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Environmental Sustainability Commitment and Access to Finance by Small and Medium Enterprises: The Role of Financial Performance and Corporate Governance

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Abstract: Small and Medium Enterprises in South Africa contribute critically to the economy, yet they face many challenges, such as lack of access to external finance. Thus, applying the stakeholder theory, this study tested the relationship between environmental sustainability commitment and access to finance and whether this relationship was mediated by financial performance. The study further examined the moderating role of corporate governance on the relationship between environmental sustainability commitment and access to finance. Owner/managers of 600 SMEs from three provinces in South Africa were randomly selected using a probability sampling method. Primary data were collected using self-administered questionnaires. The moderated mediation model was tested using PLS-SEM. The findings showed that environmental sustainability commitment significantly predicts access to finance both directly and indirectly through financial performance. Moreover, the results showed that corporate governance positively moderates the link between environmental sustainability commitment and access to finance. This study has several implications. Practically, small unlisted firms can adopt and apply the model developed in this study to enhance their environmental, social, and governance practices to unlock external funding. The novelty of this study is that it proposed and tested a moderated mediation model to understand SMEs' determinants of access to finance. In addition, this study provides a nuanced understanding of responsible business through green behaviour in the context of SMEs, which has been lacking in the existing literature.

Keywords: access to finance; corporate governance; environmental sustainability; financial performance; South Africa

1. Introduction

Small and Medium Enterprises (SMEs) play a critical role in stimulating economic growth and the country's competitiveness [1]. This emanates from the different business activities they conduct, which offer solutions to the country's developmental needs [2]. To that effect, SMEs are the backbone of each country because of their massive share of the entire business sector [3]. This sector is active in job creation, especially for semi-skilled employees. This significantly adds value to the economy, as these employees' incomes can improve the economy through the multiplier effect. Ideally, SMEs are regarded as a key strategy to achieve sustainable development goals by 2030 [1]. Nevertheless, the SME sector in South Africa is plagued with a concoction of challenges that weaken their expected impact on the economy [4]. Considering the country's hopes for this sector, the business discontinuance rate between 70-80% is worrying [3]. Among other challenges, lack of access to finance remains the most notorious obstacle inhibiting SMEs from growing their businesses [1,2]. SMEs in developing countries face challenges in accessing credit from banks, which normally require collateral security, which poses a barrier for most small businesses as they do not have fixed assets [1,5]. There is a huge financing gap among SMEs in developing countries such as South Africa, as most applications for credit by SMEs are rejected by banks [1,4].



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It is crucial to uncover factors that may determine small and unlisted businesses' ability to raise capital for growth purposes. Existing studies have tested age, gender, level of education, business size, and business location [6,7]. Recently, factors such as environmental, social, and governance issues have become important in attracting investors in the business [8–10]. This is because investors are now considering the environmental behaviour of a firm before they can commit their capital to the business. This has become a new norm because of the emergence of responsible investing [9–11]. Responsible investing describes the type of investment that considers the target firms' sustainability behavior [12,13]. Before investing, several investors conduct in-depth due diligence on environmental, social, and governance (ESG) issues [10,11,14]. Existing evidence shows that excelling in environmental issues enhances a firm's ability to access credit [8,15]. Nevertheless, the link between environmental sustainability commitment and access to finance may not hold in certain instances as this link maybe contingent on other different mechanisms and boundary conditions. On this account, this study proposes that financial performance can provide the mechanism through which environmental sustainability commitment can effectively predict access to finance. Existing studies submit that most lending institutions prefer firms that perform well and have a track record of credit history [16,17].

The current study proposes that corporate governance can moderate the link between environmental sustainability commitment and access to finance. Corporate governance refers to the adoption and implementation of systems to safeguard the rights and interests of stakeholders by ensuring that managers act in an accountable and transparent manner [14]. There is evidence that corporate governance plays a significant role in the small business sector in the same way that it does in larger entities [10,16,18]. Even though small unlisted firms are believed to not have shareholders, in certain instances they have investors and debts, which can entail the need to have proper mechanisms to safeguard stakeholders' rights and keep them informed about the business [19,20]. In South Africa, corporate governance issues are regulated by the King IV principles. Nevertheless, SMEs' implementation of corporate governance principles remains in its infant stages. An empirical study connecting the green behaviour of SMEs to access to finance is lacking in the existing literature [9]. Another weakness of the existing literature is that previous authors have only tested a direct relationship on the determinants of access to finance. This approach is flawed, as it fails to provide the mechanisms and boundary conditions that help to explain how and when this relationship is significant.

Against this background, this study makes the following contributions. First, the current study is the first to test the link between environmental sustainability commitment and access to finance among unlisted small firms from a developing country context. This is in line with calls for context-specific studies when researching ESG issues in developing countries [21,22]. Second, this study contributes theoretically by developing and testing a moderated mediation model, which enhances our understanding of the determinants of access to finance among unlisted small firms in South Africa. Such an approach has been missing in the existing literature. Methodologically, this study is the first of its kind among studies that have explored access to finance among SMEs in South Africa to introduce corporate governance as a moderating variable. Additionally, the study adopts a multi-dimensional approach to measure environmental performance, as recommended by existing studies [23,24], as it has been lacking. Practically, small unlisted firms can adopt and apply the model developed in this study as a strategy to enhance their ESG practices and unlock resources from their key stakeholders, such as banks and investors. The study is structured as follows: Section 2 presents the theoretical framework and hypothesis development; the methodology and measures of constructs adopted in this study are presented in Section 3; Section 4 presents the findings, and Section 5 discusses them; Section 6 presents the conclusions; finally, limitations and areas for further research are presented in Section 7.

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2. Theoretical Framework

The stakeholder theory has been used in most studies to understand the key stakeholders of businesses and their needs [25]. The theory defines a stakeholder as a person or institution with interests that can be affected by the activities of the business. Thus, different stakeholders may demand to be kept up to date with the day-to-day running of a business in order to understand whether their needs are being considered. Hence, the theory advances that it is pertinent for businesses to conduct in-depth stakeholder analysis to help them map out their key stakeholders and their needs. In this case, it is difficult for a business to survive without active support from key stakeholders such as employees, customers, suppliers, creditors, investors, the government, environmental pressure groups, and the community at large. It has become essential for growth-oriented SMEs to act beyond pursuing profitability as their primary goal and to consider other initiatives such as enhanced sustainability performance due to the rise in responsible investing.

In this case, stakeholders such as customers have become environmentally aware [26,27], thus preferring environmentally friendly firms [28,29]. Customers now require firms to be transparent and honest in reporting and engaging in environmental sustainability issues [30]. Suppliers have become inclined towards environmental sustainability as well, and they prefer to associate with or supply only those players in the supply chain who are environmentally sensitive [27,31]. It has emerged that suppliers, mostly in developed countries, prefer their supply chain partners to have environmental certificates [32]. Regarding employees as stakeholders, many employees now believe in working in a firm that incorporates green practices in its strategy [33–35]. Because this accords with their values and belief systems, employees derive motivation and a sense of belonging in such organisational settings, reducing their turnover intention [30,34]. This has led to calls for firms to excel in green human resource management practices in which employees are recruited and rewarded based on their green innovations and behaviour [36]. As the primary decision-maker in terms of policy and the legal framework, the government has become critical in enforcing environmental sustainability commitment among listed firms due to the rise in water shortages, excessive carbon emissions, and load shedding in South Africa. Hence, the government can withdraw operating licenses from firms that do not comply [27,37,38]. According to the stakeholder theory, listed firms should address the needs of particular groups, such as environmental pressure groups. It is critical to note that environmental pressure groups have recently become well-recognised and well-represented [39]. Environmental pressure groups consist of individuals and non-profit organisations rising to force firms to take responsibility for their environmental damage [34,40]. This group uses a series of demonstrations, lobbying, environmental research, legal action, and boycotts to achieve their mission [41]. Due to rising concerns over environmental strain, this group is well respected globally, and their concerns are taken seriously by governments in their respective countries [41]. Therefore, a firm should work with environmental pressure groups lest it risk litigation cases and lose its reputation.

