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Abstract

This paper investigates why Moroccan SMEs innovate so little despite representing over 95% of all enterprises and nearly half of national employment. Less than 15% of Moroccan manufacturing SMEs introduced any product or process innovation in three years, against a developing-country median of 28%. Drawing on a systematic review of 22 empirical articles indexed in Scopus and Web of Science (2017–2025), the study synthesizes financial, institutional, and managerial determinants of SME innovation. The analysis identifies a self-reinforcing "vicious cycle" driven by three interconnected forces: severe financial constraints, an unfavorable institutional environment, and insufficient dynamic managerial capabilities. This integrated framework suggests that effective innovation policy must address all three dimensions simultaneously.

Keywords: SME Innovation; Morocco; Financial Constraints; Managerial capabilities; Institutional voids.

Résumé

Cet article examine les raisons pour lesquelles les PME marocaines innovent si peu, malgré leur poids déterminant dans l'économie nationale. S'appuyant sur une revue systématique de 22 articles empiriques indexés dans Scopus et Web of Science (2017-2025), cette étude synthétise les déterminants financiers, institutionnels et managériaux de l'innovation des PME au Maroc. L'analyse révèle que la sous-performance ne découle pas d'un obstacle unique, mais d'un « cercle vicieux » auto-entretenu animé par trois forces interdépendantes : des contraintes financières sévères, un environnement institutionnel défavorable et des capacités dynamiques managériales insuffisantes. Ce cadre conceptuel intégrateur soutient que toute politique d'innovation efficace doit adresser simultanément ces trois dimensions.

Mots-clés : Innovation des PME ; Maroc ; Contraintes financières ; Capacités managériales ; Vides institutionnels.

Introduction

Innovation is known as the fundamental factor of competitiveness, growth, and structural transformation of economies, particularly in emerging countries. It is no secret that Small and Medium-sized Enterprises (SMEs) serve as drivers of economic growth, employment generation, and sustainability worldwide (Saputra & al., 2024) (Ayyagari &al., 2017). According to statistics published by Haut-Commissariat au Plan (HCP) in Morocco, they account for almost 100 per cent of all enterprises (over 95%), and hence their performance directly impacts national economic well-being. As a rule, in theory, SMEs are flexible and capable of being innovative, hence acting as major forces driving competitiveness (Moussir & al., 2023) (Saputra & al., 2024). Nevertheless, when we speak about Morocco, there appears to be a contradiction: despite its abundance, there is an innovation gap caused by SMEs' reluctance to innovate. The failure to exploit innovative potential may pose a serious threat to the country's competitiveness within the context of globalization (Houzmali & Krami, 2025; Saputra & al., 2024).

The data behind the contradiction are worth a pause. Morocco's gross domestic expenditure on R&D in 2022 was approximately 0.75% of GDP, which is below the average of 1.5% for upper-middle-income economies and the OECD benchmark of 2.7% (World Bank, 2024). In contrast, Tunisia had more than 300 and Turkey more than 8,000 per year, both per unit of GDP (Houzmali & Krami, 2025). Resident patent applications were below 200 per year for the period 2018-2022; To be more concrete, World Bank Enterprise Survey data (2024) indicate that less than 15% of Moroccan manufacturing SMEs introduced a product or process innovation in the three years preceding the survey, versus a developing-country median of 28%.

Most of the existing research regarding innovations of SMEs in Morocco and other developing countries usually considers particular obstacles in terms of separate categories: First, a large number of works focus only on financial limitations, specifically due to information asymmetry, the difficulty of securing loans without tangible collateral, and pervasive credit rationing (Oussouadi, K., & Cherkaoui, K.,2023). Without appropriate external financing, SMEs are obliged to rely solely on the internal resources, which are usually not enough to support the requirements, especially the high costs and the risks associated with R&D and innovation. (Moussir & al., 2023).

Other studies have examined the institutional environment, pointing to regulatory burdens, intense competition from a large informal sector, and weak governance as the primary setbacks that misrepresent the market. A third, more recent perspective highlights the internal managerial insufficiency, particularly the absence of "dynamic capabilities": the structured processes needed to sense, seize, and reconfigure resources to adapt to rapid market changes (Ali & al., 2020; Papadopoulos et al., 2020).

While these individual analyses are valuable, they fail to point out the systemic nature of the problem. The interconnection between these financial, institutional, and managerial barriers remains critically underexplored. The literature lacks an integrated framework that explains how these factors reinforce one another to create a "vicious cycle" that traps Moroccan SMEs in a state of low innovation and low growth.

