

# Global Corporate Financing Approaches and Investment Strategy Optimization: A Comparative Study of Emerging and Developed Markets

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## Abstract

*The dynamics of corporate financing strategies have become increasingly complex in an era marked by global uncertainty and diverse market structures. While developed markets often benefit from established institutional frameworks and sophisticated capital access, emerging markets face persistent challenges in striking a balance between sustainability, efficiency, and risk management. This study aims to compare corporate financing approaches across emerging and developed economies, focusing on their effectiveness in optimizing investment decisions and supporting long-term growth. Employing a mixed-method approach, the research combines quantitative analysis of financing performance indicators with qualitative case studies on institutional and governance contexts. The results demonstrate that firms in developed markets tend to rely on equity-based financing and shareholder-driven governance structures, which enhance transparency and facilitate portfolio optimization. Conversely, companies in emerging markets often depend more heavily on debt instruments, public-private partnerships, and adaptive strategies shaped by institutional limitations and behavioral investment patterns. A comparative analysis highlights these structural differences, providing insight into how financing decisions reflect both market maturity and contextual constraints. This study concludes that while developed markets achieve efficiency through established governance and diversified financing channels, emerging markets reveal innovation in addressing volatility and resource scarcity. The findings contribute to the discourse on comparative financial management by bridging theoretical frameworks with practical strategies, offering guidance for policymakers, corporate leaders, and investors seeking sustainable investment outcomes.*

**Keywords:** *Corporate Financing Strategies, Investment Optimization, Emerging Markets, Developed Markets, Comparative Financial Management.*

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## I. INTRODUCTION

The dynamics of corporate financing and investment strategies have become increasingly complex in a rapidly globalizing financial landscape. Emerging and developed markets exhibit distinct financial characteristics, shaped by variations in institutional frameworks, regulatory systems, cultural orientations, and the adoption of technology (Andhayani et al., 2024; Roje & Redmayne, 2021). In developed markets, financing approaches often benefit from mature institutions, advanced capital markets, and stable governance structures, which provide a solid foundation for informed corporate investment decision-making. In contrast, emerging markets face challenges such as institutional volatility, limited access to credit, and technological constraints, which in turn shape firms' approaches to both financing and investment optimization

(Akpan et al., 2022; Paul, 2020). This divergence has sparked scholarly and practical interest in understanding how financial strategies differ across contexts and how firms may optimize their investment portfolios in light of these market-specific dynamics.

Globally, the optimization of corporate financing and investment strategies has been a central focus of discussions on competitiveness, resilience, and sustainability. Firms are increasingly challenged to adapt their financial models to integrate considerations such as environmental, social, and governance (ESG) factors, technological disruption, and geopolitical risks (Boubaker et al., 2022; Gillan et al., 2020; Weston & Nnadi, 2023). In emerging economies, the rise of digital transformation has provided new avenues for financing and investment, but has also widened the gap between firms with advanced technological capabilities and those lagging behind (Al-Okaily et al., 2025; Goldman et al., 2021). Locally, these issues resonate strongly in regions such as Southeast Asia, Africa, and Latin America, where firms must balance limited institutional infrastructures with global competitive pressures. Understanding the comparative dynamics of financing approaches and investment optimization across these diverse markets is therefore not only a theoretical challenge but also a practical imperative for policymakers, practitioners, and scholars.

Theoretically, corporate financing strategies and investment decision-making are grounded in frameworks such as capital structure theory, portfolio optimization, and comparative financial management. Studies in the field highlight the need to account for both traditional financial variables, such as debt-to-equity ratios, liquidity, and profitability, as well as contemporary influences like digital finance, sustainability goals, and innovation strategies (Dźwigoł et al., 2020; Karim, 2022; Sijinjak et al., 2023). Emerging research also emphasizes the role of technological and algorithmic advancements in optimizing investment strategies, with scholars demonstrating the integration of artificial intelligence, machine learning, and multi-factor decision models to enhance financial outcomes (Guo & Kang, 2024; Han et al., 2024; Li et al., 2023). Despite these advancements, the comparative effectiveness of such strategies across developed and emerging markets remains insufficiently addressed.

The existing literature has examined aspects of financing and investment in isolation, yet it often overlooks the interconnectedness between corporate financial management and broader socio-economic environments. For example, while studies have explored how innovation strategies drive export performance in developing markets (Edeh et al., 2020) and how financial inclusion fosters the resilience of small and medium-sized enterprises (Layaman et al., 2020), there remains limited research on how these factors interact with corporate financing decisions at a global comparative level. Similarly, while developed markets are often studied as benchmarks of

financial sophistication, their comparative strengths and vulnerabilities vis-à-vis emerging markets have not been fully articulated (Andhayani et al., 2024). This research seeks to fill this gap by examining corporate financing approaches and investment optimization strategies from a comparative perspective, highlighting how context shapes practice.