2.1. The Concept of Sustainable Development and Sustainability

Sustainable development is defined as development that meets the needs of the current generation without compromising the needs for future generations [27]. Sustainable development is achieved by performing well in terms of the economic, social, and environmental pillars [42]. As such, all nations are mandated to achieve sustainable development goals to ensure that human needs are balanced with the regeneration rate of the environment [42,43]. It becomes vital to define sustainability to understand sustainable development at the firm level. Sustainability describes a firm's corporate strategy, which ensures that it achieves operational efficiency and the going concern principle while incorporating the economic, environmental, and social pillars of sustainable development into its main strategy [44–46]. Nonetheless, this study focuses on environmental sustainability commitment among unlisted SMEs. As such, environmental sustainability is discussed in the following section.

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Environmental sustainability is defined as the ability of a business to establish a balancing act between business operations and the regeneration rate of the environment [46,47]. Environmental sustainability details a firm's commitment to reducing carbon emissions and water consumption, attaining energy efficiency, and eliminating waste, among other practices [27,42,48]. Environmental protection has become important globally due to climate change, droughts, and natural disasters that threaten humanity [48,49]. The entire world has finally realized that the issue of climate change is more a reality than a myth, which calls for immediate action from firms and other stakeholders to commit to environmental sustainability practices. Besides just compliance, firms can strategically benefit from environmental investments [50]. Environmental sustainability is a strategic issue that requires a firm to develop a profound green strategy. Lack of a clear strategy can weaken the business' competitiveness in the face of competitors who might be doing well on strategic issues [46,51]. Firms should not view the sustainability call as a threat to business viability, but rather as a scope within which to unlock new opportunities [31]. In this case, the best environmental sustainability strategy should leverage clear green policies and green practices shared by all organisational members and other stakeholders [33,36,43]. This ensures that everyone understands the strategy, making it easier to implement and achieve the expected results [52]. Firms that adopt proactive environmental protection initiatives tend to benefit from such investments compared to those that adopt a reactive stance [50,53,54]. In this case, other scholars argue that firms should build a strong case for sustainability, making it relatively easier to harness the gains from environmental investments [31,46,54].

2.2. Hypothesis Development

A moderated mediation model is proposed to understand the determinants of access to finance among unlisted SMEs, as depicted in Figure 1 below.

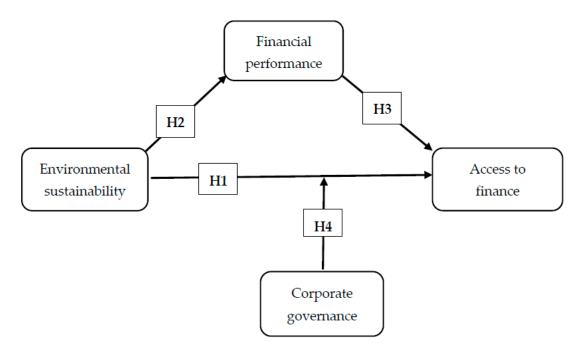


Figure 1. Conceptual model. Source: Author (2022).

2.2.1. Environmental Sustainability Commitment and Access to Finance

Any firm may require additional capital to expand its operations at various points, considering that internal sources may be insufficient to sustain the business. As most SMEs face challenges in accessing external funding, mainly from banks, existing studies believe that excelling in environmental performance can unlock funding opportunities for small unlisted firms [53,55,56]. This is because participating in environmental initiatives forces

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firms to consistently disclose their carbon footprints and the strategies they are putting in place to enhance environmental sustainability, eliminating information asymmetry between the firm and credit suppliers [24,55,56]. Furthermore, it is crucial to note that firms that voluntarily disclose their green initiatives may reduce the cost of debt and enhance the chances of attracting more external finance by demonstrating that they are a less risky business, thus gaining public trust from credit suppliers [23,57]. In essence, firms that demonstrate responsible behaviour through quality disclosures stand a high chance of accessing low-interest debt finance from banks, which may perceive such businesses as trustworthy [24,58–60].

Due to the rising concerns around climate change, which has affected several countries globally, conducting business responsibly has become a vital metric used by investors before transacting with a firm. Thus, investors are interested in investing in firms that excel in environmental performance [9–11]. Because of the mounting pressure on firms to commit to environmental sustainability, investors see it as credible to invest in environmentally responsible firms as a way to safeguard their reputation and strong values toward a green economy [10,61]. They are prepared to buy shares in such firms even at a higher price because they anticipate future stock price appreciation. In support of the above assertion, existing studies indicate that investors and banks highly regard firms that respond to environmental demands. This makes them relax the borrowing terms and conditions, thus minimising barriers to accessing debt finance for such firms [57,62]. Ideally, environmental performance is one of the key elements that shape investment and lending decisions by investors and banks, respectively [10,31,57]. Thus, investors are now more well informed about environmental sustainability than they were in the past. Hence, firms must incorporate sustainability in their businesses lest they lose potential investors [46,49].

Another source of funding for green-oriented businesses is green finance from different governments that are actively trying to mitigate environmental degradation and attain sustainable development. Among such green finance instruments are green bonds, which have been burgeoning to support environmental sustainability inclined projects [9,57]. As such, the financing of responsible small businesses has been embraced by renowned organizations such as the United Nations [9] and the European Union [56], which has seen an increase in several global green finance initiatives for SMEs. This implies that small unlisted firms can easily unlock access to finance by demonstrating responsible behaviour to stakeholders such as investors and banks [9,24,57], who have recently moved away from profitability alone to ESG behaviour of the firm [10,46,63]. Thus, firms that actively contribute towards achieving sustainable development goals such as water and energy efficiency, waste reduction, and carbon emission reduction will likely attract green funding from investors, banks, and green-oriented government grants [23,53,64]. Based on the above discussion, the first hypothesis is stated as follows:

Hypothesis 1 (H1). *Environmental sustainability commitment positively predicts access to finance by SMEs.*

2.2.2. Environmental Sustainability Commitment and Financial Performance

There has been growing interest by researchers and other stakeholders in understanding the link between environmental performance and financial performance [65]. Nevertheless, the relationship between environmental sustainability commitment and financial performance has mainly been investigated in the context of large entities [47,66], neglecting unlisted small firms. The current study argues that unlisted small firms can benefit from environmental investments such as water-saving, energy efficiency, and actively reducing carbon emissions. In addition to benefiting from an environmental image, unlisted small firms can benefit financially from excelling in environmental initiatives, which helps to cut costs [50,65,67]. An environmental sustainability strategy can help a firm to enhance operational efficiency, resulting in improved financial performance [50,67]. Other scholars believe that a proactive environmental sustainability strategy can become a

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unique capability that the firm can leverage to enhance competitive advantage and financial performance [68,69]. Essentially, a firm's green-oriented practices, such as eco-innovation and cleaner production, enable the business to excel in product and process innovation, providing the company with a competitive advantage over others in the industry [70]. Ideally, excelling in green innovation can provide a business with a cost advantage over its competitors, while selling green products can open new profitable markets for the firm, resulting in enhanced financial performance [71]. Consistent with the Resource Based View [72], it becomes relatively easier for a firm to survive and become profitable if it possesses unique resources such as product and process innovation which are inimitable by competitors. This view is further supported by the Natural Resource Based View [73].

According to the NRBV, an investment in green initiatives enhances a firm's financial performance by ensuring that the business can eliminate costs by attaining efficiency in production and sourcing of raw materials, supply chain integration, and being viewed by its key stakeholders as a responsible business [73]. Likewise, investing in environmental initiatives signals that the firm has its key stakeholders at heart, which enhances its market value [70,74]. Thus, firms should identify innovative combinations of environmental investments that can open revenue streams for the business [70,75]. There is evidence that environmental sustainability initiatives aiming to attain a circular economy through reverse logistics positively predict financial performance [54,75]. Likewise, several existing studies have found a positive relationship between environmental performance and financial performance [65,76,77]. Thus, the current research argues that unlisted small firms' responsible behaviour can help them to unlock value from stakeholders such as banks, suppliers, employees, investors, and customers. It is believed that the resources required by a business to excel are all locked within its networks. Additionally, unlisted firms' environmental sustainability initiatives such as energy efficiency, water efficiency, carbon emission reduction, product stewardship, and resource efficiency through reverse logistics can help the business to eliminate production costs, leading to superior financial performance. Businesses can enhance their financial performance by selling organic and green biodegradable products at a premium to green-oriented customers. Based on this background, the second hypothesis is stated as follows:

Hypothesis 2 (H2). Environmental sustainability commitment positively predicts financial performance of SMEs.

