



# What are the Determining Factors of the Sustainability of Microfinance Institutions In the MENA Region : A Theoretical Study and an Empirical Investigation for The Case of 22 MFIs

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## Abstract :

*Microfinance is considered a better solution for the fight against poverty. It allows the integration of the excluded into productive activity. The current challenge for MFIs (microfinance institutions) is to seek their durability and sustainability, in order to be able to achieve their objective. Sustainability can be defined as the ability of institutions to maintain the sustainability of their actions. It is assessed through three dimensions, namely, financial autonomy, institutional and social viability, as well as technical efficiency. The objective of this work is to identify the main determinants of the sustainability of MFIs. We will, in this regard, conduct a case study of 22 MFIs in the MENA (Middle East and North Africa) region. Keywords : Microfinance, Sustainability, MFIs, MENA region.*

## Introduction

The rise of the microfinance sector raises an important question, which is the sustainability of the system in order to achieve a real impact on the marginalized population. This is the current challenge for all MFIs. The debate on the sustainability of microfinance services lies between two different logics : « institutionalist logic ; and welfarist logic ». MFIs have a dual mission: financial and social, and the objective of these institutions is to seek a balance between these two missions to maintain their sustainability.

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The « institutionalist » logic is strictly banking. Its main objective is to achieve the financial viability of MFIs, through high repayment rates, interest differential, operational and financial autonomy, financial balance and professionalism. While the « welfarist » logic is concerned with the social impact of the services provided by the MFI. It favours the allocation of microcredits to a maximum number of poor people, by adopting tolerated interest rates, and without giving much importance to repayment rates. Several elements can ensure the sustainability of MFIs. The plan of this document includes a conceptual overview of microfinance ; the determinants of the sustainability of MFIs ; and a case study of 22 MFIs in the MENA region.

### **Current debates on microfinance**

The microfinance experiments have been extremely successful, particularly on the social front. MFIs have enabled many poor families to finance income-generating activities to help them improve their living conditions. The positive impact of microfinance remains limited, due to the increased information about the crises and bankruptcies of MFIs. The question that arises is the sustainability of this sector. To do so, the MFI must look for the elements that allow it to overcome obstacles and weaknesses.

Despite its growth, the microfinance sector has experienced cases of crises and bankruptcies of MFIs, which are increasing due to the weaknesses and vulnerabilities of this sector. we speak of a crisis in the case where the dysfunctions weaken the MFI's sustainability factors.

These crises are often accompanied by significant liabilities to be cleared and the institution to be liquidated. Such a thing causes the mistrust of microfinance funders. This distrust can lead the institution to turn to other types of financial sources such as international aid, which leads to its dependence.

Autonomy is a key factor in the sustainability of MFIs, which must be organizationally, technically, financially and institutionally self-sufficient, without ignoring their social objective. It is necessary to strengthen the operational capacities of MFIs that want to serve the maximum number of poor people. But this does not prevent them from being demanding on the projects to be financed, to ensure the achievement of the balance between the social mission and the commercial mission. The number of the poor is still increasing. The basic problem of this paper is to ask the question about the future of microfinance in order to be able to help the poor to improve their living conditions. MFIs must seek their sustainability to be able to serve this large number of marginalized populations.

Microfinance is a strategy for combating poverty, manifested through the granting of microcredits and other financial services, particularly for the poor (Labie M. (1999)), to help them improve their living conditions. It operates under institutions called MFIs. The rise of this sector raises an important question, which is the sustainability of these institutions. This challenge is becoming more difficult to meet because of the

vulnerabilities experienced by microfinance (risks, crises, fragile place...). One of the success criteria of microfinance is its ability to offer services to its particular audience with a view to sustainability. The sustainability of the MFI lies in its ability to achieve a balance between its social mission and its commercial mission. Several factors are necessary for MFIs to achieve this objective, such as : the adoption of a rigorous risk management process ; promotion of a clear legislative framework specific to microfinance ; offering adequate services to the target clientele ; facilitating access to financial and technical means to ensure infrastructural and institutional performance. Good governance also appears as a necessary condition for the sustainability of organizations (Mekouar F. (2014)).

### **Definition of MFIs**

Behind the establishment and development of microfinance programmes are organisations called "microfinance institutions". They provide financial, technical and managerial support to micro-entrepreneurs who want to start a business. The term microfinance institution (MFI) has become common to refer to all types of formal or semi-formal institutions that offer microfinance services. The term has come to define all organisations that devote 50% or more of their circulating assets to microfinance services, and/or whose clientele is composed of 50% very small, low-income entrepreneurs.

