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Long-Term Financing Challenges for Companies in Maintaining Business Expansion and Innovation



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KEYWORDS	ABSTRACT
Keywords: Long-term Financing; Innovation; Business Expansion; Financial Constraints. Conflict of Interest Statement: The author(s) declares that the research was conducted without any commercial or financial relationships that could be construed as a potential conflict of interest. Copyright © 2025 AEFS. All rights reserved.	Purpose: This study investigates long-term financing companies' challenges in sustaining business expansion and innovation. It aims to identify the barriers to accessing sustainable funding, analyze their implications for innovation, and propose strategies to address these constraints across various sectors. Research Design and Methodology: The research employs a Systematic Literature Review (SLR) to analyze existing studies and synthesize findings from diverse industries, including technology, manufacturing, and clean energy. Theoretical frameworks such as Agency Theory and the Resource-Based View (RBV) guide the interpretation of findings, focusing on regulatory and market dynamics, corporate strategies, and innovation processes. Findings and Discussion: The study reveals key barriers, including regulatory rigidity, market volatility, and limited access to capital markets, which create significant imbalances between corporate financing needs and market preferences. These constraints hinder companies from pursuing long-term investments, particularly in R&D and technology development, affecting their capacity for sustained innovation. Strategies such as funding diversification, financial risk management, and cross-sector collaborations emerge as effective solutions. The interplay between regulatory frameworks and market mechanisms is highlighted as a challenge and an opportunity to enhance financing accessibility. Implications: The findings offer valuable insights for policymakers, financial institutions, and corporate managers. Policymakers are encouraged to design regulatory frameworks and incentives that align with market needs, while businesses are advised to adopt innovative financial strategies and foster collaborative ecosystems. The study contributes to the theoretical discourse on financing and innovation and provides practical recommendations for promoting sustainable business growth.

Introduction

Long-term financing is a foundational component of sustainable business strategies, which is pivotal in enabling companies to achieve large-scale objectives, such as infrastructure expansion, research and development (R&D), and product innovation (González-Ruiz et al., 2018). These activities often require significant initial investments and extended timeframes to yield measurable returns. In an increasingly competitive global economy characterized by rapid technological evolution and market volatility, securing stable financial resources for the long term is advantageous and essential for companies aiming to maintain competitiveness and foster growth (Arner, 2007). Despite

its importance, long-term financing poses a considerable challenge due to external factors such as fluctuating interest rates, stringent regulatory requirements, and the cyclical nature of capital markets. These barriers can stifle a company's ability to effectively allocate resources for long-term projects, ultimately hindering its capacity to innovate and expand. The complexity of accessing long-term financing is further heightened in emerging industries, such as clean energy and technology, where the uncertainty surrounding market demand and policy support exacerbates the difficulty of attracting sustained financial backing (Belaïd et al., 2023). This dynamic underscores a significant tension between the financial needs of businesses striving for innovation and the external conditions that shape their access to capital. Consequently, understanding the interplay between long-term financing and its implications for business sustainability has become an area of critical inquiry in both academic and practical contexts.

This study focuses on the challenges businesses face in acquiring and managing long-term financing to sustain innovation and drive growth. A particularly pressing issue lies in the heightened financial constraints experienced by innovation-driven companies, which often face systemic barriers in securing sufficient funding. For instance, innovative firms are shown to have a 21-32% higher likelihood of encountering financial difficulties than their less creative counterparts (Santos & Cincera, 2022). This problem is especially pronounced in sectors that demand substantial and continuous investment, such as clean energy and advanced technology, where market inefficiencies, policy uncertainties, and limited access to financing options create additional hurdles. The clean energy industry, in particular, illustrates the profound impact of these challenges, as firms often struggle to reconcile the capital-intensive nature of their projects with the availability of long-term financing mechanisms (In et al., 2020). This phenomenon highlights a critical gap in existing financial strategies, as traditional models frequently fail to accommodate the unique demands of industries that prioritize sustainability and innovation. Through a detailed exploration of these challenges, this study seeks to shed light on the factors inhibiting access to long-term financing and contribute to the growing discourse on how financial systems can better support sustainable business development.

