

Factors Affecting the Application of Green Accounting in Vietnamese Small and Medium-Sized Enterprises

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Abstract

In the current context, sustainable development has become a common trend among countries worldwide. For businesses, green accounting is an important financial management tool that enables organizations to monitor and report environmental-related costs, thereby optimizing expenses, increasing profits, enhancing social responsibility, and promoting sustainable development. In Vietnam, the number of small and medium-sized enterprises (SMEs) has been increasing rapidly. However, this rapid growth has also led to negative environmental impacts.

This study aims to examine the factors influencing the adoption of green accounting in Vietnamese SMEs. The research applies a mixed-methods approach, combining qualitative methods with quantitative analyses using reliability testing (Cronbach's Alpha), exploratory factor analysis (EFA), correlation analysis, and linear regression modeling in SPSS 26. The results indicate that six factors influence the adoption of green accounting in Vietnamese SMEs, including: legal regulations, social trends, stakeholder pressure, managerial awareness, advanced technology, and the competency level of accounting staff. This research provides a foundation for proposing recommendations to promote the adoption of green accounting among Vietnamese SMEs.

Keywords: green accounting, sustainable development, Vietnamese small and medium-sized enterprises (SMEs),

1. Introduction

In the current context, sustainable development has become a global trend embraced by all nations. Faced with challenges such as climate change, resource depletion, and environmental pollution, most countries have formulated and implemented strategies for "greening" their economies (Duong, 2024). This is reflected through various specific policies and tools, such as promoting the green growth model that links economic growth with environmental protection; developing green supply chains; and adopting green accounting to enhance transparency regarding environmental impacts in business and production activities.

Green accounting is a financial management tool that focuses on recording, monitoring, and reporting environmental-related costs within a company's business performance, as well as measuring the enterprise's impact on ecosystems, natural resources, and the environment (Ntalamia, 2017). The purpose of green accounting is to help organizations manage their environmental goals and move toward sustainable development. In addition, the implementation of green accounting contributes to cost savings and creates opportunities for businesses to invest in modern facilities, machinery, and equipment to produce environmentally friendly products. As a result, enterprises can establish competitive advantages, improve their image with stakeholders, enhance their reputation and position in the market.

At present, the number of small and medium-sized enterprises (SMEs) in Vietnam has been continuously increasing over the years, accounting for about 98% of all active enterprises nationwide (Nguyen, Hoang & Nguyen, 2018). SMEs are one of the key components of the market economy, creating employment opportunities for a large number of workers and contributing significantly to GDP growth. However, along with their development, these enterprises have also caused negative impacts on the environment.

According to Ratulangi, Pangemanan & Tirayoh (2018), the implementation of green accounting provides substantial benefits by delivering comprehensive and timely information to managers, thereby supporting strategic decision-making aimed at minimizing environmental costs. Green accounting places a particular emphasis on environmental issues by broadening the accounting scope beyond traditional economic and financial dimensions. Through the application of green accounting, enterprises are able to anticipate potential negative



environmental impacts arising from their production and business activities. As a result, managers can develop appropriate measures to prevent and mitigate risks and respond promptly to environmental incidents.

At the same time, green accounting reflects enterprises' social responsibility and business ethics, demonstrating that they are not only concerned with profit but also committed to sustainable development. Therefore, promoting and implementing green accounting in SMEs has become increasingly essential. In this study, the author aims to identify and assess the extent to which factors influence the adoption of green accounting in Vietnamese SMEs. This serves as a basis for business managers to effectively implement green accounting practices within their organizations.

2. Objectives

The objectives of this study are clearly and specifically defined.

- 1. To identify and examine the key factors that influence the adoption of green accounting practices in Vietnamese small and medium-sized enterprises (SMEs), with a focus on organizational characteristics, technological capabilities, and the regulatory framework.
- 2. To analyze and evaluate the degree of influence that each of these factors has on the actual application of green accounting within SMEs, shedding light on the most critical determinants that can either facilitate or hinder its adoption.
- 3. Based on these findings, the study proposes practical recommendations for government agencies, policymakers, and business managers to enhance the effectiveness of green accounting practices, strengthen sustainable business operations, and improve environmental accountability in the SME sector.