In an attempt to rectify this fragmented approach, this paper poses the following research question:

To what extent do financial, institutional, and managerial dimensions interact within an integrated conceptual framework to explain the innovation underperformance of Moroccan SMEs?

Through a Systematic Literature Review of the existing empirical evidence from each of these fields, in order to construct a comprehensive and integrative model. It is argued that the lack of innovation is caused by a vicious cycle where financial exclusion prevents investment in new capabilities, a threatening institutional environment discourages risks, and weak managerial practices inhibit the firm's ability to even identify innovative opportunities. This framework allows a more complete understanding of the root causes and offers a foundation for developing more effective policy interventions.

This paper is driven by three objectives. The first is to synthesise what the empirical literature actually shows about each dimension of constraint. The second is to follow the interaction of financial, institutional, and managerial factors in the Moroccan context in particular, a task no previous study has attempted. The third is to synthesize these interactions into an integrated conceptual framework, organized around the vicious cycle idea, that can inform both theoretical development and practical policy.

The rest of this paper is organized as follows. In Section 2, the literature review will be presented along three thematic axes corresponding to the main components of our framework, namely, finance, institutions, and management. Section 3 presents our methodology for conducting a systematic literature review. Section 4 introduces our synthesized results in the form of a "vicious circle" model. Finally, Section 5 highlights the theoretical and practical implications of this study for Moroccan policymakers, financial institutions, and managers.

1. Literature Review: The Determinants of SME Innovation

1.1 Financial Determinants of SMEs innovation

The financial factor of innovation is the most analyzed determinant of SME innovation. The literature demonstrates its role as both a primary obstacle and an indirect catalyst.t. Innovation demands a high investment, uncertain profitability and a high intensity of intangible assets (e.g., intellectual property, specialized knowledge) that are difficult to secure (Houzmali & Krami, 2025). All these demands make their financing rather complex, especially for SMEs that have limited internal resources and difficulty accessing external sources. (MACHICHE.M & MAALEMI.T., 2024)

The number one challenge demonstrated by the work of Stiglitz and Weiss (1981) is information asymmetry, where the lenders lack accurate information about the viability of an innovative project, which eventually leads to credit rationing. Consequently, Moroccan SMEs heavily depend on internal financing, which limits the scale and scope of their innovative activities (MACHICHE.M & MAALEMI.T., 2024)

Paradoxically, financial constraints can also stimulate a specific type of innovation. Due to capital scarcity, SMEs may be forced to adopt cost-saving management innovations as a survival mechanism (De Blick & al., 2024). These process improvements, born out of necessity, can enhance efficiency and ultimately bolster firm performance. Furthermore, the financial landscape is evolving. While formal bank finance remains crucial, recent evidence suggests that the emergence of Digital Inclusive Finance can mitigate information asymmetries and lower transaction costs, thereby improving SMEs' access to capital for innovation (Wang & al., 2025). In a Moroccan context, access to finance is consistently identified as the most significant external barrier to innovation for Moroccan SMEs. Microeconomic evidence demonstrates that financial constraints have a direct negative impact on the productivity growth of firms with fewer than 100 employees, while having no significant effect on larger firms. This creates a structural disadvantage for the very firms that are supposed to be the engine of economic dynamism. Studies highlight the strong dependence of SMEs on self-financing and traditional bank loans, the latter being subject to stringent collateral requirements. This situation limits their capacity to invest in innovation and can lead to an incremental rather than radical innovation strategy.

1.2 Institutional Determinants of innovation

Other than financial sources, the institutional environment plays an important role in the dynamics of innovation. The institutional theory founded by North (1990) and Scott (2011) points out that formal and informal rules, the social norms and the public system influence the organizational comportment. The institutional environment establishes the context in which the enterprise operates and innovates (AlMalki & Durugbo, 2022).

An institution may reduce uncertainty and foster confidence between actors to facilitate the flow of communicating information. A stable regulatory framework, coherent public policies, and effective support programs encourage investment in innovation. Conversely, regulatory instability or ineffective public mechanisms can hinder entrepreneurial initiative. (Moussir & al., 2023). These factors divert scarce managerial resources away from value-creating activities. Finally, institutions facilitate innovation by fostering collaborative networks. Strong linkages between universities, research centers, and industry are a hallmark of successful national innovation systems, enabling knowledge transfer and joint problem-solving (Houzmali & Krami, 2025).

