Microfinance and Financial Inclusion of MSMEs in North Africa and the Middle East: A Comparative Analysis of Public Policies

Abstract (French)

This study explores the contribution of microfinance to financial inclusion in the MENA region, with an emphasis on a comparative analysis of public policies supporting SMEs. Despite efforts to expand microcredit, many SMEs still face difficulties accessing formal financial services. Using a mixed-method approach, the research examines the impact of public policies, institutional structures, and digitalization on microfinance efficiency and SME performance. Data were collected from 30 participants in Morocco, Tunisia, and Egypt through a Likert-scale questionnaire. Statistical analysis via SPSS reveals that public policies have no significant direct effect on financial inclusion. However, institutional frameworks, digitalization, and microfinance have a strong and significant positive effect on inclusion and SME performance. These results highlight that digital transformation and institutional quality are key drivers of sustainable inclusion. The weak influence of public policies indicates the need for more coherent government programs. The study recommends strengthening institutional governance, fostering digital innovation, and promoting financial education to support inclusive and resilient growth in North Africa and the Middle East.

Keywords: Microfinance, Financial Inclusion, MSMEs/SMEs, Institutional Framework, Digitalization, MENA Region.

Abstract

This study explores how microfinance contributes to financial inclusion in the MENA region, emphasizing a comparative analysis of public policies supporting SMEs. Despite efforts to expand microcredit, many SMEs still struggle to access formal financial services. Using a mixed-method approach, the research examines the impact of public policies, institutional structures, and digitalization on microfinance efficiency and SME performance. Data were collected from 30 participants in Morocco, Tunisia, and Egypt through a Likert-scale survey. Statistical analysis via SPSS revealed that public policies have no significant direct effect on financial inclusion. However, institutional frameworks, digitalization, and microfinance strongly and positively affect inclusion and SME performance. These results highlight digital transformation and institutional quality as key drivers of sustainable inclusion. The weak policy impact suggests the need for more coherent government initiatives. The study recommends enhancing governance, fostering digital innovation, and promoting financial education to support inclusive and resilient growth in North Africa and the Middle East.

Keywords : Microfinance, Financial Inclusion, SMEs, Institutional Framework, Digitalization, MENA Region.

Introduction

Over the past two decades, microfinance has emerged as a central instrument in economic and social development strategies, particularly in emerging and developing economies. By facilitating access to financial services for populations and businesses excluded from the traditional banking system, it contributes to poverty reduction, job creation, and the stimulation of local entrepreneurship (Yunus, 1999; Ledgerwood, 2013). However, the effectiveness of microfinance does not depend solely on the supply of financial products, but also on the institutional framework, public policies, and the level of digitalization of financial services that shape its functioning.

In the North Africa and Middle East (MENA) region, these issues are of particular importance. Micro, small and medium enterprises (MSMEs/SMEs) constitute more than 90% of the productive fabric and play a decisive role in value creation and employment. Despite the proliferation of microcredit programs and financial inclusion initiatives, access to formal financing remains limited for a large proportion of these enterprises (World Bank, 2020). This situation highlights a persistent paradox between the scale of the mechanisms put in place and their actual impact on the performance and sustainability of MSMEs.

The literature highlights several structural constraints explaining this weakness. On the one hand, public support policies often suffer from a lack of institutional coordination, administrative burdens, and insufficient adaptation to the operational needs of small enterprises (OECD, 2014; IMF, 2019). On the other hand, the digitalization deficit in financial services limits the ability of microfinance institutions to reduce transaction costs and effectively extend their reach. Added to this are significant disparities between Maghreb countries and those of the Middle East, both in terms of institutional governance and regulatory maturity and technological integration. These differences call for a comparative approach, enabling a more nuanced assessment of the determinants of microfinance effectiveness in the two sub-regions.

In this context, the present research aims to analyze the link between microfinance and financial inclusion through an integrated perspective combining institutional, technological, and economic dimensions. More specifically, it seeks to evaluate the impact of public policies, institutional framework quality, and financial digitalization on the performance of microfinance institutions and on the economic and social competitiveness of MSMEs in the MENA region. By employing a mixed methodology based on quantitative analyses (Pearson correlations using SPSS) and exploratory interviews, this study offers a comparative reading of the microfinance model in North Africa and the Middle East.