2.2.3. Financial Performance and Access to Finance

"Financial performance shows how effective and efficient an organization is in achieving its goals" [78]. This means that a well-performing firm can efficiently and effectively allocate resources to boost shareholders' value [76]. The financial performance of a business is one of the crucial metrics used by banks and investors before committing their investments to a business [78]. This entails that there is a relationship between financial performance and access to finance by SMEs [79]. Existing studies submit that most lending institutions prefer firms that perform well over those that are not profitable [16,17]. Consistent with the Trade-off theory [80], being profitable means a business will have the ability to repay a loan without defaulting. In this case, banks usually prefer businesses with positive cashflows and traceable records of profitability [79]. Existing studies report that most profitable businesses do not usually experience barriers in accessing credit facilities [16,81]. There is evidence that financial performance positively predicts access to finance by SMEs [16,78,81]. Thus, the current study argues that a well-performing firm can satisfy its key stakeholders, such as investors and banks. Because a well-performing entity guarantees investors and banks a return on their investment, extending credit to such a business is less complex than unprofitable firms. Thus, the third hypothesis is stated as follows:

Hypothesis 3 (H3). *Financial performance positively predicts access to finance by SMEs.*

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2.2.4. The Mediating Role of Financial Performance

In certain circumstances, it is crucial to note that environmental sustainability commitment may not always directly predict access to finance. Thus, accessing external finance may require specific mechanisms in the business [79]. This is because banks and investors evaluate all aspects of the business, i.e., its strategy, business model, and performance, before releasing funds [10,23]. In this case, relying on a sound strategy only (environmental sustainability commitment) without accounting for other mechanisms (e.g., financial performance) may fail to convince banks to grant the business the required credit. Consistent with Signaling theory [82], the argument is that environmental sustainability commitment will predict access to finance through financial performance, which helps the business to send a signal to stakeholders such as banks and investors that the business is efficient and effective in managing its resources. This helps to eliminate the information asymmetry problem [56,78], which usually makes it difficult for banks to extend credit to small unlisted firms. Hence, the hypothesis that environmental sustainability commitment will predict access to finance through financial performance entails that environmental initiatives may bear fruit only if the business is achieving its financial goals. Thus, financial performance becomes the crucial mechanism through which the effect of environmental sustainability commitment can positively predict access to finance. Essentially, it is reported that financial performance is an excellent mediating variable between several strategic variables and access to finance among SMEs [79]. Existing studies have used financial performance as a boundary condition to explain the association among different variables [78,83]. This is because financial performance is an important indicator that a business will be able to operate as a going concern, which assures the stakeholders of the business that their investment will yield a positive return [74,78,80,83]. On this account, the fourth hypothesis is stated as follows:

Hypothesis 4 (H4). Financial performance mediates the link between environmental sustainability commitment and access to finance by SMEs.

2.2.5. The Moderating Role of Corporate Governance

Corporate governance refers to the systems, structures, mechanisms, policies, and procedures that a business puts in place to regulate its activities and safeguard the rights of the stakeholders [14,43,84]. Corporate governance practices include adopting effective operational processes and systems, having a sizeable and knowledgeable board, having independent board members, having internal control processes, and having a well-structured audit committee [14,19,85]. Having a corporate governance system in place shifts the attention from self-serving managers towards stakeholders of the business, enhancing business performance [43]. The presence of an effective board helps small businesses to be strategically aligned in their vision, while independent board members bring relevant skills to help grow the business. In the same vein, the presence of internal controls and audit committees help small businesses to be compliant in preparing financial statements, eliminating misconduct, and enhancing transparency [14,19,85]. Due to the structure of most SMEs, their environmental practices are more likely to be successful when effective corporate governance practices are implemented [43]. Existing studies have noted that effective corporate governance helps firms to achieve their desired goals in terms of environmental practices compared to those with weaker governance structures [43,86]. Likewise, the Signaling theory [82] states that a firm should effectively communicate the management of its resources to its key stakeholders. Thus, corporate governance serves as an indicator that a business is transparent in its conduct, which signals a positive brand image to stakeholders. In essence, firms which voluntarily disclose their financial statements, carbon footprint, stakeholder engagement strategies, and internal environmental policies are likely to delight stakeholders, which enhances company image [24,43,86]. Small unlisted firms that excel in corporate governance tend to have higher chances of attracting funding for their businesses than those with weak corporate governance practices [87,88]. Sustainability **2022**, 14, 8863 8 of 20

Essentially, excelling in corporate governance principles helps businesses to establish long-term relationships with key stakeholders such as banks, customers, investors, and shareholders [69,89]. This can help resource-constrained SMEs to unlock resources among their key stakeholders [20,43,59]. Small businesses that excel in corporate governance principles have higher chances of accessing external finance than those with weak corporate governance practices [5,20,43,87,88,90]. Therefore, the fifth hypothesis is stated as follows:

Hypothesis 5 (H5). Corporate governance moderates the link between environmental sustainability commitment and access to finance such that access to finance will be high when both ES and CG are favourable (i.e., high) and lowest when both factors are unfavourable (i.e., low).

3. Materials and Methods

The current study was grounded in the philosophy of positivism, as the researcher intended to collect and analyse quantitative data [91]. Henceforth, the study adopted a quantitative research method which enhanced the objectivity of the study. A cross-sectional research design was adopted where data was collected all at once. The cross-sectional research design was considered because of the fear of losing contact with participants because of SMEs' high business discontinuance rate [92]. This study considered the context of the SME sector in South Africa. This sector was considered because it is at the heart of the National Development Plan 2030, which seeks to create new decent jobs from SMEs. Additionally, the South African government believes that the SME sector has potential to solve several of the socio-economic issues facing the country, which entails that SMEs should perform optimally [93]. Another reason relates to the call to encourage SMEs to participate in ESG initiatives, a phenomenon that has been primarily explored in large firms [43], as their combined environmental damage is huge [92]. Primary data were collected from 600 SMEs using a questionnaire. The questionnaire was developed by adapting the constructs from the existing literature, where such measures have been validated to ensure reliability and validity. The questionnaire was pretested using 20 participants, which helped the researcher to refine the questions and the structure of the questionnaire. The questionnaire was administered to the owners/managers of the SMEs surveyed in person. Using a questionnaire enabled the researcher to gather a large dataset, which enhanced the rigour of the findings. The participants were randomly recruited to participate in the survey, which enhanced the representativeness of the sample. These small businesses operated in different industries such as retail, services, manufacturing, and construction. The data collection process took six months; out of the 725 questionnaires distributed, 600 were returned and usable, resulting in an 83% response rate.

3.1. Measures

The measures of the constructs were adopted from the existing literature. The detailed items which were used to measure the constructs are presented in Table 1.

3.1.1. Environmental Sustainability Commitment

Environmental sustainability was measured using eight items adapted from existing studies as indicated in Table 1 [8,27,48]. Nevertheless, four items were dropped because of low factor loadings. Examples of the sample questions include "Our sustainable business practices recycle, reuse, and reduce waste." These questions were scored on a 5-point Likert scale format: (1) Strongly disagree, (2) Disagree, (3) Neutral, (4) Agree, and (5) Strongly agree.

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Table 1. Variables and measures.

Constructs	Items	Source
Environmental sustainability commitment		[8,27,48]
Our sustainable business practices recycle, reuse, and reduce waste.	ES1	
Our business has internal environmental policies.	ES2	
Our business excels in saving water, energy and reducing carbon emissions.	ES3	
Our business provides training to its employees on green practices.	ES4	
Financial performance		[94–96]
Our profits have increased significantly over the past three years.	FP1	
Our financial performance was relatively better than our competitors.	FP2	
We have recorded positive sales growth in the past three years.	FP3	
Our gross margins were better than our competitors in the past three years.	FP4	
Our business has never experienced any cash flow problem in the past three years.	FP5	
Access to finance		[8]
All our credit applications were approved by the bank in the past three years.	AF1	
The banks we considered for loan facilities were less strict on collateral security requirements.	AF2	
We were able to secure funding from the bank at a reasonable interest rate.	AF3	
We managed to secure funding from private investors in the past three years.	AF4	
Our business has managed to secure funding from the government in the past three years.	AF5	
Corporate governance		[5,14,90]
Our business has proper accounting, internal controls, and an internal audit committee.	CG1	
Our board has a sufficient number of independent directors.	CG2	
Our business complies with accounting guidelines and regulations which govern private companies in the country.	CG3	
Our business has stakeholder management policies in place.	CG4	
Our board members possess relevant business qualifications.	CG5	

3.1.2. Financial Performance

Financial performance was measured using five self-reported statements adopted from existing studies as presented in Table 1 [94–96]. The scale exhibited acceptable levels of reliability and validity. Examples of the sample items include "Our profits increased significantly for the past three years." These questions were scored on a 5-point Likert scale format: (1) Strongly disagree, (2) Disagree, (3) Neutral, (4) Agree, and (5) Strongly agree.

