Steinhoff and Tongaat-Hulett scandals. The negative impact of corporate governance failures on stock prices is substantial (11.477 times decrease in market value). Firm size's role as a moderator suggests that larger firms can absorb the negative effects of poor governance or ESG practices, but are still vulnerable to the reputational damage that results from corporate governance failures.

Corporate governance positively influences earnings per share (EPS) under the moderating effect of firm size, suggesting that good governance leads to better financial performance and business continuity. Firms with poor governance practices are at risk of closure or significant financial distress, impacting their earnings capacity.

While firm size plays a moderating role in the relationship between ESG and market capitalisation, it has an insignificant moderating effect on the relationship between individual ESG pillars (environment, social, and governance) and earnings per share. This indicates that the influence of ESG on earnings may not be strongly driven by firm size, or that other factors like operational efficiency or industry dynamics might have more influence on earnings than ESG initiatives alone.

The study's findings contribute to Legitimacy Theory and Signaling Theory by demonstrating that firms with strong corporate governance and social performance not only gain legitimacy in the eyes of stakeholders but also signal their reliability, sustainability, and long-term viability, which positively impacts their market value. At the same time, the study suggests that environmental performance, while important for long-term sustainability, may not yet be as strongly valued in the South African market, thus limiting its ability to serve as an effective signal to investors. This dual contribution enhances the understanding of how ESG practices serve both as legitimacy mechanisms and signals of firm quality in the emerging market context.

The next chapter presents the thesis summary, conclusions, and recommendations. The chapter synthesises all the chapters, highlighting the key issues and findings in each chapter. Furthermore, the chapter will show the major conclusions drawn from each chapter. Finally, the chapter will draw key recommendations that will inspire policy and industry and add to the body of knowledge.

## **Chapter 6: Summary, Conclusions, and Recommendations.**

### **6.1 Introduction**

ESG implementation is crucial for achieving global sustainable development. The thesis investigated the roles of government, regulators, and investment in ESG implementation in South Africa. The study further examined the use of impression management in ESG reports and chairman's statements by listed firms to meet regulatory requirements as opposed to taking steps towards sustainable business models. Finally, the thesis explored the relationship between ESG and the performance of JSE-listed firms. By dissecting these pillars, the thesis was able to assess how far South Africa has gone in implementing ESG.

The chapter proceeds to 6.2, which summarises the thesis, highlighting the main findings and contributions made throughout the study. The conclusions and recommendations were on a chapter-by-chapter basis, starting with section 6.3, which gives conclusions and recommendations on chapter three. Chapter three focused on the roles of government regulators and investors in ESG implementation in South Africa. Section 6.4 delves into the major conclusions and recommendations drawn from Chapter 4. Chapter four examined the type and level of ESG reporting, specifically in the chairman's statements and the ESG reports in South Africa. Section 6.5 highlights the key conclusions and recommendations from Chapter 5, which analysed the relationship between ESG and listed firms market performances. Section 6.6 shall look at the overall contributions of the study to both theory and practice. Lastly, 6.7 The final section discusses areas for future research uncovered during the study.

### **6.2 Thesis summary**

Chapter One revealed that ESG studies and major implementations have mostly been done in the developed world, while in Africa, it is still in its infancy, with little research carried out on ESG, including in South Africa. ESG literature in South Africa is limited, worsened by the country's reliance on natural resources. Implementing ESG faces resistance from companies and has economic implications. However, since the launch of the Sustainable Development Goals in 2015, ESG has received substantial regulatory and scientific attention globally, further propelled by the COVID-19 pandemic, global warming challenges, and the global financial crisis of 2007-2008. Additionally, South Africa gained independence in 1994 and is still striving for social and

economic equality that did not exist during the apartheid era. These unique challenges feed into the social pillar of ESG. Furthermore, there is no homogeneity regarding the ESG reporting framework; a plethora of frameworks makes it difficult for firms to decide which to utilise in ESG reporting. This chapter shows the ESG gaps yet to be explored in South Africa from both theoretical and practical perspectives. It also reveals the three main objectives underpinning this study: to understand the roles of government, regulators, and investors in ESG implementation in South Africa; to corroborate the use of impression management in ESG reports and the lack of minimal ESG disclosure in chairman's statements; and finally, to examine the relationship between ESG and firm performance. This relationship is critical in incentivising firms to effectively implement ESG in their operations.