Beyond the empirical contribution, this research aims to contribute to the academic debate on the effectiveness of financial inclusion mechanisms in emerging economies, while formulating operational recommendations for public policymakers and microfinance stakeholders. It thus seeks to identify the institutional and digital levers capable of strengthening the impact of microfinance and accompanying the transition towards more inclusive and sustainable growth in the MENA region.

1. Literature Review

Microfinance has been an essential lever for promoting financial inclusion for several decades, particularly in emerging economies where a large proportion of the population and micro-enterprises remains excluded from formal banking circuits (Yunus, 1999; Ledgerwood, 2013). In the Nord d'Afrique et du Moyen-Orient (MENA)**,** this issue is of particular importance due to the weight of micro, small and medium enterprises (MSMEs/SMEs) in job creation and poverty reduction (World Bank, 2020). Yet, despite the proliferation of microcredit programs and supportive public policies, effective access to financing remains limited and unevenly distributed (Beck & Demirgüç-Kunt, 2006).

Comparative studies show that the major obstacles lie in the weak diversification of financial products, lack of collateral, regulatory rigidity, and insufficient digitalization of the sector (OECD, 2014; IMF, 2019). Furthermore, disparities between Maghreb countries and Middle Eastern countries are explained by differences in institutional maturity and government commitment to promoting financial inclusion (El-Zoghbi, 2019).

In this context, it becomes relevant to comparatively analyze the support policies for microfinance and SMEs in these two sub-regions in order to identify performance levers and structural barriers. This literature review therefore aims to highlight the main theoretical and empirical works relating to the link between microfinance, financial inclusion, and MSME development in the MENA region.

Microfinance is defined as the set of financial services, including credit, savings, insurance, and transfers, intended for populations excluded from the traditional banking system (Ledgerwood, 2013). It aims to promote economic empowerment, particularly of women and micro-entrepreneurs, by providing them with the means to create or develop income-generating activities (Yunus, 1999). According to Morduch (1999), it constitutes both a tool for fighting poverty and a lever for inclusive development. This approach rests on the conviction that access to financing is a fundamental economic right, essential for stimulating local growth and reducing social inequalities.

The concept of financial inclusion refers to the ability of all individuals and enterprises to access useful, affordable, and safe financial products (Beck et al., 2007; Demirgüç-Kunt et al., 2018). Inclusion is not limited to having a bank account: it also encompasses active participation in the financial system through the use of credit, savings, and payment services (World Bank, 2020). In MENA region countries, access to financial services remains limited, due to structural factors such as low banking penetration, lack of collateral, and the predominance of the informal sector (IMF, 2019). These constraints hinder the growth of micro-enterprises and reduce their capacity to fully contribute to economic development.

Several economic theories explain these difficulties in accessing financing. Credit constraint theory (Stiglitz & Weiss, 1981) highlights the role of information asymmetries between lenders and borrowers, which lead to credit rationing for small enterprises. Social capital theory (Ghatak & Guinnane, 1999) emphasizes solidarity and collective responsibility as risk-reduction mechanisms in microcredit. Finally, the institutionalist approach (Beck et al., 2009) and recent work on inclusive digitalization (Ozili, 2018) stress the importance of the regulatory framework, governance, and technological innovations in strengthening the reach of microfinance and accelerating financial inclusion in developing economies.

The microfinance sector in the MENA region (Middle East and North Africa) occupies a strategic place in economic and social development policies. However, it remains behind other emerging regions. According to the International Monetary Fund (IMF, 2019), less than 45% of adults have a formal bank account in the region, compared to a global average of 76%. Microfinance institutions (MFIs) were created to fill this financial inclusion gap, but they remain concentrated in certain countries, primarily Morocco, Egypt, Tunisia, and Jordan, where regulatory frameworks are more favorable (World Bank, 2020). These institutions offer microcredit, savings, and sometimes entrepreneurial training services, aimed at strengthening the economic autonomy of low-income households and micro-enterprises.

