

The disclosure of Environmental, Social, and Governance reports of Small and Medium-sized Enterprises in the emerging market

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ABSTRACT

The study aims to explore the factors influencing the disclosure of ESG reports of Small and Medium-sized Enterprises (SMEs) in Vietnam, an emerging economy in Southeast Asia, using fundamental theories such as legitimacy theory, stakeholder theory, organizational theory, institutional theory, and agency theory. Using a survey dataset of 217 SMEs in Vietnam's two largest cities obtained through convenience sampling, we tested hypotheses and structural equation models using SmartPLS software. The results indicate that legal regulations have the greatest impact on ESG report disclosure among SMEs in Vietnam, while the sector of an enterprise exerts the least influence. These findings provide insights into the factors influencing ESG disclosure in an emerging economy, offering valuable implications for companies, policymakers, and other stakeholders.

1. Introduction

ESG reporting refers to enterprises disclosing their impacts on Environmental, Social, and Governance (ESG) issues, commonly referred to as “sustainability reporting”. Unlike financial reports regulated by accounting standards, ESG reports are less clearly defined and often voluntary (Darnall et al., 2022). This lack of standardization leads to inconsistencies in reporting content and raises concerns about the quality and accuracy of the disclosed information.

Currently, the rise in ESG reporting stems from growing societal attention and demand regarding corporate operations, with increasing scrutiny of how business activities impact the environment (Helfaya et al., 2022). At the corporate level, increased ESG reporting contributes to risk mitigation and improved financial performance (Raimo et al., 2021). According to Ioannou and Serafeim (2012), ESG disclosure practices vary across businesses and countries. Therefore, this study seeks to explore and identify the factors influencing ESG reporting practices in Vietnam, an emerging market in Southeast Asia.

In Vietnam, business managers, particularly those from SMEs, perceive ESG activities differently from their counterparts in European countries due to differences in cultural systems, levels of development, and organizational capabilities. According to a PwC's report (2022), 61 percent of enterprises in Vietnam have not committed to practicing ESG due to a lack of knowledge, while 67 percent identified the absence of standardization in ESG reporting as a major barrier. Therefore, it is essential to investigate why enterprises hesitate to disclose ESG reports and identify the factors influencing this disclosure.

Furthermore, studies on ESG report disclosure have garnered significant attention from scholars worldwide. For instance, Krambia-Kapardis et al. (2023) investigated the impact of

socio-economic (macro-economic) factors on ESG reporting and called for globally unified standards related to ESG reporting. Similarly, Helfaya et al. (2022) examined the determinants of ESG reporting practices in Europe. In Vietnam, scholars have primarily explored the impact of ESG on corporate performance (Bui & Trinh, 2023) or corporate tax avoidance behavior (Nguyen, 2024). To date, to the best of the authors' knowledge, no empirical evidence exists explaining the determinants of ESG report disclosure among SMEs in Vietnam, an emerging market in Southeast Asia. Therefore, this study aims to address gaps in existing research by identifying, analyzing, and evaluating factors influencing ESG report disclosure in SMEs in Vietnam, using data collected from managers to contribute to sustainable development. The findings contribute to the academic literature by testing an ESG reporting model of SMEs in the Vietnamese market and provide managerial implications to encourage future ESG disclosure. Furthermore, the results serve as a valuable resource for government agencies to develop policies that encourage ESG disclosure among businesses.

The remainder of the paper is structured as follows. Section 2 presents the theoretical framework and research hypotheses. Section 3 describes the research methodology. Section 4 presents the findings. Section 5 is the discussion and implications. The final section offers conclusions, as well as the limitations of the study and directions for future research.

2. Literature review

2.1. Theoretical background

2.1.1. Legitimacy theory

According to legitimacy theory, enterprises must ensure their operations comply with the norms and regulations of the society in which they operate. These norms and regulations are grounded in the concept of the "Social Contract", which outlines the implicit expectations society imposes on enterprises to align with societal goals.

An enterprise can only survive if the social benefits it provides outweigh the costs society bears to address its negative impacts (Mathews, 1993). In other words, society permits an enterprise to operate if it meets societal expectations, does not violate the social contract, and is considered legitimate. However, an enterprise's legitimacy can be threatened when its activities deviate from social expectations, such as failing to disclose information to the community or providing evidence that its operations align with societal norms. Enterprises can demonstrate the legalization of their information disclosures through annual reports, sustainability reports, ESG reports, social responsibility reports, or by publishing this information on their websites. This theory provides a foundation for explaining why enterprises disclose ESG information to demonstrate their legal compliance and alignment with societal expectations.

2.1.2. Stakeholder theory

Stakeholders are groups or individuals who influence the objectives of an enterprise or, conversely, are influenced by its objectives. Stakeholder theory encompasses two dimensions: ethical and powerful stakeholders.