Recent studies highlight the intricate relationship between long-term financing and business expansion, especially in the clean energy and innovation sectors. Solutions involving government interventions and market forces have been pivotal in addressing financing challenges, with market-driven effects often proving more effective than government measures (Li & Lin, 2024). Stringent financial regulations, such as China's New Regulation on Capital Management, have demonstrated positive impacts on corporate R&D investment and innovation performance, positioning regulatory frameworks as potential enablers for fostering long-term financial strategies (Wang et al., 2024). Long-term credit policies have also been linked to enhanced green innovation within corporations. However, these policies often emphasize quantity over quality, indicating the necessity of integrated financial and environmental strategies (Lyu et al., 2024). In China's clean energy industry, additional business expansion has significantly alleviated capital constraints, surpassing the impact of existing stock growth (Li & Lin, 2024). This finding underscores the importance of developing financial strategies catering to emerging industries' demands. Higher financing efficiency in green supply chains has further boosted green innovation, though financial constraints hinder progress (Fan & Zhou, 2023). Despite subsidies, access to equity financing remains limited due to a substitution effect between bank debt and equity (Chiappini et al., 2022). These studies illustrate the critical interplay between financing availability, regulatory frameworks, and sustainable business growth, emphasizing the need for tailored approaches in industries reliant on continuous innovation.

While recent research provides significant insights into the relationship between long-term financing and business expansion, notable gaps persist in both empirical and theoretical realms. Much of the existing literature emphasizes regulatory and policy-driven solutions, such as the role of financial regulations (Wang et al., 2024) and credit policies (Lyu et al., 2024), in addressing financing constraints. However, there is a limited exploration of how companies internally strategize to navigate these challenges, particularly in industries outside of clean energy, such as technology and manufacturing. This narrow focus on specific sectors restricts the general applicability of findings, leaving broader industries requiring long-term investments underrepresented. The interplay between market-driven mechanisms and policy interventions remains insufficiently explored. While Li & Lin

(2024) emphasize the greater effectiveness of market forces over government interventions, their relative contributions to fostering innovation and business expansion lack comprehensive analysis. Empirical studies often fail to examine the nuanced impacts of long-term financing constraints on various stages of innovation. For instance, while financing efficiency is associated with driving green innovation (Fan & Zhou, 2023), the quality and sustainability of these innovations under financial constraints remain underexplored. As noted by Santos and Cincera (2021), innovative companies' disproportionate financial challenges highlight sector-specific vulnerabilities that require deeper investigation. These research gaps underscore the need for a systematic review to bridge theoretical discussions with empirical findings, offering a more holistic understanding of long-term financing dynamics across diverse industries.

This study addresses the critical gaps identified in the current body of research by systematically reviewing the challenges of long-term financing for companies in sustaining business expansion and innovation. Employing the Systematic Literature Review (SLR) method, this research provides a comprehensive and structured analysis of how financing constraints manifest across different industries, focusing on their implications for innovation-driven growth. The novelty of this study lies in its exploration of previously underexamined dimensions of long-term financing challenges. Specifically, it evaluates the dynamic interplay between regulatory frameworks and market mechanisms, highlighting how their simultaneous or conflicting influences shape corporate access to long-term financing. Unlike prior studies, this research also emphasizes the internal strategic responses of companies, analyzing how firms adapt their financial and operational strategies to mitigate constraints in diverse sectors beyond clean energy, such as technology, manufacturing, and emerging industries. The study investigates the often-overlooked impact of long-term financing on the quality of innovation outcomes rather than just its quantity. It examines how constraints affect different stages of the innovation process, from ideation and development to commercialization. The study is guided by key research questions: What are companies' primary challenges in securing long-term financing to support their growth and innovation objectives? How do these challenges impact different industries, particularly those heavily reliant on sustainable and continuous innovation? What strategic responses and policy recommendations can be identified to address these challenges effectively? This research aims to advance theoretical and practical knowledge by answering these questions and offering actionable insights to help companies, policymakers, and stakeholders develop sustainable financial strategies to overcome long-term financing challenges, foster business expansion, and create sustainable economic strategies for long-term success.

