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The influence of implementing sustainable accounting on business performance in garment firms

Nguyen Thi Thuy Nga[a] ✉ | **Nguyen Thi Thanh Hoa**[b] | **Nguyen Thi Thanh Mai**[c] | **Nguyen Thi Xuan Hong**[d] | **Dang Thi Bac**[e]

[a]University of Labour and Social Affairs, Vietnam.
[b]College of Economics, Vinh University, Vietnam.
[c]Banking Academy of Vietnam, Hanoi, Vietnam.
[d]Hanoi University of Industry, Hanoi, Vietnam.
[e]Hanoi University of Business and Technology, Vietnam.

Abstract This study investigates the impact of sustainable accounting implementation (SAI) on the business performance (BP) of garment enterprises in Vietnam, an export-oriented and labor-intensive industry facing increasing pressure from global sustainability standards. Drawing on sustainability accounting and management control theories, the study conceptualizes sustainable accounting implementation as a multidimensional construct comprising managerial-oriented (SAI_M), information-oriented (SAI_I), and risk- and compliance-oriented (SAI_R) practices. The study employs a quantitative research approach using survey data collected from Vietnamese garment enterprises. Data were analyzed using multiple linear regression techniques to examine the relationships between sustainable accounting implementation and business performance. Business performance was measured using perceptual indicators reflecting operational efficiency, cost control, quality improvement, compliance capability, and risk reduction. The empirical results reveal that all three dimensions of sustainable accounting implementation have a positive and statistically significant impact on business performance. Among them, managerial-oriented sustainable accounting practices exert the strongest influence on performance, followed by information-oriented practices and risk-oriented practices. These findings suggest that integrating sustainability considerations into internal management accounting systems plays a critical role in enhancing operational performance, while sustainability information disclosure and compliance-oriented accounting further strengthen firms' relationships with stakeholders and improve organizational resilience. This study contributes to the sustainability accounting literature by providing empirical evidence from an emerging economy context, where sustainable accounting adoption remains limited. Practically, the findings offer important implications for managers and policymakers by highlighting sustainable accounting as a strategic managerial tool rather than merely a compliance mechanism. The study also provides a foundation for future research examining the performance implications of sustainable accounting across industries and institutional settings.

Keywords: accounting, sustainable accounting, business performance, garment firms, finance, environmental social governance

1. Introduction

With sustainable development becoming a central goal of the global economy, sustainable accounting is increasingly seen as an important tool for firms to measure, record, and fully disclose the economic, social, and environmental impacts of their production and business activities. Unlike traditional accounting, which primarily focuses on short-term financial profits, sustainable accounting aims to help firms create long-term value for stakeholders, thereby contributing to improved overall operational efficiency and competitiveness.

The Vietnamese textile and garment industry is one of the key export sectors, making a significant contribution to economic growth and job creation. However, it also faces considerable pressure related to resource utilization, environmental emissions, labor conditions, and social responsibility. In the context of increasingly stringent environmental, social, and governance (ESG) standards in major export markets such as the EU and the US, implementing sustainable accounting has become essential for Vietnamese garment firms to maintain market share and improve business performance.

Recent empirical evidence suggests that implementing sustainable accounting and environmental accounting not only signifies compliance but can also improve the business performance of manufacturing businesses. For example, Nguyen's

(2022) study on a sample of 426 textile and garment businesses in Vietnam showed that environmental accounting impacts business performance and is influenced by factors such as size, financial resources, leadership awareness, and legal regulations. Furthermore, in the context of global supply chains increasingly valuing ESG, Do and Le (2023) noted that ESG practices positively influenced the business performance of Vietnamese textile and garment firms (2018–2021) through mediating mechanisms such as reputation, corporate culture, and customer loyalty. From a management accounting perspective, Do and Le (2023) also provides evidence from a survey of 356 garment firms regarding environmental cost management accounting supporting cost control and thereby positively impacting financial performance, reinforcing the argument that sustainable accounting can become a value-creating management capability for Vietnamese garment firms during the green transition period. However, in Vietnam, especially in the textile and garment sector, empirical studies are still relatively limited and inconsistent in their results. Many firms still view sustainable accounting as a compliance cost rather than a strategic management tool. Therefore, a systematic study of the impact of implementing sustainable accounting on the business performance of Vietnamese garment firms is necessary both academically and practically.