3. Research overview and Methods

3.1. Research overview

The United Nations first issued the System of Environmental Economic Accounting (SEEA) Handbook in 1993 and continued implementing the SEEA application program in 2014. Since then, countries have been advised to adopt green accounting in their business activities.

According to Sudhamathi & Kaliyamoorthy (2014), green accounting is a method that integrates environmental factors into traditional accounting systems to promote sustainable development. The authors state that green accounting has three main objectives. First, it aims to identify, collect, calculate, and analyze data on materials and energy, thereby assessing resource use and its environmental impacts. Second, it supports internal reporting and the use of information on environmental costs, such as waste management, pollution control, and resource conservation, helping organizations become more aware of hidden environmental expenses. Third, green accounting provides cost-related information for decision-making, enabling managers to make more effective choices that enhance economic performance while contributing to environmental protection. In this way, green accounting serves not only as a financial management tool but also as a means to support businesses in achieving sustainable development goals.

Green accounting is a modern and comprehensive accounting system that fully reflects environmental assets, liabilities, investments, costs, and benefits. Environmental and sustainability factors are integrated into the processes of recording, measuring, and disclosing financial statements (Milijana et al., 2022). At the same time, green accounting focuses on clarifying the environmental costs, risks, and benefits to ensure that the environmental impacts of a company's business activities are accurately and completely represented in accounting reports. Consequently, it provides a foundation for enterprises to make appropriate business decisions aimed at achieving sustainable development (Sarea, 2021).

According to Elkington (1997), sustainable development of enterprises needs to be considered from three closely related aspects: economic, environmental and social. In that context, enterprises not only need to create economic value but also need to protect and enhance environmental and social values. However, in reality, many business activities are still causing increasingly serious impacts on the natural environment and surrounding social communities.

Moreover, green accounting is not only associated with environmental aspects but also considers social impacts such as employee welfare, public health, corporate social responsibility, and the societal benefits brought about by sustainable development activities (Weng, Chen & Chen, 2015). Consequently, green accounting becomes an important tool for enterprises in balancing economic interests with social responsibility and



environmental protection. In this way, green accounting serves not only as a financial management tool but also as a means to support businesses in achieving sustainable development goals.

3.2. Theoretical basis

To develop factors influencing the application of green accounting in enterprises, the author relies on the following theoretical foundations:

Institutional theory

Institutional theory explains changes in organizational behavior under the influence of regulations, professional norms, and organizational perceptions. According to Scott (1995), institutional pressures create forces that compel organizations to adjust in order to survive and thrive. DiMaggio and Powell (1983) identify three main types of institutional pressures that drive organizational change: coercive isomorphism, which arises from political influence and the need for legitimacy; mimetic processes, which occur when organizations face uncertainty and seek to reduce risk by imitating other successful organizations; and normative pressures, which relate to professional standards and ethical norms. In the context of green accounting. Jalaludin, Sulaiman and Ahmad (2011) showed that institutional pressures play a critical role in promoting the adoption of environmental accounting practices. Coercive pressure is manifested through compliance with government policies or stakeholder requirements; mimetic pressure occurs when organizations learn from successful peers to minimize risks in uncertain environments; and normative pressure relates to implementing green accounting according to professional and ethical standards. Therefore, institutional theory helps explain why organizations adjust their behavior in response to external pressures and societal norms to gain legitimacy, acceptance, and sustainable development.

Stakeholder theory

Stakeholder theory asserts that organizations should operate in a manner that creates value not only for their shareholders but for all stakeholders who are affected by or have an interest in the organization's activities. These stakeholders include employees, customers, suppliers, investors, the local community, and the natural environment (Islam, 2023). According to this theory, sustainable organizational success is closely tied to the ability to identify, understand, and respond to the needs and expectations of these diverse groups. By actively considering stakeholder interests, organizations can build mutually beneficial relationships, foster trust, and enhance their reputation, which in turn can lead to greater social legitimacy and stronger support from the community.

In the context of green accounting, stakeholder theory provides a strong conceptual foundation for understanding why organizations adopt environmental accounting practices. By reporting and managing environmental costs, businesses respond to the expectations of regulatory authorities, investors, customers, and society at large, thereby balancing financial performance with environmental and social responsibility (Jamil, Ahmad, & Khan, 2015). Overall, stakeholder theory emphasizes that organizations do not operate in isolation; their long-term success depends on the ability to create value for a wide array of stakeholders, ensuring sustainable development and resilience in an increasingly complex and interconnected business environment.