The ethical dimension of stakeholder theory argues that stakeholders should be treated fairly. Enterprises are viewed as operating entities that harmonize interests. When conflict arises among stakeholders, business managers must balance these economic interests optimally. Conversely, the powerful dimension of stakeholder theory suggests that managers intentionally prioritize the expectations of influential stakeholders. Managers must identify and meet the demands of these stakeholders to achieve organizational goals, recognizing that stakeholder

expectations may evolve over time. Hence, enterprises must regularly adjust their operations and disclose information to align with these expectations. Disclosed information, such as financial, environmental, and social data, provides stakeholders with evidence to evaluate the enterprise's activities and determine whether to support its operations. This theory encourages enterprises to disclose ESG reports to gain approval and demonstrate their commitment to environmental protection in compliance with legal authorities, investors, and environmental activists.

2.1.3. Organizational theory

Organizational theory explains why enterprises adopt similar or distinct behaviors to maintain legitimacy. The first dimension of organizational theory is similarity, which involves aligning one unit with another to ensure compatibility. For instance, if many units jointly disclose environmental information, others are often compelled to disclose similar information to maintain uniformity. Similarity encompasses mandatory, replicative, and canonical forms.

The second dimension of organizational theory is separation. While managers often adopt a similar model, several enterprises differentiate themselves through unique behaviors. For instance, while most enterprises prioritize increasing profits and shareholder value, a few focus on building a distinct public image through financial, environmental, and social responsibility disclosures.

This theory suggests that enterprises learn from the practices of those that publicly report ESG, aiming to gain stakeholder support and align with social norms. On the other hand, some enterprises aim to create a distinct public image through environmental disclosures, ESG reports, and social responsibility reports.

2.1.4. Institutional theory

Institutional theory represents a framework for various stakeholders who pursue common goals related to business sustainability. This theory emphasizes the role of normative influences in decision-making processes that shape organizational structures and addresses the challenges leading to institutionalization. It examines the social dimensions of decision-making, including socially responsible indicators, conditions for such investments, environmental initiatives, and their potential social and environmental impacts.

Institutional theory posits that the institutional environment, including internal corporate governance mechanisms and corporate culture, is more effective than external measures such as laws, mandatory regulations, or external governance mechanisms in achieving Economic, Governance, Social, Ethical, and Environmental (EGSEE) dimensions. Additionally, institutional theory emphasizes internal sustainability by positioning the enterprise as a means to serve human needs and protect stakeholder interests.

The theory asserts that ESG disclosure responds not only to legal and societal pressures but also forms part of a corporate governance strategy to maintain legitimacy, build trust, secure competitive advantages, and ensure sustainable development. Enterprises that disclose ESG reports often enhance brand credibility, improve risk management, and achieve differentiation, thereby standing out to investors and stakeholders.

2.1.5. Agency theory

Agency theory suggests that conflicts of interest arise from information asymmetry (an imbalance in the information structure where transacting parties possess unequal levels of information) between the authorizer and the representative party. The relationship between the authorizer and the representative party includes that between the owner (shareholder) and the manager via the authorized shareholder, as well as the relationship between the creditor and the

shareholder through the creditor's authorization to use capital. In the relationship between shareholders and managers, information asymmetry occurs because managers possess more information than shareholders, including knowledge of the enterprise's goals and associated risks.

Agency theory explains why business managers voluntarily disclose information about their production and operational activities. Managers recognize that shareholders seek to control behavior through alignment and monitoring activities. Therefore, they seek to convince shareholders that the business is optimally managed and that disclosing information about the operational process is the best way to achieve this goal.

This theory considers various characteristics of an enterprise (such as size, asset levels relative to total investment, and expected debt levels), which are positively associated with the likelihood of ESG report disclosure. Businesses disclose this information only when the benefits outweigh the costs.

2.2. The concept of ESG

The term ESG (Environment, Social, and Governance) first appeared in a United Nations Global Compact report in late 2004 titled "Who Cares WIN Connecting Finance Marketing to a Changing World" to focus investors and analysts on the materiality and interconnection of environmental, social, and governance issues. However, as early as the 1950s, ESG was mentioned in Bowen's (1953) publication *Social Responsibilities of the Businessman*. At the time, ESG was conceptualized through Corporate Social Responsibility (CSR). Over the past two decades, ESG has evolved from a specialized set of standards for measuring sustainability factors into a mainstream framework guiding leaders and brands in assessing the impact of their enterprises and products on the environment, society, and employees.