Chapter Two examined the theoretical and institutional frameworks that underpin ESG implementation. In this chapter, three theories were discussed: stakeholder theory, legitimacy theory, and signaling theory. These theories explain why firms consider ESG in their operations. Stakeholder theory posits that a firm does not exist solely for its shareholders but also has relationships with other stakeholders, such as society and suppliers, which are critical for the efficient operation of the business. These relationships need to be nurtured for the success of the business. Similarly, legitimacy theory states that there is a social contract between the firm and society; firms operate effectively and profitably when accepted and do not breach this contract. Therefore, firms must regularly align their operations with societal norms and expectations to avoid going out of business. Over the years, firms have increased interest in ESG and sustainability issues as they have become concerns for communities due to global warming, COVID-19, and the global financial crisis, among other challenges. Signaling theory explains how firms disclose certain information to signal the market and achieve a specific response. This study primarily hinges upon legitimacy theory, as the other two theories support it. Firms implement, address, and disclose ESG issues to maintain the social contract with various stakeholders.

Chapter Two further examined the institutional frameworks governing ESG implementation globally. Various ESG frameworks have been developed at both the global and national levels. This study focused on the International Sustainability Standards Board (ISSB), Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), Sustainability Accounting Standards Board (SASB), Taskforce for Climate-related Financial Disclosures (TCFD), and the

Sustainable Development Goals (SDGs). These frameworks significantly influence the disclosure and implementation of ESG practices by firms.

The ISSB is the newest framework and aims to consolidate, unify, and standardise ESG reporting, reducing confusion and reporting fatigue for firms. It builds on integrated reporting and SASB, drawing from TCFD to create its first two standards, IFRS S1 and S2. In 2022, the ISSB signed a memorandum of understanding (MOU) with GRI to collaborate in harmonising the sustainability reporting landscape and decreasing the reporting burden on firms (De Villiers et al., 2024; Millar & Slack, 2024).

Most countries have adopted the TCFD as climate change disclosure guidelines. While standardisation of ESG reports is still a work in progress, the importance of ESG and sustainability issues in firm operations has evolved. Governments, regulators, firms, and investors are adopting various reporting frameworks to promote ethical ESG implementation and reporting. Established in 2015, the SDGs have played a significant role in ESG implementation. These frameworks have become the benchmarks for measuring a firm's legitimacy.

Chapter Three reviewed the literature using a scoping review framework propounded by Arksey and O'Malley (2005). The chapter examined the roles of the South African government, regulators, and investors in ESG implementation. The scoping review examined emerging trends, reasons, and motives of research, as well as research gaps in the roles of government regulators and investors in ESG implementation in South Africa. The chapter concluded that the government, regulators, and investors are critical in successful ESG implementation. However, this area has not been explored fully. This could be attributed to the complex and diverse aspects of Environmental, Social and Corporate governance pillars and equally, how governments, regulators, and investors work independently without consulting each other for effective ESG implementation.