Uncertainty theory

Uncertainty theory stems from the view that every decision in corporate governance takes place in an uncertain environment, where information about costs, benefits, risks and long-term impacts is often difficult to predict (Buric et al., 2022). In the study of green accounting implementation, this theory helps explain why the application of environmental accounting tools in many businesses still faces many difficulties. The costs related to environmental protection, long-term impacts on society, and potential benefits from sustainable activities are often non-financial, not easily quantified, and can change over time. This creates uncertainty in the decision-making process, requiring businesses to carefully consider the risks and benefits before implementing green accounting.

3.3. Research method

Hypothesis and Research Model

The implementation of green accounting in enterprises can be influenced by various factors. Based on previous studies, combined with expert interviews, this study proposes a research model identifying the factors affecting the adoption of green accounting in Vietnamese SMEs. The proposed hypotheses are as follows:

Legal Policy (LP)



The national legal system, regulations, and accounting standards provide direction and establish the legal framework for enterprises during implementation (Dinh, Nguyen & Nguyen, 2022). When the government issues clear regulations on environmental reporting, green accounting standards, or supportive policies such as tax incentives and financial assistance, businesses are more motivated and better positioned to adopt green accounting practices. Conversely, in the absence of specific legal frameworks, the application of green accounting tends to face numerous difficulties and lacks consistency (Nguyen & Le, 2021).

According to the study by Huang and Siti (2024), government policies and incentives for green accounting remain limited, leading to the slow implementation of green accounting among SMEs in China. The lack of a clear policy framework and appropriate financial support has resulted in insufficient motivation for these enterprises to adopt and maintain green accounting practices.

H1: The legal policy factor has a positive impact on the adoption of green accounting in Vietnamese SMEs.

Social Trends (ST)

The study by Feng (2024) indicates that the culture of a society has a profound influence on the accounting profession, including the perception and adoption of green accounting in enterprises. The application of green accounting is one of the means by which businesses can achieve harmony among economic interests, human well-being, and environmental protection, as green accounting reflects economic activities in accordance with the principles of the circular economy. In the context of increasing social concern for environmental issues, climate change, and sustainable development, enterprises are encouraged to engage in more environmentally friendly business practices. Consumers also tend to prefer and prioritize "green" products - those manufactured through energy-efficient, low-emission processes that minimize environmental pollution (Duong, 2016).

H2: The social trends factor has a positive impact on the adoption of green accounting in Vietnamese SMEs.

Pressure from Stakeholders (PS)

According to stakeholder theory, enterprises are not only accountable to shareholders but also need to meet the expectations of other groups such as the government, investors, customers, the community, and employees. The pressure exerted by these groups significantly influences the readiness and effectiveness of green accounting implementation. The study by Jamil, Ahmad & Khan (2015) indicates that stakeholders' awareness - particularly from investors, customers, and the media - has a considerable impact on the adoption of green accounting practices within enterprises. Islam (2023) found that pressure from stakeholders influences the adoption of green practices within businesses, thereby helping firms improve organizational, social, and environmental performance. These practices include green procurement, reducing resource consumption, using renewable energy, and providing environmental training.

H3: The pressure from stakeholders factor has a positive impact on the adoption of green accounting in Vietnamese SMEs.

Managers' Awareness (MA)

According to Liu and Zhang (2022), senior managers' attitudes toward the environment have a significant impact on the choice of green production strategies, the implementation of environmental accounting, and the creation of green competitive advantages for enterprises. When managers are well aware of the benefits of environmental protection, they tend to adopt appropriate production and accounting strategies to achieve sustainable competitive advantages.

Buric et al. (2022) found that managers' attitudes towards green accounting influence the implementation of environmental accounting in the tourism industry in Montenegro. According to Huang and Siti (2024), many small and medium-sized enterprises in China still have limited environmental awareness among their management and employees. Due to the lack of understanding of environmental issues and the benefits of green accounting, these enterprises lack motivation to apply green accounting methods in practice.