According to Kocmanova et al. (2012), ESG comprises three standards that measure the impact of enterprises on social issues, sustainable development factors, and community well-being:

(i) *Environment - E*: Enterprise activities impacting the environment such as reducing greenhouse gas emissions, preventing pollution, addressing climate change, promoting renewable energy, conserving biodiversity, and preserving nature.

(ii) *Social - S*: Enterprise policies for employees, customers, partners, and other stakeholders include labor practices, health and safety measures, human rights initiatives, support for physical and mental health, job satisfaction, advancement opportunities, and fair compensation, including salaries and bonuses.

(iii) *Governance - G*: Governance factors include the enterprise's leadership quality, management efficiency, shareholder rights, board diversity, and structure, transparency in financial reporting, tax compliance, customer protection, and accountability. Thus, social responsibility is an integral component of ESG standards.

ESG report disclosure involves presenting information and data on environment, society, and corporate governance factors. Similar to other disclosures, ESG report disclosures aim to illuminate corporate ESG practices, enhance investor transparency, and inspire similar initiatives in other businesses (Darnall et al., 2022).

2.3. ESG practices in Vietnam

Globally, ESG is emerging as a transformative trend, compelling enterprises to intensify efforts to reduce greenhouse gas emissions, use environmentally friendly raw materials, uphold social responsibility, attract investors, and retain customers.

In Vietnam, the 13th Party Congress outlined a development plan for the 2021 - 2030 period, emphasizing the goals of ensuring social and human security. Simultaneously, it emphasizes managing resources effectively and sustainably while prioritizing the protection of the environment and public health. Hence, the goals of enhancing sustainable development among Vietnamese enterprises are gradually being concretized. For instance, the Ministry of Finance (2020) issued Circular No. 96/2020/TT-BTC, dated November 16th, 2020 which provides guidelines for information disclosure on the stock market and stipulates requirements for ESG reporting for public companies listed on Vietnam’s stock exchanges. Public and listed companies are required to disclose annual ESG reports. These reports must include data on greenhouse gas emissions, resource management, energy and water consumption, compliance with environmental protection laws, labor policies, community responsibilities, and green capital market activities as outlined by the State Securities Commission.

Some Vietnamese enterprises have shifted their management mindset toward sustainable development and integrated ESG principles into their business strategies. On July 18th, 2022, the Ho Chi Minh City Stock Exchange announced the selection of twenty companies from the VN100 index basket (Phung, 2022) (including the 100 largest listed companies in the Vietnamese stock market) that were comprehensively evaluated across three ESG dimensions: environment, social and governance.

Table 1

ESG Practices in Vietnam

Name	Field	ESG practices		
		E (Environment)	S (Social)	G (Governance)
Vietnam Dairy Products Joint Stock Company (Vinamilk)	Dairy products	<ul style="list-style-type: none"> Vinamilk has implemented circular economy principles throughout its production process, from input to output, to minimize material consumption and maximize the reuse of production materials and waste. By utilizing biogas systems at its dairy farms, Vinamilk transforms waste into raw materials for other industries, such as fertilizer, gas, and water. 	<ul style="list-style-type: none"> Vinamilk Green Farm employs an ecological farm model and a green value chain to produce 100 percent fresh milk products for its customers. Vinamilk regularly conducts large-scale nutrition programs for children (e.g., the Vietnam Rising Milk Fund and the school milk program, and actively sponsors various volunteer initiatives). 	Vinamilk used ERP (Enterprise Resource Planning) software in its management process, including accounting, financial analysis, planning and production management, logistics management, and customer relationship management.
Ma San Group Corporation	Consumer goods and retail	<ul style="list-style-type: none"> Ma San has established wastewater treatment systems at manufacturing facilities located in industrial parks across various 	<ul style="list-style-type: none"> MeatDeli’s meat processing complexes are certified by the British Retailer Consortium (BRC) under the Global Food Safety Standard. 	Ma San applies advanced management systems aligned with international standards.

Name	Field	ESG practices		
		E (Environment)	S (Social)	G (Governance)
		<p>localities, ensuring that the treated wastewater meets class A standards, the highest wastewater quality standard in Vietnam.</p> <ul style="list-style-type: none"> Plastic bags have been replaced with 100 percent biodegradable bags across the WinMart and WinMart+ consumer goods retail systems. 	<ul style="list-style-type: none"> Ma San provided financial support for environmental protection and sustainable development initiatives, aiding the community in enhancing social responsibility across various sectors such as health, education, construction, infrastructure, and so on. 	
Thanh Thanh Cong - Bien Hoa Joint Stock Company (TTC AgriS)	Sugarcane products	<ul style="list-style-type: none"> TTC AgriS has transitioned from a traditional farming model to an organic farming model. TTC AgriS optimizes the value of sugarcane and maximizes the use of raw materials derived from by-products in the production process. TTC AgriS Apply employs the use of red-eyed bees to prevent pests, thereby avoiding pesticide residues on agricultural products. 	<ul style="list-style-type: none"> Contributing to local economic development. 	