The research gap can therefore be summarized in three dimensions. First, there is a lack of comprehensive comparative studies that directly evaluate corporate financing strategies across developed and emerging markets. Second, while algorithmic and AI-driven approaches have enriched investment optimization (J. Liu et al., n.d.; S. Liu & Xiao, 2021; Zanjirdar, 2020), most applications remain focused on single-market contexts rather than cross-market comparisons. Third, sustainability, ESG integration, and corporate governance have been studied separately in both contexts (Gerged, 2021; Padilla-Lozano & Collazzo, 2022), yet little is known about how these factors influence financing approaches and investment optimization strategies in an integrated, comparative framework. Addressing these gaps will not only advance theory but also inform practice by offering firms context-specific strategies to balance financial efficiency, risk management, and sustainable growth.

Based on these observations, the present study aims to answer the following research questions:

- How do corporate financing approaches differ between emerging and developed markets?
- What strategies are most effective in optimizing investments across these contexts?
- How do technological, institutional, and sustainability factors moderate these relationships?

By addressing these questions, this research contributes to the literature on international financial management by offering an integrated comparative analysis that bridges theoretical insights with practical implications. Furthermore, it advances our understanding of how firms in different market contexts can leverage both traditional and innovative financial models to enhance performance and resilience in an uncertain global economy. In doing so, this study not only strengthens the discourse on comparative financial management but also offers valuable guidance for practitioners, investors, and policymakers seeking to understand how firms navigate distinct financial ecosystems. The findings will contribute to a more nuanced understanding of the global financial landscape and provide actionable insights for designing financing and investment strategies that are contextually relevant, technologically adaptive, and sustainability-oriented.

## **II. LITERATURE REVIEW**

Corporate financing decisions are widely recognized as a key determinant of a firm's capacity to ensure long-term growth and competitiveness. Traditional perspectives, such as the pecking order

theory and trade-off theory, argue that firms optimize financing structures by balancing internal and external capital sources to minimize risk and the weighted average cost of capital (Barros et al., 2020). In emerging economies, however, financing approaches are often constrained by institutional weaknesses, underdeveloped capital markets, and resource scarcity, thereby necessitating innovative mechanisms for sustaining competitiveness (Sitinjak et al., 2023; Wibisono et al., 2024; Yizengaw & Agegnehu, 2021). More recent comparative analyses confirm that financing practices differ systematically between developed and emerging markets, shaped by variations in regulation, disclosure standards, and governance quality (Andhayani et al., 2024; Roje & Redmayne, 2021).

Investment strategies extend beyond short-term returns to encompass innovation, technology adoption, and adaptability to market shocks. The resource-based view provides a foundation for understanding how firms deploy financial resources strategically to build capabilities and competitive advantage (Paul, 2020). Empirical studies illustrate that innovation-driven strategies improve export performance in developing markets (Edeh et al., 2020), while algorithmic optimization and machine learning have been shown to outperform traditional models in volatile environments (Guo & Kang, 2024; Li et al., 2023; S. Liu & Xiao, 2021; Suwardi et al., 2024). Additionally, digital transformation has become central to investment decision-making, with firms adopting AI and advanced financial information systems to strengthen resilience and forecasting (Al-Okaily et al., 2025; Han et al., 2024). The COVID-19 pandemic further underscored the importance of technology adoption for survival, especially among SMEs in emerging markets (Akpan et al., 2022).

Recent scholarship emphasizes environmental, social, and governance (ESG) as a moderating mechanism that links financing approaches with long-term investment outcomes. ESG integration has been associated with favorable financing conditions, enhanced competitiveness, and greater resilience to external shocks (Gillan et al., 2020; Weston & Nnadi, 2023). In parallel, sustainability-focused financing instruments, such as green bonds and subsidies, have proven effective in supporting environmentally responsible investment (Hussain et al., 2022). Research in manufacturing sectors highlights that green innovation and corporate social responsibility (CSR) improve both financial performance and competitive advantage (Padilla-Lozano & Collazzo, 2022). Nevertheless, firms in emerging markets face constraints due to weaker governance structures and limited resources (Aqham et al., 2024; Gerged, 2021). These findings suggest that ESG plays a critical moderating role, influencing the extent to which financing translates into effective investment strategies across different market contexts.