H4: The managers' awareness factor has a positive impact on the adoption of green accounting in Vietnamese SMEs.

Qualifications of Accounting Staff (QS)

The qualifications of accounting staff refer to the level of competence of accountants in collecting, processing, and disclosing accounting information related to the financial, environmental, and social aspects of an enterprise. High professional qualifications enable accountants to provide integrated, comprehensive and relevant accounting information, thereby supporting management in assessing the performance of the enterprise



as well as making effective economic and non-economic decisions through green accounting reports (Setiawan, Pratama, & Nugroho, 2023). Fota (2024) showed that accountants' competencies, including soft skills and knowledge of sustainability accounting, affect the quality of corporate sustainability reporting.

H5: The qualifications of accounting staff factor has a positive impact on the adoption of green accounting in Vietnamese SMEs.

Advanced Technology (AT)

The rapid development of digital transformation, along with a range of modern technologies such as artificial intelligence, big data, cloud computing, and blockchain, has opened up new approaches for integrating environmental factors into accounting reports (Sherine, Jacob, & Jolly, 2012). These technologies enhance the accuracy, transparency, and analytical capacity of enterprises, thereby supporting the recognition and evaluation of environmental and social factors alongside traditional financial elements. The integration of technology in green accounting has been shown to have a positive impact on environmental performance and corporate sustainability (Sunarmin, 2020; Phan & Le, 2019). The study suggests that green accounting is the process of applying information technology tools and systems to record, process and report environmental factors in the accounting activities of enterprises. This helps improve the accuracy and transparency of environmental data, while supporting environmental cost management, minimizing risks and optimizing green performance of enterprises. Burritt and Schaltegger (2010) also believe that green accounting is only truly effective when supported by modern information technology systems, helping businesses not only accurately reflect environmental impacts but also use this information to serve decision-making.

H6: The advanced technology factor has a positive impact on the adoption of green accounting in Vietnamese SMEs.

Research Model

Based on relevant studies, the author proposes the following research model, as illustrated in the figure below:

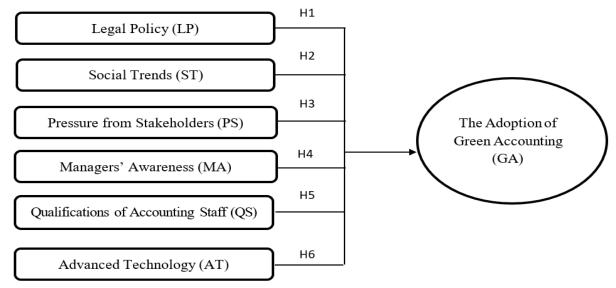


Figure 1 Proposed Research Model

The research model is specified in the following form:

 $GA = \beta_0 + \beta_1 *LP + \beta_2 *ST + \beta_3 *PS + \beta_4 *MA + \beta_5 *QS + \beta_6 *AT + \epsilon$

In there

GA (Dependent variable): Intention to adopt green accounting in Vietnamese SMEs. Independent variables (X_i) :

- LP: Legal Policy
- ST: Social Trends
- **PS:** Pressure from Stakeholders
- MA: Managers' Awareness



- QS: Qualifications of Accounting Staff
- AT: Advanced Technology

 β_k : Regression coefficients (k = 0, 1, 2, ..., 6).

ε: Random error term (residual).

Methods of collecting and processing data

In this study, the author uses a combination of qualitative and quantitative research methods. Qualitative research is conducted through an overview of research issues combined with in-depth interviews and group discussions with experts to explore factors affecting the application of green accounting in Vietnamese SMEs. The author conducted a preliminary study through direct interviews with 8 accounting experts to adjust the observed variables. The study used primary data collected via survey forms, with a 5-level Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The survey forms were sent to the survey subjects, who were senior managers (board of directors, board of supervisors, chief accountants) of small and medium-sized enterprises in Vietnam, via an online survey tool (Google Docs).

According to Hair et al. (2006), when conducting an exploratory factor analysis (EFA) with 27 observed variables, the number of questionnaires needed was 27*10 = 270. To ensure objectivity and reliability, the author sent 352 survey questionnaires using a non-probability, convenience sampling method and received 334 valid questionnaires for analysis.