3.1.3. Access to Finance

Consistent with the existing literature [8], access to finance was measured using five items as presented in Table 1. Applications made by the business to investors, the bank, and the government in the past three years and approved were considered in the study. Thus, examples of sample questions included "All our credit applications in the past three

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years have been approved." These questions were scored on a 5-point Likert scale format: (1) Strongly disagree, (2) Disagree, (3) Neutral, (4) Agree and (5) Strongly agree.

3.1.4. Corporate Governance

Corporate governance was measured using five items adopted from existing studies [5,14,90]. Examples of sample questions included: "We have a sizeable and effective board" and "Our business has proper accounting, internal controls, and an internal audit committee in our business." These statements were scored on a 5-point Likert scale format: (1) Strongly disagree, (2) Disagree, (3) Neutral, (4) Agree and (5) Strongly agree.

3.2. Data Analysis

The moderated mediation model was tested using PLS-SEM. It is a contemporary analysis tool that enhances rigour of the findings [97]. The PLS-SEM tool assisted the researcher in testing complex causal relationships in the study.

4. Results

4.1. Demographic Characteristics

Table 2 presents the results from the demographic information of the participants. The findings showed that most participants (55%) were males. The dominant age groups of the participants were 31–40 years and 20–30 years, respectively. Regarding the legality of the business, most businesses were private companies (68%), followed by sole traders (25%). These SMEs mainly operated in the retail (44%) and the services sector (31%). This was expected, as these two sectors are not capital-intensive, which means that the barriers to entry are relatively low compared to the manufacturing and construction sectors.

Variables	Category	Frequency	Percent (%)	
Gender	Male	330	55%	
Gender	Female	270	45%	
	Below 20 years	18	3%	
	20–30 years	186	31%	
Age	31–40 years	294	49%	
	41–50 years	60	10%	
	Above 50 years	42	7%	
	Private company	408	68%	
Legal entity	Sole trader	150	25%	
Legal entity	Close corporation	12	2%	
	Partnership	30	5%	
Business sector	Retail	264	44%	
	Services	186	31%	
	Manufacturing	102	17%	
	Construction	48	8%	

Table 2. Biographical information.

4.2. Descriptive Statistics

Table 3 present descriptive statistics and correlations among key variables. The mean values ranged from 4.40–4.50, indicating that most participants agreed with the statements provided for these variables. The results showed a positive correlation between environmental sustainability commitment and access to finance (0.392; p = 0.001). Environmental sustainability commitment was positively correlated with financial performance (0.213; p = 0.001). Finally, the results showed a positive correlation between financial performance and access to finance (0.361; p = 0.001).

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Scale	Mean	SD	1	2	3	4
1. ES	4.45	0.660	1			
2. AF	4.40	0.504	0.392 **	1		
3. FP	4.50	0.514	0.213 **	0.361 **	1	
4. CG	4.49	0.500	0.396	0.119 **	0.141 **	1

Table 3. Mean, Standard deviation, and correlations.

4.3. Evaluation of the Model

The measurement and structural models should be evaluated when one adopts Smart-PLS to analyse data [97]. In order to assess the measurement model, the researcher assessed the issues of reliability and validity. Interestingly, all of the factors loaded perfectly, as shown in Table 4. Cronbach's alpha and composite reliability were used to ascertain reliability. As indicated by Table 4, the Cronbach's alpha values ranged from 0.887–0.949, surpassing the minimum value of 0.7 [97]. Composite reliability figures were acceptable as well, as they ranged from 0.920–0.956. Convergent validity was attained, as all of the AVE values ranged from 0.692–0.813, above the recommended 0.5 [97].

Table 4. Evaluation of the model.

Constructs	Items	Loadings	CA	CR	AVE
AF	AF1	0.726	0.887	0.918	0.692
	AF2	0.888			
	AF3	0.887			
	AF4	0.862			
	AF5	0.782			
CG	CG1	0.795	0.949	0.956	0.813
	CG2	0.913			
	CG3	0.931			
	CG4	0.947			
	CG5	0.914			
ES	ES1	0.818	0.891	0.924	0.752
	ES2	0.885			
	ES3	0.888			
	ES4	0.877			
FP	FP1	0.778	0.892	0.920	0.698
	FP2	0.822			
	FP3	0.880			
	FP4	0.876			
	FP5	0.815			

4.4. Discriminant Validity

Discriminant validity was assessed using the Fornell and Larcker [98] criterion. As indicated by Table 5, the model satisfied the assumptions advanced by Fornell and Larcker [98]. The diagonal values in bold, i.e., AVE square roots, are all greater than their individual correlation coefficients.

^{**} Correlation is significant at the 0.01 level (two-tailed).

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Table 5.	Discriminant	validity
Table 5.	Discriminant	vanuity.

Constructs	AF	CG	ES	FP
AF	0.832			
CG	0.139	0.902		
ES	0.408	0.033	0.867	
FP	0.374	0.122	0.222	0.835

Note: Diagonal values show the square root of AVEs for the constructs.

4.5. Evaluation of the Structural Model

Following recommendations from a prior study [97], the researcher evaluated the construct variance inflation factor (VIF) to assess collinearity issues. The VIFs for ES, FP, CG, and AF were 2.83, 2.79, 1.05, and 1.68, respectively. This means that there were no collinearity issues. The model R^2 predicted 28% of the variance in the dependent variable (access to finance). The standardized root mean square residual (SRMR) was used to evaluate model fitness. An SRMR value of 0.073 indicated satisfactory model fit, as the figure was within the recommended threshold value of 0.08 [99,100]. The hypothesised relationships were tested using bootstrapping with 5000 samples. Table 6 presents the findings of hypothesis testing. The results show that environmental sustainability commitment positively predicts access to finance ($\beta = 0.347$; t = 9.671; p = 0.000), leading to the decision to accept Hypothesis 1. Furthermore, the results showed a positive and significant relationship between environmental sustainability commitment and financial performance ($\beta = 0.222$; t = 5.603; p = 0.000), confirming Hypothesis 2. A positive and significant link was established between financial performance and access to finance ($\beta = 0.272$; t = 7.291; p = 0.000), thus confirming Hypothesis 3.

Table 6. Structural model.

Hypotheses	β	t-Statistics	<i>p</i> -Values	Decision
H1: ES \rightarrow AF	0.347	9.671	0.000	Accepted
H2: ES \rightarrow FP	0.222	5.603	0.000	Accepted
H3: $FP \rightarrow AF$	0.272	7.291	0.000	Accepted

The statistical findings presented above are further depicted in Figure 2.

4.6. Mediation Analysis

Table 7 presents the mediation analysis results. Following recommendations from an existing study [101], mediation assumes that the independent variable should predict the dependent variable positively. In addition, the same should apply to the independent and mediator variables. Finally, the mediator variable should predict the dependent variable. These assumptions were all met. Mediation analysis was conducted using bootstrapping with 5000 samples. It was established that financial performance positively mediates the link between environmental sustainability commitment and access to finance ($\beta = 0.061$; t = 4.697; p = 0.000). Thus, Hypothesis 4 was confirmed. This entails that environmental sustainability commitment positively predicts access to finance through financial performance.

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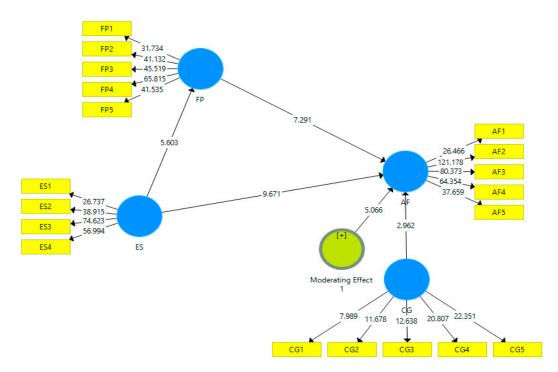


Figure 2. Structural model.

Table 7. Mediation analysis.

