



ISSN: 2617-6548

URL: [www.ijirss.com](http://www.ijirss.com)



## Organizational and strategic determinants of effective financial inclusion: An empirical study of Moroccan SMEs

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### Abstract

This article analyzes the determinants of effective financial inclusion for SMEs in Morocco, defined as the relationship between access to, use of, and quality of financial services. Based on a sample of 250 formal SMEs, a conceptual framework integrating the Resource-Based View, configurational approaches, and neo-institutional theory is used to construct, using PCA, a composite index of financial inclusion (FIi) and scores for organizational resources (Resi), strategic configurations (Configi), and acceptance of digital payments (Accepti). The linear regression (OLS) and interaction models tested show that Resi, Configi, and especially Accepti have significant positive effects on FIi. Digital acceptance plays a central mediating role, transforming strategic configurations into effective use. These results highlight the strategic importance of the operational activation of digital payments and adapted usage pathways, in line with the objectives of the National Financial Inclusion Strategy (SNIF).

**Keywords:** Digital payments, Financial inclusion, Linear regression, Mediation, ACP, Resource-Based View, Strategic configurations.

**DOI:** 10.53894/ijirss.v9i4.11537

**Funding:** This study received no specific financial support.

**History: Received:** 6 February 2026 / **Revised:** 3 April 2026 / **Accepted:** 8 April 2026 / **Published:** 21 April 2026

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**Competing Interests:** The authors declare that they have no competing interests.

**Authors' Contributions:** All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

**Transparency:** The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

**Publisher:** Innovative Research Publishing

### 1. Introduction

The financial inclusion of small and medium-sized enterprises (SMEs) is central to development strategies, but a significant portion of the literature and public policy continues to view it primarily from the perspective of formal access to financial services (account ownership, availability of instruments, existence of credit lines). However, this focus on access masks a more decisive issue for businesses: the ability to use all the financial services available to them on a regular, fluid, and high-quality basis. Several international measurement frameworks now emphasize the need to clearly distinguish between access and use, showing that progress on the former does not automatically translate into the effective inclusion of

businesses in financial circuits. In the case of SMEs, whose trajectories depend heavily on the management of cash receipts, cash flow, and financing, this distinction is particularly important.

In Morocco, this issue is part of an institutional environment marked by the National Financial Inclusion Strategy (SNIF), which explicitly emphasizes the digitization of financial services, particularly electronic and mobile payments, as well as the strengthening of small business financing mechanisms. Monetary authorities and international partners have developed a set of indicators and index methodologies to track progress in financial inclusion, particularly for SMEs, combining dimensions of access and usage. At the same time, several studies highlight that barriers to inclusion are not only related to the characteristics of businesses (size, informality, risk aversion), but also to the specific ways in which financial institutions design, distribute, and manage their offerings to this segment.

From a management science perspective, this observation calls for a shift in focus towards the organizational and strategic processes that determine the ability of financial institutions to transform a base of internal resources into effective SME inclusion. The literature shows that digital, informational, human, and relational resources only generate an advantage when converted into operational capabilities and coherent strategic configurations adapted to a given environment.

This article aims to propose a theoretical and empirical analytical framework to explain the effective financial inclusion of SMEs in Morocco, considering it as the result of a mechanism for converting the organizational resources of financial institutions into SME-oriented strategic configurations, subject to institutional alignment with the SNIF ( ) framework. The theoretical ambition is twofold. On the one hand, it aims to clarify how the internal resources and capacities of banks, microfinance institutions, and payment institutions can be articulated into coherent configurations of supply, channels, and risk management mechanisms for SMEs. On the other hand, it aims to situate these configurations within an institutional environment that sets priorities (digitalization, financing of small businesses) and expectations of legitimacy, drawing on institutional theory and configurational approaches to strategy.

Empirically, the article proposes a survey approach targeting formal SMEs in Morocco, based on three methodological choices. First, effective financial inclusion is measured as a multidimensional construct combining access, usage, and quality, through the construction of a composite index inspired by SME index methodologies developed by international organizations and recent work on small business inclusion. Second, resources and/or capabilities and strategic configurations are operationalized using survey items that characterize SMEs' experience with their financial service providers (dedicated offers, channels, pricing, acceptance of digital payments, treasury services, scoring/monitoring). Third, a linear regression econometric model is specified to test the direct effects of resources and configurations on effective inclusion, as well as the mechanistic role of digital payment acceptance as a vector for transforming access into usage.

The article aims to contribute to the literature on the financial inclusion of SMEs in three ways: by clarifying the concept of effective financial inclusion as an articulation between access, usage, and quality; by proposing an organizational and strategic reading of its determinants, focused on the capacities and choices of financial institutions operating in Morocco; and by proposing a replicable empirical protocol, based on a synthetic index and econometric modeling, useful both for managerial reflection and for public policy development.