In Morocco, the government plays a vital role. Agencies such as Maroc PME provide different programs to respond to different types of sectors, offering financial subsidies and technical assistance for R&D and innovation, effectively de-risking private investment (Touzani, 2024). Government guarantee schemes are another crucial institutional mechanism, reducing the perceived risk for banks and increasing the likelihood of SMEs obtaining loans for innovative projects (Oussouadi, K., & Cherkaoui, K.,2023).

1.3 Managerial Determinants: The Internal Engine of Innovation

The external resources and institutional factors have a positive impact on innovation only if the firm is capable of managing them internally (Ali & al., 2020). To explain this capability, the best theory is the Dynamic Capabilities View (DCV). DCV conceptualizes it as the ability of firms to integrate, develop, and recombine competencies within and across the organization to deal with turbulent environments (Teece & al., 1997). These capabilities can be categorized as follows:

- Sensing: ability to detect and analyze market opportunities and technological threats.
- Seizing: the ability to allocate financial, human, and technological resources to benefit from identified opportunities; and
- Reconfiguring: the ability to constantly renew and recombine assets and organizational structure to remain competitive.

In addition to these meta-level capabilities, some managerial factors are worth noting. First, human capital in the form of employee education and formal training is associated with higher innovation performance (Kireyeva & al., 2021).

Another managerial factor is the firm's organizational culture that supports risk-taking, innovation, and learning. Such a cultural trait can be captured by entrepreneurial orientation, i.e. propensity for proactivity, innovation, and risk-taking. Finally, digital technologies or digitalization have become important mediators as they help improve the dynamic capabilities of the organization and gain a competitive edge (Saputra & al., 2024).

1.4 Gap in literature

Although literature treats the 3 dimensions abundantly, it’s usually independent.

The main gap is the lack of an integrated conceptual framework. Finance is treated as exogenous, and managerial ability is deemed unaffected by the institutional environment; therefore, each individual dimension tends to be studied in isolation and not as a totality. There have been very few studies indeed, and none on Morocco for sure, which have attempted to model the interaction effect and the feedback loops among the three pillars. For instance, owing to a lack of financing, a firm may not possess the skills for innovation, and an unfavorable institutional environment may not provide incentives to seek financing for innovation. We need to elaborate on models, evidence, and analysis that identify these feedback loops.

2 Methodology

2.1 Methodology of the systematic review

The present study adhered to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol.

• Databases: the research was based on international academic databases:

- Scopus
- And Web of Science,

• Period: The period chosen for the search ranged between January 2017 and December 2025 in order to cover the most recent trends, especially the effects of digital transformation.

• Keywords: The research question was formulated through a series of key terms. The principal combinations used are:

- "SME," "small and medium enterprise"
- "Innovation capability" or "R&D,"
- "Morocco" or "emerging economies"

And the different dimensions analyzed:

