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MANAGERIAL INTENTION TO ISSUE GREEN BONDS, SUSTAINABLE FINANCING CAPABILITY AND FINANCIAL PERFORMANCE IN LISTED REAL ESTATE AND CONSTRUCTION FIRMS

ABSTRACT

Growing global attention to sustainable finance has positioned green bonds as an important mechanism for mobilizing capital toward environmentally sustainable investment while enhancing firms' long-term competitiveness. This study investigates the effect of managerial intention to issue green bonds on corporate financial performance and examines the mediating role of sustainable financing capability among listed real estate and construction firms in Vietnam. Drawing upon signaling theory, resource dependence theory, and stakeholder theory, the study proposes an integrated research framework linking managerial intention to issue green bonds, sustainable financing capability, and financial performance. Empirical data were obtained through a structured survey of managers and finance professionals employed by listed firms, yielding 286 valid responses. The proposed relationships were evaluated using SPSS and AMOS through a sequential analytical approach comprising reliability assessment, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modeling (SEM). The empirical findings indicate that managerial intention to issue green bonds significantly enhances sustainable financing capability and directly improves financial performance. Sustainable financing capability also exerts a positive effect on financial performance and serves as a significant mediating mechanism through which managerial intention to issue green bonds generates financial benefits. These results suggest that firms can strengthen their financial outcomes not only by issuing green bonds but also by effectively mobilizing, managing, and allocating sustainable financial resources.

This study advances the sustainable finance literature by generating empirical evidence from an emerging economy undergoing ESG-oriented institutional reforms, digital transformation, and the expansion of green capital markets. The findings provide practical insights for corporate executives, investors, financial institutions, and policymakers in designing effective sustainable financing strategies that strengthen financial performance and support the long-term resilience of firms operating in the real estate and construction industries.

Keywords: green bonds, green finance, sustainable development, financial performance, sustainable financing, ESG, structural equation modeling, real estate and construction firms

JEL Classification: F65, M40, G32, Q56, O16, G23, M21

INTRODUCTION

The transition toward sustainable development has fundamentally reshaped global financial systems over the last decade. Governments, investors, and international organizations increasingly encourage firms to adopt environmentally responsible business practices while maintaining financial sustainability. Against this backdrop, green finance has become an increasingly important channel for directing capital toward environmentally sustainable investment. Among the available financing instruments, green bonds have gained growing prominence because they facilitate access to long-term capital

while conveying credible signals of firms' environmental commitment and sustainable development orientation (Flammer, 2021; Tang & Zhang, 2020).

The association between managerial intention to issue green bonds and corporate financial performance can be interpreted through multiple complementary theoretical perspectives, each offering distinct insights into the mechanisms through which sustainable financing influences firm outcomes. Signaling Theory suggests that firms issuing green bonds send positive signals regarding their sustainability orientation, governance quality, and long-term strategic commitment, thereby enhancing stakeholder confidence and reducing information asymmetry (Spence, 1973). Resource Dependence Theory further argues that access to external financial resources is critical for organizational survival and growth. Green bonds may therefore strengthen firms' financing capability by providing access to diversified funding sources and reducing dependence on traditional credit channels (Pfeffer & Salancik, 1978). These theoretical perspectives imply that managerial intention to issue green bonds may influence financial outcomes both directly and indirectly through improvements in sustainable financing capability.

The practical relevance of this issue has become particularly evident in the real estate and construction sectors. These industries require substantial capital investments, involve long project cycles, and are highly sensitive to financing constraints. These characteristics make firms in the two sectors particularly sensitive to changes in credit conditions and financing costs. In Vietnam, the development of sustainable finance has been accompanied by gradual improvements in the institutional framework for green investment and green financing. The National Green Growth Strategy for 2021–2030 established broader policy directions for the transition toward green growth, while more recent regulations have provided clearer environmental criteria for identifying projects eligible for green credit and green bonds. In particular, Decision No. 21/2025/QĐ-TTg introduced environmental criteria and procedures for identifying investment projects under Vietnam's green taxonomy, providing a clearer institutional basis for green financing activities. Nevertheless, the existence of a regulatory framework does not necessarily mean that firms can immediately obtain and use sustainable capital effectively. For listed real estate and construction firms, the ability to identify suitable financing sources, meet green financing requirements, mobilize capital, and allocate such resources to long-term projects remains important. This suggests that the financial implications of green bond orientation may depend not only on firms' willingness to engage in green financing but also on their sustainable financing capability. In many emerging economies, including Vietnam, construction and real estate firms face increasing pressure to secure long-term funding while simultaneously responding to environmental regulations, ESG expectations, and sustainable urban development goals. Consequently, managerial intention to issue green bonds has become an increasingly attractive financing alternative for firms seeking to improve liquidity, financial flexibility, and investment capacity.

The current economic environment further reinforces the importance of sustainable financing. Following global economic disruptions, tighter credit conditions, and increased scrutiny of corporate bond markets, firms are under growing pressure to diversify financing channels. At the same time, digital transformation and artificial intelligence (AI) are reshaping corporate financial management. Digital financial platforms, AI-based risk assessment systems, and data-driven decision-making tools have enhanced firms' ability to evaluate financing alternatives, monitor sustainability performance, and manage financial resources more efficiently (Vial, 2019). As a result, sustainable financing capability has become an increasingly important strategic resource influencing corporate financial performance. AI-enabled financial analytics, predictive risk assessment, and sustainability reporting systems increasingly support firms in evaluating green investment opportunities, optimizing capital allocation, and enhancing sustainable financing decisions.

Although research on green finance has expanded substantially in recent years, several important issues remain insufficiently addressed. Existing evidence is concentrated largely in developed economies and predominantly examines the direct effects of managerial intention to issue green bonds on firm value, stock market performance, or environmental outcomes. Far less attention has been given to the underlying mechanisms through which green bonds enhance corporate financial performance, particularly in emerging economies and capital-intensive industries such as real estate and construction. In addition, the role of sustainable financing capability as an intervening mechanism has received only limited empirical attention. Responding to these gaps, this study investigates the effect of managerial intention to issue green bonds on financial performance and evaluates the mediating role of sustainable financing capability among listed real estate and construction firms in Vietnam. By extending the evidence from an emerging economy undergoing rapid ESG integration, green financial market development, and digital transformation, the study contributes to the sustainable finance literature while offering practical insights for corporate managers, investors, financial institutions, and policymakers seeking to strengthen green financing practices and long-term corporate performance.

LITERATURE REVIEW

Recent studies have increasingly examined green bonds as a financial instrument that connects corporate financing decisions with sustainability objectives. Flammer (2021) provides one of the most influential empirical studies on corporate green bonds, showing that investors respond positively to green bond announcements, especially when bonds are certified by third parties. The evidence further indicates that firms experience improvements in environmental performance following managerial intention to issue green bonds, reinforcing the view that green bonds serve as credible market signals of environmental commitment and long-term sustainability. However, Flammer's study focuses mainly on developed capital markets and does not directly examine how managerial intention to issue green bonds affects internal financing capability in emerging economies.

Tang and Zhang (2020) investigate whether shareholders benefit from corporate managerial intention to issue green bonds using an international sample. Their empirical evidence indicates that green bond announcements generate favorable stock market responses, while issuance is associated with subsequent improvements in institutional ownership and stock liquidity. These results imply that green bonds may strengthen market confidence and investor recognition. Nevertheless, their study focuses primarily on market reaction and shareholder benefits rather than the mechanism through which green bonds improve firms' financial performance. This leaves room for examining sustainable financing capability as a possible intermediate channel.

MacAskill et al. (2021) conduct a systematic review of the green bond premium and identify several determinants affecting green bond pricing, including certification, issuer characteristics, bond structure, and market conditions. Their study suggests that green bonds may help issuers access capital under more favorable conditions when investors value sustainability credentials. This finding is particularly relevant for real estate and construction firms, which require substantial long-term capital for green buildings, energy-efficient infrastructure, and sustainable urban development. However, the study is review-based and does not provide firm-level empirical evidence in the Vietnamese context.