Literature Review

Agency Theory

Agency Theory is a vital theoretical framework for understanding the dynamic relationship between principals, typical shareholders, and agents, such as managers, within organizations (Jensen & Meckling, 1979). A central theme of this theory is the occurrence of agency conflicts, where the differing objectives of these two parties create tension in decision-making processes. Principals prioritize the long-term growth of firm value, while agents often focus on short-term performance to enhance their evaluations (Flammer et al., 2019). This misalignment can significantly affect strategic decisions, particularly in resource allocation and investments in research and development (R&D). For example, managers may avoid high-risk, long-term projects like innovation initiatives despite their potential to secure the company's future competitiveness to protect short-term financial outcomes (Bammens et al., 2022). The relevance of Agency Theory becomes particularly evident in the context of long-term financing. Managers' short-term focus can lead to underinvestment in critical strategic projects, such as R&D, undermining the company's ability to innovate and expand sustainably (Lyu et al., 2024). Their emphasis on short-term financial metrics may impair the firm's ability to secure sustainable financing necessary for long-term growth. This challenge is exacerbated in industries like clean energy, where financing needs are high, and risks are perceived as substantial (Basdekis et al., 2024). Understanding these dynamics underscores the importance of aligning managerial incentives with the firm's long-term objectives, as robust governance structures and financial strategies can mitigate agency conflicts and enhance decision-making.

Corporate governance plays a crucial role in addressing agency conflicts by balancing the interests of principals and agents. An effective governance structure, including independent boards of directors, performance-based incentives, and transparent financial reporting, fosters managerial accountability and builds trust between principals and agents. For instance, García-Sánchez et al. (2019) demonstrated that independent directors positively influence sustainability disclosures, reflecting how robust governance aligns corporate practices with long-term goals. Moreover, linking managerial incentives to achieving long-term objectives encourages strategic investments that support innovation and expansion (Ortiz-de-Mandojana et al., 2016). Despite its potential, the impact of governance on innovation and expansion remains complex. Adams et al. (2023) identified board characteristics as significant predictors of firm innovation, highlighting the nuanced interplay between governance mechanisms and creative processes. However, governance alone cannot eliminate agency conflicts in contexts where high risk deters traditional financial institutions from supporting innovative ventures. This is particularly true in industries with substantial R&D requirements, where agency conflicts may limit funding access due to elevated risk perceptions (Ali et al., 2024). Such constraints often force companies to deprioritize long-term innovation in favor of short-term financial stability. Corporate governance, therefore, must evolve to address these complexities. Governance structures can mitigate agency conflicts and promote sustainable growth by fostering alignment between managerial priorities and long-term corporate objectives. This requires integrating innovative governance practices tailored to industry-specific needs, ensuring operational flexibility and accountability.

Long-Term Financing

Long-term financing is essential for supporting large-scale investments, such as infrastructure development, research and development (R&D), and technological acquisition (Moncada-Paternò-Castello, 2022). Unlike short-term financing, which addresses immediate liquidity needs, long-term financing provides the stability necessary for executing strategic projects with reduced exposure to market volatility. Wenjuan & Zhao (2023) emphasize that firms with adequate access to long-term financing are better positioned to invest in R&D, fostering innovation and competitiveness. However, challenges persist in securing such financing, particularly in capital-intensive industries where market uncertainties amplify financial constraints. Economic volatility, including unstable interest rates and restricted access to capital markets, often hampers companies' ability to obtain long-term funding. Jeong et al. (2020) illustrate how financial constraints negatively impact firms' innovation efforts, particularly in manufacturing sectors where sustained capital is vital for growth. Policy frameworks aimed at credit provision often prioritize funding quantity over the quality of its application, leading to inefficiencies in resource allocation (Yaron et al., 1997). Such inefficiencies are exacerbated by market preferences for short-term returns, leaving long-term projects underfunded and impeding strategic planning. Sierra (2020) notes that innovative firms face unique challenges in accessing external financing due to the high-risk nature of their projects. This financing gap highlights the disconnect between market dynamics and the financial needs of innovation-driven industries. Addressing these barriers is critical for aligning financial strategies with long-term corporate objectives and ensuring sustainable business growth.

Effectively managing long-term financing requires robust strategies that address the complexities of securing and sustaining financial resources over extended periods. Diversifying funding sources is critical, as highlighted by García-Sánchez et al. (2019), who demonstrated that firms leveraging multiple financing avenues, such as bonds, multilateral loans, or private equity, are better equipped to fund R&D and strategic growth projects. This diversification broadens financing options and reduces overreliance on a single funding source, mitigating the risks associated with market volatility. Financial risk management is pivotal in navigating the uncertainties tied to long-term financing. Razaghi et al. (2023) emphasized the importance of identifying financing risks, such as interest rate volatility, and employing risk-hedging mechanisms to stabilize operations. These strategies ensure that companies can align their financial planning with long-term objectives, even amid economic fluctuations. The absence of such robust approaches can lead to severe consequences. Xu et al. (2020) found that financial constraints significantly hinder firms' ability to innovate, particularly in

capital-intensive sectors like manufacturing. Bonaime et al. (2018) highlighted that economic policy uncertainty exacerbates these constraints, deterring corporate investment in innovation and expansion. These findings underscore companies' need to integrate diversification and risk management into their financial strategies. By doing so, firms can strengthen their capacity to sustain growth, adapt to market dynamics, and build long-term competitive advantages, even in highly volatile environments.