The rest of the article is organized as follows: Section I sets out the theoretical framework and formulates the research hypotheses; Section II details the methodology, the construction of the indices, and the analysis strategy; Section III presents the econometric specifications and empirical results; Section IV discusses the managerial and institutional implications in relation to the SNIF.

## **2. Theoretical and Conceptual Framework**

The theoretical framework of this article draws on the literature on financial inclusion, banking intermediation, and organizational and strategic approaches in order to move beyond a restrictive conception of inclusion based solely on access to financial services. It adopts a broader definition of effective financial inclusion, conceived as the articulation between access, use, and quality of services, and highlights the central role of the organizational capacities, strategic choices, and operational practices of financial institutions, as well as technological innovation, particularly digital payments, in the process of SME inclusion. This approach allows financial inclusion to be analyzed as a relational and institutional phenomenon, shaped jointly by financial supply and the economic and regulatory environment.

### *2.1. Conceptual Clarification: Effective Financial Inclusion of SMEs*

Effective financial inclusion of SMEs refers to a broader understanding of the process of integration into the formal financial system, which is not limited to simply holding financial products, but questions the reality of their appropriation and economic usefulness.

#### *2.1.1. A Multidimensional Concept: Access, Use, and Quality*

In the literature, the financial inclusion of businesses is often understood through formal access indicators, such as account ownership, the existence of a line of credit, or the availability of payment instruments. However, the measurement frameworks promoted by the World Bank and international institutions now emphasize the need to distinguish between access and effective use. The Global Findex and methodological guides for measuring inclusion thus emphasize that an increase in the rate of account openings does not guarantee the effective integration of actors into financial services [1]. In the same vein, the International Monetary Fund proposes an SME financial inclusion index that combines dimensions of access, use, and depth of services [2].

For SMEs, this distinction is crucial: having a business account, a payment terminal, or a line of credit does not necessarily imply regular use of these services for collections, supplier payments, cash management, or operating financing. Research on the inclusion of small businesses shows that activation and continuity of use are major determinants of the economic impact of financial inclusion [3, 4]. In these approaches, effective financial inclusion can be defined as the combination of sufficient access, regular and diversified use, and a quality of service deemed acceptable by the business (cost, reliability, continuity).

Index methodologies dedicated to SMEs are generally based on survey data, where a distinction is made between access variables (presence of an account, use of credit, availability of payment instruments) and usage variables (frequency of transactions, diversification of channels, intensity of use of products). These variables are then aggregated using dimensional reduction techniques, in particular principal component analysis (PCA), to construct synthetic SME inclusion indices [2, 4]. In this context, the effective financial inclusion of Moroccan SMEs refers to the ability of existing mechanisms to support, over time, practices that contribute to the security of collections, the fluidity of payments, and access to appropriate financing.

### *2.1.2. Managerial Implications: From "Available Products" to "Usage Paths"*

From a managerial perspective, this multidimensional approach requires moving beyond a logic centered on the simple availability of products to adopt a usage path approach. Research on user experience in financial services shows that friction related to costs, procedural complexity, and the quality of digital channels are major barriers to regular use, even when formal access is guaranteed [1, 5]. For financial institutions, the challenge is therefore no longer simply to be able to declare that an SME segment is "served," but to demonstrate that the services offered translate into sustained use, with a level of friction low enough not to discourage businesses.

Friction can be explicit (fees, commissions, collateral requirements) or implicit (waiting times, complex documentation, instability of digital channels). Analyses carried out as part of national financial inclusion strategies show that these frictions particularly affect SMEs due to their limited capacity to absorb fixed costs or prolonged delays [6]. Effective inclusion therefore requires financial institutions to design simplified processes tailored to the constraints of small businesses, for example through digitized customer identification procedures, more accessible interfaces, or more flexible credit offerings.

In the Moroccan context, the National Financial Inclusion Strategy (SNIF) explicitly emphasizes the need to move from a logic of simple access to a logic of use, with a focus on the digitization of services and improving the quality of the relationship with small businesses [7]. Effective financial inclusion thus becomes a shared objective between public policies and financial institution strategies, which justifies the adoption of an analytical framework capable of articulating institutional, organizational, and strategic dimensions.

## *2.2. Organizational Resources and Inclusion Capacities: Contributions from the Resource-Based View*

### *2.2.1. Strategic Resources that can Be Mobilized to Serve SMEs*

The Resource-Based View (RBV) posits that an organization's sustainable performance depends on its portfolio of specific resources—both tangible and intangible—as well as its ability to mobilize them in ways that are difficult to imitate [8, 9]. Applied to financial institutions, this perspective leads to the identification of resources likely to support effective SME inclusion: digital capabilities, data analysis infrastructure, sales and support team skills, and distribution and partner networks.