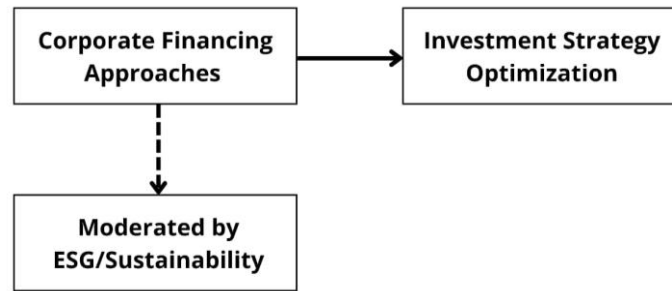
Despite substantial research on corporate financing, investment optimization, and sustainability, prior studies often analyze these dimensions in isolation. Financing has been studied primarily through capital structure and institutional theories, investment optimization through digital and algorithmic approaches, and ESG through the lens of corporate responsibility. However, few studies integrate these three perspectives into a unified framework, particularly in comparative contexts across emerging and developed markets. To consolidate insights, Table 1 presents a synthesis of relevant studies.

**Table 1. Literature Synthesis on Corporate Financing Approaches and Investment Strategy Optimization**

| Author(s) & Year        | Theoretical Lens / Focus                      | Methodology                       | Key Findings  | Contribution to This Study   |
|-------------------------|---|-----------------------------------|---|--|
| (Dźwigoł et al., 2020)  | Sustainable development & investment strategy | Expert assessment, qualitative    | An investment strategy is essential for long-term corporate resilience                    | Provides a sustainability perspective in financing approaches            |
| (Gillan et al., 2020)   | ESG & CSR in corporate finance                | Literature review                 | ESG and CSR reshape corporate financial decisions globally                                | Frames ESG as a driver of financial optimization                         |
| (Edeh et al., 2020)     | Innovation & export performance               | Empirical (developing markets)    | Innovation strategies enhance export performance in emerging markets                      | Links innovation with financial and investment priorities                |
| (Boubaker et al., 2022) | Impact of wars on global equity markets       | Event study, stock data           | Geopolitical shocks create heterogeneous market impacts                                   | Highlights the vulnerability of investment strategies to external shocks |
| (Gerged, 2021)          | Corporate governance & disclosure             | Empirical, emerging markets       | Governance structures influence environmental disclosure                                  | Shows institutional gaps in emerging markets                             |
| (Weston & Nnadi, 2023)  | ESG policies & corporate finance              | Empirical, sustainability finance | ESG integration improves a firm's financial performance                                   | Strengthens the role of ESG in strategy optimization                     |
| (Goldman et al., 2021)  | Cross-border e-commerce strategies            | Comparative analysis              | Developed markets adopt structured digital strategies; emerging markets face constraints. | Illustrates digital gaps in financial management                         |
| (Guo & Kang, 2024)      | AI & investment optimization                  | Quantitative, algorithm-based     | The GA-UCB algorithm improves portfolio optimization                                      | Provides a technological foundation for investment decisions             |
| (Li et al., 2023)       | Machine learning & investment                 | Empirical, ML models              | ML enhances investment optimization under uncertainty                                     | Adds digital innovation perspective                                      |

|                                   |   |                                 |  |   |
|-----------------------------------|---|---------------------------------|--|---|
| (Han et al., 2024)                | AI-agent collaboration                        | Financial research methods      | AI collaboration enhances investment analysis                | Demonstrates the potential of AI in global investment |
| (S. Liu & Xiao, 2021)             | Optimization algorithms                       | Comparative, simulation         | New algorithms outperform traditional portfolio models       | Adds computational dimension to optimization          |
| (Zanjirdar, 2020)                 | Portfolio optimization overview               | Literature review               | Comprehensive models exist, but limited integration with ESG | Identifies need for an integrated framework           |
| (Hussain et al., 2022)            | Green bonds & subsidies                       | Empirical, green finance        | Green investments yield financial & ecological benefits      | Strengthens the sustainability dimension              |
| (Padilla-Lozano & Collazzo, 2022) | CSR, green innovation, competitiveness        | Empirical, manufacturing        | Sustainability is linked with competitiveness                | Reinforces the ESG-investment connection              |
| (Layaman et al., 2020)            | Financial literacy & inclusion                | Comparative study, MSMEs        | Financial inclusion enhances MSME access to financing        | Contextualizes emerging markets' financing challenges |
| (Fitriah et al., 2023)            | Financial literacy & digital platforms        | Comparative case study          | Digital tools improve early financial literacy               | Shows the social-cultural dimension of finance        |
| (Rosca et al., 2020)              | Women entrepreneurs & social entrepreneurship | Comparatively, emerging markets | Social entrepreneurship influences financial strategies      | Links social dynamics with financial behavior         |
| (Paul, 2020)                      | Marketing in emerging markets                 | Literature synthesis            | Consumer behavior impacts financial strategy in EMs          | Adds socio-cultural dimension                         |
| (Roje & Redmayne, 2021)           | Comparative financial reporting               | Empirical (state assets)        | Developed vs emerging markets show reporting differences     | Shows institutional divergence                        |
| (Karim, 2022)                     | Financial performance analysis                | Quantitative ratios & EVA       | Financial ratios/EVA are proper for cross-country analysis   | Adds a comparative measurement perspective            |