The research results not only contribute empirical evidence to the theory of sustainable accounting and management but also provide a scientific basis for garment business managers to integrate sustainable accounting into their management systems. At the same time, the research is also significant for state management agencies in improving the policy framework to promote sustainable development of the Vietnamese textile and garment industry.

Aims and objectives include the following: The overall objective of this study is to assess the impact of implementing sustainable accounting practices on the business performance of garment firms in Vietnam. The specific objectives are to analyze the level of sustainable accounting implementation in Vietnamese garment firms and to measure and evaluate the impact of sustainable accounting implementation on business performance.

This study will answer the following research questions:

1. To what extent is sustainable accounting implemented in Vietnamese garment firms?

2. How does the implementation of sustainable accounting affect the business performance of garment firms? Which aspects of sustainable accounting have the strongest impact on business performance?

While prior studies have examined environmental accounting or ESG disclosure and business performance, most empirical evidence has been generated in developed economies or cross-industry settings (Eccles et al., 2014; Sardi et al., 2020). However, limited research has explicitly conceptualized sustainable accounting implementation as a multidimensional managerial system embedded in internal management control processes and tested its performance implications in export-oriented, labor-intensive industries within emerging economies.

Furthermore, existing studies often treat sustainability accounting as a reporting or compliance mechanism rather than as an integrated management control capability that influences operational performance (Burritt & Schaltegger, 2010; Quesado et al., 2024). This creates a theoretical gap concerning how different dimensions of sustainable accounting (measurement, integration, and reporting) interact with management control systems to generate performance outcomes in contexts characterized by institutional transition and global supply chain pressures.

The Vietnamese garment industry provides a distinctive empirical setting due to its deep integration into global ESG-driven supply chains, cost-based competitive structure, and evolving regulatory environment. By focusing on this context, the present study contributes novel evidence regarding the strategic role of sustainable accounting in emerging markets, thereby extending sustainability accounting and management control literature.

2. Literature review & hypotheses

2.1. Theoretical basis

2.1.1. Sustainability Accounting Theory

Sustainability Accounting Theory extends traditional accounting by incorporating environmental, social, and economic dimensions into accounting measurement, reporting, and decision-making processes. Unlike conventional financial accounting, which focuses primarily on short-term financial outcomes, sustainability accounting emphasizes the long-term impacts of organizational activities on multiple stakeholders, including employees, communities, and the natural environment (Gray, 2010; Burritt & Schaltegger, 2010). The theory argues that accounting systems should capture not only economic value creation but also social and environmental costs and benefits in order to provide more comprehensive and decision-relevant information.

From a theoretical perspective, sustainability accounting serves as a mechanism to enhance organizational transparency, accountability, and legitimacy. By systematically measuring and reporting sustainability-related information, firms can reduce information asymmetry, improve stakeholder trust, and align business operations with sustainable development goals (Larrinaga et al., 2020). Sustainability accounting therefore functions not only as a reporting tool but also as a strategic instrument that supports sustainable value creation.

In the context of this study, Sustainability Accounting Theory provides the conceptual foundation for examining how the implementation of sustainable accounting practices contributes to improved business performance in Vietnamese garment enterprises. The three dimensions of sustainable accounting implementation—managerial-oriented, information-oriented, and risk-oriented practices—reflect the core principles of sustainability accounting by integrating sustainability considerations into internal decision-making, external information disclosure, and compliance management.

Applying this theory to the garment industry, which faces significant environmental and social pressures from global supply chains, sustainability accounting enables firms to monitor resource use, labor practices, and compliance risks more effectively. Consequently, firms that adopt sustainability accounting practices are better positioned to enhance operational efficiency, meet stakeholder expectations, and achieve superior business performance, supporting the central hypotheses of this study.

2.1.2. Management Control Theory

Management Control Theory focuses on how organizations design and use control systems to ensure that employee behaviors and organizational activities are aligned with strategic objectives (Anthony & Govindarajan, 2007). Management control systems (MCS) include formal mechanisms such as budgeting, performance measurement, cost control, and incentive systems, as well as informal controls related to organizational culture and norms (Henri, 2006). The theory emphasizes that effective control systems provide managers with timely, relevant, and reliable information to support planning, coordination, and performance evaluation.

Contemporary management control theory has evolved to recognize that control systems must be adaptive and multidimensional, particularly in dynamic and uncertain environments. Rather than focusing solely on financial metrics, modern MCS increasingly incorporate non-financial and sustainability-related indicators to support strategic decision-making and long-term performance (Simons, 1995; Henri, 2006).