Source. Compiled by the authors

2.4. Hypothesis development

Drawing on the theoretical background, combined with the set of ESG measurement criteria and an actual survey of enterprises implementing ESG, the authors put forward six factors that directly influence the disclosure of ESG reports by SMEs in Vietnam, namely:

Profitability is a crucial indicator of production and business performance. Profitability is measured by Return On Equity (ROE) and Return On Assets (ROA). Higher profitability is associated with more positive business development outcomes. Proactively disclosing social responsibility and sustainable development reports helps enterprises build trust, attract investors, and strengthen their position within the community and society. Several studies have found that profitability is closely related to sustainability reporting disclosures (Dibia & Onwuchekwa, 2015; Frias-Aceituno et al., 2012; Gray et al., 1995) and corporate social responsibility (Issa, 2017). Nevertheless, Marston and Polei (2004) concluded that no association exists between profitability and the disclosure of corporate-related reports and information. Based on the above discussion, the following hypothesis could be started:

H1: Profitability will be positively associated with the disclosure of ESG reports

Size refers to the scale of a business unit or organization. It directly impacts the organizational structure and governance system of the enterprise. Larger enterprises tend to have more complex organizational structures, whereas smaller enterprises typically have simpler ones. The studies of Said et al. (2009), Nguyen and Nguyen (2017) found that the disclosure of information reports related to production and business operations is influenced by enterprise size. Larger enterprises produce a greater volume of reports, particularly those related to the environment and social responsibility (Brammer & Millington, 2006). According to Bayoud et al. (2012), the number of employees significantly affects the disclosure of corporate social responsibility reports. Additionally, Issa (2017) emphasized a correlation between enterprise size and the disclosure of social responsibility reports. Based on the above discussion, the following hypothesis could be started:

H2: Size will be positively associated with the disclosure of ESG reports

Growth opportunities for enterprises refer to favourable conditions that enable the expansion and development of production and business activities in the future. Enterprises with growth opportunities tend to proactively disclose reports on social responsibility and sustainable development to improve their position, create opportunities to expand equity and increase market share (Craswell & Taylor, 1992; Lang & Lundholm, 1993). Additionally, disclosing reports during production and business activities serves to demonstrate to investors that the enterprise's development aligns with social and community responsibility. In other words, businesses that transparently disclose reports on business results and environmental information create greater development opportunities for themselves (Frias-Aceituno et al., 2012; Shamil et al., 2014). However, Frias-Aceituno et al. (2014) found no relationship between the future expansion of an enterprise and the disclosure of its reports and information. Based on the above discussion, the following hypothesis could be started:

H3: Growth opportunities for enterprises will be positively associated with the disclosure of ESG reports

The perspective of business owners refers to the views of the highest-ranking leaders, such as the chairman of the board or the general director. Studies by Trotman and Bradley (1981) and Ho and Wong (2001) demonstrated a strong relationship between the perspective of business owners and the disclosure of environmental reports and information. Similarly, the business owner typically makes the final decision regarding the information included in the social responsibility report. On the one hand, Fathi (2013) found an inverse relationship between the perspective of business owners and the disclosure of business-related reports. Business owners often avoid or deliberately withhold unfavourable information in disclosure reports related to their production and business activities. On the other hand, Shamil et al. (2014) argued that several business owners are willing to disclose business-related reports and information transparently and honestly to reduce information asymmetry for investors. Based on the above discussion, the following hypothesis could be started:

H4: The perspective of business owners will be positively associated with the disclosure of ESG reports

Legal regulations are charters and provisions established for enterprises, requiring compliance in production and business activities. The Government plays a crucial role in guiding businesses to voluntarily disclose reports and fulfill their responsibilities to the community and society in pursuit of sustainable development (Guan & Noronha, 2017). Furthermore, legal

regulations, particularly sustainable development standards, pressure businesses to voluntarily transform their strategies and disclosures regarding their impact on the community and society (Frias-Aceituno et al., 2012; Tauringana, 2020). Based on the above discussion, the following hypothesis could be started:

H5: Legal regulations will be positively associated with the disclosure of ESG reports