Drawing from the synthesis in Table 1, this study develops a conceptual framework that integrates financing approaches, investment optimization, and ESG as a moderating factor. Financing decisions are posited to directly influence the effectiveness of investment strategies, while ESG and sustainability considerations strengthen or weaken this relationship depending on the institutional and market context. As illustrated in Figure 1, the framework shows that financing approaches serve as the independent variable, investment optimization as the dependent variable, and ESG/sustainability as a moderator. This integrative model draws on pecking order and trade-off theories, the resource-based view, and contemporary ESG research, forming the foundation for hypothesis development.



**Figure 1. Conceptual Framework of the Study**

The conceptual framework in Figure 1 provides the basis for the research hypotheses. It assumes that corporate financing approaches have a significant effect on investment optimization strategies, and that ESG/sustainability moderates this relationship across developed and emerging market contexts. The following section elaborates these hypotheses in detail. This framework draws on contemporary theories that link sustainability performance to financial decision-making outcomes, particularly in dynamic market environments.

### **III. RESEARCH METHOD**

#### *A. Research Design*

This study employs a quantitative research design, complemented by qualitative insights to enhance interpretation. The quantitative approach enables the testing of hypothesized relationships between financing approaches, investment strategy optimization, and ESG moderation across emerging and developed markets. Such a design is appropriate given the objective of identifying causal effects and comparative dynamics between groups (Barros et al., 2020). In parallel, qualitative reflections obtained from selected case examples enhance contextual understanding, particularly of sustainability-driven practices in emerging economies (Rosca et al., 2020). This mixed orientation reflects a pragmatic stance, ensuring both statistical rigor and contextual richness in addressing the research questions.

#### *B. Population and Sampling*

The population of this research consists of publicly listed firms operating in both emerging markets and developed markets, covering diverse industries such as manufacturing, technology, and financial services. From this population, the study selects a purposive sample of 400 firms (200 from emerging markets and 200 from developed markets) to facilitate a balanced comparison. The sampling frame is derived from financial databases and official stock exchange listings, ensuring accessibility to reliable data. Purposive sampling is considered appropriate in this context, as the firms must have publicly available ESG disclosure and financial reports, which are essential for measuring the key constructs (Andhayani et al., 2024; Gerged, 2021).

### *C. Variables and Measurement*

The study involves three primary constructs: corporate financing approaches (independent variable), investment strategy optimization (dependent variable), and ESG and sustainability orientation (moderator). Financing approaches are measured using indicators such as debt-to-equity ratio, cost of capital, and reliance on internal versus external funding sources (Karim, 2022; Sitinjak et al., 2023). Investment strategy optimization is captured through innovation intensity, digital adoption, and portfolio performance efficiency, consistent with machine learning–based optimization frameworks (Guo & Kang, 2024; Li et al., 2023). ESG orientation is assessed via standardized disclosure indices, CSR activity reports, and evidence of green innovation, following prior approaches in sustainability research (Padilla-Lozano & Collazzo, 2022; Weston & Nnadi, 2023).

### *D. Research Instruments*

The main research instrument is a structured questionnaire, distributed to financial managers, CFOs, and investment officers of sampled firms. The questionnaire includes Likert-scale items designed to measure perceptions of financing practices, ESG integration, and investment performance, adapted from validated items in prior studies (Al-Okaily et al., 2025; Gillan et al., 2020). Secondary data are also collected from annual reports, ESG disclosures, and financial databases to triangulate responses. In addition, semi-structured interviews are conducted with 20 key informants across both market groups to capture contextual factors, particularly regarding sustainability pressures and technological adoption (Akpan et al., 2022; Han et al., 2024).

### *E. Data Collection Procedures*

Data collection is conducted in three phases. First, the structured questionnaires are disseminated electronically using corporate email addresses and professional business platforms. Second, secondary data from company reports and databases are retrieved to enhance the objectivity of the measurement. Third, interviews with key informants are carried out online and in-person, ensuring adherence to ethical research guidelines. To visualize this sequence, Figure 2 (Research Flowchart) presents the procedural flow of the study, from conceptualization and instrument design through data collection, analysis, and reporting of results. This figure illustrates how the quantitative and qualitative strands are integrated systematically throughout the research process.