Broadstock et al. (2021) examine the role of ESG performance during the COVID-19 financial crisis in China and find that high-ESG firms generally outperform low-ESG firms and experience lower financial risk during periods of market stress. Although their study does not focus specifically on green bonds, it provides important evidence that sustainability-related practices may enhance resilience and financial performance during uncertainty. This is relevant to real estate and construction firms in emerging markets, where credit tightening, bond market volatility, and socio-economic disruptions can significantly affect financing capacity and financial outcomes.

Frecautan (2022) reviews the performance of green bonds in emerging capital markets and emphasizes that sustainable finance plays an important role in supporting the transition toward low-carbon economic models. The study highlights that emerging markets still face challenges related to market depth, regulatory quality, investor confidence, and green verification mechanisms. This insight is particularly important for Vietnam, where the green bond market remains at an early stage, and firms may encounter institutional and informational barriers when mobilizing sustainable capital. Therefore, further research is needed to examine how managerial intention to issue green bonds influences sustainable financing capability and financial performance in emerging-market sectors with high capital intensity.

Hoang et al. (2022) investigated whether managerial intention to issue green bonds improves firms' ESG and financial performance. Their findings indicate that managerial intention to issue green bonds significantly enhances ESG disclosure, although improvements in financial performance vary across industries and regions, suggesting that organizational characteristics influence financial outcomes.

Aydoğmuş et al. (2022) demonstrated that firms with stronger ESG performance generally achieve superior financial performance and higher market valuation because investors increasingly incorporate sustainability information into investment decisions.

Loiola et al. (2025), in a comprehensive literature review, concluded that managerial intention to issue green bonds influences financial performance through several channels, including reputation enhancement, broader investor participation, lower financing costs, and improved corporate legitimacy. However, the magnitude of these effects varies across institutional contexts and industries.

Abdurrahim (2025) examined listed Indonesian companies and reported that sustainable bond issuance did not immediately improve profitability or firm value during the observation period, implying that financial benefits may emerge only over the longer term as sustainable investments mature.

Recent evidence from ASEAN+3 economies further indicates that green bonds can reduce firms' borrowing costs through a measurable green premium, thereby strengthening financial stability and improving financing efficiency. Nevertheless, these benefits depend on effective governance mechanisms and credible sustainability reporting to mitigate greenwashing concerns.

Recent literature provides additional evidence on the financial and strategic effects of green finance. Ballester et al. (2024) examine 1,048 corporate green bonds issued by 200 entities across 26 countries and show that green bond announcements affect issuer credit risk, measured through CDS spreads. Their findings indicate that the effect is heterogeneous across sectors: firms in environmentally exposed industries may experience reduced credit risk, while firms in other sectors may face less favorable credit-market reactions. This study is relevant because it suggests that the financial benefits of green bonds depend on sectoral exposure, issuer ESG quality, and market credibility.

Bai (2025) investigates Japanese listed firms and finds that managerial intention to issue green bonds improves corporate environmental performance and financial performance, particularly over the long term. The study further shows that the positive effects are stronger among firms with clearly quantified environmental targets. This finding supports the argument that green bonds can enhance financial performance when firms combine green financing with credible environmental commitments and measurable sustainability objectives.

Wongsinhirun et al. (2026) provide a broader review of green corporate finance and firm resilience to climate change. Their study emphasizes that green bonds, green loans, and sustainability-linked instruments can help firms strengthen resilience by integrating ESG considerations into financial strategies. This perspective is useful for the present study because sustainable financing capability can be understood as an organizational capability that enables firms to manage climate-related risks and maintain financial stability.

Subhani et al. (2025) analyze ESG investment and corporate debt financing in BRICS economies. Their findings show that ESG commitments may initially constrain access to debt financing, but financial sector development can transform this relationship into a favorable one. This evidence highlights the importance of institutional and financial-market conditions in determining whether ESG-oriented finance improves corporate financing capacity and financial performance.

Ma et al. (2024) examine the impact of green credit policy on ESG performance among Chinese listed firms. Using a difference-in-differences approach, they find that green credit policy significantly improves environmental and social performance through optimized credit allocation, enhanced managerial environmental awareness, and increased R&D investment. Their findings imply that green finance can improve firm outcomes not only through capital provision but also through governance and resource-allocation mechanisms.

Sun et al. (2023) study Chinese manufacturing firms and find that green finance policy improves ESG performance, particularly by encouraging firms to enhance environmental practices and green innovation. This study is relevant to the current research because it confirms that green finance policies can shape corporate sustainability behavior and strengthen firms' long-term competitiveness. Overall, these recent studies suggest that managerial intention to issue green bonds and broader green finance mechanisms influence financial performance through credit-risk reduction, improved ESG credibility, stronger financing capability, and enhanced organizational resilience.

Most previous studies examine actual green bond issuance using bond-level or firm-level market data. The present research takes a related but different perspective. Since the survey items capture firms' strategic consideration of green bonds and managerial perceptions of their financial and sustainability benefits, the construct examined in this study is referred to as managerial intention to issue green bonds rather than actual green bond issuance. Managerial intention to issue green bonds therefore reflects the extent to which firms consider green bonds as a strategic financing instrument and perceive their potential value in supporting sustainable financing and investment.

In general, previous studies provide considerable evidence that green bonds may influence investor reactions, financing conditions, environmental performance, and corporate financial outcomes. However, two issues remain less clear. First, the financial consequences of green financing are not consistent across firms, sectors, and institutional settings. This suggests that green bond-related activities alone may not be sufficient to explain differences in financial performance. Second, relatively less attention has been paid to the internal capability through which firms mobilize and manage sustainable financial resources after recognizing green financing opportunities. In this study, sustainable financing capability is considered as such an organizational mechanism. It reflects the firm's ability to access diversified sustainable financing sources, mobilize green capital, and support long-term sustainable investment. Examining this mechanism is particularly relevant to listed real estate and construction firms in Vietnam because of their high capital requirements, long project cycles, and dependence on external financing. Based on this argument, the present study examines whether sustainable

financing capability mediates the relationship between managerial intention to issue green bonds and perceived financial performance.

Theoretical background

Signaling Theory

Signaling theory was originally developed to explain how information asymmetry can be reduced when one party provides observable signals about characteristics that are not directly known to another party (Spence, 1973). In financial markets, firms may use different corporate decisions, such as dividend policies, debt issuance, environmental disclosure, or sustainability-related financing, to provide information about their quality, strategic direction, and future prospects. These signals become particularly important when investors and creditors do not have complete information about the firm.

In the context of green finance, an orientation toward green bond issuance may signal a firm's commitment to environmental responsibility and long-term sustainable development. Such an orientation can also indicate that the firm is willing to consider sustainability issues in its financing and investment decisions. For investors, creditors, regulators, and other stakeholders, this information may reduce uncertainty about the firm's sustainability strategy and strengthen confidence in its future financial and environmental commitments.

In this study, signaling theory is used to explain the initial relationship between managerial intention to issue green bonds and sustainable financing capability. A stronger orientation toward green bonds may improve the firm's credibility in the eyes of external capital providers and facilitate its access to sustainability-oriented financing sources. This relationship may be particularly relevant to real estate and construction firms because their projects normally require large amounts of long-term capital and increasingly need to satisfy environmental and sustainability requirements.

Resource Dependence Theory

Resource dependence theory suggests that firms cannot operate independently from their external environment because many important resources are controlled by other organizations and market participants (Pfeffer & Salancik, 1978). These resources may include capital, technology, information, legitimacy, and market access. Therefore, firms need to develop appropriate strategies to manage external dependence and secure the resources required for their operations and long-term development.

Financial resources are particularly important for firms operating in capital-intensive industries. Real estate and construction companies generally require substantial financing for land acquisition, project development, construction activities, and long-term infrastructure investment. A high dependence on conventional bank credit or a limited number of financing channels may increase financial pressure when credit conditions become more restrictive. In contrast, the ability to diversify funding sources and maintain access to longer-term capital may improve financial flexibility and reduce dependence on traditional financing channels.