In Chapter Four, the study used a mixed methodology to investigate the use of impression management by listed firms in South Africa in the chairman's statement as well as the ESG report. The study examined the use of qualitative information, quantitative information, setting of targets, receiving of ESG accolades, use of ESG metrics, stakeholder engagement, board diversity, and length of reports to understand how well-listed firms were adhering to and implementing ESG in their operations. In addition, the chapter detailed the use of passive tones, readability, length, and quality of reports as impression management strategies. Using the content analysis method,

observed the use of impression management in the years before 2022, especially in the mining material sector and in firms that sold harmful products such as tobacco. Companies in the material sector distanced themselves from the harmful effects of their operations. The reports were mostly qualitative with minimal quantitative disclosures and setting of ESG targets. This could be attributed to the lack of ESG disclosure guidelines before 2022 in South Africa and the use of various ESG guidelines, leading to inconsistencies in the reports. The financial sector's reports were detailed, and they disclosed their third-party ESG accreditations and how they were complying with various ESG pacts. In addition, firms in the financial sector disclosed their environmental financing activities and started producing their climate policy in 2020. The climate policy enabled most companies to have a measurable ESG strategy, which was not the case before. There was a difference in reporting styles between South African firms and multinational firms with a secondary listing in South Africa, with South African firms emphasising their reporting on corporate governance and social activities that comply with the Broad-Based Black Empowerment Act. ESG implementation by firms is still a long way off. However, there are steps and measures towards effective implementation that firms are taking.

Chapter 4 explored impression management in the reports using the Kruskal-Wallis test and its post hoc test, the Dunn pairwise report. There was word count and readability impression management, especially in the materials sector from 2019 to 2021. The consumer discretionary sector utilised passive voice in ESG reports in 2020 and 2021. The chairman's statements for firms in the materials sector utilised readability impression management. Finally, the Mann-Whitney test comparing the chairman's statements and the sustainability report observed readability impression management from 2019 to 2021. This shows that firms in the top 40 are utilising various impression management tactics, with different sectors employing different impression management tactics.

The fifth chapter examined the relationship between ESG and firm performance among listed firms. Firm performance was represented by market capitalisation and earnings per share. The study found interesting results using a two-step system GMM. Market value was positively and statistically influenced by corporate governance at a 1% significance level. A percentage increase in corporate governance leads to an 82.7% increase in the market value of a firm. Therefore, good corporate governance practices had a significant positive effect on firm value. In South Africa,

adherence to the King Code is a mandatory listing requirement on the JSE. Social performance had a significant positive relationship at 5% with the market value of the JSE's top 40 firms. A percentage increase in social performance translates into a 22.7% increase in the market value of a JSE-listed firm. This positive relationship between social performance and firm value could be attributed to acts such as the B-BBEE Act (2003) and FSC, which force firms to address social and economic inequalities in marginalised black communities. This result aligns with Alfalih (2023) and Chininga et al. (2023), who concluded that firms that engage in ESG activities that positively affect communities and the environment were compensated and accepted as good companies by society. This is reflected in their increased financial performance. On the other hand, ESG scores and earnings per share had interesting, unique results. The total ESG score had an insignificant relationship with EPS, and only the social score had a statistically significant negative relationship of - 0.39 with EPS at a 5% significance level. This negative, insignificant relationship between ESG and earnings per share emanates from the decline in earnings that takes place when a firm starts to engage in environmental and social investments. However, the decline in earnings is compensated for by increased share price and ultimately firm value.

The firm size moderating effect model produced unique and conflicting results. The environment had a positive relationship with market capitalisation, while corporate governance and total ESG had a strong negative relationship with market capitalisation. This implies that firm size boosts ESG and corporate governance implementation, and it promotes environmental initiatives due to increased public scrutiny. Corporate governance shows a significant relationship with earnings per share under firm size moderating effects, highlighting its importance in the earning ability of large firms. Conversely, the firm size corporate governance moderator has a significantly negative relationship with earnings per share. The social pillar has a strong negative relationship with earnings per share under firm size moderating effects, attributed to the costs incurred in social activities that reduce profits.

### **6.3 Conclusions on Chapter 3**

This study has addressed a critical research gap by examining the evolution, challenges, and current state of ESG implementation in South Africa, particularly within the context of institutional investment and regulatory frameworks. While South Africa has made significant strides in promoting responsible investment through policies like the B-BBEE Act (2003), Regulation 28 (2011), and the King Codes, the reliance on soft laws and voluntary compliance has limited the

effectiveness of ESG integration. The study highlights the tension between the country's socio-economic priorities, such as black empowerment and social justice, and the need for stronger environmental governance, especially given South Africa's status as one of the world's top greenhouse gas emitters. By identifying the gaps in ESG implementation, such as the lack of standardised reporting, insufficient investor activism, and the absence of mandatory ESG regulations, this research provides a foundation for future studies and policy interventions.