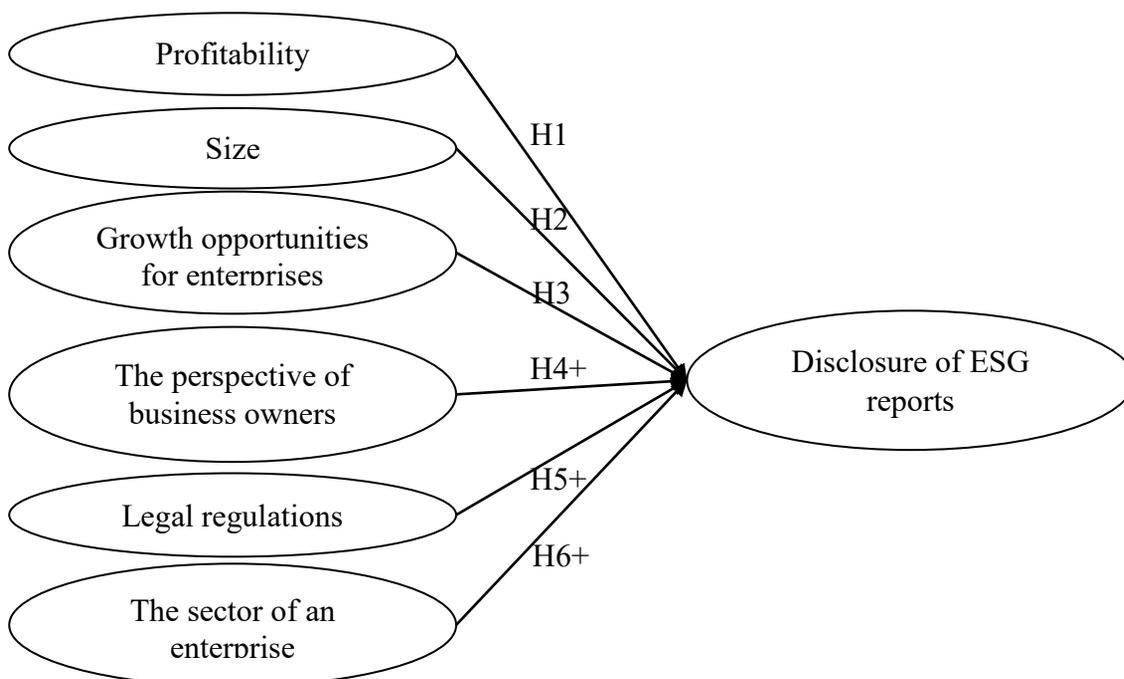
The sector of an enterprise encompasses the range of products, services, and goods within a specific industry that facilitate business activities aimed at generating profits. Studies by Haniffa and Cooke (2005), Frias-Aceituno et al. (2012) revealed that the sector directly influences the disclosure of environment and social responsibility reports, particularly information in the enterprise's sustainable development report. In Vietnam, studies by Trinh and Tang (2019), Nguyen and Dang (2019) produced results consistent with the findings of the aforementioned studies. They emphasized that the sector serves as the basis for disclosing their sustainability reports, with variations across sectors. Jorge and Giner (2002) disagreed with this view, asserting that no correlation exists between the sector and the enterprise's reports and information. Based on the above discussion, the following hypothesis could be started:

H6: The sector of an enterprise will be positively associated with the disclosure of ESG reports

Synthesizing from the above hypotheses, the authors proposed a research model as follows:

Figure 1

Research Model



Source. The authors proposed

3. Methodology

3.1. Scale

The preliminary scale was proposed based on relevant domestic and international studies, as well as the content of influencing factors. Additionally, to develop a scale that aligns with the characteristics of the research subjects and context in Vietnam, the authors conducted group discussions with senior managers from several SMEs to revise the observed variables and

consider the factors in the proposed research model. Furthermore, the authors conducted in-depth interviews with five sustainable development experts to re-evaluate the relationships and content of the factors, as well as to address issues arising during the group discussion. This process took approximately two months (from October to December 2023) and synthesized the opinions that received the highest approval from participants to design the formal scale.

The qualitative research results indicated that the factors in the proposed research model were consistent. Nevertheless, the observed variables within each factor needed to be supplemented, and certain terms required adjustment based on the feedback of experts and senior managers to make the content clearer and more aligned with the research objectives.

3.2. Sample size and data analysis

The authors employed a 5-degree Likert scale from 1 (strongly disagree) to 5 (strongly agree) to measure the formal scale. Typically, larger sample sizes improve the reliability and accuracy of research findings. However, the choice of sample size is constrained by both cost and time considerations. According to Hair et al. (2016), the recommended sample size for PLS-SEM ensures a statistical sensitivity of 80 percent. With six independent variables, a minimum sample size of 179 is required to achieve a statistical sensitivity of 80 percent for detecting R^2 values as small as 0.1, with a 5 percent margin of error (Hair et al., 2016). Nevertheless, the authors distributed 240 questionnaires to mitigate a low response rate and ensure reliability. Additionally, this study employed a convenience sampling method to maximize the sample size. The questionnaires were created using Google Forms and distributed via emails and online messaging applications to mid-level and senior managers at SMEs operating in Hanoi and Ho Chi Minh cities. The survey was conducted over four weeks in February 2024. After data cleaning, the authors obtained 217 valid questionnaires, resulting in a response rate of 86.8 percent.