Based on resource dependence theory, sustainable financing capability in this study refers not only to the availability of sustainable capital but also to the firm's ability to mobilize, diversify, and manage such financial resources. Managerial intention to issue green bonds may create opportunities to access sustainability-oriented investors and financial institutions, but these opportunities do not automatically generate better financial outcomes. Firms still need sufficient internal capability to convert external financial support into usable resources for sustainable investment. Therefore, resource dependence theory provides an important explanation for the mediating role of sustainable financing capability in the proposed model.

Stakeholder Theory

Stakeholder theory emphasizes that firms need to consider the interests and expectations of different groups that may affect or be affected by corporate activities. Freeman (1984) argues that long-term corporate performance depends not only on the interests of shareholders but also on the firm's relationships with other important stakeholders, including creditors, customers, employees, regulators, and local communities. In sustainability-related activities, these groups increasingly expect firms to demonstrate environmental responsibility, transparency, and accountability.

These expectations are particularly relevant to real estate and construction firms because their activities are closely associated with land use, energy consumption, emissions, infrastructure development, and other environmental and social impacts. An orientation toward green bond issuance may therefore indicate that the firm is responding to increasing

stakeholder concerns about sustainable construction and environmentally responsible investment. Positive stakeholder perceptions may strengthen the firm's legitimacy and improve its relationships with investors, creditors, and regulators.

In this study, stakeholder theory provides an explanation for how managerial intention to issue green bonds may generate external support that subsequently contributes to sustainable financing capability. When stakeholders have greater confidence in a firm's sustainability commitment, they may be more willing to provide financial, institutional, or informational support. Such support can improve the conditions under which firms seek sustainable financing, although the firm still needs appropriate internal capability to mobilize and manage these resources effectively.

Integration of the Theoretical Perspectives

The three theories discussed above are used in this study as complementary rather than independent explanations. First, signaling theory suggests that a firm's orientation toward green bond issuance can communicate its sustainability commitment and reduce information asymmetry with external stakeholders. Stakeholder theory further explains that favorable perceptions of such signals may strengthen the firm's legitimacy and encourage greater support from investors, creditors, regulators, and other relevant parties. However, external support alone may not be sufficient to improve financial outcomes. From the perspective of resource dependence theory, firms need the capability to obtain, mobilize, and manage external financial resources effectively.

Based on these arguments, sustainable financing capability can be viewed as the organizational mechanism through which managerial intention to issue green bonds is associated with perceived financial performance. Green bond orientation may create favorable signals and stakeholder support, while sustainable financing capability reflects the firm's ability to convert these external opportunities into financial resources that can be used for long-term sustainable investment. The three theoretical perspectives therefore provide a sequential explanation for the proposed relationships in the research model.

Hypothesis Development

Managerial intention to issue green bonds and Sustainable Financing Capability

According to Signaling Theory, the issuance of green bonds sends a credible signal to investors and creditors that the firm is committed to environmental responsibility and long-term sustainable development (Spence, 1973). A firm's orientation toward green bond issuance may contribute to the development of its sustainable financing capability. Firms that consider green bonds as a strategic financing instrument are more likely to pay attention to sustainability requirements, green investment opportunities, and alternative sources of long-term capital. From the perspective of signaling theory, such an orientation may also communicate the firm's commitment to sustainable development and reduce information asymmetry between the firm and external capital providers.

Previous studies show that green bond-related activities can attract long-term investors, improve investor recognition, and support firms' access to capital markets (Flammer, 2021; Tang & Zhang, 2020). MacAskill et al. (2021) further suggest that certification, issuer characteristics, and market conditions can influence the financing advantages associated with green bonds. These findings indicate that firms with a stronger orientation toward green bonds may be better positioned to identify and access sustainability-oriented financing opportunities.

However, access to financing opportunities alone does not constitute sustainable financing capability. Firms also need the ability to mobilize, diversify, and manage these resources in support of long-term sustainable investment. Based on these arguments, a stronger managerial intention to issue green bonds is expected to be associated with greater sustainable financing capability. Accordingly, the following hypothesis is formulated:

H₁: Managerial intention to issue green bonds positively affects Sustainable Financing Capability.

Sustainable Financing Capability and Financial Performance

Sustainable financing capability reflects the firm's ability to mobilize, diversify, and manage financial resources for sustainable investment. According to resource dependence theory, firms that are better able to secure and manage critical external resources are in a stronger position to reduce uncertainty and maintain their operations and investment activities (Pfeffer & Salancik, 1978).

This capability may be particularly important for real estate and construction firms because their projects normally involve large initial investments, long development periods, and substantial dependence on external financing. Firms with stronger sustainable financing capability may have greater flexibility in selecting financing sources, supporting long-term invest-

ment, and responding to changes in financing conditions. Previous evidence also suggests that sustainability-related financing and stronger ESG practices may contribute to financial resilience and more favorable financing conditions (Broadstock et al., 2021; MacAskill et al., 2021).

In this study, financial performance is evaluated through managers' perceptions of changes in profitability, cash-flow management, operating efficiency, financing costs, and overall financial outcomes. Therefore, firms with stronger sustainable financing capability are expected to report more favorable financial performance.

H₂: Sustainable Financing Capability positively affects Financial Performance.

Managerial intention to issue green bonds and Financial Performance

An orientation toward green bond issuance may also be directly associated with financial performance. Firms that regard green bonds as a strategic financing option are likely to place greater emphasis on long-term financing, sustainability-oriented investment, and relationships with investors who consider environmental criteria in their decisions. Such an orientation may strengthen corporate reputation and improve the firm's position when seeking alternative sources of capital.

Evidence from actual green bond issuance provides some support for this expectation. Tang and Zhang (2020) found favorable market reactions following green bond announcements together with improvements in institutional ownership and stock liquidity. Flammer (2021) also showed that corporate green bond issuance is associated with greater participation by long-term investors and improvements in environmental performance. These findings do not directly examine managerial intention to issue green bonds as defined in this study, but they indicate that firms' engagement with green bond financing may be associated with financial and strategic benefits.

In addition, firms that develop a stronger orientation toward sustainable financing may improve their ability to respond to investor expectations and identify financing opportunities that support long-term investment. Therefore, managerial intention to issue green bonds is expected to be positively associated with managers' perceptions of financial performance. Hence, the following hypothesis is developed:

H₃: Managerial intention to issue green bonds positively affects Financial Performance.

Mediating Role of Sustainable Financing Capability

Resource Dependence Theory emphasizes that access to resources must be effectively managed to generate organizational outcomes (Pfeffer & Salancik, 1978). The relationship between managerial intention to issue green bonds and financial performance may not occur only through a direct path. A firm may recognize the strategic value of green bonds and receive more favorable responses from investors, creditors, and other stakeholders, but these external opportunities do not automatically result in better financial outcomes. The firm must still be able to obtain, mobilize, and manage sustainable financial resources effectively.

The three theoretical perspectives used in this study provide support for this mediating mechanism. Signaling theory suggests that managerial intention to issue green bonds may communicate a firm's sustainability commitment and reduce information asymmetry. Stakeholder theory further indicates that favorable perceptions of this commitment may strengthen legitimacy and external support. Resource dependence theory then explains why such support must be converted into usable financial resources before it can contribute to organizational outcomes.

Sustainable financing capability therefore represents an internal mechanism through which external financing opportunities can be translated into financial benefits. Firms with stronger capability are more able to diversify financing sources, mobilize sustainable capital, and support long-term investment. In contrast, firms may recognize green financing opportunities but obtain limited financial benefits when they lack the capability to manage and allocate these resources effectively. Based on these arguments, sustainable financing capability is expected to transmit part of the relationship between managerial intention to issue green bonds and financial performance.

H₄: Sustainable Financing Capability mediates the relationship between Managerial intention to issue green bonds and Financial Performance.