Management Control Theory is particularly relevant to this study as it explains how sustainable accounting practices can be embedded into management control systems to enhance business performance. Managerial-oriented sustainable accounting practices, such as sustainability-related cost measurement and performance indicators, directly support planning, monitoring, and control functions within garment enterprises. These practices enable managers to identify inefficiencies, reduce waste, and align operational activities with sustainability objectives.

In addition, information-oriented and risk-oriented sustainable accounting practices strengthen management control by improving information quality and supporting proactive risk management. By integrating sustainability data into control systems, garment enterprises can better respond to regulatory changes, buyer audits, and environmental or social risks. From a management control perspective, sustainable accounting thus functions as an extended control mechanism that enhances organizational effectiveness and performance, consistent with the empirical findings of this study.

Business performance is measured using a perceptual scale reflecting firms' improvements in productivity, cost efficiency, quality, compliance, and risk reduction. This approach has been widely adopted in sustainability accounting and management accounting research, particularly in contexts where objective financial data are limited (Henri, 2006; Gadenne et al., 2012). Prior studies suggest that perceptual measures of operational performance are reliable proxies for actual performance and are suitable for examining the performance implications of sustainability practices (Zhu & Sarkis, 2004; Asiaei & Bontis, 2019).

2.2. Research Hypotheses

Theoretically, sustainability accounting implementation is often viewed as a measurement, control, and reporting system that helps firms (i) reduce information asymmetry, (ii) improve decision-making quality, and (iii) strengthen the legitimacy and trust of stakeholders. Empirical evidence shows that firms that prioritize sustainability tend to improve their governance processes and long-term performance, such as efficiency, risk management, and value creation (Eccles et al., 2014).

In emerging market contexts like ASEAN, ESG practices and sustainable transparency have been shown to be significantly linked to financial performance and competitiveness, although the extent of the impact may depend on the industry and institutional context (Tripopsakul, 2025).

For Vietnam's textile and garment industry, increasing ESG pressure from supply chains and export markets is driving the need for more pragmatic sustainability measurement and reporting to ensure compliance, secure orders, reduce risks, and improve operational standards (Pham, 2025).

Implementing sustainable accounting (SAI) refers to the extent to which sustainability issues are implemented, measured, managed, and reported.

Sustainable practices, or sustainable ESG and transparency practices, can improve governance capacity, innovation, and financial performance; in ASEAN, the ESG–financial performance link has been noted significantly (Eccles et al., 2014).

Research on sustainable governance emphasizes the role of management control systems (MCS) in integrating sustainability into strategy and operations, thereby improving implementation effectiveness (Quesado et al., 2024).

Based on the above analysis, implementing sustainable accounting practices is measured using a reflective scale approach, which comprises three components: measurement, integration, and reporting; we propose the following research hypothesis.

H1a: Implementing sustainable accounting_measurement has a positive impact on the business performance of Vietnamese garment firms.

H1b: Implementing sustainable accounting_integration has a positive impact on the business performance of Vietnamese garment firms.

H1c: Implementing sustainable accounting_reporting/disclosure has a positive impact on the business performance of Vietnamese garment firms.

3. Methodology

This study adopts a quantitative research approach to examine the impact of sustainable accounting implementation (SAI) on the business performance (BP) of garment enterprises in Vietnam. A quantitative design is appropriate, as it allows the empirical testing of hypothesized relationships among latent constructs and enables the assessment of the magnitude and statistical significance of each effect (Hair et al., 2019). The research framework is grounded in sustainability accounting and management control theories, which posit that the systematic integration of sustainability-related information into accounting practices enhances organizational performance.

3.1. Data Collection and Sample

Data were collected from garment enterprises operating in major textile clusters in Northern and Southern Vietnam. Firms were selected based on the following criteria: (1) active production operations during the study period; (2) participation in export markets; and (3) availability of accounting personnel or managerial staff involved in sustainability-related activities.

A total of 400 questionnaires were distributed via email and direct contact. After screening for completeness and consistency, 325 valid responses were retained for analysis, resulting in a usable response rate of 81.25%. Respondents included managers (43.7%) and staff (56.3%), ensuring that the collected data reflected informed managerial perceptions.

The sample size exceeds the minimum recommended threshold for multivariate regression analysis and factor analysis (Hair et al., 2019), thereby ensuring statistical robustness and reliability.