In simple terms, a microfinance institution is an organisation that provides financial services to low-income people who have no or limited access to the formal financial sector. The MFI is therefore the distributor and manager of micro-credit. Within the sector, the term microfinance institution today refers to a wide variety of organisations that are diverse in terms of their size, degree of structuring and legal status (NGO, association, mutual/credit union, limited company, bank, financial institution, etc.).

For a more synthesised and differentiated view of micro-credit institutions, a functional definition should be adopted. Thus, MFIs are intermediaries that provide both financial and social intermediation. In financial terms, their activities include :

- The provision of microfinance ;
- Informal assessment of entrepreneurs and their investments ;
- Engaging in specific guarantee schemes such as solidarity bonds or compulsory savings ;
- Monitoring and supporting financial projects.

On the social level, MFIs offer support services for the development of the enterprise (technical training), and social actions for the benefit of the beneficiaries (education, health, etc.).

### **Notion of sustainability**

Microfinance institutions (MFIs) have been responding for several decades to a permanent need on the part of populations excluded from formal banking systems. They have become indispensable partners in social and economic development and must

constantly adapt to the needs of the population. For the most part, they were created on the initiative of development projects and must survive the withdrawal of the operator. The challenge for institutions is therefore their ability to sustain their action over time. Sustainable institutions are those that have acquired their autonomy in terms of : Organisational and technical, Financial Institutional and social. Sustainability can be defined as the capacity of institutions to keep their actions sustainable. It is assessed through three dimensions, namely financial autonomy, institutional and social viability, and technical efficiency<sup>1</sup>.

### Financial autonomy

The financial autonomy of an institution reflects the capacity to cover its expenses by its income on the one hand, and to build a solid financial structure on the other. The focus here is not only on the financial viability of the institution but also on its financial management. Financial management is concerned with ensuring sufficient liquidity to cover an MFI's obligations in terms of disbursing loans to its borrowers and repaying loans to its creditors. The institution's financial income comes mainly from the interest earned on the loans granted. It is therefore essential to set an interest rate level that allows the institution's various expenses to be met, namely :

- the cost of the resources loaned, i.e. the interest that the institution itself will pay on its capital borrowing and on the collected savings,
- the possible impact of inflation on equity,
- operating expenses, staff costs, travel, operations and collection of savings, amortisation,
- provisions for bad debts, i.e. expenses related to the risk of non-repayment of loans.

To achieve financial autonomy, the MFI must meet the following conditions :

The interest rate should provide an additional margin to strengthen the institution's own funds. The volume of activity, determined by the level of the loan portfolio, must be sufficient to cover the charges generated by the system. Depending on the context, the institution will call on more or less staff, and will be required to make more or less travel. Because of their large number of credits granted, MFIs cannot reduce their charges.

An essential element in controlling costs is the institution's ability to collect repayments, and it is generally believed that microfinance institutions must have a collection rate close to 100% to be viable. Knowledge of the client and his project, mutual trust, extreme rigour in the collection of loan deadlines and their follow-up, are the main

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<sup>1</sup> [https://thedocs.worldbank.org/en/doc/77035152908067\\_02950340022018/original/WorldBankInvestorNewsletter.pdf](https://thedocs.worldbank.org/en/doc/77035152908067_02950340022018/original/WorldBankInvestorNewsletter.pdf)

factors allowing for a good repayment of the debts. Finally, preventing misappropriation by staff or attacks (robbery or hold-up) on physical transfers of funds is part of sustainability.

Another factor is necessary for the MFI to be financially autonomous. It is the soundness of its financial structure, which depends on its level of solvency and its control of liquidity risk. The solvency of an MFI can be assessed by taking the ratio of equity to debt, which should be superior than 20%. Liquidity risk exists when the institution lends long-term resources (savings, borrowing) that are available only for the short term. The concern of the institution's management is to ensure that resources and uses match in maturity.

### **Organizational and technical autonomy**

This is the capacity of an MFI to be managed locally, after the withdrawal of any external assistance. It can be said that the sustainability of an MFI lies in the capacity of its human resources, which must guarantee the following elements :

- A clear division of functions (management, operations, audit, human resources, etc.).
- Compliance with procedures and control of operations within the MFI.
- Professionalism.
- The adoption of a transparent and clear information and management system in order to provide managers with precise indicators on the running of the institution.