Despite these advances, the development of microfinance in the MENA region faces several structural obstacles. First, the strong dependence on public subsidies and international donors (such as the EIB and AfDB) limits the financial sustainability of institutions (OECD, 2014). Then, high transaction costs, weak collateral, and low financial literacy constitute major barriers to expanding the client base (Beck & Demirgüç-Kunt, 2006). Finally, political instability and institutional disparities between countries hinder the harmonization of support policies for micro-enterprises. These constraints explain why, despite the proliferation of national programs, the microcredit penetration rate remains low in several Arab economies (El-Zoghbi, 2019).

Nevertheless, certain national experiences demonstrate positive developments. Morocco has established itself as a regional model thanks to a structured legal framework and solid institutions such as Al Amana and Attadamoune Microfinance, which have contributed to extending access to rural and female financing (CGAP, 2020). In Tunisia, the reform of the legislative framework in 2011 fostered the emergence of a more competitive sector, while in Egypt, the 2014 microfinance law enabled the regulation of the private sector and NGOs. At the same time, digitalization, particularly through mobile banking and fintechs, opens new prospects for inclusion, although its adoption remains uneven (Ozili, 2018). These developments confirm that the success of microfinance in the region depends less on the volume of available funds than on the quality of the institutional framework, governance, and technological innovation.

Public support policies for micro, small and medium enterprises (MSMEs/SMEs) in the MENA region aim to strengthen access to financing and stimulate job creation. These policies revolve around credit guarantee mechanisms, participatory financing, and technical support programs (OECD, 2014). The International Monetary Fund (IMF, 2019) emphasizes that these measures aim to mitigate information asymmetries between lenders and borrowers and to improve the business environment. Several countries have established dedicated institutions, such as the Central

Guarantee Fund in Morocco, the Microfinance Network in Egypt, and the Tunisian Solidarity Bank in Tunisia, which support entrepreneurs through targeted credit lines and training programs.

However, the effectiveness of these support policies remains mixed. In many cases, financing mechanisms suffer from a lack of institutional coordination and weak performance evaluation (World Bank, 2020). Guarantee mechanisms cover only a limited portion of risk, and bureaucracy hinders the distribution of funds to final beneficiaries (Beck & Demirgüç-Kunt, 2006). Furthermore, support policies are often concentrated in urban areas, leaving rural and peri-urban zones on the margins of the inclusion process (El-Zoghbi, 2019). Experience shows that without a stable regulatory environment and transparent governance, microfinance programs risk reinforcing existing imbalances rather than correcting them.

Finally, international organizations play a decisive role in strengthening regional policies. The European Investment Bank (EIB) and the African Development Bank (AfDB) support several microfinance and SME development programs, particularly through credit lines, guarantee funds, and public-private partnerships (EIB, 2018). The OECD (2020) also encourages the digitalization of financial services to improve the reach and effectiveness of these mechanisms. These partnerships have helped strengthen the resilience of entrepreneurial ecosystems and promote a new generation of policies based on inclusive and digital finance. However, to ensure sustainable growth, these policies must integrate social dimensions (female employment, youth) and technological dimensions (fintech, mobile banking) to address the specific challenges of the MENA region.

The literature on microfinance and financial inclusion in the MENA region highlights significant progress made over the past two decades, particularly in terms of expanding credit access and diversifying financial products (Ledgerwood, 2013; World Bank, 2020). Research shows that microfinance contributes to poverty reduction, job creation, and the economic empowerment of women (Yunus, 1999; Morduch, 1999). Moreover, several studies highlight the positive role of public policies and international partnerships in structuring the sector (OECD, 2014; EIB, 2018). These works confirm that the success of microfinance depends on a solid institutional environment, effective governance, and regulations adapted to the local socio-economic context.

However, the existing literature presents important limitations. On the one hand, the majority of studies focus on macroeconomic aspects and often neglect the social and behavioral dimensions of financial inclusion (El-Zoghbi, 2019). On the other hand, empirical analyses in the MENA region suffer from a lack of longitudinal and comparative data between countries (IMF, 2019). Few studies measure the real impact of public policies on the performance of micro-enterprises and SMEs, or on the reduction of territorial and gender inequalities (Beck & Demirgüç-Kunt, 2006). This methodological gap limits the ability of policymakers to adapt financing mechanisms to the real needs of beneficiaries.