3.2. Measurement of Variables

The measurement scales used in this study were adapted from prior validated studies and adjusted to reflect the context of Vietnamese garment enterprises. Sustainable accounting implementation (SAI) was operationalized as a multidimensional construct comprising managerial-oriented practices (SAI_M), information-oriented practices (SAI_I), and risk- and compliance-oriented practices (SAI_R). Business performance (BP) was measured using perceptual indicators capturing improvements in operational efficiency, cost control, quality, compliance capability, and risk reduction. All measurement items were assessed using a five-point Likert scale, ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). The use of perceptual performance measures is widely accepted in sustainability accounting and management research, particularly in contexts where objective financial data are difficult to obtain (Henri, 2006; Gadenne et al., 2012).

3.3. Data Analysis Techniques

The collected data were analyzed using statistical software following a multi-step procedure. First, reliability analysis was conducted using Cronbach’s alpha to assess the internal consistency of the measurement scales. Second, exploratory factor analysis (EFA) was employed to validate the factor structure and ensure construct validity. Finally, multiple linear regression analysis was used to test the proposed hypotheses and examine the impact of sustainable accounting implementation on business performance. Diagnostic tests, including multicollinearity and model fit assessments, were performed to ensure that the regression assumptions were not violated (Hair et al., 2009; Hoang & Trong, 2008).

3.4. Research Model and Estimation

The empirical model specifies business performance as a function of the three dimensions of sustainable accounting implementation. Standardized regression coefficients were used to compare the relative importance of each explanatory variable. This approach enables a clear interpretation of how different aspects of sustainable accounting contribute to performance improvement and provides robust empirical evidence for hypothesis testing. The methodological design thus ensures both internal validity and analytical rigor, supporting meaningful conclusions regarding the role of sustainable accounting in enhancing the performance of Vietnamese garment enterprises (Table 1 and Figure 1).

4. Results

4.1. Cronbach’s Alpha

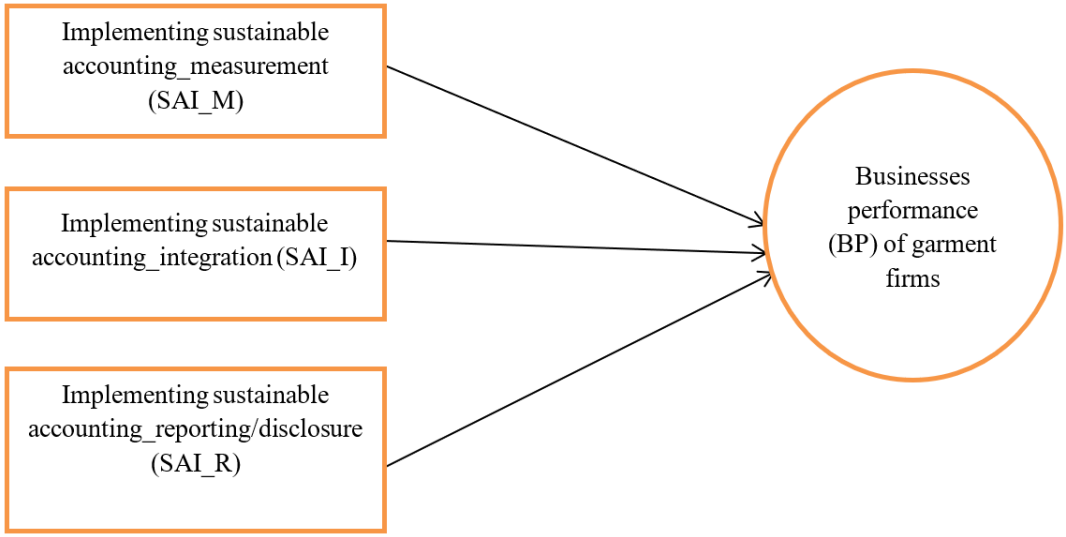

Figure 1 Research model.

Table 1 Scales of variables in the research model.