The survey results were compiled and analyzed using SPSS 26. First, descriptive statistics were conducted to summarize the characteristics of the survey sample and the variables in the model. Next, exploratory factor analysis (EFA) was employed to identify the structure among observed variables and to test the convergent and discriminant validity of the measurement scales. Subsequently, correlation analysis was performed to examine the relationships between the independent and dependent variables. Finally, multiple linear regression analysis was conducted to test the research model and to assess the extent to which the independent variables influence the dependent variable.

To evaluate the goodness-of-fit of the multiple linear regression model, the study used the adjusted coefficient of determination (Adjusted R^2), which indicates the proportion of variance in the dependent variable explained by the independent variables. In addition, the F-test was applied to determine whether the dependent variable is linearly related to all independent variables. A p-value of < 0.05 indicates that the multiple linear regression model is appropriate and statistically valid for use.

4. Results and Discussion

4.1. Results

Evaluate the reliability of the scale

The results of the reliability analysis indicate that the Cronbach's Alpha coefficients for all factors are greater than 0.7, while the corrected item—total correlations of all observed variables within each construct exceed 0.3. These results demonstrate that each observed variable contributes positively to the internal consistency of its corresponding scale. Therefore, all measurement items meet the reliability requirements and are retained for the subsequent Exploratory Factor Analysis (EFA). No items were eliminated from the scales.

Table 1 Results of testing the reliability of the scale

Factors	Code	Number of Items	Cronbach's Alpha	Corrected Item- Total Correlation
Legal policy	LP	4	0.847	0.632-0.732
Social trends	ST	5	0.865	0.648-0.716
Pressure from stakeholders	PS	4	0.840	0.653-0.707
Managers' awareness	MA	5	0.838	0.621-0.670
Qualifications of accounting staff	QS	3	0.780	0.589-0.643
Advanced technology	AT	3	0.733	0.531-0.586
The Adoption of Green Accounting	GA	3	0.839	0.672-0.746

(Source: Results of data processing on SPSS software)



The results of the Exploratory Factor Analysis (EFA) for the independent variables are presented in detail in Tables 2 and 3.

Table 2 KMO and Bartlett's Test for Independent Variables

Kaiser-Meyer-Olkin Measure of San	0.875		
Bartlett's Test of Sphericity	Approx. Chi-Square	3400.101	
	df	276	
	Sig.	0.000	

Table 3 Rotated Component Matrix

	Rotated Component Matrix Component						
	1	2	3	4	5	6	
ST3	0.813						
ST2	0.805						
ST5	0.798						
ST1	0.762						
ST4	0.728						
MA4		0.793					
MA3		0.781					
MA5		0.766					
MA2		0.756					
MA1		0.717					
PS3			0.839				
PS4			0.798				
PS1			0.792				
PS2			0.763				
LP1				0.757			
LP3				0.725			
LP2				0.723			
LP4				0.665			
QS3					0.825		
QS2					0.811		
QS1					0.757		
AT3						0.823	
AT2						0.804	
AT1						0.716	

(Source: Results of data processing on SPSS software)

Research results show that 27 observed variables are grouped into 6 factors, all observed variables have factor loadings greater than 0.5. The KMO coefficient is 0.875 (range from 0.5 to 1); The Eigenvalue value is equal to 1.979 (greater than 1); The total variance extracted is 68.306 % (greater than 50%); The Bartlett test has a significance level of 0.000 (less than 5%). Thus, the independent variables satisfy two conditions "Convergent validity" and "Discriminant validity".

The results of the EFA for the dependent variable show that the analysis extracted a factor with a KMO index of 0.809 (greater than 0.5), The Eigenvalue index is 2.213 (greater than 1), the Bartlett test has a significance level of 0.000 (less than 5%). So, the variable "the adoption of Green Accounting" (GA) qualifies as a dependent variable to be included in the analysis of the next steps.



Correlation Analysis among Factors

Correlation analysis was conducted to examine the relationships between the independent variables and the dependent variable — the adoption of green accounting (GA). The results of the Pearson correlation coefficients are presented in Table 4.