Finally, a major finding of recent literature is the insufficient integration of financial digitalization and fintechs into microfinance analysis models (Ozili, 2018). While digital innovations such as mobile banking, blockchain, and peer-to-peer platforms are profoundly transforming financial circuits, few studies explore their potential to strengthen inclusion in the MENA region. Moreover, the question of institutional resilience in the face of economic crises (such as the COVID-19 pandemic) remains understudied. These findings reveal an urgent need for multidimensional approaches integrating economic, social, and technological variables to understand the dynamics of microfinance in Arab economies.

Existing research on microfinance and financial inclusion in the MENA region has established solid theoretical foundations, emphasizing the role of inclusive financing as a lever for socio-economic development. Several studies demonstrate that microcredit constitutes an effective tool for strengthening the economic participation of marginalized groups, particularly women and young entrepreneurs (Yunus, 1999; Ledgerwood, 2013). This work has contributed to the conceptualization of microfinance as an instrument of social empowerment, beyond its simple economic function (Morduch, 1999). It has also highlighted the link between microfinance and the creation of sustainable employment in economies with high informality (Beck & Demirgüç-Kunt, 2006).

Another major contribution of the literature lies in the identification of the institutional and political role in the success of microfinance programs. Several comparative studies have shown that the performance of the sector depends largely on the regulatory framework, governance, and the effectiveness of public policies (OECD, 2014; IMF, 2019). Countries such as Morocco and Tunisia are often cited as examples of good practice thanks to the establishment of microfinance institutions that are regulated and supported by the state (World Bank, 2020). This research highlights that the presence of a clear institutional framework, combined with rigorous supervision, promotes sector stability and the confidence of international investors.

Finally, recent literature highlights the emergence of new technological and partnership dynamics in microfinance development. Studies such as those by Ozili (2018) and the EIB (2018) show that financial digitalization and the entry of fintechs have extended the reach of microcredit, reduced transaction costs, and improved the transparency of operations. At the same time, the growing role of international organizations such as the African Development Bank (AfDB), the EIB, and the CGAP has contributed to the dissemination of common governance and reporting standards, strengthening comparability between national experiences. These contributions demonstrate that the literature has greatly contributed to a better understanding of the conditions for success in microfinance in a context marked by the digital transition and the pursuit of social sustainability.

Despite its important contributions, the literature on microfinance and financial inclusion in the MENA region presents several methodological and empirical limitations. First, the majority of works focus on macroeconomic or descriptive analyses without rigorously measuring the impact of microfinance on sustainable development and the real performance of MSMEs (Beck & Demirgüç-Kunt, 2006; IMF, 2019). Comparative quantitative studies between countries are still rare, and most available data come from international organizations, often aggregated and not representative of local contexts (OECD, 2014). This dependence limits the precision of conclusions and prevents the formulation of policy recommendations adapted to each MENA region country.

Another important limitation concerns the social and behavioral dimension of microfinance, often neglected in existing studies. While the foundational works of Yunus (1999) and Morduch (1999) highlight women's empowerment and community solidarity as drivers of microcredit success, few recent studies examine these aspects in the Arab-African context. The literature focuses more on the financial viability of institutions than on their social impact, creating an imbalance between economic performance and social inclusion (Ledgerwood, 2013; El-Zoghbi, 2019). Furthermore, cultural, religious, and territorial specificities, such as Islamic finance or rurality, remain insufficiently integrated into analytical models.

Finally, current literature struggles to account for digital transformations and their influence on microfinance models. Financial innovations such as fintech, mobile banking, and blockchain are profoundly redefining lending and savings practices, but their potential remains underexplored in research on the MENA region (Ozili, 2018; World Bank, 2020). Likewise, the impacts of recent crises, such as the COVID-19 pandemic, on institutional resilience and the continuity of microfinance services are still poorly documented (EIB, 2018). These gaps reveal an urgent need for interdisciplinary approaches combining economics, sociology, technology, and governance to understand the new challenges of financial inclusion in a rapidly changing context.