Code	Description	Source
Implementing Sustainable Accounting_Measurement (SAI_M)		
SAI_M1	Firms regularly measure and monitor environmental and social indicators related to their operations, such as energy, water, waste, and workplace safety.	GRI
SAI_M2	Firms record or estimate environmental and social costs to support internal controls and decision-making.	Quesado et al. (2024)
SAI_M3	Firms have sustainable goals and standards linked to performance monitoring.	Expert opinion
Thực hiện kế toán bền vững Implementing Sustainable Accounting_Integration (SAI_I)		
SAI_I1	Sustainable information is integrated into budgeting and production-quality-cost planning.	Quesado et al. (2024)
SAI_I2	Sustainable KPIs are used in departmental evaluation and performance management.	Quesado et al. (2024)
SAI_I3	The leadership team uses sustainable information in investment decisions and process improvements.	Expert opinion
Implementing Sustainable Accounting _Reporting (SAI_R)		
SAI_R1	Firms prepare sustainability reports or disclose sustainability information in accordance with the framework guidelines.	GRI
SAI_R2	Firms disclose sustainable risk and opportunity information with financial impact.	ISSB (2023)
SAI_R3	Firms publish climate information and climate risk response strategies.	ISSB (2023)
Business performance (BP)		
BP1	Labor productivity and production processes have improved in the last 2 to 3 years.	Henri (2006); Gadenne et al. (2012)
BP2	Error rates, returns, or waste are reduced.	Zhu & Sarkis (2004); López-Gamero et al. (2009)
BP3	Operating costs, including electricity, water, and raw materials, are better controlled.	Henri (2006); Asiaei & Bontis (2019)
BP4	The ability to meet customer requirements or orders, such as compliance and buyer audits, is improved.	Gadenne et al. (2012); Sardi et al. (2020)
BP5	Compliance risks and order disruptions are reduced.	Larrinaga et al. (2020); Burritt & Schaltegger (2010)

Table 2 show that, The Cronbach's Alpha coefficient of the Implementing Sustainable Accounting Accounting_Measurement (SAI_M) factor is 0.893, a very high level, indicating very good reliability. The indicators have a significant influence on the overall reliability, but all contribute to keeping the reliability high.

The Cronbach's Alpha coefficient of the Implementing Sustainable Accounting_Integration (SAI_I) factor is 0.891, indicating that this scale has a very high reliability. All indicators have a positive effect on the overall reliability.

The Cronbach's Alpha coefficient of the Implementing Sustainable Accounting_Reporting (SAI_R) factor is 0.840, indicating that this scale has a high reliability. All indicators have a positive effect on the overall reliability.

The Cronbach's Alpha coefficient of business performance (BP) is 0.853, indicating that this scale has a very high reliability. All indicators have a positive effect on the overall reliability.

Thus, the designed scales are capable of accurately and reliably measuring the research aspects (Hoang & Trong, 2008; Hair et al., 2009).

Table 2 Results of Cronbach's alpha testing of attributes and item-total statistics.

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Measurement (SAI_M): α = 0.893				
SAI_M1	7.11	3.047	.747	.886
SAI_M2	7.00	2.633	.808	.833
SAI_M3	7.17	2.561	.823	.819
Integration (SAI_I): α = 0.891				
SAI_I1	6.08	1.516	.752	.876
SAI_I2	5.98	1.503	.827	.810
SAI_I3	5.99	1.525	.782	.848
Reporting (SAI_R): α = 0.840				
SAI_R1	6.25	1.967	.665	.817
SAI_R2	6.22	2.089	.760	.736
SAI_R3	6.09	1.851	.701	.784
Business performance (BP): α = 0.853				
BP1	13.02	7.250	.766	.802
BP2	13.19	6.554	.695	.817
BP3	13.06	7.154	.646	.828
BP4	13.72	7.269	.668	.823
BP5	13.85	7.453	.580	.845

Source: Prepared by the authors (2025) and SPSS software.

4.2. EFA analysis

After checking the reliability of the factors through Cronbach's alpha coefficient analysis, the independent variables, including Implementing Sustainable Accounting_Measurement (SAI_M), Implementing Sustainable Accounting_Integration (SAI_I), and Implementing Sustainable Accounting_Reporting (SAI_R), were measured by 9 observed variables (scales). Factor analysis was used to assess the convergence of observed variables according to components.

The KMO and Bartlett's tests in factor analysis showed sig = 0.000; the KMO coefficient was 0.787 (1.0>0.787>0.5). This result indicated that the observed variables in the population were correlated with each other, and factor analysis (EFA) was appropriate (see Table 3) (Hoang & Trong, 2008; Hair et al., 2009).

Table 3 KMO and Bartlett's Test.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.787
Bartlett's Test of Sphericity	Approx. Chi-Square	1706.266
	Df	36
	Sig.	.000

Source: Prepared by the authors (2025) and SPSS software.

The EFA analysis results show that the extracted variance is 80.733%. Thus, the extracted variance meets the requirements (>50%).

From the results of the factor analysis of the independent scales, it can be seen that the model with 3 factors is suitable for the next steps.