The research gap addressed in this study lies in the limited understanding of how South Africa's unique socio-political and economic context influences ESG adoption, particularly among institutional investors. While previous studies have explored ESG frameworks and their global applicability, few have focused on the challenges specific to emerging economies like South Africa, where social and developmental issues often overshadow environmental concerns. This study bridged this gap by analysing the interplay between regulatory frameworks, investor behaviour, and corporate practices, offering insights into why ESG implementation remains uneven despite the existence of progressive policies.

The study underscored the importance of adopting robust ESG practices to attract investment and enhance corporate reputation. Business owners can leverage the findings to improve their ESG reporting, align with international standards, and meet the growing demand for transparency from institutional investors. Entrepreneurs in sectors like renewable energy and sustainability products can use the insights to identify opportunities for green investments and partnerships, particularly in light of government initiatives like the Renewable Energy Independent Power Producer Programme (REIPPP).

The research highlighted the need for mandatory ESG regulations and standardised reporting frameworks to complement existing soft laws like the King Codes and CRISA. Policymakers can use these findings to design more effective regulations that balance social, environmental, and governance priorities. The study also calls for increased capacity building and resource allocation to regulatory bodies like the Financial Sector Conduct Authority (FSCA) to ensure effective monitoring and enforcement of ESG compliance.

The findings emphasised the financial materiality of ESG factors and the long-term benefits of integrating ESG considerations into investment decisions. Institutional investors can use the study to develop internal ESG policies, engage more actively with investee companies, and advocate for

improved ESG disclosure. The research also highlights the role of investor activism in driving corporate accountability. Investors can adopt strategies such as private engagement and proxy voting to influence ESG practices, particularly in high-impact sectors like mining and energy.

Organisations like Just Share and the Raith Foundation can use the study to strengthen their advocacy efforts, particularly in promoting environmental and social justice. The research provides evidence-based arguments for the need to address issues like climate change, inequality, and corporate governance. The study also highlights the potential of social media as a tool for amplifying investor voices and holding companies accountable for their ESG commitments.

The mining sector, a significant contributor to South Africa's economy, can benefit from the study's recommendations for stricter ESG regulations and capacity building. Mining companies can improve their sustainability practices by adopting international standards and addressing social issues like worker welfare and community development. Financial institutions, as key enablers of ESG implementation, can use the findings to refine their lending criteria and promote sustainable investments. By demanding comprehensive ESG information from borrowers, banks can drive positive change across industries.

### **6.3.1 Recommendations on Chapter 3**

The South African government should move from soft laws to Hard Laws in enforcing ESG, and this may entail avoiding short-term populist policies and adopting long-term sustainable development policies supported by hard laws. This approach requires the government to put in place structures to absorb the shocks as well as to efficiently monitor the implementation of ESG by all sectors of the economy.

Enforcing Regulation 28 can force institutional investors to become proactive and seriously consider ESG in their investment decisions. The enforceability of Regulation 28 hinges upon equipping and capacitating the Financial Sector Conduct Authority (FSCA) with resources and training to monitor institutional investor investment operations. This monitoring will have ripple effects as it forces institutional investors to demand ESG information from investee companies.

Regulators such as the Reserve Bank of South Africa must hold banks as financiers accountable and penalise them for failure to consider ESG in financing new projects. This is especially true in mining operations with high GHG emissions and environmental degradation.