The analysis of the literature reveals that microfinance plays a central role in promoting financial inclusion and MSME development in the MENA region. The works of Yunus (1999), Ledgerwood (2013), and Morduch (1999) demonstrate that access to microcredit stimulates entrepreneurship, improves incomes, and reduces poverty. At the same time, recent research (OECD, 2014; IMF, 2019) emphasizes the importance of public policies and the institutional framework in ensuring the viability of inclusive financing mechanisms. Thus, the success of microfinance rests on the complementarity between public, private, and international actors, but also on the capacity of institutions to adapt to the specific needs of local populations.

However, this literature also highlights structural disparities between Maghreb and Middle Eastern countries. While some, like Morocco and Tunisia, have a solid institutional ecosystem and well-established microfinance programs, others, such as Algeria or Yemen, suffer from a lack of coordination and financial governance (World Bank, 2020; El-Zoghbi, 2019). Moreover, the digitalization of the sector remains embryonic, limiting the potential of fintechs to extend financial inclusion at scale (Ozili, 2018). These differences show that the success of support policies depends less on the volume of available financing than on strategic coherence and institutional capacity to implement them effectively.

For future research, several directions emerge. It appears necessary to deepen comparative empirical studies on the real impact of microfinance on the economic and social performance of MSMEs, integrating gender, location, and digitalization variables. The integration of financial technologies, such as blockchain and mobile banking, opens new prospects for reducing costs and improving the transparency of financial services (EIB, 2018; OECD, 2020). Finally, the emergence of a coordinated regional governance framework could harmonize regulations, strengthen institutional resilience, and promote sustainable and equitable financial inclusion throughout the Arab world.

2. Methodology

The methodology adopted in this study is based on a mixed approach (quantitative and qualitative) aimed at examining the relationships between public policies, institutional framework quality, financial services digitalization, and MSME performance in the context of microfinance within the MENA region. The choice of this approach is explained by the multidimensional nature of the phenomenon under study, which combines economic, institutional, and technological dimensions.

On the theoretical level, the research draws on the works of Stiglitz and Weiss (1981), Beck et al. (2009), and Ozili (2018), who highlight the decisive role of institutional frameworks and financial digitalization in promoting financial inclusion and improving the performance of small productive structures.

2.1 Quantitative Approach and Sample Justification

On the quantitative level, the study is based on a sample of 30 respondents, including executives from microfinance institutions, public program managers, and microcredit beneficiaries, from three representative countries of the MENA region: Morocco, Tunisia, and Egypt. The use of purposive sampling is justified by the specificity of the study field, the difficulty of accessing key sector actors, and the exploratory nature of the research.

Although the sample size may appear limited, it remains methodologically acceptable within the framework of an exploratory and explanatory study. According to Hair et al. (2017), a threshold of 30 observations constitutes the minimum required for correlation analysis and simple regression models, particularly when theoretical relationships are clearly isablished and expected effects are significant. Furthermore, Kock and Hadaya (2018) emphasize that small samples can produce reliable results when observed coefficients are high and statistically significant, as is the case in the present study.

Data were collected using a structured questionnaire comprising eight variables, measured on a five-point Likert scale ranging from "strongly disagree" to "strongly agree." Statistical analyses were carried out using SPSS software (version 26). The tools employed include Pearson correlation, which measures the strength and direction of relationships between variables, as well as simple linear regression, used to evaluate the direct influence of explanatory variables on dependent variables.

2.2. Qualitative Approach and Methodological Triangulation

The qualitative approach was used in a complementary manner, in order to enrich the interpretation of the quantitative results. It is based on entretiens semi-directifs conducted with financial sector professionals and micro-enterprise managers. These interviews made it possible to identify the main freins et leviers du microfinancement, particularly regarding regulatory framework, service digitalization, and effective access to financing.

La methodological triangulation issue de la combinaison des approches quantitative et qualitative renforce la internal and external validity of results, enabling a more nuanced understanding of the interactions between public policies, institutional quality, and financial inclusion in the MENA region.

2.3. Qualitative Approach and Methodological Triangulation

The approach adopted is deductive and explanatory. It relies on a pre-established theoretical framework to empirically test hypotheses H1 to H4, relating to the impact of public policies, institutional framework, and financial digitalization on the performance and financial inclusion of MSMEs. The results obtained allow for the formulation of concrete implications for the design and implementation of more inclusive and more effective microfinance policies in the MENA region.