4.3. Correlation Analysis

The correlation matrix in table 4 presents the Pearson correlation coefficients (r) between the independent variables and the dependent variable. The coefficient is considered significant if the p-value (sig. (2-tailed)) is less than or equal to 0.05. It can be seen that all VIFs are <10, so there is no multicollinearity phenomenon—the phenomenon of independent variables that are closely correlated with each other, thereby increasing the standard deviation of the regression coefficients and reducing the t-statistic value of the significance test (Hoang & Trong, 2008; Hair et al., 2009).

In addition, the analysis results also indicate that there is a correlation between the independent variables—observations of Implementing Sustainable Accounting_Measurement (SAI_M), Implementing Sustainable Accounting_Integration (SAI_I), and Implementing Sustainable Accounting_Reporting (SAI_R)—and the dependent variable of Business Performance (BP). Implementing Sustainable Accounting_Measurement (SAI_M) has a strong correlation with Business Performance (BP) (r=0.518; p<0.01), Implementing Sustainable Accounting_Integration (SAI_I) has a strong

correlation with Business Performance (BP) (r=0.445; p<0.01), and Implementing Sustainable Accounting_Reporting (SAI_R) has a quite strong correlation with Business Performance (BP) (r=0.377; p<0.01).

Overall, factors such as Implementing Sustainable Accounting_Measurement (SAI_M), Implementing Sustainable Accounting_Integration (SAI_I), and Implementing Sustainable Accounting_Reporting (SAI_R) all have a significant impact on Business performance (BP).

Table 4 The correlation between the correlation between Implementing Sustainable Accounting_Measurement (SAI_M), Implementing Sustainable Accounting_Integration (SAI_I), and Implementing Sustainable Accounting_Reporting (SAI_R) and Business performance (BP).

		BP
SAI_M	Pearson Correlation	0.518**
	Sig. (2-tailed)	0.00
	N	325
SAI_I	Pearson Correlation	0.445**
	Sig. (2-tailed)	0.00
	N	325
SAI_R	Pearson Correlation	0.377**
	Sig. (2-tailed)	0.00
	N	325
BP	Pearson Correlation	1
	Sig. (2-tailed)	
	N	325

Source: Prepared by the authors (2025) and SPSS software.

4.4. Linear Regression

The multiple linear regression analysis method with all variables entered at the same time (enter) showed that the regression model was suitable for testing the theoretical model (sig = 0.000) and explained 38.3% of the difference in the dependent variable (adjusted R^2 = 0.383) (see Table 5, table 6, and Table 7).

Table 5 Model Summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.624[a]	.389	.383	.51519	1.753

Source: Prepared by the authors (2025) and SPSS software.
a. Predictors: (Constant), Reporting, Integration, Measurement.
b. Dependent Variable: Business performance.

Table 6 ANOVA.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	54.192	3	18.064	68.057	.000[b]
	Residual	85.201	321	.265		
	Total	139.392	324			

Source: Prepared by the authors (2025) and SPSS software.
a. Dependent Variable: Business performance.
b. Predictors: (Constant), Reporting, Integration, Measurement.

This regression model is statistically significant (Sig < 0.05) (see table 6), indicating that factors such as Implementing Sustainable Accounting_Measurement (SAI_M), Implementing Sustainable Accounting_Integration (SAI_I), and Implementing Sustainable Accounting_Reporting (SAI_R) all have significant effects on Business Performance (BP). The high F coefficient and low p value (tolerance) indicate that the model has a good ability to explain the variation in business performance (BP) (Hoang & Trong, 2008; Hair et al., 2009).

Table 7 Regression model.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	Measurement	.282	.040	.347	7.105	.000		
	Integration	.325	.051	.297	6.411	.000	.797	1.255
	Reporting	.195	.045	.204	4.357	.000	.889	1.125
	Measurement	.282	.040	.347	7.105	.000	.870	1.149

Source: Prepared by the authors (2025) and SPSS software.

The results shown in table 5, table 6 and table 7 also show:

Testing for multicollinearity: The variance inflation factor (VIF) index according to Hair et al. (2009) suggests that a VIF threshold of 10 or more will result in strong multicollinearity. According to the table above, the VIF coefficients of the

independent variables are all less than 10, so the data does not violate the multicollinearity assumption. Thus, the linear regression model built according to the above equation does not violate the necessary assumptions in linear regression (Hoang & Trong, 2008; Hair et al., 2009).