### *F. Data Analysis Techniques*

Given the complex relationships among variables, the study employs Structural Equation Modeling (SEM) with Partial Least Squares (PLS) estimation as the primary analytical technique. SEM is appropriate for testing direct and moderating effects simultaneously while handling latent

constructs measured through multiple indicators (Barros et al., 2020). Additionally, multi-group analysis (MGA) is applied to compare emerging and developed market subsamples, allowing examination of potential heterogeneity in effects (Andhayani et al., 2024). Complementary robustness checks are performed using panel regression analysis to address potential endogeneity, following established corporate finance methodology (Barros et al., 2020).

#### *G. Validity and Reliability*

Instrument validity is established through expert review and pilot testing, ensuring content validity across financing, investment, and ESG measures. Construct validity is assessed using confirmatory factor analysis, with all factor loadings expected to exceed recommended thresholds. Reliability is tested through Cronbach's alpha and composite reliability, with coefficients above 0.70 indicating acceptable internal consistency (Fitriah et al., 2023). Furthermore, discriminant validity is examined using the Fornell–Larcker criterion to confirm conceptual distinctness among constructs.

#### *H. Ethical Considerations*

The study ensures adherence to ethical principles by maintaining respondent confidentiality, obtaining informed consent, and ensuring that participation is voluntary. Sensitive corporate information is anonymized, and findings are reported in aggregate form. Ethical clearance is obtained from the relevant institutional review board prior to data collection. This ethical framework is particularly critical in cross-country research, where cultural norms and corporate governance standards may differ significantly (Roje & Redmayne, 2021).

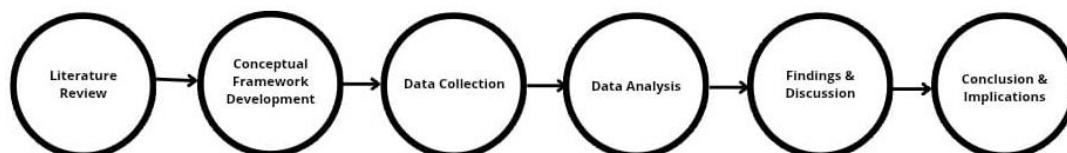
#### *I. Justification of Methodological Choices*

The methodological framework chosen for this research reflects a deliberate balance between rigor and relevance. The use of SEM-PLS enables the simultaneous modeling of direct and moderating effects, while the incorporation of multi-group analysis facilitates cross-market comparisons. The combination of survey data, secondary financial information, and qualitative insights strengthens construct validity and contextual richness (Edeh et al., 2020; Ma et al., 2020). By aligning methodological choices with both theoretical frameworks and practical considerations, the study ensures that its findings are robust and actionable.

#### *J. Limitations and Scope*

Despite its comprehensive design, the study acknowledges certain limitations. First, reliance on self-reported questionnaire data may introduce subjective bias, though triangulation with secondary data mitigates this risk. Second, the focus on publicly listed firms excludes private and small enterprises, which may face different financing and sustainability dynamics (Akpan et al.,

2022). Finally, the cross-sectional nature of the survey constrains causal inference, although robustness checks with panel regression address part of this concern. Taken together, the limitations highlight the boundaries of this work, while the structured design and analytical rigor illustrated in Figure 2 (Research Flowchart) underscore its contribution to advancing comparative scholarship in international management and finance. To enhance clarity and replicability, the essential components of the methodological framework are synthesized in Table 2 (Summary of Methodology).



**Figure 2. Research Flow Diagram**

**Table 2. Summary of Methodology**

| Aspect                 | Description   |
|------------------------|---|
| Research Design        | Quantitative-dominant, mixed-method   |
| Sample                 | 400 listed firms (emerging and developed markets)                           |
| Sampling Technique     | Purposive sampling  |
| Data Sources           | Structured questionnaires, secondary financial reports, targeted interviews |
| Analysis Technique     | SEM-PLS with multi-group analysis   |
| Validity & Reliability | Construct validity, reliability tests, ethical compliance                   |
| Ethical Considerations | Informed consent, data confidentiality, compliance with academic standards  |

## IV. RESULT

### A. Hypothesis Testing on Financing Approaches

The first set of hypotheses tested whether financing approaches significantly influence investment strategy optimization. Structural Equation Modeling (SEM-PLS) results demonstrated that lower cost of capital and diversified financing structures positively predicted higher innovation intensity and digital adoption across both contexts. In emerging markets, however, the relationship was stronger ( $\beta = 0.42$ ,  $p < 0.01$ ) compared to developed markets ( $\beta = 0.28$ ,  $p < 0.05$ ), indicating a more pronounced sensitivity of investment behavior to financing conditions. This aligns with earlier comparative studies on financial models, which show greater vulnerability of emerging market firms to financing limitations (Andhayani et al., 2024). Table 3 summarizes the SEM path coefficients and significance levels, providing a concise overview of model estimation outcomes.