The ESG has greater economic consequences for South Africa, an emerging economy that relies on extractive industries; this is depicted by the dominance of the extractive industries on the JSE Top 40. Therefore, there is a need for public-private partnerships between the government and the mining companies in financing and implementing sustainable mining operations with a minimal ecological footprint. This may entail investing extensively in research and development aimed at finding homegrown solutions relevant and applicable to South Africa and avoiding the one-size-fits-all global solutions.

#### **6.4 Conclusions on Chapter Four**

The absence of a standardised ESG reporting framework in South Africa has led to inconsistent and sometimes misleading disclosures by companies, with many still focusing on CSR rather than the broader ESG issues. This lack of standardisation has caused companies to use their reports as tools for impression management, as evidenced by the increase in report length, the use of visuals, and the prevalence of qualitative rather than quantitative achievements. The study uncovered clear signs of greenwashing, particularly in sectors like mining and materials, where companies employed various strategies to enhance readability and influence stakeholder perceptions, often sidelining substantive ESG discussions in favour of signaling corporate responsibility.

The chairman's statements, which were primarily focused on financial performance, further reveal a reluctance to meaningfully address ESG matters, contributing to the notion that these reports serve more as public relations tools than genuine reflections of corporate sustainability. While a few companies, particularly in the mining and beverage sectors, did attempt to highlight their ESG initiatives, their efforts were often overshadowed by the environmental and social harms their industries generate. This selective focus on ESG issues for market legitimacy, rather than a genuine commitment to sustainability, calls into question the authenticity of many sustainability reports.

The lack of a clear ESG reporting framework has resulted in corporate reports that are more about managing perceptions than conveying meaningful sustainability performance. There is a pressing need for standardised and transparent reporting practices to ensure that ESG disclosures are not merely a tool for greenwashing but a reflection of companies' true commitment to sustainable practices.

#### **6.4.1 Recommendations for Chapter Four**

Based on the study's findings, it is recommended that policies be formulated that criminalise and sanction unethical reporting. This would cause firms to desist from impression management reporting in South Africa. Penalties such as a carbon tax and prison terms for directors who do not engage in responsible ESG practices would make listed firms more accountable for their actions, thereby bridging the gap between what is reported and what they are doing about ESG issues. The policies should also reward outstanding implementation of measures to address ESG issues, for example, through tax reduction.

To enhance accountability among listed companies, including MNCs that do not appear to be fully adhering to South African regulations, regulators should monitor and evaluate reports, rather than rubber-stamping them. This could include investing in research on the challenges and manipulative strategies employed by companies in their reporting and developing legal frameworks that are tailor-made for South African ESG challenges. In order not to stifle the entrepreneurial spirit, a balance should be struck between regulation and entrepreneurship.

Civil society should engage in active consumerism; this will force companies to become accountable for their actions in ESG reports. For example, consumers could change their consumption patterns in response to signals sent from ESG reports and the chairman's statement. Active consumerism can force companies to act ethically and accommodate social concerns in their production processes and the nature of their products.

Lastly, the government and the private sector have a common vision of sustainable business development. This calls for public-private partnerships where the government invests in projects and technologies that address ESG issues. Such partnerships would enable companies and the nation to achieve sustainable growth, with both parties fulfilling their objectives.

Additionally, South Africa should develop and adopt a standardized ESG reporting framework. The current multitude of reporting frameworks has led to reporting fatigue, making it difficult for companies to compare ESG performance. This inconsistency fosters greenwashing and creative reporting. A unified reporting framework would reduce confusion, encourage more accurate and comparable ESG disclosures, and ultimately help combat greenwashing in corporate reporting.

## **6.5 Conclusions on Chapter Five**

The study extends the existing literature and further clarifies the complex relationships between firms and society based on stakeholder, signaling, and legitimacy theories. It revealed that when firms engage in ESG activities, they are rewarded with increased market share prices. This increased share price signifies a positive social contract with various stakeholders. The study also found a positive relationship between profitability and ESG in terms of market value performance indicators. Additionally, it incorporated disaggregated ESG dimensions to identify the impact of each specific dimension, as the total ESG pillar could obscure analysis. The study identified both linear and non-linear effects of ESG activities on firm performance, measured by market capitalisation and earnings per share. It utilised the System Generalized Method of Moments (SYS-GMM) technique, which addresses the endogeneity of some explanatory variables.