3. **Results**

Table 1 : Correlations between Public Policy Effectiveness and the Level of Financial Inclusion

Variables		**Level of Effectiveness of Public Support Policies for MSMEs/SMEs**	**Level of Financial Inclusion (access to credit, banking services, etc.)**
Level of Effectiveness of Public Support Policies for MSMEs/SMEs	Pearson Correlation	1,000	0,034
	Sig. (2-tailed)		0,858
	N	30	30

Variables		Level of Effectiveness of Public Support Policies for MSMEs/SMEs	Level of Financial Inclusion (access to credit, banking services, etc.)
Level of Financial Inclusion (access to credit, banking services, etc.)	Pearson Correlation	0,034	1,000
	Sig. (2-tailed)	0,858	
	N	30	30

Source: Compiled by the author using SPSS

The results of the Pearson correlation test show that there is no significant relationship between the perceived effectiveness of public support policies for MSMEs and the level of financial inclusion in the studied sample ($r = 0.034$; $p = 0.858 > 0.05$). The correlation coefficient value, very close to zero, indicates a near-null relationship between the two variables, suggesting that the intensity or quality of public policies does not directly translate into a measurable improvement in access to financial services for small enterprises. This result suggests that other external factors, such as institutional stability, governance, or financial culture, could play a more decisive role in the inclusion dynamic.

Thus, hypothesis **H1** is **rejected**, as the correlation is neither strong nor significant. This absence of a statistical link can be explained by the weak operational effectiveness of support policies or by a mismatch between public programs and the real needs of MSMEs on the ground. Several studies confirm that in the MENA region, the implementation of microfinance policies often suffers from administrative delays, lack of inter-institutional coordination, and weak ownership by beneficiaries (OECD, 2014; IMF, 2019). These findings suggest that better integration of monitoring mechanisms and greater involvement of the private sector would be necessary to strengthen the effectiveness of these mechanisms and improve long-term financial inclusion.

Table 2 : Correlation between the Performance of Microfinance Institutions and the Quality of the Institutional and Regulatory Framework

Variables		Performance of Microfinance Institutions	Quality of the Institutional and Regulatory Framework
Performance of Microfinance Institutions	Pearson Correlation	1,000	0,794
	Sig. (2-tailed)		0,000
	N	30	30
Quality of the Institutional and Regulatory Framework	Pearson Correlation	0,794	1,000
	Sig. (2-tailed)	0,000	
	N	30	30

Source: Compiled by the author using SPSS

The results of the Pearson correlation analysis reveal a strongly positive and significant relationship between the quality of the institutional and regulatory framework and the performance of microfinance institutions ($r = 0.794$; $p = 0.000 < 0.01$). Ce coefficient élevé indique que l'amélioration du cadre institutionnel is étroitement liée à une meilleure performance des institutions de microfinance. Autrement dit, plus le système réglementaire is stable, transparent et bien encadré, plus les institutions de microfinance sont capables d'opérer efficacement et durablement. Cette relation confirme que la gouvernance institutionnelle et la réglementation jouent un rôle stratégique dans la consolidation du secteur financier inclusif, notamment dans les pays émergents.

Thus, **hypothesis H2 is confirmed**, as the obtained correlation is both strong and highly significant at the 1% threshold. These results align with the conclusions of Beck & Demirgüç-Kunt (2006) and the World Bank (2020), which state that institutional robustness is a decisive factor in the success of microfinance. A coherent regulatory framework, supported by adapted public policies, strengthens investor confidence, reduces the risk of failure, and improves the internal governance of MFIs. In the context of the MENA region, this link highlights the importance of structural reforms and financial supervision to ensure the long-term viability of microfinance and maximize its social impact.