Digital capabilities include information systems, web and mobile platforms, remote integration tools, electronic signature solutions, and automated workflows that enable SME transactions to be processed at a lower unit cost. They play a central role in offering faster and more accessible services, particularly when physical branch networks are limited. Similarly, data and analytics infrastructure—data quality, segmentation tools, scoring and monitoring models—are key resources for improving risk assessment, tailoring offers to business profiles, and managing commercial relationships in a more refined manner [2, 4].

The skills of teams—SME advisors, credit analysts, risk and compliance specialists—represent another category of strategic resources. Management literature emphasizes the role of interpersonal and analytical skills in the quality of the bank-SME relationship, particularly in reducing information asymmetries and building lasting trust [10, 11]. Finally, distribution and partner networks – branches, correspondents, authorized agents, payment service providers – determine the bank's presence in the field and its ability to offer collection and cash management solutions tailored to SMEs, including in less densely populated areas.

### *2.2.2. From Resources to Capabilities: Execution, Reliability, and Learning*

In the RBV, resources only create performance when they are combined within organizational capabilities—routines, processes, governance systems—that enable them to be deployed effectively [9, 12]. This transformation is particularly important in financial services, where simply having a digital platform or a scoring model does not guarantee a smooth service for customers.

In the field of SME inclusion, distinctive capabilities can be understood through several dimensions:

- Speed of execution (*time to serve*) for opening accounts, providing payment instruments, or disbursing loans;
- Operational quality, measured by the frequency of incidents, the availability of digital channels, and the responsiveness of support;

- Data-driven learning, i.e., the ability to use transactional information to continuously improve scoring, monitoring, and product design.

These capabilities are crucial for serving an SME segment characterized by relatively modest ticket sizes, high sectoral heterogeneity, and sometimes low digital maturity. Research on SME financing in emerging economies shows that institutions with advanced digital and analytical capabilities can reduce transaction costs, improve the accuracy of risk assessment, and offer more tailored products, resulting in greater inclusion [1, 2]. In the Moroccan context, SNIF explicitly encourages the strengthening of these capabilities within banks, MFIs, and new players (payment institutions, fintechs) to better serve small businesses [6].

### *2.3. Theoretical Proposals Based on the RBV*

On this basis, several proposals can be made. First, financial institutions with more advanced resources and organizational capabilities—particularly in terms of digitalization and data & analytics—should achieve more effective financial inclusion of SMEs, all other things being equal, by reducing friction and improving risk management [2, 8]. Second, the effect of these resources is not only direct: it depends on the institution's ability to design and implement coherent SME-oriented strategic configurations, which refers to a strategic bundle approach. These theoretical proposals translate into empirically testable research hypotheses.

Research hypotheses:

Based on the theoretical framework developed, four research hypotheses are tested empirically:

*H<sub>1</sub>: Organizational resources and capabilities (Resi) have a direct positive effect on the effective financial inclusion of SMEs (Fli).*

*H<sub>2</sub>: SME-oriented strategic configurations (Configi) have a positive effect on Fli.*

*H<sub>3</sub>: Acceptance of digital payments (Accepti) has a direct positive effect on Fli and mediates the effect of Configi.*

*H<sub>4</sub>: A high level of Resi amplifies the effect of Configi on Fli (positive interaction Resi × Configi).*

### *2.4. Strategic Configurations and Complementarities: A "Bundle" Approach*

#### *2.4.1. Justification For a Configurational Approach*

Work in strategy and contingency theory emphasizes that organizational performance often depends on the internal consistency of a set of choices—structure, control systems, human resource policies, product offerings—rather than on the isolated effect of each element [13]. Configurational approaches thus view organizations as "bundles" of complementary characteristics, certain combinations of which produce superior results depending on the environment [14].

In the case of SME inclusion, this perspective leads to analyzing the strategies of financial institutions not on a product-by-product basis, but as integrated configurations:

- Dedicated SME offerings (accounts, credit, treasury services);
- Adapted distribution channels (local branches, digital platforms, correspondents);
- Pricing compatible with the margin and cash flow constraints of small businesses;
- Renewed scoring and monitoring systems;
- Digital payment acceptance solutions and partnerships with PSPs or aggregators.

The effect on effective inclusion then stems from the complementarities between these elements: for example, appropriate pricing may have only a limited effect if the channels are not accessible, while a digital acceptance solution will be little used if the flows are not integrated into cash management tools. This reasoning justifies the formulation of hypotheses where resource/capacity variables interact with strategic configuration scores, in order to test the idea that a high level of resources amplifies the effect of strategic bundles.

### *2.5. The Acceptance of Digital Payments as the Cornerstone of Usage*

Among the components of an SME-oriented strategic configuration, the acceptance of digital payments occupies a central place. Work by the World Bank and the Bank for International Settlements on merchant payments shows that the ability of businesses to collect electronic payments determines the conversion of accounts into "active" accounts and the generation of usable transactional data [15]. Recent analyses of Morocco highlight that the barrier of merchant acceptance remains a significant obstacle to the spread of digital payments, despite efforts to provide equipment and incentives [6, 16].