Table 4 Pearson Correlation Coefficients among Variables

	GA	LP	ST	PS	MA	QS	AT
GA	1	0.720**	0.464**	0.477**	0.327**	0.131**	0.299**
LP		1	0.500**	0.424**	0.378**	0.435**	0.381**
ST			1	0.221**	0.214**	0.263**	0.172**
PS				1	0.327^{*}	0.251**	0.214**
MA					1	0.254**	0.113*
QS						1	0.212**
AT							1

^(**) The Pearson correlation is statistically significant at the 0.01 level (2-tailed).

(Source: Results of data processing on SPSS software)

The research results show that the Pearson correlation significance (Sig) values between the independent variables LP, ST, PS, MA, QS, AT and the dependent variable GA are all less than 0.05. This indicates a linear relationship between these independent variables and the dependent variable.

Multiple linear regression analysis

Table 5 Results of Multiple Linear Regression Analysis

Model		Standardized	Sig. (t) t-value		Variance Inflation	Order of
		Coefficient (β)			Factor (VIF)	Influence
	LP	0.461	0.000	6.066	1.703	1
1 -	ST	0.174	0.000	3.660	1.340	3
	PS	0.203	0.000	4.546	1.234	2
	MA	0.171	0.016	1.576	1.186	4
	QS	0.116	0.007	2.720	1.265	6
	AT	0.156	0.000	3.523	1.180	5

Adjusted $R^2 = 0.590$

Durbin-Watson = 2.271

F-value = 80.805

Sig. (F-test) = 0.000^{b}

(Source: Results of data processing on SPSS software)

The analysis results show that the adjusted R^2 value of 0.590 indicates that the independent variables included in the model explain 59% of the variation in the dependent variable, while the remaining 41% is explained by other factors outside the model and random errors. The Durbin–Watson coefficient is 2.271 (within the acceptable range of 1.5 to 2.5), indicating that there is no first-order autocorrelation and that the residuals are independent.

In addition, the results of the analysis of variance (ANOVA) show an F-value of 80.805 with a significance level of Sig. = 0.000 (< 0.05), demonstrating that the multiple linear regression model is appropriate for the data and statistically significant. This means that the independent variables in the model have a significant impact on the dependent variable.

The results show that the Sig. (t-test) values of the regression coefficients for all independent variables are less than 0.05, indicating that all independent variables are statistically significant and contribute to explaining the variation in the dependent variable. None of the variables were excluded from the model. The Variance Inflation Factor (VIF) values of all independent variables are less than 2, demonstrating that no multicollinearity problem exists in the model. Furthermore, all regression coefficients are positive, indicating that the independent variables included in the analysis have a positive impact on the dependent variable.

^(*) The Pearson correlation is statistically significant at the 0.05 level (2-tailed).



4.2. Discussion

The results show that all 6 independent factors are significant and positively affect the dependent variable. In addition, the importance of the factors affecting the application of green accounting in Vietnamese SMEs differs, as shown by the β coefficients in the regression model. Specifically:

The Legal Policy factor has the strongest impact on the application of green accounting in Vietnamese SMEs with a coefficient of β of 0.461. A clear and synchronous legal policy system, along with appropriate business support policies, will help businesses easily implement green accounting in business practices towards sustainable development. Although there are a number of legal regulations referring to green accounting, the legal framework in Vietnam is still incomplete and lacks specific and detailed instructions.

The Pressure from stakeholders factor has the second strongest impact on the application of green accounting in Vietnamese SMEs with a coefficient of β of 0.203. Stakeholders such as investors, customers, communities and social organizations are increasingly aware of the importance of environmental protection and sustainable development. Therefore, they place higher demands on corporate social responsibility, especially transparency and honesty in the disclosure of accounting information related to environmental factors. Therefore, enterprises tend to proactively apply green accounting to meet the expectations of stakeholders and enhance their reputation and image.

The Social Trend factor has the third strongest impact on the application of green accounting in Vietnamese SMEs with a coefficient of β of 0.174. In the context of the global trend towards a green economy, society increasingly tends to consume green, use environmentally friendly products, and increase recycling to minimize negative impacts on the environment. Therefore, businesses operate not only towards profit but also have to consider environmental and social factors in business operations.

The Managers' Awareness factor has the fourth strongest impact on the application of green accounting in Vietnamese SMEs with a coefficient of β of 0.171. Managers' views on green accounting play an important role in orienting development strategies as well as providing ways to operate and implement green accounting activities in enterprises. When managers clearly understand the role and benefits of green accounting for the development of enterprises, they will proactively incorporate this content into management strategies and allocate appropriate resources for implementation.