Table 3 : Correlation between the Digitalization of Microfinance Services and Access of MSMEs to Financial Services

Variables		Level of Digitalization of Microfinance Services (mobile banking, fintech)	Level of Access of MSMEs/SMEs to Financial Services
Level of Digitalization of Microfinance Services (mobile banking, fintech)	Pearson Correlation	1,000	0,778
	Sig. (2-tailed)		0,000
	N	**30**	**30**
Level of Access of MSMEs/SMEs to Financial Services	Pearson Correlation	0,778	1,000
	Sig. (2-tailed)	0,000	
	N	**30**	**30**

Source: Compiled by the author using SPSS

The results of the Pearson correlation indicate a strongly positive and significant relationship between the level of digitalization of microfinance services and the level of access of MSMEs to financial services ($r = 0.778$; $p = 0.000 < 0.01$). This high coefficient suggests that digitalization, through the development of mobile banking, fintech platforms, and digital services, contributes decisively to the broadening of financial inclusion. The more institutions adopt digital technologies, the more easily small enterprises can access credit, savings, and electronic payments. This result confirms that the digital transition constitutes a strategic lever for improving the performance and reach of microfinance in the MENA region.

Thus, hypothesis **H3 is fully validated**. These results are consistent with the works of Ozili (2018) and the World Bank (2020), which highlight that digitalization reduces transaction costs and facilitates the distribution of financial services to unbanked populations. In the context of MSMEs, it accelerates decision-making, improves the traceability of operations, and strengthens trust between lenders and borrowers. However, for this impact to remain lasting, it is essential to accompagner la digitalisation par une **appropriate regulation**, cybersecurity measures, and public policies promoting equitable access to technologies.

Table 4 : Correlations between the Impact of Microfinance and the Economic and Social Performance of Beneficiary Micro-enterprises

<table>
<tr><th colspan="2">Variables</th><th>Impact of Microfinance on Beneficiaries</th><th>Economic and Social Performance of Beneficiary Micro-enterprises</th></tr>
<tr><td rowspan="3">Impact of Microfinance on Beneficiaries</td><td>Pearson Correlation</td><td>1,000</td><td>0,794</td></tr>
<tr><td>Sig. (2-tailed)</td><td></td><td>0,000</td></tr>
<tr><td>N</td><td>30</td><td>30</td></tr>
<tr><td rowspan="3">Economic and Social Performance of Beneficiary Micro-enterprises</td><td>Pearson Correlation</td><td>0,794</td><td>1,000</td></tr>
<tr><td>Sig. (2-tailed)</td><td>0,000</td><td></td></tr>
<tr><td>N</td><td>30</td><td>30</td></tr>
</table>

Source: Compiled by the author using SPSS

The results of the Pearson correlation indicate a very strong and highly significant relationship between the impact of microfinance on beneficiaries and the economic and social performance of micro-enterprises ($r = 0.886$; $p = 0.000 < 0.01$). Ce coefficient de corrélation proche de 1 traduit un lien quasi linéaire entre les deux variables : plus le niveau de microfinancement is élevé, plus la performance des TPE s'améliore. Ces résultats confirment que le microfinancement joue un rôle déterminant dans la consolidation des petites entreprises, en leur permettant d'accéder à des ressources financières, de renforcer leur productivité et d'améliorer la stabilité de leurs revenus. L'analyse statistique confirme donc **the validity** of hypothesis **H4**, suggesting that microfinance is a powerful lever for economic and social inclusion in the MENA region.

These results corroborate the foundational works of Yunus (1999), Morduch (1999), and Ledgerwood (2013), which highlight that microcredit contributes to the empowerment of entrepreneurs, the reduction of poverty, and the promotion of sustainable local development. In the context of North Africa and the Middle East, these effects are particularly evident in micro-enterprises led by women and young people, where microfinance promotes not only economic performance but also social cohesion. However, to maintain this positive impact, it remains essential to strengthen the quality of non-financial support (training, management monitoring, innovation) and to consolidate the governance of microfinance institutions to ensure inclusive and sustainable growth.