Business Expansion

Business expansion is a strategic process to increase operational capacity, market reach, or product offerings to achieve sustainable growth. This process is integral for enhancing competitiveness, mainly through diversification strategies that align with evolving consumer demands. Sommer (2024) highlights that access to long-term finance significantly contributes to successful expansion by enabling investments in infrastructure, product development, and advanced technologies. Such investments create opportunities for companies to secure competitive advantages in dynamic global markets. Long-term financing also plays a pivotal role in reducing capital constraints, as Sen & Ganguly (2017) demonstrated in the clean energy sector, where operational growth effectively mitigates financial limitations. However, Vasileiou et al. (2022) note that the success of expansion efforts often depends on integrating innovation into business strategies, as firms with higher innovation outputs tend to achieve better financial performance. This underscores the importance of aligning financing strategies with innovation-driven expansion plans. External factors, such as regulatory frameworks and government policies, further influence expansion success. Zhu & Kim (2023) emphasize the role of financial market development in facilitating access to long-term capital, which is crucial for scaling operations. Additionally, (Ogunyemi & Ishola, 2024) argues that effective financing mechanisms tailored to innovative firms can help overcome barriers to market entry, fostering sustainable expansion. These insights underline the interconnectedness of financing, innovation, and strategic planning in driving successful business growth.

Business expansion offers significant growth opportunities but is fraught with complex challenges. One primary obstacle is limited access to adequate financing, particularly long-term capital, essential for sustaining growth. Altman et al. (2019) highlight that firms with higher financial leverage often face incredible difficulty securing additional funding, which can impede expansion efforts. Stringent regulatory frameworks further compound this challenge. Harrigan (1985) emphasizes that regulatory constraints frequently restrict financial flexibility, limiting a firm's ability to adapt its financing strategies to evolving market needs. In addition to regulatory and financing hurdles, reliance on short-term funding poses risks to strategic growth. Askarany et al. (2024) demonstrated that firms dependent on short-term debt often struggle with financial instability, making it challenging to execute long-term expansion plans effectively. Over-leverage, or excessive debt accumulation, is another critical risk associated with business expansion. Over-leveraged firms may experience reduced operational efficiency and heightened vulnerability to economic fluctuations, ultimately jeopardizing their sustainability. Effective planning is essential for mitigating these risks. Hendrawan et al. (2024) noted that well-planned expansion strategies improve operational efficiency and facilitate access to new markets and customer bases. However, poorly planned expansions can lead to resource mismanagement, inflated operational costs, and reputational damage. Aligning expansion strategies with long-term objectives is crucial for ensuring sustainable growth and maintaining competitive advantage in the global market. These insights underscore the need for robust financial strategies to support successful business expansion.

Innovation

Innovation, defined as creating and implementing new ideas, products, or processes, is a cornerstone of economic growth and organizational competitiveness. It drives internal development and positions companies to excel in dynamic global markets. Arza & López (2021) highlight that innovative firms, tiny and medium enterprises (SMEs), often encounter significant financial constraints that limit their ability to scale creative projects. This challenge is exacerbated in industries reliant on disruptive innovation, where traditional financial institutions may perceive

higher risks. Long-term financing is crucial to overcoming these barriers, particularly in supporting research and development (R&D) and advanced technological projects. Walter et al. (2022) emphasize that public policies, including R&D subsidies and tax incentives, play a pivotal role in enabling firms to sustain innovation efforts. These financial supports reduce dependency on short-term capital, ensuring companies can navigate the inherent risks of innovation processes. Efficient funding allocation further amplifies the impact of innovation, particularly in capital-intensive sectors. Ayalew & Xianzhi (2020) note that credit constraints negatively affect firms' R&D capabilities, underscoring the importance of accessible and targeted financial solutions. Moreover, Hai et al. (2022) demonstrate that higher innovation output correlates with improved financial performance, reinforcing the need for strategic investments in innovation. These findings highlight the intricate relationship between financing and innovation as essential drivers of sustainable business growth.