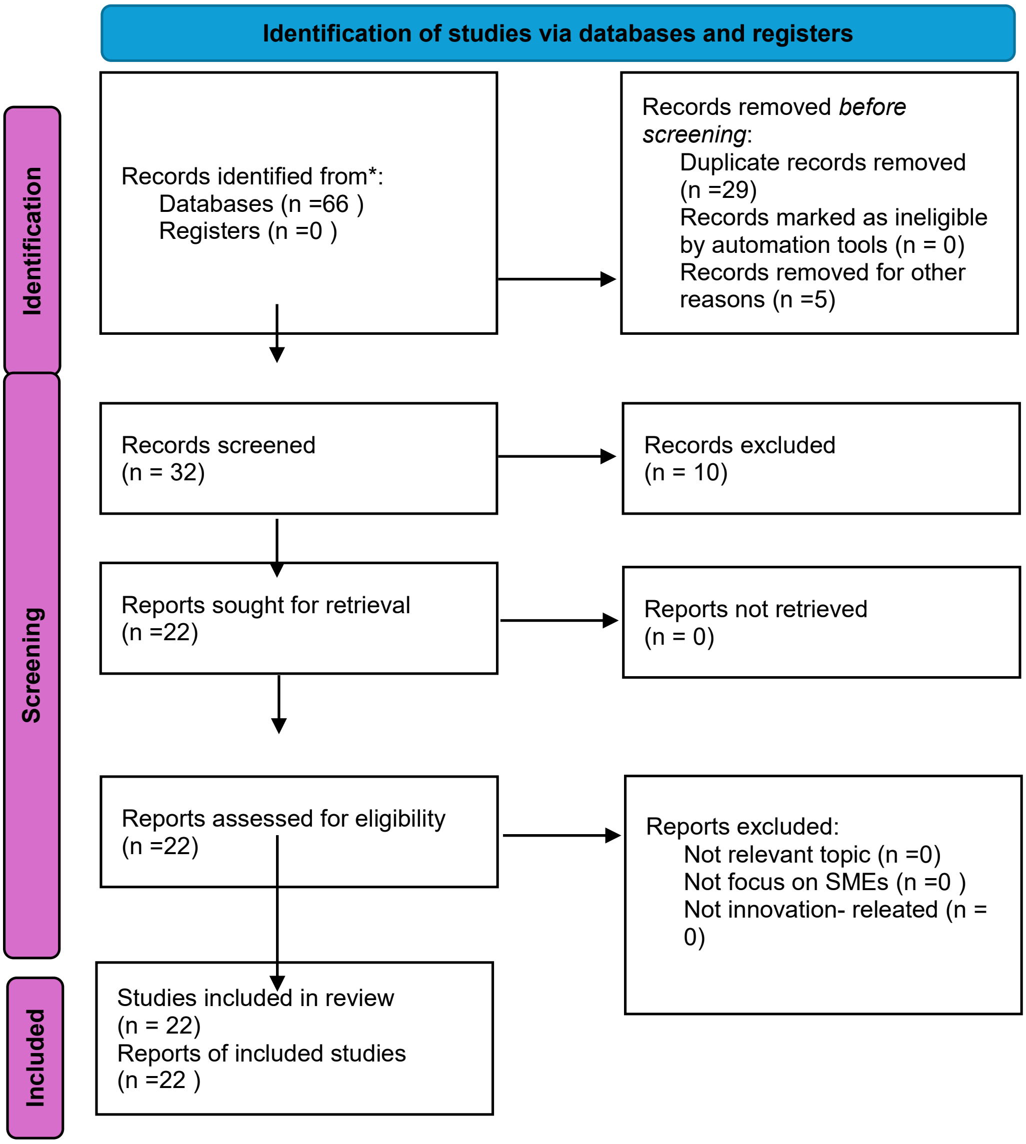
- Financial constraints
- Institutional environment
- and Dynamic capabilities.

• Inclusion Criteria: Peer-reviewed empirical articles (qualitative or quantitative), written in English or French, that study the determinants of innovation in SMEs.

• Exclusion Criteria: Non-empirical articles, case studies focused on large firms, and unvalidated grey literature

The study selection process is illustrated in Figure 1 following the PRISMA guidelines:

Figure 1. PRISMA 2020 flow diagram illustrating the study selection process for the systematic literature review



*Databases : Scopus, Web of science

Source: Authors' own elaboration based on PRISMA 2020

2.2 Thematic Analysis Procedure

The coding process began with the three existing pillars of theory: constraints on finance, institutions, and management capability, as a framework, but not a constraint. Each paper was read carefully, and codes were assigned along five axes: geography, method, key dependent variable, theory used, and core result. The first pass involved codes on a descriptive level, while the second involved categorizing these codes at a thematic level within the existing pillars.

Independent coding took place for two researchers, followed by a comparison to reach agreement in cases of disagreement. Rather than averaging the results in case of disagreement, a return to the original text was made for the resolution of the issue. An inter-rater reliability test was not performed formally, although no divergent view was left unresolved. Finally, the last stage focused on cross-cutting elements that spanned two or more existing pillars; such cross-cutting elements served as the basis for the vicious circle in Section 4 below.

3 Results

The following is an analysis of the selected 22 articles on the topic of innovation by Moroccan SMEs. Such an analysis will first discuss the literature on the topic in its entirety, followed by the themes that emerged from the thematic analysis of the literature, and finally, the most important of those findings regarding the interrelationship between the themes.

3.1 Descriptive Profile of the Reviewed Literature

The collection is methodologically diverse, dominated by quantitative econometric models and firm-level surveys. This empirical part is complemented by qualitative case studies offering deep contextual insights, and influential policy reports (e.g., from the OECD and World Bank) that frame the macroeconomic and institutional environment. Geographically, while a significant portion of the articles focuses specifically on the Moroccan context, including other studies on developing economies, it provides a valuable comparative lens, highlighting both shared challenges and risks.

The descriptive profile of the reviewed literature is summarized in Table 1. It provides an overview of the included studies in terms of authorship, geographical context, research methodology, thematic focus, and main findings related to innovation and financial dimensions.