In addition to the institutional organisation, the MFI must also offer adequate products and services to its customers. For example, in a highly isolated environment, efforts should be made to rely on volunteer villagers to manage operations in order to reduce costs and part of the risks. In urban areas, the organisation will be built around small branches capable of serving a local customers.

### **Institutional and social sustainability**

The institutional sustainability of an MFI is based on the following elements : the quality of the organisation, the regulation and the existence of a consultation framework. The quality of the organisation is determined by the governance system in place. Governance is also presented as an element of the sustainability of a microfinance institution. Used in a restrictive sense in microfinance, governance refers to the quality of the relationship between boards of directors and managers. This has four dimensions :

- define the major orientations, in particular the customers concerned and the financial products.
- coordinate actors, means and activities to achieve the objectives. This concerns the quality of the organisation (distribution of functions, accounting and information system, degree of decentralisation, incentive system, human resources management, etc.).
- adapt quickly to changes in the environment.

- prevent and overcome crises.

The distribution of power within the organisation between employees and owners (whoever the latter may be, elected members, external shareholders) is a key factor in the governance of the institution. Administrators are the guarantors of the integrity of the system and must be able to both 'sound the alarm' in the event of major risks and ensure that the social vocation of the microfinance institution is respected over time. The governance of an MFI should have three objectives, namely, to ensure sound financial management, to provide a clear vision of the organisation's objectives and to ensure the transparency of the organisation. The corporate culture that forms the basis of the relationship between the MFI's employees should be strong and based on respect for the customers, whether or not they own the institution. Legal recognition allows the institution to operate within a clear framework. Regulation imposes a minimum of rigour but also offers protection in an often informal and risky environment. The existence of specific regulations for microfinance institutions is also a way to improve the comprehension of this sector by the authorities. As for social viability, it is based on the rooting of an MFI in its social environment, which favours both physical and cultural proximity.

The MFI must have a close relationship with the beneficiary populations. Their savings and credit arrangements must be in harmony with the cultural norms of the society (the conception of the interest rate, the forms of guarantees, etc.). The relationship between employees and customers, whether owners or not, should be based on respect. Finally, conflicts need to be resolved through a subtle mix of old and new norms. The MFI must also have a good integration into its environment. This is based on several elements, namely : broad information and discussion ; good liaison with other development interventions ; effective support from the state ; reduced room for maneuver for loan sharks ; and positive cooperation with external personalities and institutions such as political and administrative authorities, religious leaders and notables.

### **Data and methodology Data**

The the aim of this work is to determine the main factors that can influence the sustainability of MFIs. To do this, we will use panel data to study the case of 22 MFIs from the MENA region. These institutions are located in 9 Arab countries. The duration of the study is from 2010 to 2018, and the figures are taken from the MIX Market database, which belongs to the World Bank. We have chosen the MFIs that regularly present the necessary information.

### **Presentation of the variables and specification of the model**

The existing literature on the sustainability of MFIs proves that this magnitude can be measured through an indicator called AO, which informs us about operational self-sufficiency, which is a very important concept for an MFI that wants to reach its target in a sustainable way and ensure its growth. It is necessary to combine financial and social

factors to measure the sustainability of MFIs. This study covers a sample of 22 MFIs located in 9 countries in the MENA region. this choice is not arbitrary. we chose MFIs that regularly reveal their data regularly in the microfinance database "mix market".

**Table 1 : Variables**

Variable to be explained	Explanatory variables
Sustainability (Operational Autonomy AO)	Economic profitability : ROA (Return on assets)
	Financial structure : Capital/asset ratio
	Portfolio quality : PAR 30
	Productivity : number of employees - borrowers / staff member
	Outreach (social performance) : number of female borrowers - number of active borrowers
	Size : Total assets

Source : the author

**The empirical model**

The econometric model tested is as follows :

$$\text{Sustainability} = f(\text{Explanatory variables})$$

The empirical model for estimating these different impacts is written as follows :

$$Y_{it} = \alpha + X_{it} \beta + \epsilon_{it}$$

Where :

$Y_{it}$  : the matrix of variables to be explained for MFI  $i$  in period  $t$  ;  $X_{it}$  : the matrix of explanatory variables of MFI  $i$  in period  $t$  ;

$\epsilon_{it}$  : the vector of random terms ;

$\beta$  : the vector of coefficients of the explanatory variables ;  $\alpha$  : constant ;

$i = 1, \dots, 22$  ; and  $t = 2010, 2018$  ;

$i$  denotes MFIs; and  $t$  denotes time. The tested model is :

The tested model is :

$$Sustainability (AO)_{it} = a_{it} + \beta_1(ROA)_{it} + \beta_2 \left( \frac{Capital}{Assets} \right)_{it} + \beta_3(PAR (30))_{it} + \beta_4(Number\ of\ employees)_{it} + \beta_5 \left( \frac{Borrowers}{Staff} \right)_{it} + \beta_6(\% \text{ female borrowers})_{it} + \beta_7(Total\ assets)_{it} + \beta_8(Number\ of\ active\ borrowers)_{it} + sit.$$

**Result of the study**

In this section we will present the descriptive statistics of this study, and then the results of the regression analysis.