Acceptance depends on factors specific to SMEs (customer profile, average transaction value, payment preferences) but also on the characteristics of the solutions offered: equipment costs, pricing structure (fixed fees, commissions), ergonomics of terminals or applications, reliability of payments, dispute management, technical support [5]. A strategic configuration conducive to the effective inclusion of SMEs is therefore likely to incorporate simple, inexpensive, interoperable acceptance solutions, combined with cash management tools (reconciliation, reporting, accounting integration).

In the proposed conceptual framework, digital payment acceptance is treated as a mechanism linking organizational resources and strategic configurations to effective inclusion. Institutions with advanced digital and analytical capabilities that design coherent bundles including acceptance should be able to generate higher transaction flows, increase SME banking penetration, and improve the perceived quality of services [5]. Empirically, this idea can be tested using mediation models where acceptance acts as a proxy variable between strategic configuration and effective inclusion index, based on standardized market survey instruments.

## **2.6. Partnerships and Market Architecture**

Partnerships with payment service providers (PSPs), aggregators, or other ecosystem players also shape strategic configurations. In many countries, the expansion of digital payment acceptance among small businesses relies on collaborative models between banks, fintechs, mobile operators, and PSPs, which share the costs of equipment, marketing, and support [3, 5]. These partnerships influence the structure of incentives (commissions, equipment subsidies, support programs) and can facilitate SMEs' access to more integrated solutions (payment + invoicing + cash management).

Explicitly integrating these partnerships into the strategic configuration provides a better understanding of the market architecture in which SME inclusion takes place. Rather than considering PSPs and aggregators as a mere context, they are analyzed as active components of the strategic bundle, capable of strengthening or weakening the ability of financial institutions to offer attractive usage paths for SMEs.

## **2.7. Institutional Environment: Strategic Alignment and Constraints**

### **2.7.1. The SNIF as a Framework for Institutional Alignment**

The actions of financial institutions take place within an institutional environment that shapes incentives, norms, and expectations of legitimacy. Neo-institutional theory shows that organizations are subject to coercive, normative, and mimetic pressures that lead them to adopt structures and practices considered legitimate in their field [17]. In Morocco, the National Financial Inclusion Strategy (SNIF) is a major driver of these pressures, setting priorities for digitization, expanding access, and supporting SME financing [6, 18].

This strategy explicitly calls on financial institutions to develop products tailored to small businesses, strengthen their digital capabilities, expand the range of transactional services, and improve the quality of their relationships with underserved segments. It also encourages data collection and utilization, as well as the establishment of partnerships with new players (payment institutions, fintechs), which directly influences how resources and strategic configurations are deployed in the field of SME inclusion.

### **2.7.2. Compliance Constraints and Organizational Translation**

At the same time, compliance requirements—anti-money laundering and counter-terrorist financing (AML/CFT), know-your-customer rules, prudential requirements—impose constraints that can either hinder or support inclusion. If applied rigidly and with little digitalization, these requirements can increase friction for SMEs (cumbersome procedures, delays, costs), thereby reducing the likelihood of access and use. Conversely, when integrated into appropriate digital processes and analytical tools, they can coexist with smooth customer journeys and help secure the relationship for both parties [1, 2].

The net effect of these constraints therefore depends on the ability of financial institutions to translate them organizationally into their systems, processes, and risk models. This translation mobilizes resources (information systems, compliance skills, data & analytics) and is reflected in the strategic configurations chosen (level of automation, customer segmentation, credit delegation policies). It provides an ideal opportunity to observe the relationship between RBV, the configurational approach, and the institutional environment.

## **3. Methodological Framework**

The methodological framework is based on a quantitative explanatory approach, centered around a survey mechanism that allows for empirical analysis of the determinants of effective financial inclusion for formal SMEs operating in Morocco.

### **3.1. Research Design and Fieldwork**

The study adopts an explanatory quantitative design based on a cross-sectional survey of formal SMEs operating in Morocco. This choice is consistent with the recommendations of international institutions, which favor surveys to measure the financial inclusion of SMEs and analyze its microeconomic determinants [1, 2]. The unit of analysis is the legally constituted SME, while the unit of response is the manager or person in charge of financial decisions, in order to capture both actual practices and perceptions of services.

The cross-sectional design makes it possible to observe, at a given moment, differences in effective inclusion between companies exposed to different strategic configurations and varying levels of resources/capabilities of their financial service providers. This approach is frequently used in empirical studies on SME inclusion, which combine descriptions of inclusion profiles using indices with estimates of explanatory models based on survey data [4]. It offers an acceptable compromise between operational feasibility and the ability to identify associative relationships, provided that causal limitations are explicitly taken into account.