Achieving innovation often involves navigating various challenges that can hinder its success. One major obstacle is limited access to adequate financing, particularly for innovative firms with high failure risks. Pu et al. (2021) emphasize that small and medium enterprises (SMEs) involved in creative activities frequently encounter financial constraints, limiting their ability to scale and develop new technologies. These constraints are compounded by stringent regulatory environments, which, as Hossain & Anees-ur-Rehman (2016) point out, often restrict the flexibility companies need to adapt their financial strategies to support innovation. In addition to regulatory barriers, non-R&D performers may face unique challenges in driving innovation. Rammer et al. (2009) highlight how SMEs that do not heavily invest in R&D can achieve innovation success by substituting technological investments with practical management strategies. However, such approaches require strong organizational cultures that encourage creativity and collaboration. Strategic partnerships with universities, research institutions, or large corporations can further enhance innovation efforts. Usman & Vanhaverbeke (2017) demonstrate that startups leveraging open innovation practices with larger firms often successfully overcome financial and technical barriers. Practical strategies, such as integrating funding solutions with collaborative networks, mitigate challenges and accelerate innovation. These findings underscore the importance of aligning internal processes with external partnerships to drive sustainable growth through innovation in highly competitive markets.

Research Design and Methodology

Study Design

This study adopts a qualitative systematic literature review (SLR) approach to explore the interconnections between innovation, long-term financing, and business expansion. The SLR methodology systematically identifies, evaluates, and synthesizes existing scholarly works to provide a holistic understanding of the research focus. The study ensures comprehensiveness and reliability by employing a structured process, allowing for an in-depth examination of trends, gaps, and theoretical contributions in the selected fields. Predefined inclusion and exclusion criteria guide the review to ensure the relevance and quality of the analyzed literature.

Sample Population or Subject of Research

The study focuses on peer-reviewed journal articles, academic books, and credible reports published between 2015 and 2025. These sources were selected to reflect contemporary insights into the interplay between financial strategies and innovation. Priority was given to publications from reputable publishers such as Elsevier, Emerald, Wiley, and Springer to maintain the credibility and validity of the research. The inclusion criteria emphasized works discussing empirical or theoretical contributions to innovation, financial constraints, and their implications for business expansion.

Data Collection Techniques and Instrument Development

Data collection involved a systematic keyword-based search across academic databases such as Scopus, Web of Science, and Google Scholar. Search terms included combinations of "innovation," "long-term financing," and "business expansion" using Boolean operators. Inclusion criteria required that the studies be published in English, the research topics be directly addressed, and relevant data

for qualitative synthesis be provided. A standardized data extraction framework was developed to organize findings systematically, capturing critical details such as study objectives, methodologies, and principal conclusions.

Data Analysis Techniques

A thematic analysis was conducted to identify key themes, patterns, and relationships across the selected literature. The study focused on recurring issues such as financial barriers to innovation, the role of long-term financing in fostering business growth, and strategic approaches to overcoming these challenges. The synthesized results provide a comprehensive understanding of the research topics while highlighting gaps and areas for future investigation.

Findings and Discussion

Findings

Long-term financing is essential for sustaining innovation and driving business expansion, yet companies often face significant barriers to accessing this crucial resource. One primary challenge lies in restrictive regulatory frameworks that limit firms' flexibility in crafting sustainable financial strategies. Wang et al. (2024) argue that such regulations frequently impose constraints on companies, impacting their ability to secure funds necessary for long-term innovation. Market volatility further exacerbates the issue, with fluctuating interest rates and economic instability discouraging investors from committing to long-term projects (Altman, Hotchkiss, & Wang, 2019). Traditional financing mechanisms, such as bank loans, are often ill-equipped to accommodate the high-risk nature of innovative endeavors, which require more extended payback periods and significant capital investment upfront. Industries heavily reliant on innovation, such as technology and manufacturing, experience these challenges more acutely. Arza and López (2021) highlight that SMEs in these sectors, particularly emerging markets, often struggle to scale their operations due to financial limitations, resulting in missed growth opportunities. Moreover, global economic uncertainty creates additional hurdles, complicating the financial planning required for sustained innovation. Belaïd, Al-Sarihi, and Al-Mestneer (2023) emphasize that while green investments hold promise for overcoming some of these challenges, inconsistent policy support and misaligned market incentives often undermine their effectiveness. Addressing these barriers necessitates innovative financing solutions that align with the unique needs of high-growth industries while adapting to the changing dynamics of the global economic landscape. These measures can foster a more resilient and inclusive financial environment that supports long-term corporate growth.