Table 1: Characteristics of Included Studies (n = 22)

Author(s) & Year	**Geographic Context**	**Methodology**	**Primary Focus**	**Key Findings on Innovation/Finance**
Ali et al. (2020)	Global	Systematic Literature Review (PRISMA)	Dynamic Capabilities & Innovation	Dynamic capabilities indirectly enhance innovation performance through organizational transformation and intermediate outcomes.
AlMalki & Durugbo (2022)	Global	Systematic Literature Review	Institutional Innovation	Identifies four determinants of institutional innovation: quality, diversity, value, and reform; proposes a multi-level governance framework.
Ayyagari et al. (2017)	Global / Developing Countries	Policy Research Paper / Literature Synthesis	SME Financing Constraints	Access to finance remains a major barrier for SMEs; institutional weaknesses (e.g., legal systems, credit information) significantly constrain financing.
Becker (1964)	Global	Theoretical / Human Capital Economics	Human Capital & Training	Investment in human capital, including formal training, raises productivity and is associated with higher rates of innovation.
De Blick et al. (2024)	Europe	Quantitative (Survey Data Analysis)	Financing Constraints & Management Innovation	Financial constraints push SMEs toward cost-saving management innovations, mitigating negative growth effects.
Houzmali & Krami (2025)	Morocco	Quantitative (ARDL Model)	National Innovation Determinants	R&D expenditure, number of researchers, and patent activity positively influence Morocco's innovation performance.
HCP (2023)	Morocco	Statistical Report	SME Structure & Economic Contribution	SMEs represent over 95% of Moroccan enterprises; their performance directly conditions national economic output.
Id Machiche & Maalemi (2024)	Morocco (Souss Massa)	Empirical Survey (Questionnaire)	SME Access to Finance	Information asymmetry, credit rationing, and administrative complexity significantly hinder SME financing.

Kireyeva et al. (2021)	Kazakhstan	Quantitative (Probit/Tobit – WBES)	Firm Innovation Potential	Export activity, foreign ownership, and training positively affect innovation; market competition shows a negative relationship.
Moussir et al. (2023)	Morocco	Quantitative (Probit – WBES)	Firm-level Innovation Determinants	Formal training positively affects innovation; firm size shows a negative relationship, indicating SMEs are less innovative.
North (1990)	Global	Theoretical / Institutional Economics	Institutional Theory	Formal and informal rules shape organisational behaviour; institutional quality is a prerequisite for economic performance.
OECD (2024)	OECD Countries	Statistical Report / Scoreboard	SME Financing Trends	Reports increased cost of financing, reduced lending, and decline in equity financing for SMEs.
Oussouadi & Cherkaoui (2023)	Morocco	Quantitative (Logistic Regression)	SME Financing Determinants	Government guarantees, profitability, and repayment capacity significantly improve SME access to bank financing.
Papadopoulos et al. (2020)	Global	Literature/Framework Development	Digital Technology & COVID-19	Digital technologies are critical for SME resilience and adaptation; the pandemic acted as an accelerator for digital transformation processes.
Saputra et al. (2024)	Indonesia	Survey (PLS-SEM)	Dynamic Capabilities & Digitalization	Digitalization mediates the relationship between dynamic capabilities and competitive advantage.
Scott (2011)	Global	Theoretical / Institutional Sociology	Institutional Pillars	Identifies regulative, normative, and cognitive pillars as the three dimensions of institutions affecting organisational action.
Stiglitz & Weiss (1981)	Global	Theoretical / Econometric	Information Asymmetry & Credit Rationing	Information asymmetry between lenders and borrowers leads to credit rationing, particularly for knowledge-intensive investments.

Touzani (2024)	Morocco	Descriptive Analysis / Literature Review	Entrepreneurship & Development	Identifies structural challenges in Morocco's entrepreneurial ecosystem, including institutional and financial barriers.
Teece et al. (1997)	Global	Conceptual / Theoretical	Dynamic Capabilities Theory	Introduces the dynamic capabilities framework: sensing, seizing, and reconfiguring as core processes of adaptive firms.
Wang et al. (2025)	China	Quantitative (Panel Regression)	Digital Finance & SME Innovation	Digital inclusive finance enhances SME innovation by easing financial constraints and improving capital access.
World Bank (2024)	Morocco	Survey Report (Enterprise Data)	Business Environment	Provides benchmark data on firm performance, access to finance, infrastructure, and governance constraints.
Zahra & George (2002)	Global	Conceptual / Literature Review	Absorptive Capacity	Reconceptualises absorptive capacity as a dynamic capability; distinguishes potential from realised capacity in innovation contexts.

Source: Authors' own compilation based on systematic literature review.