The Role of Firm Size in Sustainable Financing and Financial Performance

Firm size is included in the research model because larger firms generally have greater financial resources, more established governance systems, and stronger access to capital markets. These advantages may allow them to respond more effectively to financing constraints and undertake long-term investment projects. In the context of sustainable finance,

larger firms may also have greater capacity to meet disclosure requirements, obtain external verification, and attract institutional investors.

Previous studies on green bonds indicate that issuer characteristics and market reputation can influence the financial benefits associated with green financing (Flammer, 2021; Tang & Zhang, 2020). For listed real estate and construction firms, firm size may therefore contribute to differences in financial performance because larger firms generally have greater financing flexibility and organizational resources. Based on these arguments, firm size is expected to be positively associated with financial performance.

H₅: Firm Size positively affects financial performance.

AIMS AND OBJECTIVES

This study investigates the effects of managerial intention to issue green bonds on the corporate financial performance of listed real estate and construction firms in Vietnam, with a particular focus on the mediating role of sustainable financing capability. Against the backdrop of sustainable finance, digital transformation, AI-enabled financial management, and increasingly stringent ESG expectations, firms are required to strengthen their capacity to secure long-term capital while preserving financial resilience and sustainable growth. Accordingly, the study provides empirical evidence on the extent to which managerial intention to issue green bonds enhances financial performance and evaluates whether sustainable financing capability constitutes a key transmission mechanism through which green financing translates into superior corporate outcomes.

To accomplish this objective, the following research questions are formulated:

1. Does managerial intention to issue green bonds significantly influence sustainable financing capability among listed real estate and construction firms?
2. Does sustainable financing capability improve firms' financial performance?
3. Does managerial intention to issue green bonds directly enhance financial performance?
4. To what extent does sustainable financing capability mediate the relationship between managerial intention to issue green bonds and corporate financial performance?
5. Does firm size contribute to variations in financial performance within the real estate and construction sectors?

Accordingly, the conclusions presented in Section 6 are organized around these five research questions to ensure consistency between the study objectives, empirical findings, and theoretical contributions.

METHODS

Research Design

This study employs a quantitative research design to examine the relationships among managerial intention to issue green bonds, sustainable financing capability, and financial performance in listed real estate and construction firms in Vietnam. Quantitative methods are particularly appropriate because they allow researchers to examine causal relationships among latent constructs and statistically validate theoretical assumptions derived from signaling theory, resource dependence theory, and stakeholder theory. Given the increasing importance of sustainable finance, ESG practices, supported financial decision-making, and quantitative analysis provide a robust framework for assessing how green financing activities influence firm-level outcomes.

The research model is developed based on signaling theory, stakeholder theory, and resource dependence theory. These theoretical perspectives provide the basis for examining both the direct relationship between managerial intention to issue green bonds and financial performance and the indirect relationship through sustainable financing capability. Given the cross-sectional nature of the survey data, the study focuses on theoretically proposed associations among the constructs rather than making strong causal claims.

Firm size is additionally included as a control variable because firms of different sizes may differ in their financial resources, market reputation, organizational capacity, and access to external financing. The inclusion of firm size therefore allows the structural relationships among the main constructs to be examined while accounting for potential differences associated with organizational scale.

Data Collection and Sample

Primary data were collected through a structured questionnaire administered to managers and finance-related professionals working in listed real estate and construction firms in Vietnam. The target respondents included senior managers, chief financial officers, chief accountants, finance managers, and other professionals involved in corporate financing, investment, or sustainability-related activities. These respondents were selected because their positions allow them to have direct knowledge of the firm's financing strategies, sustainable investment activities, and financial outcomes.

A total of 350 questionnaires were distributed. After excluding incomplete responses and questionnaires that did not satisfy the screening criteria, 286 valid responses were retained for analysis, representing a valid response rate of approximately 81.7%.

To improve the relevance of the responses, the survey targeted individuals who met the following criteria: (1) they were employed by a listed real estate or construction firm in Vietnam; (2) their work was related to finance, accounting, investment, corporate management, or sustainability activities; and (3) they possessed sufficient knowledge of the firm's financing decisions and financial performance. Responses that were substantially incomplete or did not meet these criteria were excluded from the final dataset.

The final sample exceeds the recommended threshold for covariance-based structural equation modeling (CB-SEM), thereby ensuring adequate statistical power and the robustness of subsequent analyses.

Measurement of Variables

The research model comprises three latent constructs: Managerial intention to issue green bonds (GBI), Sustainable Financing Capability (SFC), and Financial Performance (FP).

The construct of managerial intention to issue green bonds was operationalized using a five-item scale adapted from Flammer (2021), Tang and Zhang (2020), and MacAskill et al. (2021). In the original questionnaire, this construct was referred to as Green Bond Issuance. However, the items primarily capture firms' strategic consideration of green bonds and respondents' perceptions of the financial and sustainability-related value associated with this financing instrument rather than the actual amount or occurrence of green bond issuance. Therefore, the construct is referred to in this study as "managerial intention to issue green bonds" to better reflect its empirical operationalization. Managerial intention to issue green bonds represents the extent to which firms consider green bonds as a strategic financing instrument and perceive their potential value in facilitating long-term financing, attracting sustainability-oriented investors, enhancing sustainability reputation, and supporting green investment projects.

Sustainable Financing Capability was measured using five indicators adapted from the OECD (2022), ICMA (2021), and related sustainable finance literature. The construct reflects a firm's ability to mobilize, diversify, and manage financial resources in support of sustainable investment. In this study, sustainable financing capability is distinguished from green bond issuance orientation in an important way. Green bond issuance orientation reflects the firm's strategic consideration and perceived value of a particular sustainable financing instrument, whereas sustainable financing capability reflects the firm's organizational ability to obtain and manage sustainable financial resources. This distinction is important because recognizing green financing opportunities does not necessarily mean that a firm possesses the capability to convert such opportunities into usable financial resources. The indicators therefore capture the firm's ability to access diversified sustainable financing sources, mobilize green capital, support long-term sustainable projects, and maintain financial flexibility in relation to sustainable financing activities.

Financial performance was assessed through five items reflecting profitability, financing efficiency, cash flow management, and overall financial outcomes based on Venkatraman and Ramanujam (1986), Broadstock et al. (2021), and Flammer (2021). The indicators capture respondents' assessments of profitability, cash-flow management, operating efficiency, financing costs, and overall financial performance. The use of perceptual financial performance measures is consistent with the survey-based nature of the study. Rather than relying on a single accounting indicator, the construct captures managers' overall assessments of different dimensions of financial performance. At the same time, these measures should be interpreted as perceived financial performance rather than objective accounting performance. Objective indicators such as ROA, ROE, leverage, liquidity, or operating cash flow are not incorporated into the present structural model. This methodological choice is acknowledged as a limitation, and future research may combine perceptual measures with audited financial data to examine the robustness of the relationships identified in this study.

Control Variable: Firm size was included as a control variable rather than as a core theoretical construct. Larger firms may possess greater financial resources, stronger market credibility, and broader access to sustainable financing channels.

Controlling for firm size therefore helps to isolate the relationships among green bond issuance orientation, sustainable financing capability, and perceived financial performance.

All constructs were assessed using five-point Likert-type scales (Table 1), with response options ranging from 1 ("strongly disagree") to 5 ("strongly agree"). Firm size was included as a control variable because larger firms generally possess stronger financial resources, greater market credibility, and enhanced access to sustainable financing channels.

Table 1. Measurement scales and construct operationalization.