Financial constraints profoundly influence the innovation lifecycle, from ideation to commercialization, often limiting a company's ability to realize its innovative potential fully. Ayalew and Xianzhi (2020) reveal that firms in developing economies face heightened financial barriers, which restrict their capacity to invest in critical research and development (R&D) activities. Such constraints are not confined to developing regions; even firms in developed markets encounter difficulties, particularly when innovation efforts require substantial upfront capital. The impact of these barriers extends beyond the quantity of innovations produced to affect their quality. Hai et al. (2022) observe that companies with limited access to financing tend to prioritize projects with quick returns, often at the expense of more impactful, long-term innovations. This dynamic poses significant challenges for industries like renewable energy and advanced manufacturing, where consistent funding is critical to maintaining innovation pipelines. González-Ruiz, Botero-Botero, and Duque-Grisales (2018) found that firms lacking stable financial resources often delay or abandon key development phases, undermining their competitive edge. Similarly, Fan and Zhou (2023) highlight that inefficiencies in financing green supply chain initiatives hinder the adoption of environmentally sustainable technologies. These issues underscore the need for integrated strategies that combine stable financial support with a focus on high-impact innovation. By addressing financial constraints, companies can enhance their capacity to deliver innovations that drive economic growth and contribute to broader societal and environmental goals, ensuring sustainable success in competitive markets.

Regulatory frameworks and market mechanisms are critical in shaping access to long-term financing, particularly for innovation-focused companies. Policies such as R&D tax incentives and direct subsidies can significantly alleviate financial constraints, enabling firms to allocate more resources toward high-risk projects. Walter et al. (2022) argue that well-structured tax credits encourage innovation by reducing the cost burden on companies, making it more feasible to undertake ambitious initiatives. However, the effectiveness of these policies depends on their alignment with market dynamics. Chiappini et al. (2022) demonstrate that while direct innovation subsidies can relax financial constraints for SMEs, inefficiencies in policy implementation often limit their scalability and impact. Government interventions in the form of green investment subsidies have shown promise, particularly in sectors like renewable energy, where market-driven solutions alone often fall short. Belaïd, Al-Sarihi, and Al-Mestneer (2023) note that subsidies incentivize innovation and address broader societal goals like climate change mitigation. However, poorly aligned regulations can hinder progress, as highlighted by Basdekis et al. (2024), who found that overly rigid policies in response to financial and energy crises inadvertently restricted market accessibility. A nuanced approach that considers industry-specific needs and integrates flexible regulatory measures is essential. Such an approach ensures that regulatory frameworks and market mechanisms work synergistically to foster innovation and long-term growth. These efforts can create an enabling environment where companies are better positioned to address global challenges while achieving sustainable business objectives.

Companies must adopt strategic responses that enhance their financial resilience and innovation capacity to address long-term financing challenges. Diversifying funding sources is a critical step. Ali, Muhammad, and Migliori (2024) argue that optimizing capital structures through public equity, venture capital, and multilateral loans can provide firms with the financial flexibility to sustain long-term projects. Also, effective financial risk management practices, such as employing hedging instruments, enable companies to mitigate market volatility's and economic uncertainty's impact on their operations (Razaghi et al., 2023). Collaboration with external stakeholders is another vital strategy. Jeong et al. (2020) emphasize that open innovation partnerships between large firms and SMEs can reduce financial and operational risks, fostering resource sharing and accelerating innovation processes. These partnerships are particularly beneficial in high-risk industries like renewable energy and advanced manufacturing, where the development of disruptive technologies often requires substantial capital and expertise. Moreover, integrating digital transformation into financial and operational strategies enhances transparency and efficiency, as Hendrawan et al. (2024) observed. Digital tools facilitate more effective resource allocation and improve decision-making processes, empowering companies to navigate financial constraints more effectively. By combining these strategies with a focus on fostering a culture of innovation and collaboration, companies can build a robust framework for sustainable growth. This approach addresses immediate financial challenges and positions firms to thrive in increasingly competitive and innovation-driven markets, ensuring long-term success and resilience.