The collected data was analyzed using the PLS-SEM method with Smart PLS 4.0 software. This technique is used to analyze small samples and does not require the data to follow a standard distribution (Dijkstra & Henseler, 2015). In addition, PLS-SEM is one of the most common and effective approaches for linear structural model analysis of latent variables (Garson, 2012). More importantly, PLS-SEM is appropriate for studies aimed at forecasting or developing and testing hypotheses (Sarstedt et al., 2017). The process is divided into two main stages: Stage 1 involves reliability testing, as well as convergent and discriminant validity through measurement model analysis, while Stage 2 focuses on testing the model and research hypothesis using structural equation modelling.

4. Findings and discussion

4.1. Sample characteristics

Male participants accounted for 75.6% of the survey respondents. More than 80 percent of respondents were aged between 40 and 50, were married, and 100 percent held a university degree or higher. Additionally, the respondents include mid-level managers (47 percent) and senior managers (53 percent). State-owned enterprises accounted for 24.4 percent, private enterprises accounted for 58.2 percent, and foreign-invested enterprises accounted for 17.4 percent. Enterprises in the trade and service sector accounted for 43.3 percent, followed by 32.6 percent in manufacturing and 24.1 percent in other sectors. Enterprises with 50 to 100 employees represented the largest proportion (42.7 percent), with more than five years of operation and charter capital ranging from 10 to 50 billion VND. Thus, the survey characteristics are consistent and representative of the overall sample of SMEs in Hanoi and Ho Chi Minh cities.

4.2. Results of PLS-SEM

4.2.1. Measurement model

The results in Table 2 indicate that Cronbach's Alpha coefficient exceeds 0.7, and the Composite Reliability (CR) surpasses the threshold of 0.7, ensuring reliability. Additionally, the outer loadings coefficient ranges between 0.7 and 0.9, while the Average Variance Extracted (AVE) exceeds the threshold of 0.5, meeting the standards established by Hair et al. (2017). Hence, the scale demonstrates internal consistency, reliability, and convergent validity, making it suitable for further analysis.

Table 2

The Results of the Reliability and Convergent Validity

Reliability		Convergent validity		Source
Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)	Outer loadings	
Profitability (Pro)				Issa (2017), Recommendations from experts and authors *
0.813	0.788	0.632	0.735 - 0.869	
Size (Siz)				Issa (2017), Recommendations from experts and authors *
0.830	0.832	0.587	0.729 - 0.875	
Growth opportunities for enterprises (Opp)				Shamil et al. (2014), Recommendations from experts and authors *
0.784	0.810	0.646	0.762 - 0.847	
The perspective of business owners (Per)				Shamil et al. (2014), Recommendations from experts and authors *
0.800	0.792	0.661	0.758 - 0.859	
Legal regulations (Leg)				Tauringana (2020), Recommendations from experts and authors *
0.796	0.808	0.629	0.739 - 0.851	
The sector of an enterprise (Sec)				Trinh and Tang (2019), Recommendations from experts and authors *
0.779	0.823	0.658	0.738 - 0.863	
Disclosure of ESG reports (Dis)				Recommendations from experts and authors *
0.822	0.835	0.599	0.801 - 0.883	

* *The recommendations of experts and the authors are based on the results of qualitative research (group discussions and in-depth interviews)*

Source. Authors' analysis

Table 3 shows that this study found the HTMT correlation index does not exceed the threshold of 0.85 and is less than the CR coefficient. So, the constructs achieved discriminant validity (Hair et al., 2017; Henseler et al., 2015).

Table 3

The Result of Discriminant Validity

Scales	Pro	Siz	Opp	Per	Leg	Sec	Dis
Pro							
Siz	0.749						
Opp	0.684	0.398					
Per	0.553	0.564	0.673				
Leg	0.616	0.386	0.687	0.701			
Sec	0.418	0.647	0.539	0.662	0.603		
Dis	0.555	0.449	0.514	0.474	0.710	0.499	