### **3.2. Sampling and Data Collection**

#### **3.2.1. Population of Interest and Sampling Frame**

The population of interest comprises formal SMEs in the Moroccan economy, defined in accordance with the criteria generally used by national mechanisms (number of employees, turnover, legal status). Focusing on formal enterprises makes it possible to partially neutralize the effect of informality on access to financial services and to better isolate organizational and strategic determinants on the supply side. This approach is consistent with the SME index methodologies of the IMF and regional studies, which are based on registered business databases supplemented by targeted surveys [2].

### 3.3. Sampling Strategy

The sampling is designed to ensure sufficient variability in the inclusion situations and strategic configurations encountered by SMEs. Stratification was carried out according to size (micro, small, medium), sector of activity, and geographical location (large urban areas vs. secondary territories), in accordance with methodological recommendations on SME surveys [1, 3]. This stratification limits composition bias and allows the analyses to examine whether the effects of resources and configurations remain robust when controlling for sectoral structure.

The sample size is determined based on the requirements of the multivariate analysis (ACP/PCA and regressions). The usual rules recommend having at least five to ten times more observations than the number of variables used to construct the indices [19]. In this case, the construction of a multidimensional index of effective inclusion and resource/configuration scores calls for a sample of 250 SMEs, in line with the practices of comparable studies [4]. To meet the above requirements, the total number of SMEs surveyed for the purposes of our study is 250 entities.

### 3.4. Data Collection Methods

Data collection is based on a structured questionnaire administered directly to SMEs either face-to-face or by telephone. The questionnaire was designed to cover the various dimensions of financial inclusion and payment practices, targeting the company's CEO or financial decision-maker.

A pre-test was carried out with a limited number of SMEs (25 entities) to check the comprehensibility of the questions, the consistency of the measurement scales, and the time required to complete the questionnaire. In addition, precise instructions were defined for administering the questionnaire, and consistency checks were put in place to reduce the risk of measurement error and bias related to the collection method, particularly for sensitive questions concerning the actual use of financial services and perceptions of their quality.

### 3.5. Measurement of Variables and Construction of Indices

#### 3.5.1. Measuring Effective Financial Inclusion

Effective financial inclusion is measured using a composite index based on three sets of items: access, usage, and quality. This structure is based on the conceptual and methodological frameworks developed by the World Bank, the IMF, and the Alliance for Financial Inclusion for SME inclusion [1-3].

- The access block includes variables such as business account ownership, availability of payment/collection instruments (wire transfers, checks, cards, mobile payments), access to operating and investment credit, and use of ancillary products (insurance, guarantees).
- The usage block covers the frequency of transactions (cash receipts, supplier payments, salaries), the proportion of flows processed through formal or digital channels, the intensity of use of credit lines, and the diversification of services used.
- The quality block measures perceived cost (fees, commissions), reliability (incidents, unavailability), overall satisfaction, ease of procedures, and stability of the relationship.

In line with SME inclusion index practices, the items are first standardized and then aggregated using principal component analysis (PCA) to extract a main factor of effective inclusion [2, 4]. This approach reduces dimensionality, limits collinearity between variables, and constructs a statistically sound synthetic measure. We note that in similar studies, the index resulting from the above specification, denoted  $FI_i$ , is either used as a continuous variable or possibly dichotomized around an inclusion threshold considered "effective" for logit/probit models.

#### 3.6. Measurement of Resources and Capabilities

The organizational resources and capabilities of financial service providers are assessed using items describing the SME's experience with its main financial service provider. In line with the Resource-Based View [8, 12] several dimensions are considered:

- Digital capabilities: possibility of opening an account partly remotely, availability of mobile applications or dedicated SME portals, use of electronic signature tools, perceived fluidity of digital processes.
- Data/analytics capabilities: SMEs' perception of the institution's ability to track their cash flows, offer personalized services, and revise credit limits based on transactional data.
- Commercial skills: quality of advice, frequency of proactive contact, ability to explain products, support in the event of an incident.
- Local network: distance to the branch, availability of local correspondents or service points, presence of partners (PSPs, aggregators) for acceptance.

These items are also aggregated by ACP/PCA to construct a resource/capacity score  $Res_i$ , following a logic similar to studies on the "pillars" of SME inclusion [4].

#### 3.7. Measuring Strategic Configurations and Acceptance of Digital Payments

SME-oriented strategic configuration is measured by a score  $Config_i$  constructed from items describing the following elements:

- Existence of dedicated SME offers (accounts, packages, specific loans);

- Adequacy of pricing (fixed fees, commissions, credit terms) to SME constraints;
- Adaptation of service channels (opening hours, branch accessibility, digital services);
- Availability of cash management services (reconciliation, reporting, integrated collection solutions);
- Scoring/monitoring practices perceived as transparent and scalable.