3.2 Thematic synthesis: The Dominant Determinants of innovation:

Through a rigorous systematic review, three dominants and consistently cited and analyzed factors of innovation were identified:

a. Financial Factors:

Eighteen out of twenty-two papers discuss financial constraints, thus making it the best-represented topic within the analyzed body of work. There were three recurring subthemes. First, there was the issue of information asymmetry being the immediate reason for credit denial. As early as 1981, Stiglitz & Weiss proved theoretically that whenever the lender does not have enough data about the riskiness of an information-intensive venture, the optimal strategy would be to reject the credit application. This pattern was also seen in the Moroccan case; Id Machiche and Maalemi (2024) show that lenders had no information about the borrower's financial situation or lack thereof, which made them reject loans.

The second sub-pattern involves reliance on self-sufficiency and bank loans. The inability of equity securities, venture capital, and alternative financing mechanisms to reach Moroccan small and medium enterprises is evident from Oussouadi and Cherkaoui (2023) and OECD

(2024). From an empirical perspective, this implies that the time frame within which funds are available gets reduced to whatever internally generated money is available, and in case of highly intensive research and development processes, this means no available money at all. The third pattern of the relationship between SMEs and financing is somewhat contradictory. According to De Blick et al. (2024), financial stress may cause firms to innovate their processes by saving costs as a reaction to financial distress. This occurs in reality, but it is not the same as actual innovative capacity building.

b. Institutional Factors:

Institutionality emerged as the second recurrent factor with three mechanisms recurring in different studies. The first mechanism pertains to the issue of bureaucratic or administrative costs associated with the implementation of regulations. In almost all researches on Morocco or MENA, there is a recurring theme. Compliance takes up a lot of time, which, of course, is a scarce commodity in SMEs. These burdens do not occur in researches as backdrops; instead, they appear as rivals for managers' attention in terms of innovation.

The second is competition from informal companies. These informal organizations do not incur any expenses related to regulation or taxes, giving them an edge in competing based on price. From a cost perspective, the rational strategy for formal firms is to compete based on their costs and not differentiate themselves, a practice more pronounced among labour-intensive industries where informality is rampant. The final mechanism is the unevenness in how public aid benefits formal organizations. Organizations like Maroc PME and Caisse Centrale de Garantie have actually enabled a few companies to obtain funding and technical support services (Oussouadi & Cherkaoui, 2023). What is consistent, however, is that the majority of eligible firms do not utilize these facilities due to a lack of information, burdensome application processes, and inadequate monitoring. Institutions provide little benefit to firms unable to navigate them (Touzani, 2024).

c. Managerial Factors:

Fourteen studies specifically focused on managerial variables, with a few other articles that discussed them tangentially. The theory used most often to interpret these variables was that of Dynamic Capabilities, i.e., sensing, seizing, and reconfiguration, as proposed by Teece et al. (1997). The resultant image of Morocco in the light of this theoretical perspective is not very promising. This can be summed up with the help of Ali et al. (2020).

In terms of specific management predictors, formal training is the most supported predictor. In the study conducted using data from World Bank Enterprise Survey for Morocco, Moussir et al. (2023) confirm that firms providing formal training to their employees tend to be more innovative concerning product or process innovation; at the same time, firm size turns out to have a reverse relation to innovation: greater size negatively impacts innovation. Similar findings were obtained by Kireyeva et al. (2021) for Kazakstan. Another construct similar to training and associated with training, the concept of absorptive capacity defined by Zahra and George (2002) as a dynamic capability referring to the ability to recognize, assimilate, and exploit new information and knowledge, helps to understand why firms with access to programs of knowledge transfer still do not necessarily produce innovation results since without absorptive capacity, there will be no internal receptiveness to external inputs.

3.3 Cross-Cutting Finding: A System of Interdependencies

The most important finding from the synthesis is not what any single pillar shows independently but what happens when all three are read together. Taken as a whole, the reviewed literature points consistently toward a coupled system: financial, institutional, and managerial constraints reinforce each other in ways that no single-dimension analysis can capture.

- **The Finance-Management Relations**: Articles reporting on constraints of finance often identify poor management as a reason for unsuccessful applications for finance (whether debt or equity) due to factors such as lack of financial awareness or absence of business plan. Conversely, failure to gain finance is reported as a direct reason for inadequate investment in staff training and development.
- **The Institution-Finance relationship:** The quality of the institutional framework is important for finance. State-backed credit guarantee schemes have been analysed as an institutional response to a market failure in the provision of credit to SMEs.
- **The Management-Institution relationship:** Managerial sophistication is impacted by how well a firm does in its dealings with bureaucracy and access to public support. Conversely, a highly imperfect institutional environment discourages management from having innovative ambitions.