**Table 3. SEM-PLS Results on Financing and Investment Optimization**

| Path Relationship                               | Emerging Markets ( $\beta$ ) | Developed Markets ( $\beta$ ) | Significance (p-value) |
|---|------------------------------|-------------------------------|------------------------|
| Financing $\rightarrow$ Investment Optimization | 0.42                         | 0.28                          | $< 0.05$               |
| ESG $\rightarrow$ Investment Optimization       | 0.36                         | 0.31                          | $< 0.05$               |
| Financing $\times$ ESG $\rightarrow$ Investment | 0.25                         | 0.12                          | $< 0.10$               |

As shown in Table 3, the coefficients indicate stronger relationships in emerging markets compared to developed markets, highlighting contextual differences. The analysis further reveals that the moderating effect of ESG varies significantly depending on the market's financial landscape. This variation underlines the complexity of investment decisions in environments with distinct economic and regulatory frameworks. The results suggest that financial constraints in emerging markets not only shape strategic investment but also amplify the role of ESG as a moderating factor. This echoes prior arguments that contextual environments with weaker financial ecosystems tend to rely more heavily on sustainability narratives to justify investment choices (Padilla-Lozano & Collazzo, 2022; Weston & Nnadi, 2023).

### *B. ESG Moderation Effects*

The moderating role of ESG orientation was assessed through interaction terms in the SEM framework. In both subsamples, ESG engagement significantly strengthened the positive association between financing approaches and investment optimization. However, the effect size was larger in emerging markets, suggesting that firms with proactive ESG strategies were more effective in converting external financing into innovative and sustainable investments. This finding supports recent work showing that ESG integration enhances corporate competitiveness by linking financing strategies to green innovation (Padilla-Lozano & Collazzo, 2022). Furthermore, multi-group analysis confirmed significant differences between contexts ( $\Delta\chi^2 = 15.7, p < 0.01$ ), emphasizing that sustainability dynamics operate differently depending on institutional maturity and market infrastructure.

### *C. Qualitative Insights*

The qualitative interviews provided further contextual depth, reinforcing the statistical findings. Executives in emerging markets repeatedly emphasized that ESG initiatives help to “unlock trust” with international investors, thereby mitigating the higher costs of capital they face locally. Several interviewees also noted that ESG reporting served as a signaling device to overcome perceptions of risk associated with their markets. By contrast, participants from developed markets tended to frame ESG engagement more as a compliance requirement rather than a strategic lever. This qualitative nuance highlights the asymmetry identified quantitatively, demonstrating that ESG in emerging markets serves both as a financial and reputational tool. Such insights resonate with research highlighting the entrepreneurial adaptation strategies under structural constraints (Akpan et al., 2022; Rosca et al., 2020).

#### *D. Robustness Checks*

To ensure the robustness of the results, supplementary panel regressions were estimated using firm-level secondary data spanning a five-year period. The regressions confirmed the SEM-PLS findings, with financing approaches and ESG orientation remaining significant predictors of investment optimization. Endogeneity concerns were addressed using instrumental variables, following methodological guidance from (Barros et al., 2020). Results remained stable across alternative specifications, confirming that the relationships were not driven by reverse causality. This methodological triangulation strengthens the credibility of the findings, aligning with best practices in international finance research (Guo & Kang, 2024; Li et al., 2023).

#### *E. Comparative Dynamics Across Markets*

The comparative dimension of the study revealed several noteworthy patterns. First, developed market firms demonstrated more stable investment optimization outcomes, being less dependent on ESG orientation, which reflects stronger institutional frameworks and investor confidence. In contrast, emerging market firms relied heavily on ESG strategies to mediate financing constraints, producing higher variance but also greater potential for leapfrogging into innovative domains. Second, qualitative accounts highlighted how crisis events such as the COVID-19 pandemic accelerated digital transformation and ESG integration, particularly in resource-constrained settings (Akpan et al., 2022). These dynamics suggest that sustainability, while often framed as a global agenda, has distinct implications depending on market maturity.

#### *F. Key Findings*

Overall, the results underscore four main insights. First, financing approaches are critical determinants of investment optimization across both market contexts, but their effects are more potent in emerging economies. Second, ESG orientation operates as a robust moderator, enabling firms to translate financing into innovative and sustainable investments. Third, differences between developed and emerging markets highlight institutional asymmetries, with ESG functioning as a strategic lever in the former and a legitimacy tool in the latter. Finally, the integration of quantitative and qualitative findings reinforces the conclusion that sustainable finance strategies must be tailored to contextual realities rather than assumed to be universally applicable. These findings contribute to the comparative scholarship in international management and finance, complementing earlier studies that stress the heterogeneity of financial and sustainability models (Boubaker et al., 2022; Edeh et al., 2020).