Hypothesis	β	t-Statistics	p Values	Decision
H4: ES \rightarrow FP \rightarrow AF	0.061	4.697	0.000	Accepted

4.7. Moderation Analysis

The moderation effect of CG on the ES-AF relationship was tested based on Hypothesis 5, which states that H5: Corporate governance moderates the link between environmental sustainability commitment and access to finance such that access to finance will be high when both ES and CG are favourable (i.e., high) and lowest when both factors are unfavourable (i.e., low). This was evaluated using the product indicator in SmartPLS. The findings from the interaction items (β = 0.146; t = 5.066; p = 0.000) indicated that corporate governance significantly and positively moderates the ES-AF relationship. The researcher further probed the ES-AF relationship at different levels of corporate governance. As depicted in Figure 3, the blue line shows CG at -1 SD, the green line shows CG at +1 SD, and the red line shows CG at Mean. As indicated in Figure 3, these findings show that access to finance is higher at favourable (i.e., high) levels of corporate governance and environmental sustainability commitment. This implies that firms that excel in corporate governance practices such as having qualified board members, desirable board diversity, a sizeable board, and independent board members have higher chances of accessing external finance than firms with weak corporate governance practices.

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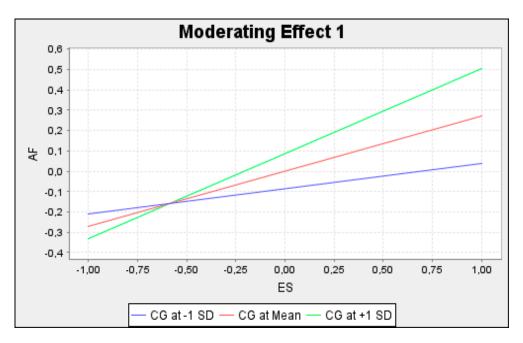


Figure 3. Probing the ES-AF relationship at different levels of corporate governance.

5. Discussion

The findings showed that environmental sustainability commitment positively predicts access to finance, supporting Hypothesis 1. Being environmentally responsible can send positive signals to key stakeholders such as banks and investors, eliminating obstacles to accessing external finance. Several environmentally sensitive stakeholders have recently preferred to associate with and invest in businesses that excel in ESG initiatives. Existing similar studies further support the findings of the current study. There is evidence that firms that actively participate in environmental protection initiatives and voluntarily disclose their carbon footprints and strategies to mitigate such issues will be more likely to access funding from green-oriented investors and banks [24,53,56]. Another strand of scholars argues that firms that excel in environmental performance may attract more external funding from investors by demonstrating that they are less risky portfolios [23,57]. In addition, because of the call for responsible investing, it has become mandatory for firms to disclose their environmental impacts and mitigation strategies [21,22]. For instance, many scholars submit that investments in ESG initiatives have become an essential strategy for attracting investors to invest in businesses [8–10]. This is because investors are now considering the environmental behaviour of a firm before they can commit their capital to businesses due to the emergence of responsible investing, whereby investors use ESG indicators in a business to determine the future value of their investments [9-11]. This implies that firms with a low score on environmental performance are regarded as risky, as they may suffer financially [10,57]. Thus, green investments make it relatively easier for SMEs to access external finance because most investors globally have moved away from profitability alone to examining the ESG behaviour of firms in order to safeguard their green values and avoid reputational damage [9-11,63]. Essentially, renowned international organizations such as the United Nations [9] and the European Union [56] have embraced the idea of financing responsible small businesses. This means that small unlisted firms can access sustainable finance from their governments, which are driven to fund green-oriented projects and businesses in order to achieve their sustainable development targets [42,43,56,92].

The findings of this study showed that environmental sustainability commitment is a crucial determinant of financial performance, thus supporting hypothesis 2. This implies that firms can enhance their financial performance by cutting costs associated with inefficiencies in their processes as well as by tapping into new markets for green products. This view is supported by existing studies indicating that environmental sustainability

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commitment can provide a firm with an unmatched competitive advantage that enhances financial performance [70–73]. There is evidence that environmental performance positively predicts financial performance as well [65,76,77]. The current study established that financial performance predicts access to finance, confirming hypothesis 3. Financial performance is the pulse of any business, and it is of interest to different stakeholders such as employees, investors, banks, and the government. Thus, financial performance is one of the indicators which influence investment and lending decisions by investors and banks, respectively. Thus, existing evidence shows that financial performance positively predicts access to finance by SMEs [16,78,81].

The findings of this study show that environmental sustainability commitment indirectly predicts access to finance through financial performance, supporting hypothesis 4. The argument advanced here is that environmental sustainability commitment predicts access to finance if the firm achieves its financial goals. Financial performance is regarded as an excellent mediating variable between several strategic variables and access to finance among SMEs [79]. Consistent with the Trade-off theory [80], being profitable means a business will have the ability to repay a loan without defaulting. In this case, banks usually prefer companies with positive cashflows and traceable financial performance [16,17,79]. Ideally, profitable firms tend to have high chances of having their loan applications approved by banks [13,52]. This shows that financial performance is a crucial mechanism through which environmental sustainability initiatives can predict access to finance by small unlisted firms. Existing studies agree that financial performance is an important indicator that a business can operate as a going concern, assuring stakeholders that their investment will yield a positive return [74,78,80,83]. The findings here show that corporate governance moderates the relationship between environmental sustainability commitment and access to finance. Thus, hypothesis 5 can be accepted. The slope analysis shows that access to finance is higher when environmental sustainability commitment and corporate governance are favourable. This implies that corporate governance is a crucial metric for businesses. The findings of this study are supported by other studies conducted in different contexts. For instance, existing studies indicate that corporate governance is a vital mechanism that helps firms to communicate their environmental sustainability commitment to key stakeholders, reducing financial constraints [43,86]. Consistent with existing studies, corporate governance practices enable firms to be transparent by voluntarily disclosing financial statements, sustainability reports, and stakeholder engagement policies, thereby eliminating information asymmetry between firms and credit suppliers such as banks and investors, resulting in access to finance [24,43,56]. Essentially, excelling in corporate governance principles helps businesses to establish long-term relationships with key stakeholders such as banks, customers, investors, and shareholders [24,43]. The findings of this study are in agreement with other studies which have found that small businesses that excel in corporate governance principles such as adopting effective operational processes and systems, having a sizeable and knowledgeable board, having independent board members, having internal control processes, and having a well-structured audit committee have higher chances of accessing external finance than those with weak corporate governance practices [5,43,87,88,90]. The findings of the current study are fully supported by several existing empirical findings conducted in other contexts.

6. Conclusions

The issue of ESG has mostly been explored in the context of large firms, neglecting small unlisted firms. Moreover, research investigating ESG practices and their effect on access to finance in the context of developing countries is limited. Thus, the current study examined the relationship between environmental sustainability commitment and access to finance and whether this relationship is mediated by financial performance, and tested whether corporate governance moderates this relationship as well. The participants were 600 valid responses from SME owner/managers randomly selected from three provinces in South Africa. Primary data were collected using self-administered questionnaires.

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The moderated mediation model was tested using PLS-SEM. The findings established a positive and significant relationship between environmental sustainability commitment and access to finance, and showed that financial performance positively mediates the link between environmental sustainability commitment and access to finance. Lastly, the findings showed that corporate governance positively moderates the link between environmental sustainability commitment and access to finance. This implies that being environmentally responsible can send positive signals to key stakeholders such as banks and investors, eliminating obstacles to accessing external finance. The results suggest that financial performance provides the mechanism through which environmental investments can best predict access to finance. At the same time, corporate governance strengthens the link between environmental sustainability commitment and access to finance. The current study demonstrates that small unlisted firms can enhance their chances of accessing external finance from green-oriented investors, banks, and the government by excelling in environmental sustainability initiatives, performing optimally, and having effective corporate governance structures in the business, a view which is supported by other scholars. The study found that the green-oriented behaviour of firms is at the heart of renowned international organizations such as the United Nations and the European Union, a trend that has seen nations globally implementing sustainable finance to promote greenoriented businesses. The findings of this study are fully supported by the existing literature.

6.1. Theoretical Implications

The current study has several implications. Theoretically, this study contributes by proposing and testing the moderated mediation model shown in Figure 1. The model was significant, enhancing understanding of the determinants of access to finance among small unlisted firms. Existing studies have mainly used theories of finance to understand access to finance by SMEs. The current research went beyond this by adding other theoretical viewpoints, such as Stakeholder theory; thus, environmental sustainability commitment and corporate governance were tested as crucial determinants of access to finance among small unlisted firms. A model of this kind has been missing in the existing literature.