The Durbin–Watson coefficient is used to test the correlation of the residuals, showing that the model does not violate the multiple regression method because the Durbin–Watson value achieved is 1.753 (between 1 and 3). In other words, the model does not have the phenomenon of correlation of the residuals (Hoang & Trong, 2008; Hair et al., 2009).

ANOVA test results with significance level (Sig.) < 0.000 show that the constructed multiple linear regression model is suitable for the data set and can be used.

The coefficient R^2 (R Square) = 0.389; this means that 38.9% of the variation in business performance (BP) will be explained by the factors that are the independent variables selected to be included in the model; the remaining 61.1% is due to variables outside the model and random errors (Hoang & Trong, 2008; Hair et al., 2009).

The results of the research model show that the independent variables SAI_M, SAI_I, and SAI_R are all statistically significant (due to Sig. < 0.05). The variables SAI_M, SAI_I, and SAI_R have a positive influence on BP (Hoang & Trong, 2008; Hair et al., 2009).

The standardized regression model is as follows:

BP = 0.347* SAI_M + 0.297* SAI_I + 0.204* SAI_R+ ε

Next, Table 8 presents the results of testing the research hypotheses.

Table 8 Results of testing the research hypotheses.

No	Hypotheses	Test results	Trends of influence
1	H1a	Accept	+
2	H1b	Accept	+
3	H1c	Accept	+

5. Discussion

The empirical results provide robust evidence that sustainable accounting implementation (SAI) exerts a positive and statistically significant impact on business performance (BP) in Vietnamese garment enterprises. All three dimensions of sustainable accounting implementation—managerial-oriented sustainable accounting (SAI_M), information-oriented sustainable accounting (SAI_I), and risk- and compliance-oriented sustainable accounting (SAI_R)—are found to positively influence business performance, thereby confirming the multidimensional role of sustainable accounting beyond traditional financial reporting.

Among the three dimensions, SAI_M demonstrates the strongest effect on business performance (β = 0.347). This finding highlights that sustainable accounting practices embedded in internal management processes, such as cost control, performance measurement, and operational decision-making, are particularly critical for improving productivity and efficiency in garment enterprises. Given the labor-intensive nature of the garment industry and its strong dependence on cost competitiveness, the integration of sustainability-related information into management accounting systems enables firms to optimize resource utilization, reduce operational inefficiencies, and enhance overall performance. This result is consistent with prior studies suggesting that sustainability-oriented management accounting enhances internal decision quality and operational outcomes (Henri, 2006; Burritt & Schaltegger, 2010).

The second most influential factor, SAI_I (β = 0.297), reflects the importance of sustainable accounting information disclosure and communication to external stakeholders. In the context of Vietnam's garment industry—where firms are deeply embedded in global supply chains—transparent and reliable sustainability-related accounting information plays a crucial role in meeting buyers' requirements, passing social and environmental audits, and maintaining long-term contractual relationships. This finding aligns with previous research indicating that sustainability accounting information improves stakeholder trust, reduces information asymmetry, and enhances operational continuity (Larrinaga et al., 2020; Sardi et al., 2020). Compared to studies conducted in developed economies, the relatively strong impact of SAI_I in this study underscores the growing relevance of sustainability disclosure in emerging markets, particularly in export-oriented industries.

Although SAI_R (β = 0.204) exhibits the smallest coefficient among the three dimensions, its positive and significant effect suggests that risk management and regulatory compliance-oriented sustainable accounting still play an important role in improving business performance. Sustainable accounting practices related to compliance with environmental regulations, labor standards, and international sustainability frameworks help firms anticipate regulatory changes, mitigate compliance-related risks, and avoid disruptions caused by sanctions or order cancellations. This finding supports the argument that sustainable accounting contributes not only to operational efficiency but also to organizational resilience and long-term stability (Burritt & Schaltegger, 2010; Larrinaga et al., 2020).

Rather than merely confirming positive associations, the findings suggest that sustainable accounting operates as an extended management control mechanism that enhances strategic alignment and operational efficiency. In line with Management Control Theory (Simons, 1995; Henri, 2006), embedding sustainability metrics into internal control systems

strengthens strategic feedback loops and improves decision-making quality. This finding advances prior sustainability accounting literature by demonstrating that performance gains arise primarily when sustainability accounting is internalized within management systems rather than treated as external disclosure alone.

Compared with evidence from developed markets where disclosure-oriented sustainability practices often dominate performance outcomes (Larrinaga et al., 2020), this study reveals that managerial-oriented sustainable accounting exerts the strongest influence in an emerging economy context. This suggests that in resource-constrained environments, operational efficiency and cost optimization remain central mechanisms through which sustainability generates value.