Table 5 : Summary of Correlation Results (SPSS)

Hypothesis	Relationship Tested	Correlation Coefficient (r)	Sig. (2-tailed)	N	Interpretation	Decision
H1	Public Support Policies for MSMEs ↔ Financial Inclusion	0.034	0.858	30	Very weak, non-significant correlation	**Rejected**
H2	Institutional and Regulatory Framework ↔ Performance of Microfinance Institutions	0.794	0.000	30	Strong and highly significant correlation	**Confirmed**
H3	Digitalization of Microfinance Services ↔ Access of MSMEs to Financial Services	0.778	0.000	30	Strong and significant correlation	**Confirmed**
H4	Impact of Microfinance ↔ Economic and Social Performance of Beneficiary Micro-enterprises	0.886	0.000	30	Very strong and highly significant correlation	**Confirmed**

Source: Compiled by the author using SPSS

The overall results from the analyses conducted under SPSS indicate that three hypotheses (H2, H3, and H4) are validated, reflecting strong and statistically significant positive relationships, tandis que l'hypothèse H1 is rejected. These results highlight the decisive role of institutional framework quality, financial services digitalization, and microfinance in improving the economic and social performance of MSMEs as well as in broadening financial inclusion in the MENA region. Conversely, the absence of a significant relationship for H1 suggests that current public support policies struggle to produce a measurable direct impact, notably due to administrative constraints, insufficient institutional coordination, and a partial mismatch between existing mechanisms and the operational needs of entrepreneurs. In this perspective, the results underscore that institutional robustness and digital transformation now constitute essential strategic levers for strengthening the effectiveness of microfinance and fostering a transition towards a more inclusive and sustainable economy.

Conclusion

This study aimed to analyze the role of microfinance in promoting the financial inclusion of MSMEs in the North Africa and Middle East (MENA) region, employing a comparative approach integrating public policies, institutional framework quality, and financial digitalization. Drawing on a mixed methodology combining quantitative analyses (correlations and regressions using SPSS) and qualitative interviews, the research sought to identify the mechanisms through which microfinance mechanisms influence the economic and social performance of micro-enterprises in a heterogeneous institutional context.

The empirical results highlight several key findings. First, the quality of the institutional and regulatory framework emerges as a central determinant of the performance of microfinance institutions and, by extension, the financial inclusion of micro-enterprises. The observed statistical significance confirms that clear rules, stable financial governance, and actor protection mechanisms foster an environment conducive to sustainable access to financing. Then, the digitalization of financial services plays a key role in reducing access constraints, improving proximity between microfinance institutions and beneficiaries, while reducing transaction costs. Finally, microfinance itself exerts a positive and significant effect on the economic and social performance of micro-enterprises, confirming its role as an essential lever for the resilience and sustainability of small productive structures.

Conversely, the hypothesis relating to the direct impact of public support policies was not empirically validated. This result suggests that, in the studied context, existing public mechanisms suffer from an operational effectiveness deficit, linked notably to weak institutional coordination, complex administrative procedures, and a mismatch between proposed instruments and the real needs of micro-enterprises. This finding does not call into question the legitimacy of public intervention, but rather highlights the need for a strategic reorientation of support policies, based on better articulation with private initiatives and international microfinance actors.

On the theoretical level, this research contributes to the microfinance and financial inclusion literature by proposing an integrated approach to the interactions between institutional framework, digitalization, and micro-enterprise performance. It highlights that the effectiveness of microfinance systems cannot be understood solely from the perspective of financial supply, but must be analyzed as the product of an institutional and technological ecosystem. In this sense, the results extend institutionalist approaches and recent work on inclusive digital finance, providing original empirical elements in the specific context of the MENA region.

The managerial and policy implications of this study are multiple. Public policymakers are invited to strengthen the quality of financial governance, simplify regulatory frameworks, and promote policies that foster inclusive financial innovation. The development of digital solutions adapted to micro-enterprises, combined with financial training programs, appears as a strategic lever for maximizing the socio-economic impact of microfinance. For their part, microfinance institutions would benefit from further integrating digital tools and non-financial services in order to improve the performance and sustainability of their interventions.

This research nevertheless presents certain limitations. The sample size, although methodologically justified in an exploratory approach, calls for caution regarding the generalization of results. Furthermore, the use of correlational analyses and simple regressions does not allow the establishment of strict causal relationships. In this regard, future work could employ structural models (SEM/PLS), expand the geographical scope to other MENA region countries, and integrate additional variables such as female entrepreneurship, financial resilience, or digital governance. These extensions would deepen the understanding of the mechanisms linking microfinance to inclusive and sustainable growth in emerging economies.

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