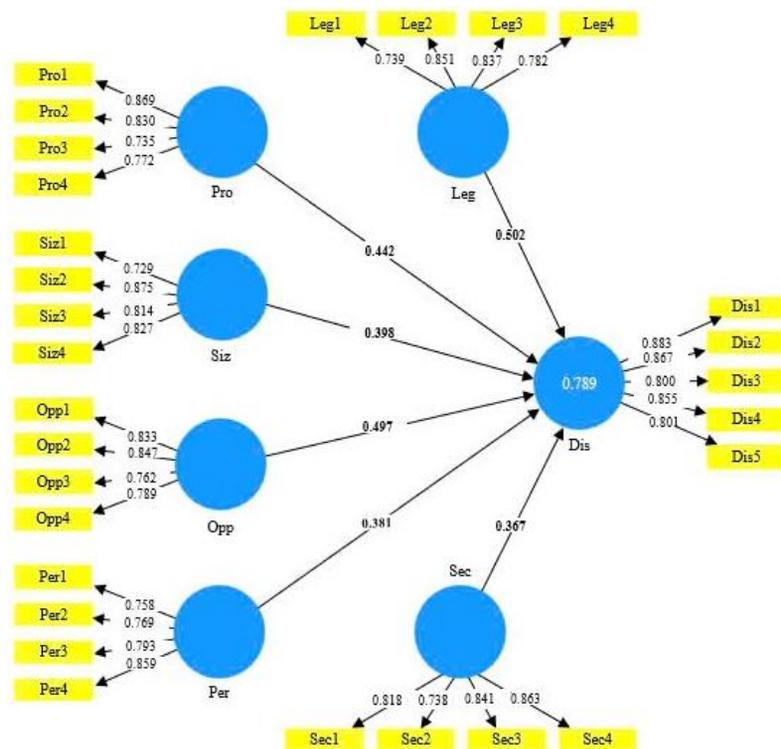
Source. Authors' analysis

4.2.2. Structural model analysis and hypothesis testing

By performing Bootstrapping with a sample size of 2,000 times to evaluate the structural model and obtain the following results:

Figure 2

PLS-SEM Structure Model



Source. Authors' analysis

The results in Table 4 show that the original sample and sample mean fall within the 95 percent confidence interval, ensuring the reliability of the model estimates. Hypotheses H1, H2, H3, H5, and H6 are accepted with a 5 percent significance level. However, hypothesis 4 (H4) is not statistically significant, as the significance level of the t-test is 0.127, which is below the critical value of 1.96, leading to its rejection. The regression coefficients for the accepted

hypotheses, all positive, demonstrate that the independent factors positively impact the dependent factor. This finding further supports the rejection of hypothesis 4. Among the factors, legal regulation exerts the highest influence, while the sector of an enterprise has the lowest effect on the disclosure of ESG reports of SMEs in Vietnam.

Table 4

Results of the Hypothesis Test

Hypothesis	Original sample	Sample mean	P values	Standard deviation	T statistics	Conclusion
H1	0.442	0.447	0.001	0.046	3.254**	Accepted
H2	0.398	0.396	0.001	0.045	4.769**	Accepted
H3	0.497	0.495	0.000	0.050	4.123***	Accepted
H4	0.381	0.255	0.067	0.051	0.127 ^(ns)	Rejected
H5	0.502	0.504	0.003	0.048	6.054**	Accepted
H6	0.367	0.370	0.000	0.045	5.432***	Accepted

*significant at $p < 0.05$, **significant at $p < 0.01$, ***significant at $p < 0.001$, ^{ns}no significant

Source. Authors' analysis

The results in Table 5 indicate that the VIF coefficient is lower than 5, so there is no multicollinearity, ensuring the reliability threshold when explaining independent factors with dependent factors (Hair et al., 2019). Furthermore, the f^2 coefficient ranges from 0.2 to 0.5, confirming that the independent factors have a directly impact on the dependent factor (Hair et al., 2019). Additionally, the adjusted R^2 coefficient is smaller than the R^2 coefficient and exceeds the threshold of 50 percent. This result reveals that the independent factors explain 78.9 percent of the variation of the dependent factor, and 21.1 percent represents errors from the system or external factors not included in the research model. The higher the R^2 coefficient, the better the model's predictive power (Hair et al., 2019). Finally, the Q^2 coefficient of 0.656 shows the strong prediction level of the structural model. In other words, the dependence factor in the proposed model meets the predictive requirements (Hair et al., 2019). Additionally, the SRMR coefficient of less than 0.09 indicates that the overall model is consistent across the two research locations, Hanoi and Ho Chi Minh City (Hair et al., 2016).