Furthermore, the relatively moderate explanatory power (Adjusted R^2 = 0.383) indicates that while sustainable accounting contributes meaningfully to performance, other institutional and competitive factors also shape business outcomes. This aligns with recent emerging-market research emphasizing contextual contingencies in sustainability-performance relationships (Tripopsakul, 2025).

Overall, the findings suggest that sustainable accounting implementation should be viewed as a strategic managerial tool rather than a symbolic or purely compliance-driven activity. Sustainability information disclosure and risk-oriented practices reinforce these benefits by strengthening stakeholder relationships and safeguarding operational continuity. This integrated perspective contributes to the literature by providing empirical evidence from a developing country context, where sustainability accounting is still at an early stage of adoption.

It should be acknowledged that business performance was measured using perceptual indicators. Although perceptual measures are widely accepted and have been validated in prior sustainability and management accounting research (Henri, 2006; Asiaei & Bontis, 2019), reliance on self-reported assessments may introduce response bias. This methodological choice reflects data accessibility constraints in emerging markets but should be considered when interpreting the magnitude of effects.

6. Policy and managerial implications

From a managerial perspective, garment enterprises should prioritize the integration of sustainable accounting into management accounting systems, including budgeting, cost analysis, and performance evaluation. Firms should develop sustainability-related key performance indicators (KPIs) that capture environmental, social, and economic dimensions and use them as part of routine managerial decision-making processes.

From an industry and policy perspective, regulatory authorities and professional accounting bodies should issue clearer guidelines and frameworks to support the adoption of sustainable accounting practices, particularly for small and medium-sized garment enterprises. Training programs and technical assistance should be provided to enhance firms' capacity to collect, analyze, and use sustainability-related accounting information effectively.

From a management control perspective, firms should redesign their management accounting systems to incorporate sustainability-based KPIs aligned with strategic objectives (Henri, 2006). This integration ensures that sustainability initiatives are not symbolic but embedded into operational decision-making processes.

Policymakers should facilitate capacity-building programs that enhance sustainability accounting competencies among accounting professionals. Institutional support mechanisms, including ESG training and standardized reporting frameworks, can accelerate the transition from compliance-driven reporting to strategic sustainability management.

Moreover, policymakers should encourage greater alignment between sustainable accounting practices and international sustainability standards (e.g., ESG frameworks), thereby helping Vietnamese garment enterprises strengthen their position in global supply chains and enhance their long-term competitiveness.

7. Conclusions

This study investigates the impact of sustainable accounting implementation on the business performance of Vietnamese garment enterprises and provides empirical evidence that sustainable accounting positively contributes to performance improvement. The results indicate that all three dimensions of sustainable accounting implementation—managerial, informational, and risk-oriented—significantly enhance business performance, with managerial-oriented practices exerting the strongest influence.

The findings confirm that sustainable accounting is not merely a reporting or compliance mechanism but a value-creating managerial approach that supports operational efficiency, stakeholder engagement, and risk management. By empirically validating the performance implications of sustainable accounting in an export-oriented and labor-intensive industry, this study extends the sustainability accounting literature to the context of emerging economies and offers insights into how sustainability practices can be leveraged to improve business performance.

Despite its contributions, this study has several limitations. First, the research relies primarily on perceptual measures of business performance, which may be subject to respondent bias. Although perceptual indicators are widely accepted in sustainability and management accounting research, future studies could incorporate objective financial and operational data to strengthen the robustness of the findings.

Second, this study focuses exclusively on the garment industry in Vietnam, which may limit the generalizability of the results. Future research could extend the analysis to other manufacturing sectors or conduct cross-country comparisons to examine whether the performance effects of sustainable accounting differ across institutional and regulatory contexts.

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8. Declarations

8.1. Ethical considerations

The authors affirm that they have obtained consent from participants in research articles utilizing the questionnaire.

8.2. Use of artificial intelligence (AI)

The authors declare that the generative artificial intelligence (AI) tool Grammarly was used exclusively for language editing and grammatical improvement. The use of AI was limited to enhancing clarity and linguistic accuracy and did not affect the manuscript's scientific content, study design, data analysis, data interpretation, results, or conclusions. The authors retain full responsibility for the content of this article.

8.3. Conflict of Interest

The authors declare no conflicts of interest.

8.4. Funding

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