6.2. Practical Implications

Practically, small unlisted firms can adopt and apply the model developed in this study as a strategy to enhance their ESG practices and unlock resources from their key stakeholders, such as banks and investors. In order to fully optimize the model designed in this study, small unlisted firms may need to adopt proactive environmental sustainability practices such as water and energy efficiency, waste and carbon emission reduction, as well as excel in corporate governance issues. This can help them to send positive signals to their key stakeholders that they are conducting the business responsibly, thus enhancing access to finance by eliminating information asymmetry. Essentially, the model developed and tested in this study addresses the demand side (the firm) through environmental initiatives and corporate governance as well as the supply side (banks). Thus, in applying the model in this study banks may consider designing green finance lending terms in line with small unlisted firms' green behaviour, which may help to reduce the financing gap among small unlisted firms in South Africa.

7. Limitations and Future Directions for Research

The current study considered only three provinces in South Africa. This may create generalizability problems; hence, future studies can replicate this study in other provinces in South Africa. The current study adopted a cross-sectional research design in which the data were collected all at once, which can be a limitation as it may take time for environmental investments to pay off. In addition, applications for funding may take more than a year to be approved. Thus, future studies could adopt a longitudinal research design in which data can be collected for a period of at least three years to enhance the quality of the dataset. In addition, this study only focused on factors such as environmental sustainability

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commitment, financial performance, and corporate governance as determinants of access to finance. However, other factors can influence access to finance by small firms. Thus, future studies could consider other factors such as credit history, having a professional accountant in the business, and networking as determinants of access to external finance by small unlisted firms in South Africa. This would help to refine conclusions regarding the determinants of access to finance by small unlisted firms, which would further help policy makers make informed decisions regarding their funding policies.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data will be made available upon request from the author.

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References

1. World Bank. Small and Medium Enterprises (SMEs) Finance. Available online: https://www.worldbank.org/en/topic/smefinance (accessed on 23 August 2021).

- Mckinsey & Company. A Credit Lifeline: How Banks Can Serve SMEs in South Africa Better. Available online: https://www.mckinsey.com/featured-insights/middle-east-and-africa/a-credit-lifeline-how-banks-can-serve-smes-in-south-africa-better (accessed on 19 May 2022).
- 3. Sebastian, A.; Merino, A. Is the Alternative Exchange achieving its objectives? A capital structure perspective. *J. Econ. Financ. Sci.* **2019**, *12*, 1–13. [CrossRef]
- 4. Olarewaju, O.; Msomi, T. Factors affecting small and medium enterprises' financial sustainability in South Africa. *Afr. J. Int. Mult. Stud.* **2021**, *3*, 103–117. [CrossRef]
- 5. Sprenger, C.; Lazareva, O. Corporate governance and investment-cash flow sensitivity: Evidence from Russian unlisted firms. *J. Comp. Econ.* **2022**, *50*, 71–100. [CrossRef]
- 6. Mazanai, M.; Fatoki, O. Access to finance in the SME sector: A South African perspective. Asian J. Bus. Man. 2012, 4, 58–67.
- 7. Serame, M. Factors Influencing SMEs' Access to Finance in South Africa. Master's Thesis, Faculty of Commerce, University of Capetown, Cape Town, South Africa, 2019.
- 8. Zhang, D. How environmental performance affects firms' access to credit: Evidence from EU countries. *J. Clean. Prod.* **2021**, *315*, 128294. [CrossRef]
- 9. Durst, S.; Gerstlberger, W. Financing Responsible Small-and Medium-Sized Enterprises: An International Overview of Policies and Support Programmes. *J. Risk. Financ. Manag.* **2021**, *14*, 10. [CrossRef]
- 10. Zhang, Y.; Weber, O. Investors' Moral and Financial Concerns—Ethical and Financial Divestment in the Fossil Fuel Industry. Sustainability 2022, 14, 1952. [CrossRef]
- 11. Cesarone, F.; Martino, M.L.; Carleo, A. Does ESG Impact Really Enhance Portfolio Profitability? *Sustainability* **2022**, *14*, 2050. [CrossRef]
- 12. Scholtens, J.; Bavinck, M. Lessons for legal pluralism: Investigating the challenges of transboundary fisheries governance. *Curr. Opin. Environ. Sustain.* **2014**, 11, 10–18. [CrossRef]
- 13. Khan, M.; Serafeim, G.; Yoon, A. Corporate sustainability: First evidence on materiality. *Account. Rev.* **2016**, 91, 1697–1724. [CrossRef]
- 14. Nasrallah, N.; El Khoury, R. Is corporate governance a good predictor of SMEs financial performance? Evidence from developing countries (the case of Lebanon). *J. Sustain. Financ. Investig.* **2022**, *12*, 13–43. [CrossRef]
- 15. Farza, K.; Ftiti, Z.; Hlioui, Z.; Louhichi, W.; Omri, A. Does it pay to go green? The environmental innovation effect on corporate financial performance. *J. Environ. Manag.* **2022**, *300*, 113695. [CrossRef] [PubMed]
- 16. Chandrayanti, T. The Influence of Business Performance on Credit Accessibility to Micro and Small Enterprises (MSEs). *Ilomata Int. J. Manag.* **2022**, *3*, 78–89. [CrossRef]
- 17. Jabbouri, I.; Farooq, O. Inadequately educated workforce and financing obstacles: International evidence from SMEs in developing countries. *Int. J. Manag. Financ.* **2021**, *17*, 118–137. [CrossRef]
- 18. Wilkin, C.L.; Couchman, P.K.; Sohal, A.; Zutshi, A. Exploring differences between smaller and large organizations' corporate governance of information technology. *Int. J. Account. Inf. Syst.* **2016**, 22, 6–25. [CrossRef]

Sustainability **2022**, 14, 8863 18 of 20

19. Tumwebaze, Z.; Mukyala, V.; Ssekiziyivu, B.; Tirisa, C.B.; Tumwebonire, A. Corporate governance, internal audit function and accountability in statutory corporations. *Cogent Bus. Manag.* **2018**, *5*, 1527054. [CrossRef]