**Interpretation of descriptive statistics**

**Table 2 : Descriptive statistics of the variables**

Variables	Mean	Max	Min	Standard deviation	Observation
AO	130.0631	271.4	-43.3	47.11	22
ROA	3.258586	32.8	88	12.62	22
Capital/Assets	37.04848	147.6	-479.7	61.87	22
PAR (30)	5.962121	95.7	0	13.56	22
Number of employees	488.5606	2468	11	557.37	22
Borrowers/Staff members	139.9141	295	33	51.56	22
% Female borrowers	56.58838	100	15.3	24.60	22
Total assets	17.30979	21.81437	13.56	1.35	22
Number of active borrowers	10.24904	12.9768	2029.31	1.65	22

Source : the author

The descriptive statistics show that the MFIs examined are self-sustaining with an average AO of 130 which is well above 100%. These MFIs are profitable and economically viable (average ROA of 3.25%). Our sample is characterized by a strong outreach and a healthy portfolio. It also showed growth in size, accompanied by an improvement in staff productivity.

**Result of the explanatory analysis**

We used Stata 11 software to regress our model on the panel data. Our regression results are shown in the table 3. The use of panel data analysis techniques identified factors affecting the sustainability of MFIs. The estimated model has an R squares > 0.5. The Hausmann test demonstrates the existence of a random effect (prob > Chi 2 = 0.9). The correlation matrix indicates the absence of a correlation problem between the variables. All these factors show that our model is globally significant. The regression gives significant statistics for two variables :



- ROA : it is the economic profitability that measures the performance of the MFI whatever its legal status.
- The capital / assets ratio : determines the financial structure of the institution, it must exceed 20%.

**Table 3: Regression results**

<b>variables</b>	<b>effects</b>	<b>significance</b>
<b>ROA</b>	+	1 %
<b>Capital/Assets</b>	-	10 %
<b>PAR 30</b>	-	
<b>Number of employees</b>	-	
<b>Borrowers/Staff members</b>	+	
<b>% Female borrowers</b>	-	
<b>Total assets</b>	+	
<b>Number of active borrowers</b>	-	

Source : the author

These results are consistent with those of Sidhom H (2015). The sign (-) indicates that the factor has a negative effect on the sustainability of the MFI, and conversely the sign (+) indicates a positive effect. Our results show that the sustainability of MFIs is closely linked to their profitability and financial structure. Sustainability increases with the improvement of their productivity and the growth of their size. Sustainability can deteriorate if the MFI is oriented towards a more vulnerable clientele, which is explained by a riskier portfolio and a poor repayment rate. Our results indicate that MFIs need to ensure good financial and portfolio management to guarantee their sustainability. these results are in line with those found by Solhi S & Rigar SM (2014). Sustainability is an essential condition for the success of for microfinance to succeed. This term refers to the ability of a microfinance institution (MFI) to bear all of its costs.

### **Conclusion**

Microfinance is today in full expansion. The number of MFIs and their clients is increasing. The ultimate goal for MFIs is to keep their activity sustainable. The growth of the microfinance sector raises the important question of the sustainability of the system in order to achieve a real impact on the marginalised population. This is the current challenge for all MFIs. Autonomy is a key factor for the sustainability of MFIs, which must be self-sufficient organisationally, technically, financially and

institutionally, without ignoring their social purpose. There is a need to strengthen the operational capacities of MFIs, which want to serve the maximum number of poor people. But this does not prevent them from being demanding about the projects to be financed, to ensure that the balance between the social and commercial mission is achieved.

The results of our study allowed us to deduce that the sustainability of MFIs depends on profitability and financial structure. We also found that size and productivity positively influence the sustainability of MFIs. While social mission orientation degrades sustainability. Some recommendations are made to the examined MFIs to make them sustainable. These MFIs must improve their financial structure. They should also arbitrate effectively between the financial and social mission, and improve the qualifications of their staff (MFIs need to recruit qualified people to improve their productivity).

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