The acceptance of digital payments is measured by a specific module inspired by the World Bank's merchant payment survey instruments. The items cover equipment (terminals, QR codes, payment links, mobile collection), activation (active account, frequency of use), the share of digital collections in turnover, and obstacles/motivations (costs, complexity, customer preferences). This information is used to calculate an acceptance indicator  $Accept_i$  (continuous score or categories), which acts both as a direct determinant of inclusion and as a mediating variable between strategic configuration and usage.

### 3.8. Analysis Strategy and Econometric Models

#### 3.8.1. Analysis Steps

The empirical analysis is carried out in three main stages.

1.  $FI_i$  Descriptive analysis of the distribution of the financial inclusion index and its components, in order to identify SME profiles (access deficit, usage deficit, quality deficit) and to situate the Moroccan case in relation to available benchmarks [2, 3].
2. Construction of scores  $Res_i$  and  $Config_i$  using ACP/PCA, as well as the acceptance indicator  $Accept_i$ , verifying statistical consistency (eigenvalues, internal reliability).
3. Estimation of econometric models to test hypotheses regarding the effects of resources, configurations, and acceptance on effective inclusion, controlling for SME profiles.

#### 3.8.2. Main Specification

When the  $FI_i$  index is used as a continuous variable, the basic specification is based on an ordinary least squares (OLS) model:

$$FI_i = \alpha + \beta_1 Res_i + \beta_2 Config_i + \beta_3 Accept_i + \gamma' X_i + \varepsilon_i,$$

where  $X_i$  is a vector of control variables (size, age, sector, revenue structure, level of internal digitalization) and  $\varepsilon_i$  is an error term. This "survey index  $\rightarrow$  regression" structure is consistent with the models used in the literature on SME inclusion [2, 4].

A logit/probit variant is used if we choose to dichotomize  $FI_i$  around an effective inclusion threshold (e.g., being in the top quartile of the index). In this case, the probability  $\Pr(FI_i = 1)$  is modeled as a nonlinear function of the same determinants, still with controls.

To test the hypothesis of complementarity between resources and configurations, an interaction term  $Res_i \times Config_i$  is introduced:

$$FI_i = \alpha + \beta_1 Res_i + \beta_2 Config_i + \beta_3 Accept_i + \beta_4 (Res_i \times Config_i) + \gamma' X_i + \varepsilon_i.$$

The significance and sign of  $\beta_4$  indicate whether the effect of strategic configuration is amplified when the level of resources/capabilities is high, in line with configurational approaches to strategy [13, 14].

### 3.9. Modeling The Mechanism: Mediation by Digital Acceptance

To analyze the role of digital payment acceptance as a mechanism linking resources/configurations to effective inclusion, a two-equation mediation approach is proposed:

$$Accept_i = a + \delta_1 Res_i + \delta_2 Config_i + \theta' X_i + u_i,$$

then

$$FI_i = \alpha + \beta_1 Res_i + \beta_2 Config_i + \beta_3 Accept_i + \gamma' X_i + \varepsilon_i.$$

This architecture makes it possible to assess whether part of the effect of  $Config_i$  on  $FI_i$  is mediated by acceptance, in line with work that treats acceptance technologies as a key lever for the diffusion of merchant payments [5] and with the classic mediation approach in social sciences [20]. We should note that, from a management science perspective, mediation is interpreted as the operational translation of a strategic "bundle" into observable practices at the level of SME cash collection.

### 3.10. Analysis of Results, Managerial Proposals, and Methodological Limitations

#### 3.10.1. Analysis of Results: Validation of the Theoretical Framework and Identified Mechanisms

The econometric analysis conducted on the sample of 250 SMEs robustly validates three of the four theoretical hypotheses formulated in the methodological framework.

**Table 1.**  
Overall descriptive statistics.

Variable	Mean	Standard deviation	Min.	Max.
FI <sub>i</sub> (effective inclusion)	0.48	0.22	0.05	0.98
Res <sub>i</sub> (resources/capacities)	0.52	0.25	0.10	1.0
Config <sub>i</sub> (strategic configuration)	0.45	0.23	0.08	0.95
Accept <sub>i</sub> (% digital payments)	35	28%	0%	95
Size (log(CA))	12.3	1.8	9.5	16.2
Age (years)	8.2	4.1	1	22

Table 1 highlights significant heterogeneity in the levels of effective financial inclusion among SMEs. The FI<sub>i</sub> index has an intermediate mean (0.48) and considerable dispersion (standard deviation = 0.22), reflecting contrasting situations in terms of access to, use of, and quality of financial services. The scores for organizational resources (Res<sub>i</sub>) and strategic configurations (Config<sub>i</sub>) also show significant variability, suggesting that SMEs are exposed to varying degrees to the capabilities and strategic choices of their financial service providers. Finally, the average share of digital receipts remains limited (35%), with a high dispersion, confirming the gual distribution of digital payment acceptance and justifying its central role in the analysis of effective financial inclusion mechanisms.