- 20. Popoola, O. The Impact of Corporate Governance on Long Term Survival of Small Businesses in Canada. *J. Int. Counc. Small Bus.* **2022**, 1–9. [CrossRef]
- 21. Duran, I.J.; Rodrigo, P. Why do firms in emerging markets report? A stakeholder theory approach to study the determinants of non-financial disclosure in Latin America. *Sustainability* **2018**, *10*, 3111. [CrossRef]
- 22. Ikpor, I.M.; Bracci, E.; Kanu, C.I.; Ievoli, R.; Okezie, B.; Mlanga, S.; Ogbaekirigwe, C. Drivers of Sustainability Accounting and Reporting in Emerging Economies: Evidence from Nigeria. *Sustainability* **2022**, *14*, 3780. [CrossRef]
- 23. Wellalage, N.H.; Kumar, V. Environmental performance and bank lending: Evidence from unlisted firms. *Bus. Strat. Environ.* **2021**, *30*, 3309–3329. [CrossRef]
- 24. Wellalage, N.H.; Kumar, V.; Hunjra, A.I.; Al-Faryan, M.A.S. Environmental performance and firm financing during COVID-19 outbreaks: Evidence from SMEs. *Financ. Res. Lett.* **2022**, 47, 102568. [CrossRef] [PubMed]
- 25. Freeman, R.E. Strategic Management: A Stakeholder Approach; Cambridge University Press: Cambridge, UK, 1984.
- 26. Mbasera, M.; Du Plessis, E.; Saayman, M.; Kruger, M. Environmentally-friendly practices in hotels. *ACT Commod.* **2016**, *16*, 1–8. [CrossRef]
- 27. Masocha, R.; Fatoki, O. The impact of coercive pressures on sustainability practices of small businesses in South Africa. *Sustainability* **2018**, *10*, 3032. [CrossRef]
- 28. Johnson, M.P.; Schaltegger, S. Two decades of sustainability management tools for Firms: How far have we come? *J. Small. Bus. Manag.* **2016**, *54*, 481–505. [CrossRef]
- 29. Ma, X.; Qing, L.; Ock, Y.S.; Wu, J.; Zhou, Y. The Effect of Customer Involvement on Green Innovation and the Intermediary Role of Boundary Spanning Capability. *Sustainability* **2022**, *14*, 8016. [CrossRef]
- 30. Whelan, T.; Fink, C. The Comprehensive Business Case for Sustainability. Available online: http://everestenergy.nl/new/wp-content/uploads/HBR-Article-The-comprehensive-business-case-for-sustainability.pdf (accessed on 1 July 2018).
- 31. Kiron, D.; Unruh, G.; Kruschwitz, N.; Reeves, M.; Rubel, H.; Felde, A.M.Z. Corporatesustainabilityatacros Roads. Available online: https://sloanreview.mit.edu/projects/corporate-sustainability-at-a-crossroads/ (accessed on 18 December 2017).
- 32. Gallego-Álvarez, I.; Segura, L.; Martínez-Ferrero, J. Carbon emission reduction: The impact on the financial and operational performance of international companies. *J. Clean. Prod.* **2015**, *103*, 149–159. [CrossRef]
- 33. Fraj, E.; Matute, J.; Melero, I. Environmental strategies and organizational competitiveness in the hotel industry: The role of learning and innovation as determinants of environmental success. *Tour. Manag.* **2015**, *46*, 30–42. [CrossRef]
- 34. Shaikh, E.; Brahmi, M.; Thang, P.C.; Watto, W.A.; Trang, T.T.N.; Loan, N.T. Should I Stay or Should I Go? Explaining the Turnover Intentions with Corporate Social Responsibility (CSR), Organizational Identification and Organizational Commitment. *Sustainability* 2022, 14, 6030. [CrossRef]
- 35. May, A.Y.C.; Hao, G.S.; Carter, S. Intertwining Corporate Social Responsibility, Employee Green Behavior and Environmental Sustainability: The Mediation Effect of Organizational Trust and Organizational Identity. *Econ. Man. Fin. Mark.* **2021**, *16*, 32–61.
- 36. Rajabpour, E.; Fathi, M.R.; Torabi, M. Analysis of factors affecting the implementation of green human resource management using a hybrid fuzzy AHP and type-2 fuzzy DEMATEL approach. *Environ. Sci. Pollut. Res.* **2022**, 29, 1–16. [CrossRef]
- 37. Mnguni, A.; Tucker, C. Energy Efficient Buildings in South Africa. Available online: http://www.bowman.co.za/FileBrowser/ArticleDocuments/EnergyEfficientBuildings-in-South-Africa.pdf (accessed on 21 June 2018).
- 38. Galleli, B.; Semprebon, E.; Santos, J.A.R.D.; Teles, N.E.B.; Freitas-Martins, M.S.D.; Onevetch, R.T.D.S. Institutional Pressures, Sustainable Development Goals and COVID-19: How Are Organisations Engaging? *Sustainability* **2021**, *13*, 12330. [CrossRef]
- 39. Tortajada, C. Nongovernmental organizations and influence on global public policy. *Asia Pac. Policy Stud.* **2016**, *3*, 266–274. [CrossRef]
- 40. Perez, A.C.; Grafton, B.; Mohai, P.; Hardin, R.; Hintzen, K.; Orvis, S. Evolution of the environmental justice movement: Activism, formalization and differentiation. *Environ. Res. Lett.* **2015**, *10*, 105–115. [CrossRef]
- 41. Mohiuddin, M. Natural environment as stakeholder and sustainability. Int. J. Sustain. Soc. 2014, 6, 1–15.
- Del-Aguila-Arcentales, S.; Alvarez-Risco, A.; Jaramillo-Arévalo, M.; De-la-Cruz-Diaz, M.; Anderson-Seminario, M.D.L.M. Influence of Social, Environmental and Economic Sustainable Development Goals (SDGs) over Continuation of Entrepreneurship and Competitiveness. J. OpenInnov. Technol. Mark. Complex. 2022, 8, 73. [CrossRef]
- 43. Zhang, L.; Zhang, X.; An, J.; Zhang, W.; Yao, J. Examining the Role of Stakeholder-Oriented Corporate Governance in Achieving Sustainable Development: Evidence from the SME CSR in the Context of China. *Sustainability* **2022**, *14*, 8181. [CrossRef]
- 44. Kocmanova, A.; Hrebicek, J.; Docekalova, M. Corporate governance and sustainability. Econ. Man. 2011, 16, 543–550.
- 45. Castrillón, M.A.; Mares, A.I. Revisión Sobre la Sostenibilidad Empresarial. Rev. Estud. Av. Liderazgo 2014, 1, 52–77.
- 46. Aldowaish, A.; Kokuryo, J.; Almazyad, O.; Goi, H.C. Environmental, Social, and Governance Integration into the Business Model: Literature Review and Research Agenda. *Sustainability* **2022**, *14*, 2959. [CrossRef]
- 47. Dzomonda, O.; Fatoki, O. Environmental sustainability commitment and financial performance of firms listed on the Johannesburg Stock Exchange (JSE). *Int. J. Environ. Res. Public Health* **2020**, *17*, 7504. [CrossRef]
- 48. Zhang, X.; Wang, Z.; Zhong, X.; Yang, S.; Siddik, A.B. Do Green Banking Activities Improve the Banks' Environmental Performance? The Mediating Effect of Green Financing. *Sustainability* **2022**, *14*, 989. [CrossRef]

Sustainability **2022**, 14, 8863 19 of 20

49. Höse, K.; Süß, A.; Götze, U. Sustainability-Related Strategic Evaluation of Business Models. *Sustainability* **2022**, *14*, 7285. [CrossRef]