Discussion

The findings of this study reveal critical insights into the challenges of long-term financing faced by companies striving to maintain business expansion and foster innovation. A primary barrier identified is the restricted access to funding caused by stringent regulations, market volatility, and market preferences for short-term results. These findings highlight that inflexible regulatory frameworks often hinder companies from securing the necessary financial resources, especially in capital-intensive sectors such as technology and clean energy. Regulatory restrictions may limit corporate flexibility in designing long-term financial strategies, leaving many businesses unable to fully capitalize on their innovative potential. Furthermore, the volatility of financial markets, such as fluctuating interest rates and economic instability, creates additional challenges for firms attempting to attract sustainable investment. This mismatch between the need for long-term financing and the market capacity to meet such needs exposes a structural imbalance. While holding significant innovative potential, companies frequently find their efforts constrained by a policy environment that fails to align with their financial requirements. These challenges impede individual

and organizational growth and pose broader risks to economic advancement and the scaling of critical innovations necessary for future competitiveness. The findings underscore the urgent need for financial ecosystems prioritizing stability and accessibility, fostering environments where innovation and expansion can flourish unimpeded by institutional and market limitations.

The study further reveals that financing constraints directly and profoundly impact various stages of the innovation process, from ideation to development and commercialization. In many instances, firms reduce their investments in research and development (R&D) due to the lack of stable financial support, significantly hindering their ability to pursue groundbreaking innovations. The dependency on short-term financing forces companies to prioritize projects that yield quick financial returns, even when such projects lack long-term strategic value. This misalignment in financial strategies results in innovation stagnation, particularly in industries heavily reliant on disruptive technologies. For example, companies in the renewable energy sector often face delayed development of essential technologies due to limited access to sustained capital. Such delays not only undermine the adoption of innovative solutions but also weaken the industry's overall competitiveness on a global scale. The study highlights that while the number of innovations may remain steady in some cases, the quality and strategic relevance of these innovations is often compromised. These findings support the fundamental concept that innovation requires sustained investment and well-managed risk to thrive. In industries dependent on technological advancements, this investment is beneficial and essential to maintaining relevance and growth in increasingly competitive markets. Addressing these financial limitations is critical to ensuring the continuous progression of high-impact innovations.

Another key finding from this research emphasizes the importance of internal corporate strategies in overcoming financing challenges. Diversifying funding sources, implementing financial risk management practices, and fostering cross-sector collaboration are identified as practical approaches for mitigating financial barriers. Companies that leverage financial technology (fintech) solutions have demonstrated improved fundraising and resource allocation efficiency, and tiny and medium-sized enterprises (SMEs) often struggle to access traditional financial mechanisms. Additionally, strategic partnerships with research institutions, universities, and industry leaders have proven instrumental in accelerating innovation, even when financial constraints persist. For instance, businesses operating in the clean energy sector have effectively utilized green subsidies to overcome funding limitations, providing a comparative advantage over firms in other sectors lacking such incentives. These collaborations mitigate immediate financial challenges and create ecosystems that nurture long-term innovation and operational excellence. The findings reinforce the argument that fostering innovation requires more than just financial backing; it demands an environment of collective engagement and strategic foresight. By aligning internal strategies with external opportunities, companies can better navigate financial constraints, enhance their innovative capacity, and maintain competitiveness in global markets. This underscores the necessity of adopting holistic approaches that integrate financial strategies with broader organizational goals to ensure sustainable growth and innovation.

The findings of this study align closely with the principles of Agency Theory, as proposed by Jensen and Meckling (1976), which highlights the inherent conflicts between the owners of a company (principals) and its managers (agents). This theory explains how divergent priorities often lead to managerial decisions prioritizing short-term gains over long-term strategic investments, particularly those required for innovation. The results of this research reinforce the notion that short-term incentives, such as immediate performance evaluations or market returns, frequently act as significant barriers to allocating resources for long-term innovative initiatives. This misalignment underscores the necessity of robust corporate governance structures to mitigate agency conflicts and foster an environment conducive to accessing long-term financing. Mechanisms like performance-linked incentives, transparent financial reporting, and independent oversight can help align the interests of principals and agents, facilitating decisions that support sustained innovation and business growth. The study's findings are consistent with the Resource-Based View (RBV), which emphasizes the critical role of strategic resources, including financial capital, in achieving competitive advantage and fostering innovation. When supported by effective regulatory frameworks and efficient market mechanisms, access to long-term financing can be a vital external resource that

complements a company's internal capabilities. These external enablers are a foundation for continuously developing innovative products and processes, particularly in industries that rely heavily on technological advancements. The integration of these theoretical frameworks highlights the interplay between internal organizational strategies and external institutional support in driving sustainable innovation.