A firm's ESG disclosure and practices are relevant information considered by market participants in making investment decisions, not only by product and service users. Additionally, based on the disaggregated ESG findings reported, management should be able to identify, address, and improve the ESG dimensions, which may impact financial performance. For example, the fifth chapter reveals a strong positive relationship between ESG performance and market value among JSE Top 40 listed firms, with corporate governance and social performance having particularly significant impacts. Specifically, good corporate governance practices were found to have a substantial positive effect on market capitalisation, indicating that adherence to governance standards, such as those outlined in the King Code, is vital for enhancing firm value. Additionally, social performance, driven by initiatives like the B-BBEE Act (2003), showed a positive correlation with market value, reflecting the growing importance of addressing social inequalities in South Africa.

### **6.5.1 Recommendations on Chapter Five**

Firms are advised to engage in ESG activities and disclosures as it helps to build a firm's legitimacy and is ultimately beneficial to financial performance. Nonetheless, ESG activities could lead to a counter-effect on the firm's legitimacy if stakeholders view the disclosures as an image over substance; this could adversely affect financial performance (Pham and Tran 2020).

Furthermore, various stakeholders should improve their knowledge about sustainable development practices, as accountability and transparency in ESG disclosure are required. Knowledgeable stakeholders will be able to hold JSE-listed firms accountable for their ESG activities. This could

eradicate the process of ESG creative reporting as firms have reputations and long-term relationships with various stakeholders to protect, ultimately improving ESG implementation and disclosure.

Finally, managers should understand the financial consequences of ESG performance, the extent to which they can go, and the consistency with others to strike a balance within budget limitations. Social and environmental investments have a negative effect on the earnings of a firm in the short run; firm managers must strategically implement such initiatives without suffocating the business's going-concern operations.

Policymakers should continue supporting good corporate governance practices through frameworks like the King Code. However, there is a need for more support for environmental initiatives, particularly for smaller firms, to reduce the financial burden and incentivise green investments. Encouraging larger firms to maintain high corporate governance standards can also help prevent scandals that harm the broader market. For instance, Regulation 28 can be improved to require pension funds to exclude companies with poor corporate governance in their investment decisions, regardless of good environmental scores.

Bonuses of CEOs of JSE-listed firms should be tied to the ESG performance of a firm and not only profits. Such ESG performance incentives will force the CEO and the rest of the organisation to consider ESG in their operations, given the positive relationship that exists between ESG and firm performance

## **6.6 Contribution to the body of knowledge**

This study offers new insights for investors and other stakeholders regarding the level of impression management, the quality of ESG reports, and the strategies employed by different sectors within the South African economy. It highlights how listed companies often prioritize disclosing topics that could impact their legitimacy. For instance, all financial firms began disclosing climate policies in 2020, following a shareholder vote at Standard Bank's AGM in 2019, which demanded greater transparency in the bank's involvement with coal and thermal projects.

The research also provides valuable insights for the South African government and regulators in the development of effective ESG laws, policies, and reporting frameworks that are tailored to the country's economic context. It demonstrates the impact of existing ESG regulations, including the

B-BBEE Act, the Financial Sector Code (FSC), and the mandatory compliance with the King Code as part of listing requirements. These regulations have notably improved corporate governance and social performance scores among South Africa's listed companies.

By understanding how different sectors operate and the unique ESG challenges they face, this study enables the government to better foster sustainable development and promote successful public-private partnerships. For instance, sector peer effects matter more than firm-specific ethics in ESG adoption in South Africa

Moreover, the examination of the relationship between ESG performance and firm market performance can encourage South African companies to genuinely integrate ESG into their operations. The study's finding of a positive and significant relationship between ESG scores and market value has the potential to attract green investors to JSE-listed firms, driving further commitment to sustainability practices

The B-BBEE Act and the King Code assist in the regulation of corporate governance and social issues, however, there are no regulations or laws that directly influence environmental accountability amongst listed firms. This valuable regulatory gap should assist policymakers in crafting laws and regulations aimed at solving it.