- 50. Danso, A.; Adomako, S.; Lartey, T.; Amankwah-Amoah, J.; Owusu-Yirenkyi, D. Stakeholder integration, environmental sustainability orientation and financial performance. *J. Bus. Res.* **2020**, *119*, 652–662. [CrossRef]
- 51. Rajala, R.; Westerlund, M.; Lampikoski, T. Environmental sustainability in industrial manufacturing: Re-examining the greening of Interface's business model. *J. Clean. Prod.* **2016**, *115*, 52–61. [CrossRef]
- 52. Haanaes, K. Why All Businesses Should Embrace Sustainability. Available online: https://www.imd.org/research-knowledge/articles/why-all-businesses-should-embrace-sustainability/ (accessed on 25 February 2019).
- 53. Aristei, D.; Gallo, M. The role of external support on the implementation of resource efficiency actions: Evidence from European manufacturing firms. *Sustainability* **2021**, *13*, 9531. [CrossRef]
- 54. Awan, U.; Sroufe, R. Sustainability in the circular economy: Insights and dynamics of designing circular business models. *Appl. Sci.* **2022**, *12*, 1521. [CrossRef]
- 55. Cheng, B.; Ioannou, I.; Serafeim, G. Corporate social responsibility and access to finance. Strat. Manag. J. 2014, 35, 1–23. [CrossRef]
- 56. Andrieş, A.M.; Marcu, N.; Oprea, F.; Tofan, M. Financial infrastructure and access to finance for European SMEs. *Sustainability* **2018**, *10*, 3400. [CrossRef]
- 57. La Rosa, F.; Liberatore, G.; Mazzi, F.; Terzani, S. The impact of corporate social performance on the cost of debt and access to debt financing for listed European non-financial firms. *Eur. Manag. J.* **2018**, *36*, 519–529. [CrossRef]
- 58. Oikonomou, I.; Brooks, C.; Pavelin, S. The effects of corporate social performance on the cost of corporate debt and credit ratings. *Fin. Rev.* **2014**, *1*, 49–75. [CrossRef]
- 59. Kim, M.; Surroca, J.; Trib, J.A. Impact of ethical behavior on syndicated loan rates. J. Bank. Fin. 2014, 38, 122–144. [CrossRef]
- 60. Ge, W.; Liu, M. Corporate social responsibility and the cost of corporate bonds. J. Account. Public Policy 2015, 6, 597–624. [CrossRef]
- 61. Park, B.I.; Ghauri, P.N. Determinants influencing CSR practices in small and medium sized MNE subsidiaries: A stakeholder perspective. *J. World. Bus.* **2015**, *50*, 192–204. [CrossRef]
- 62. Miralles-Quirós, M.M.; Miralles-Quirós, J.L.; Valente Gonçalves, L.M. The value relevance of environmental, social, and governance performance: The Brazilian case. *Sustainability* **2018**, *10*, 574. [CrossRef]
- 63. Eccles, R.G.; Krzus, M.P. *The Integrated Reporting Movement: Meaning, Momentum, Motives, and Materiality*; John Wiley & Sons: Hoboken, NJ, USA, 2015.
- 64. Zhang, K.Q.; Chen, H.H. Environmental performance and financing decisions impact on sustainable financial development of Chinese environmental protection enterprises. *Sustainability* **2017**, *9*, 2260. [CrossRef]
- 65. Hang, M.; Geyer-Klingeberg, J.; Rathgeber, A.W. It is merely a matter of time: A meta-analysis of the causality between environmental performance and financial performance. *Bus. Strat. Environ.* **2019**, *28*, 257–273. [CrossRef]
- 66. Manrique, S.; Martí-Ballester, C.P. Analyzing the Effect of Corporate Environmental Performance on Corporate Financial Performance in Developed and Developing Countries. *Sustainability* **2017**, *9*, 1957. [CrossRef]
- 67. Benitez-Amado, J.; Llorens-Montes, F.J.; Fernandez-Perez, V. IT impact on talent management and operational environmental sustainability. *Info. Tech. Man.* **2015**, *16*, 207–220. [CrossRef]
- 68. Haffar, M.; Searcy, C. Classification of trade-offs encountered in the practice of corporate sustainability. *J. Bus. Ethic.* **2017**, *140*, 495–522. [CrossRef]
- 69. Crișan-Mitra, C.; Stanca, L.; Dabija, D.C. Corporate social performance: An assessment model on an emerging market. *Sustainability* **2020**, *12*, 4077. [CrossRef]
- 70. Nasrollahi, M.; Fathi, M.R.; Hassani, N.S. Eco-innovation and cleaner production as sustainable competitive advantage antecedents: The mediating role of green performance. *Int. J. Bus. Innov. Res.* **2020**, 22, 388–407. [CrossRef]
- 71. Zhang, Y.; Wei, F. SMEs' charismatic leadership, product life cycle, environmental performance, and financial performance: A mediated moderation model. *J. Clean. Prod.* **2021**, *306*, 127147. [CrossRef]
- 72. Barney, J. Firm resources and sustained competitive advantage. J. Manag. 1991, 17, 99–120. [CrossRef]
- 73. Hart, S.L. A natural-resource-based view of the firm. Acad. Manag. Rev. 1995, 20, 986–1014. [CrossRef]
- 74. Jayeola, O. The impact of environmental sustainability practice on the financial performance of SMEs: A study of some selected SMEs in Sussex. *Int. J. Bus. Manag. Econ. Res.* **2015**, *6*, 214–230.
- 75. Fernando, Y.; Shaharudin, M.S.; Abideen, A.Z. Circular economy-based reverse logistics: Dynamic interplay between sustainable resource commitment and financial performance. *Eur. J. Manag. Bus. Econ.* **2022**, 1–22. [CrossRef]
- 76. Haninun, H.; Lindrianasari, L.; Denziana, A. The effect of environmental performance and disclosure on financial performance. *Int. J. Trad. Glob. Mark.* **2018**, *11*, 138–148. [CrossRef]
- 77. Xie, X.; Hoang, T.T.; Zhu, Q. Green process innovation and financial performance: The role of green social capital and customers' tacit green needs. *J. Innov. Knowl.* **2022**, *7*, 100165. [CrossRef]
- 78. Kurniaty, K.; Handayani, S.R.; Rahayu, S.M. Stock return and financial performance as moderation variable in influence of good corporate governance towards corporate value. *Asian J. Account. Res.* **2018**, *4*, 19–34.
- 79. Civelek, M. The mediating role of SMEs' performance in the relationship between entrepreneurial orientation and access to finance. *BAR-Braz. Admin. Rev.* **2022**, *18*, 1–25. [CrossRef]
- 80. Jensen, M.C.; Meckling, W.H. Theory of the firm: Managerial behavior, agency costs and ownership structure. *J. Financ. Econ.* **1976**, *3*, 305–360. [CrossRef]

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81. Wasiuzzaman, S.; Nurdin, N. Debt financing decisions of SMEs in emerging markets: Empirical evidence from Malaysia. *Int. J. Bank. Mark.* **2018**, *37*, 258–277. [CrossRef]

- 82. Ross, L. The intuitive psychologist and his shortcomings: Distortions in the attribution process. *Experim. Soc. Psych.* **1977**, *10*, 173–220.
- 83. Asni, N.; Agustia, D. The mediating role of financial performance in the relationship between green innovation and firm value: Evidence from ASEAN countries. *Eur. J. Innov. Manag.* **2021**. [CrossRef]
- 84. Watanabel, N.; Yamauchi, S.; Sakawa, H. The Board Structure and Performance in IPO Firms: Evidence from Stakeholder-Oriented Corporate Governance. *Sustainability* **2022**, *14*, 8078. [CrossRef]
- 85. McLarty, R.; O'Dowd, S. Even Small Businesses Need Corporate Governance. Management in Practice. Ideas from the Yale School of Management. Available online: https://insights.som.yale.edu/insights/even-small-businesses-need-corporate-governance (accessed on 22 May 2022).
- 86. Haque, F.; Ntim, C.G. Environmental policy, sustainable development, governance mechanisms and environmental performance. *Bus. Strat. Environ.* **2018**, 27, 415–435. [CrossRef]
- 87. Zhong, N. Corporate governance of Chinese privatized firms: Evidence from a survey of non-listed enterprises. *J. Comp. Econ.* **2015**, *43*, 1101–1121. [CrossRef]
- 88. Zumente, I.; Bistrova, J. Do Baltic investors care about environmental, social and governance (ESG)? *Entrep. Sustain. Issues* **2021**, *8*, 349–362. [CrossRef]
- 89. Fuertes-Callén, Y.; Cuellar-Fernández, B.; Serrano-Cinca, C. Predicting startup survival using first years financial statements. *J. Small Bus. Manag.* **2020**, 1–37. [CrossRef]
- 90. Radebe, M.S. The benefits of good corporate governance to small and medium enterprises (SMEs) in South Africa: A view on top 20 and bottom 20 JSE listed companies. *Probl. Perspect. Manag.* **2017**, *15*, 271–279.
- 91. Saunders, M.N.; Lewis, P. Doing Research in Business & Management: An Essential Guide to Planning Your Project; Pearson: Harlow, UK, 2012.
- 92. Fatoki, O. Sustainable finance and small, medium and micro enterprises in South Africa. *Acad. Account. Financ. Stud. J.* **2021**, 25, 1–7.
- 93. Meyer, N.; Meyer, D. Entrepreneurship Is a Key Economic Driver-Ramaphosa's Sona 2022 Offers Glimmers of Hope. Available online: https://www.dailymaverick.co.za/article/2022-02-16-entrepreneurship-is-a-key-economic-driver-ramaphosas-sona-2022-offers-glimmers-of-hope/ (accessed on 10 July 2022).
- 94. Wiklund, J.; Shepherd, D. Entrepreneurial orientation and small business performance: A configurational approach. *J. Bus. Vent.* **2005**, 20, 71–91. [CrossRef]
- 95. Yousaf, U.S.; Hanfiah, M.H.; Usman, B. Psychological capital: Key to entrepreneurial performance and growth intentions. *Int. Res. J. Soc. Sci.* **2015**, *4*, 39–45.
- 96. Semrau, T.; Ambos, T.; Kraus, S. Entrepreneurial orientation and SME performance across societal cultures: An international study. *J. Bus. Res.* **2016**, *69*, 1928–1932. [CrossRef]
- 97. Hair, J.F.; Risher, J.J.; Sarstedt, M.; Ringle, C.M. When to use and how to report the results of PLS-SEM. *Eur. Bus. Rev.* **2019**, *31*, 2–24. [CrossRef]
- 98. Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Market. Res.* **1981**, *18*, 39–50. [CrossRef]
- 99. Hu, L.T.; Bentler, P.M. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Struct. Equ. Model. 1999, 6, 1–55. [CrossRef]
- 100. Henseler, J.; Hubona, G.; Ray, P.A. Using PLS path modeling in new technology research: Updated guidelines. *Ind. Man. Data Syst.* **2016**, *116*, 2–20. [CrossRef]
- 101. Li, C.; Makhdoom, H.U.R.; Asim, S. Impact of entrepreneurial leadership on innovative work behavior: Examining mediation and moderation mechanisms. *Psychlogy Res. Behav. Man.* **2020**, *13*, 105–118. [CrossRef]