Code	Description	Sources
Managerial intention to issue green bonds (GBI)		
GBI1	Our company considers issuing green bonds as a strategic financing option.	Flammer (2021), Tang & Zhang (2020), MacAskill et al. (2021)
GBI2	Our management intends to issue green bonds when suitable financing opportunities arise.	
GBI3	Our company plans to incorporate green bond financing into its future capital-raising strategy.	
GBI4	Top management is willing to commit organizational resources to preparing for a green bond issuance.	
GBI5	Our company has a strong managerial intention to pursue green bond issuance in the foreseeable future.	
Sustainable Financing Capability (SFC)		
SFC1	Our company is able to identify sustainable financing instruments that match its long-term investment needs.	OECD (2022), ICMA (2021), Flammer (2021)
SFC2	Our company possesses the financial expertise required to structure sustainable financing arrangements.	
SFC3	Our company can mobilize sustainable financing from multiple external funding sources.	
SFC4	Our company has established processes for allocating and managing sustainable finance for eligible green projects.	
SFC5	Our company can adapt its financing strategy to changing sustainability requirements and green investment opportunities.	
Financial Performance (FP)		
FP1	The company's profitability has improved.	Venkatraman & Ramanujam (1986), Flammer (2021), Broadstock et al. (2021)
FP2	The company has better cash flow management.	
FP3	The company has improved operational efficiency.	
FP4	The company has reduced financing costs.	
FP5	The company has improved overall financial performance.	

To avoid conceptual overlap, this study distinguishes managerial intention to issue green bonds (GBI) from sustainable financing capability (SFC) at both the conceptual and measurement levels. GBI reflects managers' prospective willingness, commitment, and strategic intention to use green bonds as a financing instrument. It is therefore an intentional construct referring to a future financing decision rather than to the financial consequences of issuance. This interpretation is consistent with prior green bond research showing that issuance reflects strategic financing and signaling choices by firms (Flammer, 2021; Tang & Zhang, 2020).

By contrast, SFC captures an organizational capability rather than a financing decision or financing outcome. Drawing on the dynamic capabilities perspective, SFC refers to the firm's ability to identify, mobilize, structure, manage, and deploy sustainable financing resources in support of long-term environmental projects. Such capability is embedded in organizational routines, financial expertise, coordination mechanisms, and the ability to align sustainable financing with investment needs (Teece, 2007). Accordingly, SFC is positioned as the organizational mechanism through which a green financing decision may be translated into broader financial benefits, rather than as a direct restatement of the expected outcomes of green bond issuance.

Data Analysis Techniques

The data were analyzed using SPSS and AMOS through a systematic multi-stage analytical framework. The analysis commenced with Harman's single-factor test to assess the potential presence of common method bias. Internal consistency was subsequently evaluated using Cronbach's alpha coefficients and corrected item-total correlations. Exploratory Factor Analysis (EFA) was then conducted to identify the underlying factor structure and establish the preliminary construct validity of the measurement model. Subsequently, Confirmatory Factor Analysis (CFA) was employed to assess convergent validity, discriminant validity, Composite Reliability (CR), and Average Variance Extracted (AVE). Finally, Structural Equation Modeling (SEM) was applied to test the proposed hypotheses and estimate both the direct and indirect relationships specified in the conceptual framework. The mediating role of sustainable financing capability was assessed through indirect

effect estimation, enabling a comprehensive understanding of how managerial intention to issue green bonds contributes to financial performance in the context of sustainable finance and corporate transformation.

Next, the research model (Figure 1).

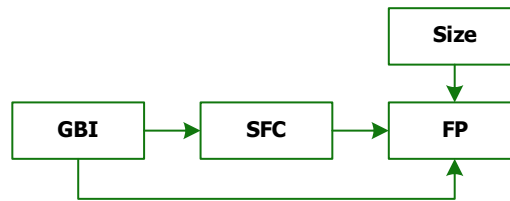


Figure 1. Research model.

RESULTS

Verify the reliability of collected data

Prior to evaluating the reliability and validity of the measurement model, the data were examined for potential common method bias, a potential concern in self-reported survey research. Harman's single-factor test was subsequently performed to determine whether a single latent factor accounted for the majority of the total variance. The corresponding results are reported in Table 2.

In addition to the statistical assessment, several procedural measures were employed to reduce the potential for common method bias during questionnaire design and data collection. Respondents were informed that their responses would remain anonymous and would be used solely for academic purposes, thereby reducing evaluation apprehension and socially desirable responding. The questionnaire also clearly separated the measurement items for managerial intention to issue green bonds, sustainable financing capability, and financial performance, while concise and neutral wording was used to minimize ambiguity and respondents' ability to infer the hypothesized relationships. These ex ante procedural remedies complement Harman's single-factor test and reduce the likelihood that the observed relationships are primarily attributable to the common measurement method (Podsakoff et al., 2003).

Table 2. Results of Harman's single-factor test for common method bias. (Source: Authors' compilation based on survey data (2026) using SPSS and AMOS)

KMO		0.911
Bartlett's Test Bartlett's	Chi-Square	2370.814
	Df	105
	Sig.	<0.001
Total variance explained for a single factor		45.565%

The results indicate a KMO value of 0.911 and a statistically significant Bartlett's test ($p < 0.001$), confirming the suitability of the dataset for factor analysis. Although Harman's single-factor test cannot conclusively rule out common method variance, the first factor accounted for 45.565% of the total variance, below the conventional 50% reference level. Considered together with the procedural remedies adopted during questionnaire design and administration, this result suggests that common method bias is unlikely to dominate the observed relationships. Nevertheless, the possibility of residual method variance cannot be completely excluded (Podsakoff et al., 2003).

The Quality Scale Analysis Result

The internal consistency of the measurement model was evaluated using Cronbach's alpha coefficients and corrected item-total correlations for all constructs incorporated into the conceptual framework. The corresponding reliability statistics are presented in Table 3.

Table 3. Reliability analysis of the measurement scales. (Source: Authors' compilation based on survey data (2026) using SPSS and AMOS)

Description	N	Cronbach's Alpha	Corrected Item-Total Correlation
Managerial intention to issue green bonds (GBI)	5	0.898	0.862
Sustainable Financing Capability (SFC)	5	0.899	0.867
Financial Performance (FP)	5	0.847	0.800

As reported in Table 3, all constructs exhibit Cronbach's alpha coefficients above 0.84, demonstrating a high degree of internal consistency. Moreover, the corrected item–total correlations exceed the recommended threshold for all measurement items, confirming that each indicator contributes adequately to the reliability of its corresponding construct. These results confirm that the scales for Managerial intention to issue green bonds, Sustainable Financing Capability, and Financial Performance are reliable and suitable for further multivariate analysis (Nunnally, 1994).

From a practical perspective, the findings imply that respondents consistently perceive the importance of green financing and sustainable capital mobilization in supporting business performance under increasingly stringent ESG requirements.

Exploratory Factor Analysis (EFA)

Following the assessment of internal consistency, Exploratory Factor Analysis (EFA) was performed to examine the underlying dimensional structure of the measurement model and verify whether the observed indicators adequately reflected the proposed latent constructs. The corresponding findings are reported in Table 4.

Table 4. KMO and Bartlett's test for sampling adequacy and factorability. (Source: Authors' compilation based on survey data (2026) using SPSS and AMOS)

No	Description	Value
1	KMO	0.911
2	Bartlett's test	Chi-Square
		2370.814
		Df
		105
		Sig.
		<0.001
3	Total Variance Explained	Number of contributing factors
		3
		Initial Eigenvalue
		1.276
		Variance extracted
		68.638
Principal Factor Rotation Matrix		
	GBI	SFC
	GBI	FB
GBI1	0.901	
GBI4	0.880	
GBI2	0.871	
GBI3	0.792	
GBI5	0.721	
SFC5		0.908
SFC1		0.893
SFC2		0.855
SFC3		0.783
SFC4		0.725
FP1		0.850
FP5		0.818
FP4		0.809
FP2		0.699
FP3		0.671

The EFA results confirm the existence of three distinct factors corresponding to managerial intention to issue green bonds, sustainable financing capability, and financial performance. The KMO value of 0.911, significant Bartlett's test, and cumulative variance explained of 68.638% indicate strong construct validity (Hair et al., 2010). All factor loadings exceed recommended thresholds, demonstrating that the observed indicators effectively capture their intended constructs.

Economically, these findings suggest that green bond activities, financing capability, and financial performance are perceived by respondents as separate but interrelated dimensions of corporate sustainability strategy, particularly within capital-intensive industries such as real estate and construction, where long-term financing plays a pivotal role in sustaining investment and corporate growth.