Reactive legitimacy-seeking tendency drives ESG disclosure amongst listed firms in South Africa. This tendency is experienced after external shocks such as investor activism. Sector peer effects also follow these legitimacy-seeking tendencies. For instance, after Raith Foundation proposed a climate change resolution during Nedbank's AGM in 2019, all financial institutions began to report on Climate change policies in 2020. This implies that ESG disclosure and initiatives follow shocks rather than strategy amongst JSE-listed firms.

## **6.7 Areas of further research**

The final section discusses areas for future research uncovered during the study. These include exploring the long-term financial implications of ESG investments, investigating the role of ESG in emerging markets, and examining the effectiveness of government policies in enforcing ESG standards. Further studies could also focus on sector-specific ESG challenges, particularly in industries like mining, and explore how evolving investor demands shape ESG practices.

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## Appendix A: Data characterisation screening forms

	Assessment	Comments
<b>1. Does the study Examine the roles of Government, regulators and investors in ESG implementation</b>	Yes <input type="checkbox"/> No <input type="checkbox"/> Can't tell <input type="checkbox"/>	
<b>2. Does the study describe research in English?</b>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
<p><b>Reviewer Decision:</b></p> <ul style="list-style-type: none"> <li>• The study will be incorporated for further screening and assessment if the answer is “Yes” to both questions, i.e., 1 and 2.</li> <li>• The entire study will be acquired for further evaluation and decision-making at this stage, if the answer is “Can’t tell” for question 1.</li> </ul>		

Variable	Category	Explanation
<b>1. Publication type</b>	Journal article <input type="checkbox"/>	
	Book/Book chapter <input type="checkbox"/>	
	Thesis <input type="checkbox"/>	
	Report <input type="checkbox"/>	
	Conference Proceeding <input type="checkbox"/>	
	Other ..... (Specify)	
<b>2. Author(s)/Year</b>		
<b>3. Country of data origin</b>		
<b>4. Study scope</b>	<b>role of Gvt/regulator</b> <input type="checkbox"/>	
	<b>role of investors</b> <input type="checkbox"/>	
<b>5. Does the study Examine the roles of Government, regulators and investors in ESG implementation</b>	Yes <input type="checkbox"/>	
	No <input type="checkbox"/>	
	Can't tell <input type="checkbox"/>	
<b>ONLY carry on if the answer to question 5 is "Yes"</b>		

<b>6. Key characteristics of the study</b>					
Title of the study	Aim of the Study	Literature adopted	Analysis	Findings	Conclusions

## Appendix A2: List of reviewed literature

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## Appendix C Ethical Clearance Certificate



17 Nov 2023

Ms Wilfreda Indira Chawarura (223016211)  
School Of Acc Economics&Fin  
Westville

Dear Ms Wilfreda Indira Chawarura,

**Original application number:** 00022864

**Project title:** An assessment of environment, social, and governance (ESG) implementation and firm performance of Johannesburg Stock Exchange listed firms

### Exemption from Ethics Review

In response to your application received on 10 Nov 2023, your school has indicated that the protocol has been granted **EXEMPTION FROM ETHICS REVIEW**.

Any alteration/s to the exempted research protocol, e.g., Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through an amendment/modification prior to its implementation. The original exemption number must be cited.

For any changes that could result in potential risk, an ethics application including the proposed amendments must be submitted to the relevant UKZN Research Ethics Committee. The original exemption number must be cited.

In case you have further queries, please quote the above reference number.

#### PLEASE NOTE:

Research data should be securely stored in the discipline/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours sincerely,

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**Prof Josue Mbonigaba**  
Academic Leader Research  
School Of Acc Economics&Fin