Model 1 (direct effects) highlights the impact of resources, configurations, and digital acceptance on effective financial inclusion. The results are presented in Table 2.

**Table 2.**  
Model 1 with direct effects.

Variable	Coefficient	Std error	t-stat	p-value
Resi	0.185	0.052	3.56	0.000
Configi	0.212	0.055	3.85	0.000
Accepti	0.288	0.068	4.24	0.0001
Size	0.041	0.021	1.95	0.052
Age	0.012	0.014	0.86	0.391
Internal digital	0.098	0.045	2.18	0.030
Constant	0.156	0.172	0.91	0.364
Adjusted R <sup>2</sup>	0.382			
F-stat	28.4			0.000
N	250			

The results show that organizational resources ( $\beta_1 = 0.185, p < 0.001$ ) have a positive and highly significant effect on effective financial inclusion (FI). This direct impact confirms hypothesis H1 from the Resource-Based View (RBV): the digital capabilities, data analytics, commercial skills, and local networks of financial institutions result in reduced access friction and improved risk management for SMEs, thereby generating more effective inclusion regardless of other factors.

Hypothesis H3 concerning the acceptance of digital payments is also strongly confirmed ( $\beta_3 = 0.288, p < 0.001$ ), positioning this lever as the most powerful operational determinant. Merchant acceptance—measured by equipment, activation, and the share of digital receipts—acts as a transformational pivot: it converts passive accounts into active accounts generating observable transaction flows, which are the basis for scoring, cash management, and access to credit.

The following equations illustrate the results of the mediation models estimated on the sample of 250 SMEs, where acceptance of digital payments (Accept<sub>i</sub>) acts as an intermediate variable between resources/capabilities (Res<sub>i</sub>), strategic configurations (Config<sub>i</sub>), and effective financial inclusion (FI<sub>i</sub>). The coefficients, derived from an OLS regression controlling for size, age, and internal digitalization, confirm the direct and indirect effects highlighted in Tables 2 and 3.

Thus, for the determinants of acceptance, the model is as follows:

$$Accept_i = 0.124 + 0.298Res_i + 0.365Config_i + \gamma'Xi \quad ; \quad R^2_{ajusté} = 0.31$$

$\gamma'Xi$  represents the control variables.

This result empirically validates the recent diagnosis of the Moroccan market, according to which digital payment still faces the barrier of acceptance [16].

Furthermore, the equation for effective inclusion is given by the following model:

$$FI_i = 0.156 + 0.185Res_i + 0.212Config_i + 0.288Accept_i + \gamma'Xi \quad avec \quad R^2_{ajusté} \approx 0.39$$

Table 3 presents the results of the model incorporating the term for interaction effects between resources and configurations. This term aims to test the complementarity hypothesis (H4) between these two dimensions.

**Table 3.**  
Identified interactions.

Variable	Coefficient	Standard error	t-stat	p-value
Res <sub>i</sub>	0.172	0.054	3.19	0.002
Config <sub>i</sub>	0.198	0.057	3.47	0.001
Accept <sub>i</sub>	0.275	0.069	3.99	0.000
Res <sub>i</sub> ×Config <sub>i</sub>	0.112	0.061	1.84	0.067
Controls	Identical			
Adjusted R <sup>2</sup>	0.412			
N	250			

It is important to note that the introduction of this interaction term changes the interpretation of the main coefficients of Res<sub>i</sub> and Config<sub>i</sub>: these now represent their marginal effects when the other variable is equal to zero. Consequently, the coefficients in Table 3 are not directly comparable to those estimated in the direct effects model (Table 2). The evaluation of hypothesis H4 is therefore based exclusively on the coefficient of the interaction term ( $Res_i \times Config_i$ ).

The main effect of Config<sub>i</sub> remains positive and statistically significant ( $\beta_2 = 0.198, p < 0.01$ ), confirming hypothesis H2 that SME-oriented strategic configurations promote effective financial inclusion, regardless of their interaction with organizational resources.

Mediation analysis provides a key explanation for this result: a substantial part of the effect of strategic configurations is mediated by the acceptance of digital payments, suggesting that these bundles only have an impact if they translate into effective collection practices. In other words, a sophisticated offering, if not activated at the point of sale by the SME, remains largely ineffective in terms of financial inclusion.

Finally, hypothesis H4 of complementarity between resources and strategic configurations is not confirmed. The coefficient of the interaction term  $Res_i \times Config_i$  is positive but statistically insignificant ( $\beta_4 = 0.112, p = 0.067$ ), suggesting that organizational resources and strategic configurations mainly have additive and relatively independent effects in the context of Moroccan SMEs. This lack of complementarity can be explained by the structural intertwining of these dimensions in financial institutions or by limited statistical power, calling for a cautious interpretation of configurational logic at this scale.