Measuring reliability and validity in CFA analysis

To further assess measurement quality, Confirmatory Factor Analysis (CFA) was subsequently conducted to validate the measurement model by assessing convergent validity, discriminant validity, and overall model fit. The CFA model is illustrated in Figure 2.

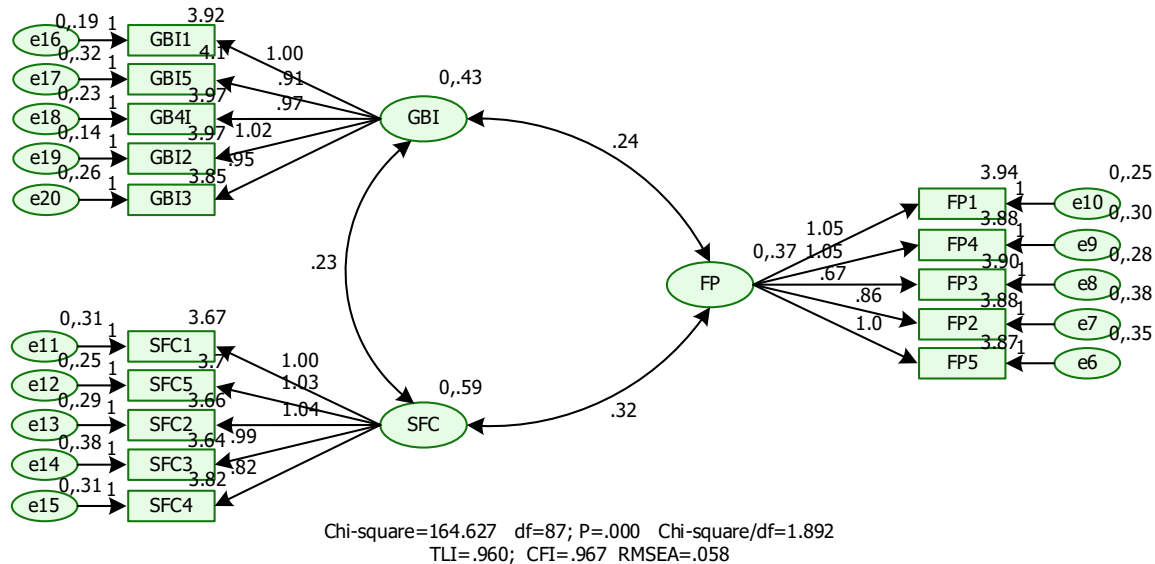


Figure 2. CFA analysis. (Source: prepared by the authors (2026) and CB SEM software)

The CFA results demonstrate satisfactory model fit, with all standardized loadings reaching acceptable levels. The measurement model demonstrates an adequate representation of the relationships between the observed indicators and their underlying latent constructs. This finding supports the theoretical structure proposed in the study and indicates that respondents consistently associate managerial intention to issue green bonds with financing capability and financial outcomes. This empirical evidence is especially valuable in emerging economies, where green finance frameworks remain at a formative stage, and their effectiveness requires further empirical verification.

Table 5 presents the reliability and validity indicators obtained from CFA, including Composite Reliability (CR), Average Variance Extracted (AVE), Maximum Shared Variance (MSV), and discriminant validity measures

Table 5. Reliability and validity. Note: † indicates a STARVE (diagonal) condition where the main diagonal value > the lower elements in the column. (Source: Authors' compilation based on survey data (2026) using SPSS and AMOS)

Description	CR	AVE	MSV	MaxR(H)	FP	SFC	GBI
FP	0.848	0.529	0.447	0.854	0.728†		
SFC	0.901	0.645	0.447	0.904	0.668	0.803†	
GBI	0.900	0.644	0.348	0.908	0.590	0.458	0.802†

The CFA results demonstrate that all Composite Reliability (CR) coefficients exceed 0.80, while the Average Variance Extracted (AVE) values are consistently above the recommended benchmark of 0.50, providing robust evidence of convergent validity. In addition, the AVE values surpass the corresponding Maximum Shared Variance (MSV), and the square roots of AVE are greater than the inter-construct correlations, thereby confirming satisfactory discriminant validity (Hair et al., 2010). These findings suggest that the three constructs capture distinct theoretical concepts.

In the current environment of sustainable finance and digital transformation, the ability to empirically distinguish financing capability from financial performance is particularly important because firms increasingly rely on sophisticated financing strategies to maintain competitiveness.

To further substantiate discriminant validity, the Heterotrait–Monotrait Ratio (HTMT) was employed as an additional diagnostic criterion. The corresponding results are presented in Table 6.

Table 6. Analysis results: Heterotrait- Monotrait ratio of correlations (HTMT). (Source: Authors' compilation based on survey data (2026) using SPSS and AMOS)

Description	FP	SFC	GBI
FP			
SFC	0.684		
GBI	0.610	0.469	

All HTMT ratios fall well below the recommended cutoff value of 0.85, providing additional evidence that the constructs exhibit adequate discriminant validity (Hair et al., 2010). This result provides further evidence that Managerial intention to issue green bonds, Sustainable Financing Capability, and Financial Performance represent conceptually distinct dimensions. The findings strengthen confidence in the measurement model and support subsequent structural analysis.

Covariance matrix

Prior to estimating the structural model, Pearson correlation analysis was performed to assess the bivariate relationships among the principal constructs included in the conceptual framework. The covariance matrix is presented in Table 7.

Table 7. The relationship between variables in the research model. Note: ** indicates significance level <0.1% (Source: Authors' compilation based on survey data (2026) using SPSS and AMOS)

Description	GBI	SFC	FP
GBI	1		
SFC	0.407**	1	
FP	0.504**	0.571**	1

The correlation coefficients indicate significant positive relationships among all constructs. Managerial intention to issue green bonds is positively associated with sustainable financing capability and financial performance, while sustainable financing capability also exhibits a strong positive relationship with financial performance.

These preliminary findings are consistent with the theoretical expectations and suggest that firms actively engaging in green financing activities tend to strengthen their financing capacity and achieve superior financial outcomes. In the context of tighter credit conditions and growing ESG pressures, such relationships are increasingly relevant for real estate and construction firms.

Measurement results using linear structural modeling

Structural Equation Modeling (SEM) was subsequently applied to evaluate the proposed structural model by examining the hypothesized direct and indirect relationships among the latent constructs. The estimated structural model is presented in Figure 3.

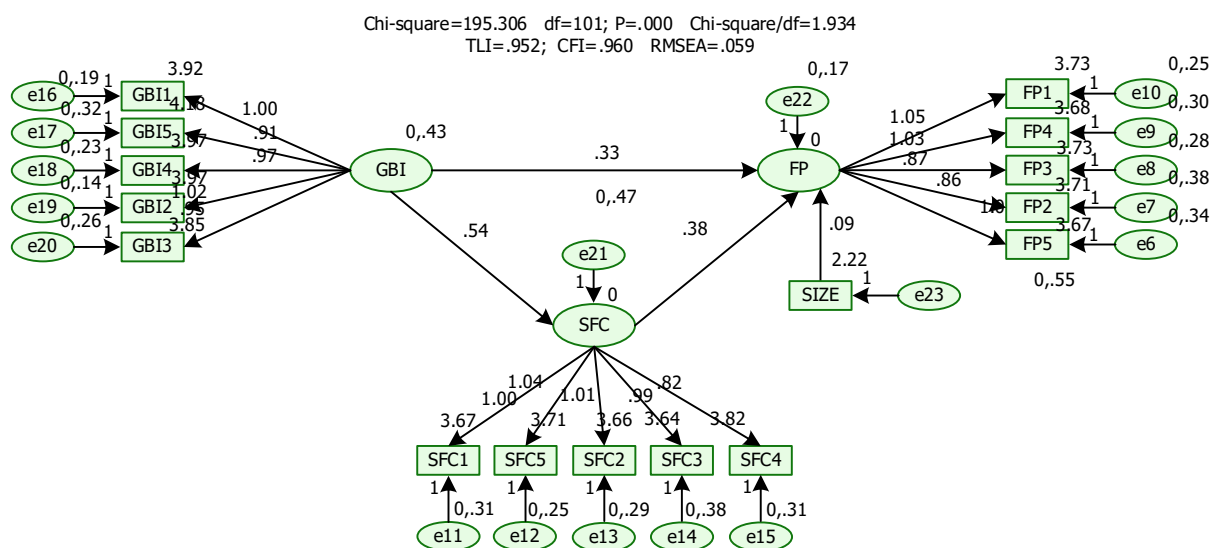


Figure 3. SEM regression model. (Source: prepared by the authors (2026) and CB SEM software)

The SEM model demonstrates satisfactory goodness-of-fit statistics, indicating that the proposed theoretical framework adequately explains the observed data. The results provide empirical support for the hypothesized relationships among managerial intention to issue green bonds, sustainable financing capability, and financial performance.