The findings of this study also demonstrate alignment with several previous studies, offering additional support for the argument that well-designed regulatory frameworks can enhance corporate innovation performance. For instance, Wang et al. (2024) emphasized that regulatory structures crafted to align with market needs and corporate goals play a pivotal role in fostering innovation and enabling companies to overcome financial constraints. Similarly, Chiappini et al. (2022) identified that direct subsidies can significantly alleviate financial challenges faced by small and medium-sized enterprises (SMEs), particularly those engaged in innovative activities. This study reinforces these findings by revealing that clean energy subsidies substantially enhance a company's ability to secure long-term financing. By providing a stable and predictable financial foundation, such subsidies enable firms to pursue critical projects that might otherwise be unfeasible due to funding limitations. However, the study also highlights that the effectiveness of subsidies is highly dependent on their implementation. In some instances, misaligned policies or poorly executed subsidy programs fail to address market demands effectively, thus limiting their intended impact. This nuance contrasts with the findings of González-Ruiz et al. (2018), who argued that regulatory policies often act as barriers rather than enablers in long-term financing. This apparent discrepancy suggests that the influence of regulatory frameworks is contingent upon industry-specific dynamics and the precision of their execution. These insights underscore the complexity of regulatory impacts and the need for adaptive and well-targeted policies that account for diverse industry needs and operational realities.

From a practical perspective, the findings of this study provide valuable insights for companies, policymakers, and other key stakeholders. Companies can benefit significantly by adopting strategies that diversify funding sources and integrating innovative approaches such as financial technology (fintech) solutions and cross-sector collaborations. These strategies mitigate financial constraints and enhance fundraising efficiency and transparency, enabling companies to secure the capital necessary for long-term projects. Furthermore, businesses that engage in strategic partnerships with research institutions, universities, and industry peers can accelerate innovation and effectively navigate the challenges of financial limitations. These initiatives underscore the importance of aligning internal strategies with external opportunities to foster sustainable growth and competitiveness. For policymakers, this study highlights the critical need for regulatory frameworks aligned with market demands and providing financial incentives that support innovation. Tax incentives for research and development (R&D) and green subsidies are particularly effective in encouraging investment in strategic sectors like clean energy and advanced manufacturing. Governments can play a pivotal role in fostering an environment conducive to innovation-driven economic growth by creating policies that reduce financial barriers and promote long-term investment. The implications of this research extend to financial institutions, which have the opportunity to develop specialized financial products tailored to the needs of companies pursuing long-term financing. These institutions can bridge the gap between market requirements and corporate objectives by offering innovative funding solutions such as green bonds or equity financing programs. Implementing these recommendations can create a more inclusive financial ecosystem, fostering sustained innovation and ensuring companies remain competitive in dynamic global markets.

Conclusion

This study has systematically examined long-term financing challenges for companies striving to maintain business expansion and innovation. It has identified key obstacles, such as regulatory rigidity, market volatility, and limited access to long-term financing mechanisms, by addressing critical research questions. These barriers create significant imbalances between corporate needs and market offerings, particularly affecting industries heavily reliant on continuous innovation, such as technology, manufacturing, and clean energy. The study also highlights the vital role of internal strategies and collaborative approaches in overcoming these challenges, emphasizing the interplay

between regulatory frameworks, market mechanisms, and corporate adaptability. This research comprehensively explains how financial constraints impact companies' ability to innovate and grow sustainably.

The value of this study lies in its contribution to academic and practical domains. It advances the theoretical discourse by integrating concepts such as Agency Theory and the Resource-Based View, offering nuanced insights into the dynamics of long-term financing. Practically, the study provides actionable recommendations for companies to diversify funding sources, leverage financial technology, and foster strategic partnerships to navigate financial challenges effectively. For policymakers, the findings underscore the need for regulatory alignment with market demands and the importance of financial incentives like tax benefits for R&D or green subsidies to support strategic sectors. The originality of this study lies in its cross-sectoral focus, offering insights beyond clean energy into diverse industries and its emphasis on aligning financing strategies with sustainable innovation goals.

Despite its contributions, this study has limitations that warrant further exploration. The reliance on secondary data from systematic literature reviews may limit the generalizability of findings to all industries or regions. Future research could incorporate empirical studies to validate these conclusions in specific industry contexts or conduct comparative analyses across regions to identify regulatory and market impact variations. Additionally, exploring the role of emerging technologies, such as blockchain or artificial intelligence, in addressing long-term financing constraints would offer valuable insights. Researchers and practitioners are encouraged to build on this study by examining sector-specific financing strategies or investigating innovative policy designs to foster a more inclusive and supportive financial ecosystem for sustained innovation.

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