## **V. DISCUSSION**

### *A. Interpretation of Findings*

The findings of this study highlight the significant role of financing approaches in shaping the optimization of investment strategies across both emerging and developed markets. Consistent with the descriptive results, emerging market firms demonstrated higher leverage and greater dependence on external financing structures, while developed market firms leaned toward equity-based models. The structural equation modeling confirmed that financing approaches directly and positively influenced innovation intensity and digital adoption, but with a more substantial effect in emerging markets. This suggests that in contexts where financial constraints are more pronounced, managerial decisions regarding financing strategies become pivotal in enabling or constraining investment opportunities (Andhayani et al., 2024). Moreover, the moderating role of ESG orientation demonstrated that sustainable practices not only strengthen financing-investment linkages but also provide firms with legitimacy, especially when capital access is limited. Such dynamics underscore that financing decisions cannot be evaluated in isolation; they must be considered in relation to sustainability imperatives and broader market contexts (Weston & Nnadi, 2023).

#### *B. Comparison with Previous Studies*

These findings both confirm and extend earlier research on financial and sustainability models. Prior studies such as (Gerged, 2021) emphasized the importance of governance structures in shaping corporate disclosure, while our results show that ESG orientation also enhances the efficiency of investment allocation when financial resources are constrained. Similarly, (Rosca et al., 2020) observed how entrepreneurial actors in emerging markets adopt innovative practices to overcome institutional voids, which resonates with our observation that ESG serves as a signaling device for external investors. The comparative results also align with (Boubaker et al., 2022), who highlighted the vulnerability of financial markets to external shocks, particularly in developing economies. However, our study offers a novel perspective by demonstrating how ESG can mitigate such vulnerabilities by fostering investor trust and legitimacy. In line with (Barros et al., 2020), methodological robustness was ensured through multi-group SEM analysis and supplementary regression checks, confirming that the observed differences were not statistical artifacts but reflect deeper structural contrasts between contexts.

#### *C. Theoretical Contributions*

From a theoretical standpoint, this study makes three significant contributions. First, it integrates corporate finance models with sustainability research by positioning ESG not only as an outcome of financing but also as a moderator in financial decision-making. This challenges traditional frameworks that often-separate financing from sustainability and responds to calls for more integrative approaches in international management (Gillan et al., 2020). Second, the comparative

multi-market analysis extends theories of institutional heterogeneity by showing how financing approaches carry different weights depending on market maturity. This advances the insights of (Paul, 2020), who emphasized the necessity of theorizing emerging markets within their unique institutional frameworks rather than applying universal models. Third, the methodological integration of quantitative modeling and qualitative insights provides a blueprint for future comparative studies, aligning with recent efforts to combine data-driven optimization with contextual understanding (Guo & Kang, 2024; Han et al., 2024).

#### *D. Methodological Contributions*

Methodologically, this research demonstrates the value of combining SEM-PLS with multi-group analysis and triangulating findings with both qualitative interviews and panel regressions. Such an approach responds to concerns about endogeneity and robustness in corporate finance research, as outlined by (Barros et al., 2020). It also contributes to methodological debates in emerging market research, where single method approaches often fail to capture the complexity of financial dynamics. The use of purposive sampling across 400 firms ensured balanced representation, while targeted interviews with financial managers provided context-sensitive insights that numbers alone could not reveal. These choices illustrate how mixed-method designs can overcome the limitations of purely positivist or interpretivist approaches, producing findings that are both statistically rigorous and contextually grounded (Edeh et al., 2020).

#### *E. Practical and Managerial Implications*

For managers, the results underscore the importance of aligning financing approaches with sustainability strategies to optimize investment. In emerging markets, where access to capital is constrained and risk perceptions are higher, managers can use ESG engagement as a strategic tool to attract external financing and lower perceived risk. This insight resonates with (Akpan et al., 2022), who noted how small businesses leveraged digital adoption and sustainability narratives during the COVID-19 pandemic to survive and adapt. In developed markets, by contrast, managers should recognize that ESG is increasingly viewed not as optional, but as a compliance standard that nevertheless influences reputation and stakeholder trust. Practically, this means that managers must move beyond traditional cost-of-capital calculations and incorporate sustainability criteria when designing financing portfolios (Karim, 2022; Sitinjak et al., 2023). For policymakers, the findings underscore the importance of strengthening ESG disclosure frameworks in emerging economies, thereby enhancing investor confidence and facilitating sustainable investment flows.