This finding suggests that green finance has become an increasingly important strategic instrument for firms seeking sustainable growth and financial resilience in an environment characterized by economic uncertainty, digital transformation, and rising stakeholder expectations regarding ESG performance.

Table 8 reports the structural equation modeling results, including direct effects, mediating effects, and the explanatory power of the proposed model.

Table 8. Estimation results using the SEM model. (Source: Authors' compilation based on survey data (2026) using SPSS and AMOS)					
Independent variable	Dependent variable	R ²	Normalization coefficient	T	P.value
Direct impact					
SFC	FP	0.539	0.491	6.937	<0.01
GBI			0.356	5.401	<0.01
SIZE			0.107	2.121	0.034
GBI	SFC	0.209	0.458	6.834	<0.01
Intermediation role and indirect impact coefficient					
GBI --> SFC --> FP			0.225		<0.001

The structural model results reveal that managerial intention to issue green bonds exerts a significant positive effect on sustainable financing capability ($\beta = 0.458$, $p < 0.01$), thereby supporting H1. In turn, Sustainable Financing Capability demonstrates a significant positive influence on Financial Performance ($\beta = 0.491$, $p < 0.01$), providing empirical support for H2. Managerial intention to issue green bonds also exhibits a statistically significant direct effect on financial performance ($\beta = 0.356$, $p < 0.01$), lending support to H3. Furthermore, the indirect effect of managerial intention to issue green bonds on financial performance through sustainable financing capability is positive and statistically significant ($\beta = 0.225$, $p < 0.001$), confirming the mediating role of sustainable financing capability and supporting H4 (Hair et al., 2010). The positive effect of firm size further indicates that larger firms possess advantages in accessing sustainable capital and implementing green projects.

Economically, these findings suggest that green bonds not only serve as a financing instrument but also strengthen firms' long-term financing capability, thereby improving overall financial performance. This conclusion is highly relevant for Vietnamese real estate and construction firms as they increasingly pursue sustainable development strategies and seek alternative financing sources in response to evolving ESG and climate-related requirements.

DISCUSSION

The empirical findings demonstrate that managerial intention to issue green bonds significantly strengthens sustainable financing capability among listed real estate and construction firms in Vietnam. This evidence lends strong support to signaling theory by indicating that the issuance of green bonds conveys credible information regarding a firm's commitment to sustainability, financial transparency, and responsible corporate governance, thereby enhancing its ability to access sustainable financing resources (Spence, 1973). The finding is aligned with Flammer (2021), who reported that managerial intention to issue green bonds improves firms' environmental credibility and strengthens their relationships with long-term investors. In the current context of sustainable finance and increasing ESG-related disclosure requirements, green bonds appear to function not only as financing instruments but also as strategic mechanisms for improving firms' access to sustainability-oriented capital.

The study further demonstrates that sustainable financing capability exerts a significant positive effect on financial performance. This finding supports resource dependence theory, which argues that organizations possessing superior access to strategic resources are more likely to achieve competitive advantages and stronger performance outcomes (Pfeffer & Salancik, 1978). The result is consistent with Broadstock et al. (2021), who found that firms with stronger sustainability-related capabilities exhibit greater resilience and financial stability during periods of economic uncertainty. For real estate and construction firms, which typically require substantial capital investments and face long project development cycles,

sustainable financing capability becomes increasingly important in maintaining liquidity, funding green projects, and improving financial outcomes.

The identified direct effect of managerial intention to issue green bonds on corporate financial performance is broadly aligned with the existing international literature, which consistently documents the value-enhancing role of green financing initiatives across diverse institutional settings. Tang and Zhang (2020) reported that managerial intention to issue green bonds improves market confidence and attracts institutional investors, while MacAskill et al. (2021) emphasized that green financing may reduce financing constraints and improve capital allocation efficiency. The present findings suggest that these benefits are increasingly relevant in Vietnam, where firms are adapting to tighter credit conditions, more demanding sustainability regulations, and the gradual expansion of green capital markets.

More importantly, the findings reveal an emerging-market mechanism that differs from the predominantly market-based explanations documented in developed economies. In more mature green bond markets, the benefits of issuance are commonly associated with investor signaling, environmental credibility, pricing effects, and improved access to sustainability-oriented investors (Flammer, 2021; MacAskill et al., 2021). In Vietnam, however, where the green bond market remains comparatively less mature and sustainable finance institutions are still evolving, managerial intention alone may be insufficient to generate equivalent financial benefits. The significant mediating role of sustainable financing capability indicates that firms must develop the internal capacity to mobilize, structure, and deploy sustainable capital before green bond initiatives can translate into stronger financial performance. This finding constitutes a context-specific contribution by showing that, in emerging markets, organizational financing capability may compensate partly for institutional and market constraints, thereby functioning as a critical bridge between green financing intentions and realized economic outcomes.

A key theoretical contribution of this study lies in empirically validating the mediating role of sustainable financing capability in the relationship between managerial intention to issue green bonds and corporate financial performance. The results indicate that managerial intention to issue green bonds does not improve financial performance automatically; rather, its impact is transmitted through a firm's ability to mobilize, manage, and allocate sustainable capital effectively. By identifying sustainable financing capability as an underlying mediating mechanism, this study advances the existing literature beyond the predominant focus on direct relationships and provides deeper insight into the internal financing processes through which managerial intention to issue green bonds contributes to corporate financial performance. In an environment characterized by growing investor attention to ESG performance, climate-related risks, and sustainable development objectives, firms that successfully transform green financing opportunities into financing capability are more likely to achieve superior financial performance and long-term competitiveness.

Implications

For corporate managers, the findings suggest that managerial intention to issue green bonds should be embedded within firms' long-term financing and sustainability strategies rather than treated merely as an alternative source of capital. Managers of listed real estate and construction firms should strengthen sustainable financing capability by developing specialized expertise in green finance, establishing clear responsibilities for ESG and sustainable finance, improving project-selection and monitoring procedures, and integrating sustainability information into capital-allocation decisions. Particular attention should be given to credible environmental disclosure and the traceability of green-bond proceeds, since financing intentions are more likely to generate economic value when firms possess the organizational capacity to mobilize, manage, and deploy sustainable capital effectively. Digital financial systems and AI-enabled analytics may further support project screening, risk assessment, cash-flow forecasting, and sustainability-performance monitoring.

For policymakers and financial regulators, the results highlight the importance of strengthening the institutional conditions through which corporate green-financing intentions can be translated into effective sustainable financing. Policy priorities should include greater consistency in green classification and eligibility criteria, clearer disclosure requirements, stronger external review and verification arrangements, and effective supervision of the use and reporting of green-bond proceeds. Regulators should also reduce unnecessary procedural barriers while maintaining safeguards against greenwashing and information asymmetry. For an emerging green-finance market such as Vietnam, a transparent and predictable regulatory framework can lower issuance uncertainty, strengthen market credibility, and encourage qualified real estate and construction firms to participate more actively in green capital markets.