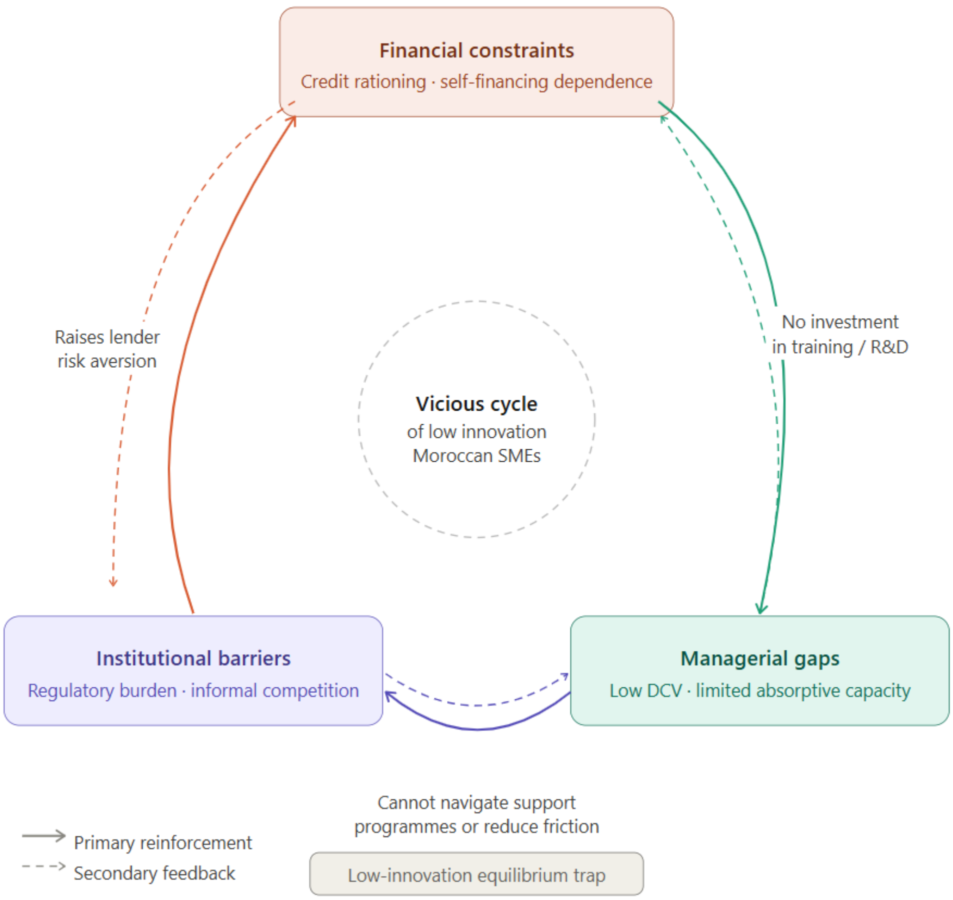
We have found a network of causations, which are locked into a systemic gridlock, called a "vicious cycle" of the lack of innovation, which we will later discuss in more detail, based on our findings from throughout this work.

4 Discussion

4.1 Interpretation of the "Vicious Cycle" Framework

However, before analyzing the pattern shown above, one important terminological point needs to be clarified. When this study refers to the pattern as "a vicious circle," it simply means that what has been presented is a model of an interrelated chain of interdependent limitations; it does not imply any attempt at determining a causative relationship between the three spheres. That can only be done with longitudinal data and a structural model, which cannot be generated in a systematic literature review.

Figure 2: Conceptual framework: the vicious cycle of low innovation among Moroccan SMEs



Source : Authors' own elaboration

A more significant interpretation of the results of this paper is that Moroccan SMEs are caught in a systemic, self-reinforcing "vicious cycle" of low innovation. The list of factors currently inhibiting innovation in SMEs in Morocco offers little insight as to why these factors persist. The cycle operates as follows:

- SMEs start with financial constraints, limiting their ability to invest.
- This lack of investment prevents the development of managerial capabilities and human capital.
- A firm with weak capabilities is ill-equipped to navigate a challenging institutional environment or to signal its quality to risk-averse lenders.

- This further reinforces the perception of high risk, leading to credit rationing that sustains the firm's initial financial constraints.

The cycle can easily be set in motion and is difficult to reverse thereby becoming self-reinforcing.