The Advanced Technology factor has the fifth strongest impact on the application of green accounting in Vietnamese SMEs with a coefficient of β of 0.156. The application of modern technology helps enterprises collect, process and report environmental information more accurately, completely and promptly. From there, managers can make decisions more quickly and effectively in controlling costs, minimizing environmental risks, and moving towards sustainable development.

The factor of Accounting Staff Qualification has the weakest impact on the application of green accounting in Vietnamese SMEs with a coefficient of β of 0.116. Although the accounting team plays a direct role in recording, accounting and reporting information related to the environment, without guidance from managers or investment in appropriate technological equipment, the application of green accounting in practice is difficult to bring about effectiveness.

5. Conclusion and Recommendations

Green accounting is an accounting model that has been studied for many years in developed countries; however, it remains relatively new in Vietnam. The empirical results of this study identified and measured the factors influencing the adoption of green accounting in small and medium-sized enterprises (SMEs) in Vietnam. The findings indicate that all six selected factors have a positive impact on the adoption of green accounting in Vietnamese SMEs, with Legal Policy being the most influential factor.

These results provide a foundation for proposing several recommendations to both government authorities and SMEs in Vietnam to enhance the implementation of green accounting within enterprises. Specifically:

From the perspective of State management agency:

Firstly, state management agencies need to continuously review, supplement, and improve the legal framework related to green accounting, in order to establish a unified, consistent legal foundation that aligns with international practices. They should issue legal documents and circulars providing detailed guidance on the methods for recognizing, measuring, and reporting green accounting information within enterprises.



Secondly, the State needs to implement financial support policies, tax incentives, and technical assistance to encourage enterprises, especially small and medium-sized enterprises, to boldly apply green accounting in their practical operations.

Thirdly, the State needs to establish a system of specific and strict sanctions for cases of legal violations, environmental harm, or failure to fully disclose environmental information in financial reports.

From the perspective of Vietnamese SMEs:

Firstly, enterprise managers need to change their mindset regarding the application of green accounting in production and business activities, using it as a strategic management tool to enable the enterprise to comprehensively assess operational efficiency while aligning economic benefits with social responsibility and environmental protection.

Secondly, enterprises need to pay special attention to investment and the development of digital infrastructure to meet the requirements of green accounting in the context of digital transformation and international integration.

Thirdly, enterprises should focus on developing a highly qualified accounting workforce capable of keeping up to date with regulations and standards related to green accounting, aiming toward integration with international accounting practices.

6. References

- Burritt, R., & Schaltegger, S. (2010). Sustainability accounting and reporting: fad or trend? *Accounting, Auditing & Accountability Journal*, 23(7), 829–846.
- Buric, M. N., Jaksic Stojanovic, A., Lalevic Filipovic, A., & Kascelan, L. (2022). Research of attitudes toward implementation of green accounting in tourism industry in Montenegro Practices, and challenges. *Sustainability*, 14(3), 1725.
- DiMaggio, P. J. & Powell, W. W. (1983). The Iron Cage Revisited: Isomorphism in Organizational Fields. *American Sociological Review, 48*(2), 147-160.
- Dinh, T. K. X., Nguyen, T. D. & Nguyen, T. H. (2022). Factors affecting the application of environmental accounting in manufacturing enterprises in Vietnam. *Journal of Accounting, Finance and Auditing Studies*, 8, 115-140
- Duong, T. T. H (2016). Green Accounting and Environmental Accounting Some Modern Perspectives. *Accounting & Auditing Journal*, 4, 1–8.
- Duong, V.T (2024), Factors affecting the effective application of green accounting for sustainable development at Vietnam's listed steel manufacturing companies, *International Journal of Multidisciplinary Research* and Growth Evaluation, 05 (03), 9 13.
- Elkington, J (1997), Cannibals with forks: The triple bot-tom line of 21 st century business. Capstone Press.
- Fota, A. (2024). Accounting competence and sustainable reporting: Evidence from European firms. *Sustainability Accounting Journal*, *12*(2), 88–105.
- Feng, X. (2024). Green accounting in China: Challenges, opportunities, and the path forward. *Proceedings of the 2nd International Conference on Management Research and Economic Development*, 223-245.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Pearson Prentice Hall.
- Huang, J. & Siti, A. Z (2024), A Study on the Current Status and Influencing Factors of Green Accounting Application in Chinese SMEs, *International Journal of Business and Technology Management*, Vol. 6, No. 3, 520-528.
- Islam, M. S. (2023). Effect of stakeholders' pressure and green practice adoption on organizational performance. *Sustainability*, 15(11), 8665. https://doi.org/10.3390/su15118665
- Jalaludin, D., Sulaiman, M., & Ahmad, N. N. N. (2011). Understanding environmental management accounting (EMA) adoption: A new institutional sociology perspective. *Social Responsibility Journal*, 7(4), 540–557. https://doi.org/10.1108/174711111111175128
- Jamil, C., Ahmad, N., & Khan, M. (2015). The influence of stakeholders' awareness on the adoption of green accounting practices in enterprises. *International Journal of Accounting and Financial Reporting*, 5(2), 45–60.
- Liu, L., & Zhang, C. (2022). Linking environmental management accounting to green organisational behaviour: The mediating role of green human resource management. *PLoS One*, 17(12), e0279568.