The goodness of fit of the direct effects model given in Table 2 (adjusted R<sup>2</sup> = 0.38) and the consistency of the empirical results support the relevance of the proposed theoretical framework. The analyses highlight a coherent chain of associative relationships, in which the organizational resources and strategic configurations of financial institutions contribute to the effective financial inclusion of SMEs, particularly through the acceptance of digital payments. These results are in line with the priorities of the National Financial Inclusion Strategy (SNIF), which emphasizes the digitization of financial services and the development of electronic payments as levers for effective use.

### 3.11. Managerial And Institutional Proposals: Priority Operational Levers

The results highlight three priority managerial recommendations for financial institutions wishing to strengthen the effective financial inclusion of SMEs.

Firstly, accepting digital payments must be considered the central operational pivot of inclusion. Beyond simply deploying terminals or payment collection solutions, financial institutions would benefit from investing in active support for SMEs: training in the use of devices, responsive after-sales support in the event of incidents, and pricing incentives to encourage regular use (e.g., commissions adjusted according to intensity of use). Empirical results show that acceptance has the highest direct effect on effective financial inclusion ( $\beta_3 = 0.288, p < 0.001$ ), confirming its key role in transforming formal access into effective use.

Second, SME-oriented strategic configurations must adopt a resolutely usage-based approach, which is consistent with the validation of hypotheses H1 and H3. Bundled offers combining business accounts, digital payment solutions, and cash management services appear to perform better when backed by pricing proportional to the actual flows generated. Mediation analysis suggests that a substantial part of the effect of strategic configurations is mediated by the acceptance of digital payments, indicating that strategic performance depends less on the intrinsic sophistication of the offerings than on their operational translation at the point of contact with the SME. From this perspective, partnerships with PSPs or aggregators are a relevant lever for industrializing deployment and reducing unit costs.

Third, investments in organizational resources remain fundamental, as confirmed by the validation of hypothesis H1. Digital and analytical capabilities, the digitization of onboarding and account opening processes, and the strengthening of sales skills in the field contribute directly to more effective inclusion ( $\beta_1 = 0.172-0.185, p < 0.01$ ) by reducing operational friction and improving the management of relationships with SMEs.

At the institutional level, these results argue for greater alignment with the guidelines of the National Financial Inclusion Strategy (SNIF). Measures such as regulating acceptance fees for micro-merchants, large-scale training programs, and targeted support mechanisms for payment service providers could help remove the main bottleneck identified: converting available equipment into effective use that generates structured transaction flows.

## 4. Conclusion

This research provides empirical insight into the mechanisms associated with the effective financial inclusion of SMEs in an emerging context, highlighting the structuring role of digital payment acceptance as an interface between the

strategies of financial institutions and the practices of businesses. The results suggest that organizational resources and strategic configurations contribute positively to inclusion, but that their effectiveness largely depends on their ability to translate into operational mechanisms that are effectively mobilized at the point of sale. Acceptance thus appears less as a simple technical instrument than as a central organizational and behavioral lever.

However, the analysis highlights a lack of statistically robust complementarity between resources and strategic configurations, suggesting that these dimensions operate mainly in an additive manner in the context studied. This observation calls for a more nuanced view of the strong configuration approaches often used in the literature and suggests that, in institutional environments characterized by high operational and organizational constraints, the accumulation of sophisticated mechanisms does not necessarily guarantee more effective inclusion. The results instead argue in favor of a logic of gradually activating existing capacities.

However, these findings must be interpreted in light of several limitations.

On the one hand, the cross-sectional nature of the data does not allow for the establishment of strict causal relationships or for understanding the temporal dynamics of the adoption and use of digital payments. On the other hand, the key variables are based on composite indices and self-reported statements, which may introduce measurement biases. Finally, the institutional context in Morocco, characterized by a specific regulatory framework and an entrepreneurial fabric dominated by small structures, limits the scope for generalizations to other environments.

These limitations open up prospects for future research. Longitudinal analyses would make it possible to examine the trajectories of digital acceptance activation and their cumulative effects on financial inclusion. The integration of objective transactional data would also offer a promising avenue for refining the measurement of actual usage. Finally, a comparative approach between countries or between business segments could help to better identify the institutional conditions under which strategic complementarity becomes effective.

Ultimately, this study invites us to move beyond a strictly instrumental conception of financial inclusion and think of it as an organizational and behavioral process, in which the availability of tools matters less than their effective appropriation. It suggests that public policies and financial institution strategies would benefit from shifting their focus from equipment to usage, in line with the guidelines of the National Financial Inclusion Strategy, while recognizing the structural constraints specific to SMEs in emerging economies.

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