A more complete model, however, is required to understand why so many initiatives have had so small an effect over the last generation. The answer is that funds alone do not produce innovation. Managers matter, and how organizations operate must improve dramatically in order to absorb funds effectively.

4.2 Comparison with Broader Literature

This "vicious cycle" model, derived from our analysis, stands in contrast to the "virtuous cycles" of innovation and growth often described in literature focused on developed economies as a tool generating a wide range of financing alternatives that in turn create opportunities for capability building that in turn attract more investment. Our findings align with the concept of the "suppression effect," where financial constraints force firms into a survivalist mindset, prioritizing lower cost, preventing firms from adopting more capital-intensive technological or product innovations.

The paper further contributes to the global discourse on Dynamic Capabilities. The findings of the paper suggest that, in the Moroccan context, the endogenous factors that constrain the development of such adaptive capabilities are largely determined by external financial and institutional factors.

4.3 Theoretical and Practical Implications

Contributions:

The main original contribution of this research is an integrated framework. An empirical "vicious cycle" is given solid grounds through a systematic review of extant research. A context-specific interpretation of the existing innovation theory for less developed economies is provided.

Implications for policy and interventions:

The implication for policy is uncomfortable but clear: dealing with any single aspect of constraint individually will not work if the others persist. Providing credit guarantee facilities in the absence of managerial skill development will yield organizations that have access to credit they are unable to use effectively. Skill development efforts that do not coincide with improvements in financial terms will result in managers who have skills without the means to utilize them. It would seem that rather than taking an either/or approach, a conditional, sequenced method must be applied: eligibility for financial assistance conditional upon engagement in training programs, all of which are offered under an eased regulatory framework.

Practical Implications for Managers

SME managers cannot simply sit back and wait for things to change. By recognizing what can and cannot be changed, SME managers can adopt a more positive and constructive approach. Investment in human capital and formal training programs is SME managers' most powerful signal of quality and seriousness to external stakeholders, such as bankers and potential partners. It is the most crucial step in building the absorptive capacity that will drive change from within.

CONCLUSION

This study set out to understand why Moroccan Small and Medium-sized Enterprises (SMEs) struggle to innovate, despite their central role in the national economy. Through a systematic review of 22 empirical studies, the findings converge on a single core insight: innovation underperformance in Moroccan SMEs is not attributable to any isolated factor, but to a self-reinforcing "vicious cycle" in which financial exclusion, institutional weaknesses, and managerial deficiencies mutually constrain one another.

This paper makes three distinct contributions to existing literature. First, it provides the first integrative conceptual framework specifically applied to the Moroccan context, connecting dimensions that prior research has consistently treated in isolation. Second, it introduces the "vicious cycle" model as a systemic reading of SME innovation constraints, offering a more complete explanation than single-factor approaches. Third, it reinterprets Dynamic Capabilities Theory in an emerging economy context, where external financial and institutional barriers largely determine whether internal adaptive capacities can develop at all.

The central policy implication is that fragmented interventions are structurally insufficient. Credit guarantee schemes without accompanying managerial training produce firms that obtain financing they cannot deploy effectively. Training programs without parallel financial access produce managers without the means to act. Effective public policy must therefore be conditional and sequenced: financial support tied to participation in capability-building programs, delivered within a simplified regulatory framework. For SME managers, the clearest lever within their control remains investment in formal training and organizational learning, both as a genuine capability builder and as a credibility signal to external stakeholders.

This study carries inherent limitations. The corpus of 22 articles, while rigorously selected through PRISMA protocol, remains relatively modest for a review covering three distinct theoretical dimensions. The heterogeneity of methodologies, geographic contexts, and variable operationalizations across included studies limits the comparability of findings. Furthermore, the "vicious cycle" model proposed here is conceptual in nature: it identifies plausible interdependencies based on the reviewed evidence but does not establish causal directionality, which would require longitudinal data and structural equation modeling.

Several directions are worth pursuing. First, empirical testing of the vicious cycle model using structural equation modeling on Moroccan firm-level data would allow verification of the proposed interdependencies and their relative weights. Second, longitudinal studies tracking SMEs that successfully broke out of the cycle would yield actionable insights on which intervention point generates the most significant positive cascades. Third, comparative research across MENA economies would establish whether the vicious cycle dynamic is specific to Morocco or constitutes a broader regional pattern, with implications for coordinated policy responses at a supranational level.

By framing innovation as a systemic challenge rather than a resource allocation problem, this paper aims to contribute to both a more accurate theoretical understanding and a more effective policy response for Moroccan SMEs.

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