- https://doi.org/10.1371/journal.pone.0279568
- Milijana, N. B, Andjela, J. S, Ana, L. F & Ljiljana, K. (2022), Research of Attitudes toward Implementation of Green Accounting in Tourism Industry in Montenegro-Practices, and Challenges, *Sustainability*, *14*, 1725. https://doi.org/10.3390/su14031725
- Nguyen, G. K. & Le, T. C. (2021). Green Accounting Model in Manufacturing Enterprises in Thai Nguyen Province. FTU Working Paper Series, 2(3), 13–27.
- Nguyen, T. H. N, Hoang, T. V. H. & Nguyen, T. T. L. (2018), Green Accounting and Sustainable Development of Listed Vietnamese Enterprises, *Proceedings of 14th International Conference on Humanities and Social Sciences*, 379 391, Khon Kaen University, Thailand
- Ntalamia, W. L. (2017). Factors Influencing Adoption Of Environmental Management Accounting (Ema) Practices Among Manufacturing Firms In Nairobi, Kenya. *Researchjournali's Journal of Finance*, 5(2), 1-16.
- Phan, D. D & Le, T. D. L (2019). Factors Affecting the Application of Environmental Management Accounting in Manufacturing Enterprises in the Central Coastal Region of Vietnam, *Journal of Economic Science University of Da Nang*, 7(02), 50–66.
- Ratulangi, A. V. J., Pangemanan, S., & Tirayoh, V. (2018). Analysis of the Application of Environmental Accounting to the Operational Costs of Waste Management at The Manado Pancaran Kasih Hospital. *Going Concern: Accounting Research Journal*, 13(04), 410–418. https://doi.org/10.32400/gc.13.03.20292.2018
- Sarea, A.M. (2021) Islamic finance and sustainability reporting: The mediator role of green accounting, *Ethics and Sustainability in Accounting and Finance, Volume II*, 199–205.
- Scott, W. R. (1995). Institutions and Organisations. A Sage Publications, London.
- Setiawan, R., Pratama, R., & Nugroho, A. (2023). The role of accounting competence in the era of digital transformation: Implications for green accounting. *Journal of Accounting and Digital Transformation*, 5(1), 45–60.
- Sherine, F., Jacob, C. & Jolly, J. (2012). Green Accounting and Management for Sustainable Manufacturing in Developing Countries. *International Journal of Business and Management*, 7(20), 36-43.
- Sudhamathi, S., & Kaliyamoorthy, S. (2014). Green accounting: A conceptual framework. *Asia Pacific Journal of Research*, 1(XIII), 110–114.
- Sunarmin, A. (2020). *Green technology accounting as an innovation to reduce environmental pollution*. Neraca: Jurnal Akuntansi Terapan, 1(2), 135–141.
- Weng, H.-H., Chen, J.-S. & Chen, P.-C. (2015) Effects of green innovation on environmental and corporate performance: A stakeholder perspective, *Sustainability*, 7(5), 4997–5026.