Table 5

Saturated Model Results

Hypothesis	VIF	f^2	Effect size
H1	3.294	0.289	Medium
H2	2.158	0.364	High
H3	3.706	0.341	Medium
H4	4.014	0.423	High
H5	2.440	0.373	High
H6	4.225	0.402	High

Source. Authors' analysis

5. Discussion and implications

5.1. Discussion

According to the findings, the disclosure of ESG reports by SMEs in Vietnam is influenced by factors including profitability, size, growth opportunities for enterprises, legal regulations, and the sector of the enterprise. This finding aligns with the conclusions of Dibia and Onwuchekwa (2015), Nguyen and Nguyen (2017), Shamil et al. (2014), Tauringana (2020), Trinh and Tang (2019). This is reasonable because transparency of information in ESG reports is essential for SMEs seeking to increase business profits. Additionally, when applying the agency theory, it can be affirmed that the increasing size of SMEs leads to a greater demand for external capital, which intensifies conflict of interest among shareholders, creditors, and managers, as well as potential costs. In this context, the voluntary disclosure of ESG reports serves as a tool to mitigate the costs associated with capital raising. Information about sustainable development also influences investors' decisions. Hence, enterprises disclose more ESG reports to attract capital and gain new growth opportunities. Moreover, Vietnam lacks a legal framework mandating SMEs to present and disclose ESG information separately, so enterprises are free to integrate sustainability-related content into their reporting. SMEs in environmentally sensitive sectors are more likely to disclose ESG reports.

More importantly, the unique contribution of this study lies in its finding that the perspective of the business owners does not affect the disclosure of ESG reports by SMEs in Vietnam, resulting in the rejection of hypothesis 4. This result contradicts the conclusion of Shamil et al. (2014) but aligns with Fathi (2013). The reasons are as follows: Firstly, many SME business owners in Vietnam are unaware of the essentials of ESG reporting or consider it a low priority. Secondly, SMEs often have limited financial and human resources. ESG reporting requires investments of time and money that they cannot afford or are unwilling to allocate. Thirdly, Vietnam's Eastern culture favors traditional governance values, discourages change, and emphasizes financial indicators over non-financial factors like ESG.

5.2. Implications

Legal regulations have the highest impact on the disclosure of ESG reports by SMEs in Vietnam. Hence, the government should establish a comprehensive legal framework for ESG reporting, including clear standards for report content. Simultaneously, the government and relevant authorities should provide detailed guidelines for businesses on implementing ESG reports. Additionally, SMEs should develop a comprehensive ESG strategy that includes specific goals and an action plan to achieve them. Furthermore, SMEs must organize employee training programs on the importance of ESG and relevant legal requirements, facilitating the implementation of ESG-related activities.

The study highlights that growth opportunities significantly influence the disclosure of ESG reports of SMEs in Vietnam and suggests that SMEs should seek access to investment funds and green finance or focus on developing environmentally friendly products and services, resulting in the public disclosure of extensive ESG-related data. Additionally, SMEs should also innovate socially and environmentally responsible production and management processes to generate valuable information for ESG reporting. Moreover, SMEs should increase their involvement in alliances and collaborate with ESG organizations to adopt best practices, thereby improving the quality and transparency of their ESG reporting.

Profitability is a significant driver of ESG reports disclosure among SMEs in Vietnam. SMEs must recognize that greater economic, social, and environmental transparency can enhance revenue and profitability. Enterprises should demonstrate their contributions to environmental sustainability, such as using environmental protection taxes to restore ecosystems and to society through charitable activities. More importantly, SMEs need to shape their profitability strategies by building strong brands that resonate with customers amidst today's intense competition.

Enterprise size also positively affects ESG report disclosure. SMEs should enhance market capitalization and scale by providing comprehensive information on their environmental and social initiatives, enabling stakeholders to effectively monitor their activities. Medium-sized enterprises may divide the ESG reporting process into stages or outsource it to specialized service providers to reduce costs while maintaining report quality. Meanwhile, small enterprises should focus on manageable ESG factors, such as energy-saving practices and community support, to ensure effective reporting.

Finally, the sector of an enterprise has a significant positive impact on the disclosure of ESG reports of SMEs in Vietnam. Manufacturing and industrial enterprises should focus on waste management, energy consumption, and pollution mitigation. Publicly disclosing data on emissions, water usage, and environmental mitigation measures is essential. Additionally, these enterprises should also obtain certifications like ISO 14001 or occupational safety certificates to affirm their ESG commitments. Service enterprises should focus on prioritizing developing products and services that reduce environmental impacts or improve society, such as energy management software, educational technology platforms, and green tourism products.

6. Conclusion, limitations, and future research

This study aims to explore the determinants influencing the disclosure of ESG reports by SMEs in Vietnam. The results indicate that profitability, size, growth opportunities for enterprises, legal regulations, and the sector of an enterprise have a positive and significant impact on ESG reports disclosure by SMEs.

Although the study has achieved notable results, it is not without limitations. Firstly, it surveyed only 217 SMEs in two cities, Hanoi and Ho Chi Minh City, leading to potential differences in ESG reporting practices between large enterprises and across localities. Secondly, there may be other internal and external factors affecting ESG reports disclosure, such as socio-economic conditions, national cultural strategies, and corporate culture, among others. Future research could expand the survey sample and geographic coverage, as well as investigate additional factors to achieve more comprehensive findings.

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