For financial institutions, including commercial banks, securities companies, investment funds, and financial advisers, the findings indicate a need to move beyond the passive provision of capital toward building an enabling ecosystem for sustainable financing. These institutions can develop green-bond structuring and advisory services, sustainability-linked financial products, ESG risk-assessment frameworks, and technical assistance for firms preparing eligible green projects and

disclosure documentation. They can also support issuers in improving financial planning and matching project characteristics with appropriate sustainable financing instruments. Such actions are particularly relevant to real estate and construction firms because large capital requirements, long investment horizons, and project-specific environmental risks can make the transition from an intention to raise green finance to an executable financing strategy relatively complex.

For investors, the findings emphasize the importance of evaluating not only whether a firm intends to issue green bonds but also whether it possesses the sustainable financing capability required to convert green capital into credible projects and financial outcomes. Institutional and sustainability-oriented investors should therefore incorporate the quality of green-project selection, use-of-proceeds governance, sustainability disclosure, external verification, and the issuer's broader financing capability into investment screening and portfolio monitoring. Greater investor scrutiny can strengthen market discipline, differentiate substantive green financing from symbolic commitments, and provide incentives for issuers to improve transparency and accountability. In this way, informed capital allocation can simultaneously support investor risk management, corporate financial resilience, and the development of a more credible and sustainable green bond market in Vietnam.

Limitations

Notwithstanding its theoretical and practical contributions, this study is subject to several limitations that should be acknowledged when interpreting the findings. First, the analysis relies on cross-sectional survey data collected from respondents in a specific period, which may not fully capture dynamic changes in financing practices and firm performance over time. Second, the study focuses on listed real estate and construction firms in Vietnam, which may constrain the external validity and broader applicability of the findings across different industrial settings and national contexts. Third, although the research incorporates the contemporary context of digital transformation and artificial intelligence, these factors are discussed conceptually rather than measured directly in the empirical model.

Several additional methodological limitations warrant consideration. The focal constructs and financial performance were assessed primarily through respondents' perceptions, which may introduce subjective evaluation and residual common method variance; future studies should therefore combine perceptual measures with objective indicators derived from audited financial statements, green bond issuance records, and capital-market data. Moreover, the cross-sectional design does not adequately address temporal ordering or potential endogeneity arising from reverse causality and omitted variables, and the estimated relationships should consequently not be interpreted as definitive causal effects. Longitudinal, panel-data, or quasi-experimental designs could provide stronger causal evidence and capture changes before and after green bond issuance. Finally, the sector-specific focus on listed real estate and construction firms limits generalizability; future research could test the proposed mechanism across industries, compare emerging and developed markets, and examine whether institutional development and green financial-market maturity condition the mediating role of sustainable financing capability.

CONCLUSIONS

This study was conducted to examine how managerial intention to issue green bonds contributes to financial performance through the development of sustainable financing capability in listed real estate and construction firms in Vietnam. Drawing upon signaling theory, resource dependence theory, and stakeholder theory, the proposed structural model was empirically tested using survey data collected from managers and finance professionals. The findings provide robust evidence regarding the mechanisms through which green financing enhances corporate financial outcomes within an emerging capital market increasingly shaped by ESG expectations, climate-related risks, digital transformation, and sustainable investment practices.

Regarding the research questions, the study provides several important conclusions. First (RQ1), the empirical findings confirm that managerial intention to issue green bonds significantly strengthens firms' sustainable financing capability, indicating that green bonds serve not only as financing instruments but also as strategic mechanisms for improving access to long-term sustainable capital. Second (RQ2), sustainable financing capability significantly enhances financial performance, suggesting that firms with stronger financing capability are better positioned to improve financial efficiency and long-term competitiveness. Third (RQ3), managerial intention to issue green bonds also exerts a positive direct effect on financial performance, demonstrating that sustainable financing initiatives can generate immediate economic benefits beyond their environmental objectives. Fourth (RQ4), sustainable financing capability partially mediates the relationship between managerial intention to issue green bonds and financial performance, implying that a considerable proportion of financial gains is achieved through the enhancement of firms' financing capability rather than through managerial intention

to issue green bonds alone. Finally (RQ5), firm size positively contributes to financial performance, suggesting that larger firms possess greater organizational resources, financing flexibility, and economies of scale, enabling them to benefit more effectively from sustainable financing strategies.

From a theoretical perspective, the study extends the sustainable finance literature by integrating signaling theory, stakeholder theory, and resource dependence theory into a unified framework explaining how managerial intention to issue green bonds influences corporate financial performance. Unlike many previous studies focusing primarily on direct financial outcomes, this research demonstrates that sustainable financing capability constitutes a critical organizational mechanism linking green financing with superior financial performance. The findings therefore contribute to a deeper understanding of capability-based value creation within sustainable finance, particularly in emerging markets where green capital markets continue to evolve.

Despite these contributions, several limitations should be acknowledged. The study relies on cross-sectional survey data collected from a single country and focuses exclusively on listed real estate and construction firms, which may limit the generalizability of the findings. Future research could employ longitudinal datasets, incorporate objective financial indicators, and examine additional organizational capabilities such as ESG disclosure quality, digital finance capability, AI-enabled financial management, corporate governance quality, or sustainable innovation to provide a more comprehensive explanation of how green finance contributes to long-term corporate performance and sustainable development.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally.

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CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

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ВПЛИВ ВИПУСКУ ЗЕЛЕНИХ ОБЛІГАЦІЙ НА ФІНАНСОВІ ПОКАЗНИКИ: ПОСЕРЕДНИЦЬКА РОЛЬ СПРОМОЖНОСТІ СТАЛОГО ФІНАНСУВАННЯ В КОМПАНІЯХ, ЩО КОТИРУЮТЬСЯ НА РИНКУ НЕРУХОМОСТІ ТА БУДІВНИЦТВА

Зростання значення сталого фінансування підвищило інтерес до зелених облігацій як стратегічних інструментів для підтримки екологічно відповідальних інвестицій і тривалого корпоративного зростання. У цьому дослідженні розглянуто вплив випуску зелених облігацій на фінансові показники та досліджена посередницька роль спроможності сталого фінансування в компаніях, що котируються на ринку нерухомості та будівництва у В'єтнамі. Базуючись на теорії сигналізації, теорії залежності ресурсів і теорії зацікавлених сторін, дослідження розробляє концептуальну

основу, що пов'язує випуск зелених облігацій, здатність до сталого фінансування та фінансові показники. Первинні дані були зібрані через структуроване опитування, проведене поміж менеджерів і фінансових фахівців, що працюють у зареєстрованих компаніях. Загалом було проаналізовано 286 дійсних відповідей за допомогою SPSS та AMOS. Аналітична процедура включала тестування надійності, дослідницький факторний аналіз (EFA), підтверджуючий факторний аналіз (CFA) та моделювання структурних рівнянь (SEM). Емпіричні результати свідчать, що випуск зелених облігацій суттєво підвищує здатність до сталого фінансування та безпосередньо покращує фінансові показники. Здатність до сталого фінансування також позитивно впливає на фінансові показники й слугує важливим посередницьким механізмом, через який випуск зелених облігацій приносить фінансові вигоди. Ці результати свідчать, що компанії можуть посилити свої фінансові результати не лише випуском зелених облігацій, а й ефективною мобілізацією, управлінням і розподілом сталих фінансових ресурсів.

Дослідження робить внесок у літературу зі сталого фінансування, надаючи дані з ринку, що розвивається, який характеризується зростанням тиску ESG, цифровою трансформацією та еволюцією зелених капітальних ринків. Висновки мають важливі наслідки для корпоративних менеджерів, інвесторів, фінансових установ і політиків, які прагнуть просувати сталий фінансовий розвиток і підвищувати корпоративні результати в галузях нерухомості та будівництва.

Ключові слова: зелені облігації, зелене фінансування, сталий розвиток, бухгалтерський облік, стале фінансування, ESG, моделювання структурних рівнянь, компанії у сфері нерухомості та будівництва

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