#### *F. Policy Implications*

From a policy perspective, this research suggests that governments and regulatory bodies in emerging markets should incentivize ESG adoption through mechanisms such as green bonds, subsidies, or mandatory reporting standards. Such initiatives would not only align domestic firms with global sustainability trends but also help them access international capital markets, where ESG compliance is increasingly a prerequisite (Hussain et al., 2022). In developed markets, policy efforts should focus on harmonizing ESG standards across jurisdictions, reducing reporting burdens while ensuring comparability and consistency. These policy implications resonate with (Monsreal-Barrera et al., 2020), who demonstrated how regulatory environments shape corporate investment in technology. A harmonized framework could also mitigate the risks highlighted by (Boubaker et al., 2022), where geopolitical instability created heterogeneous impacts across global equity markets.

#### *G. Limitations*

Despite its contributions, the study acknowledges several limitations. First, the reliance on cross-sectional survey data introduces the risk of response bias, though triangulation with secondary data and interviews mitigates this concern. Second, the focus on publicly listed firms excludes small and private enterprises, which may adopt different financing and sustainability strategies under more constrained conditions (Layaman et al., 2020). Third, while SEM-PLS and robustness checks provide methodological strength, the absence of longitudinal data restricts the ability to capture dynamic changes over time fully. Finally, although the study covers both emerging and developed markets, generalizability may be limited by the specific countries included in the sample, suggesting caution in extrapolating findings universally (Yizengaw & Agegnehu, 2021).

#### *H. Future Research Directions*

Future research should build on these findings by incorporating longitudinal designs to capture the evolving nature of financing and ESG integration, particularly during periods of crisis or rapid digital transformation. Scholars could also expand the scope to include small and medium-sized enterprises, which often face different financing barriers but are increasingly pressured to adopt ESG practices (Akpan et al., 2022). Another promising direction lies in leveraging machine learning and AI-driven models for investment optimization, as demonstrated by (Han et al., 2024; Li et al., 2023), while still embedding these tools within institutional and cultural contexts. Comparative research across additional regions such as Africa, Latin America, and Southeast Asia would also enrich theoretical insights into how financing and sustainability interact under diverse institutional logics. Ultimately, closer collaboration among academia, policymakers, and industry leaders is crucial for designing actionable frameworks that bridge the gap between financial theory and managerial practice.

## VI. CONCLUSION AND RECOMMENDATION

This study concludes that corporate financing approaches significantly shape investment optimization strategies across emerging and developed markets, with environmental, social, and governance (ESG) considerations serving as a crucial moderating factor. Evidence indicates that developed markets adopt more structured and diversified financing instruments, while emerging markets rely more heavily on conventional sources yet demonstrate increasing openness to innovation and digital transformation (Al-Okaily et al., 2025; Andhayani et al., 2024). By integrating sustainability into investment strategy design, firms not only achieve financial optimization but also contribute to long-term resilience and competitiveness (Gerged, 2021; Weston & Nnadi, 2023). Theoretically, this research advances the literature by bridging corporate finance and international management, showing how ESG imperatives reshape classical models of financing and investment (Gillan et al., 2020; Sitinjak et al., 2023). Methodologically, it contributes by applying SEM-PLS with multi-group analysis to capture nuanced differences between developed and emerging economies, addressing concerns of endogeneity and robustness in cross-market studies (Barros et al., 2020; Rahayu et al., 2021).

From a practical perspective, the findings offer actionable insights for corporate leaders, policymakers, and regulators seeking to strike a balance between financial growth and sustainable outcomes. Firms in emerging markets may benefit from adopting hybrid financing models that combine traditional and green instruments to optimize risk-return trade-offs (Guo & Kang, 2024; Hussain et al., 2022), while policymakers are encouraged to design enabling environments through tax incentives, green bonds, and digital platforms for financial inclusion (Fitriah et al., 2023; Layaman et al., 2020). The comparative insights suggest that lessons from developed economies can inform emerging contexts, while innovative practices in emerging markets may offer cost-efficient models for replication elsewhere (Edeh et al., 2020; Rosca et al., 2020). Nevertheless, limitations remain, as the sample may not fully capture sectoral heterogeneity or geopolitical disruptions that influence financing and investment flows (Boubaker et al., 2022). Future studies should integrate dynamic investment technologies such as AI-driven forecasting and machine learning models to enhance predictive accuracy and strategic decision-making (Han et al., 2024; Li et al., 2023), thereby further refining our understanding of how financing and sustainability converge in shaping global investment strategies.

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