

Microfinance As An Instrument Against Poverty

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Rec date: August 14, 2017, Acc date: August 24, 2017, Pub date: August 31, 2017

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Abstract

The objective of the current approach is to set out how microfinance institutions (MFIs) are incentives for economic development and as sources of lowering poverty. In this respect, a sample of 197 new and old clients having recourse to MFIs is targeted. The discriminant descriptive analysis which is proposed in this article is useful for mainly meeting the results that microfinance has a highly significant effect on improving people's standards of living as well as lowering poverty rates. The comparison between the new and old clients of MFIs is suggestive of the fact that: the older the MFIs is, the more the opportunity to escape poverty is at reach. It is noted that an ambiguity submerges in the short-term micro-credit. The impacts of microfinance are timely joined. Time as a variable is marked importantly in appreciating microfinance in the long term.

Keywords: Tunisia; Microfinance; Micro; Credit; Poverty

Introduction

The main objective of microfinance institutions (MFIs) is to lower poverty. Their program has encouraged public authorities to drain funding in order to support their policies and encourage small business-undertakers and non-bank adherents to join.

This program is apparently beneficial not only at the macro-level but also at the micro-economic level given the impact of lowering poverty on economic development in general.

The set of services offered by MFIs is primarily restricted to micro-enterprises as well as to the people who seeks for planning their future careers, ensuring better nutrition, investing in education and maintaining their children's medical care [1-4].

Microfinance is one of the advocated strategies for reaching the Millennium Development Objectives [5,6]. In this respect, Tunisia has managed to lower the poverty rate from 15.5% in 2010 instead of 32.4% in 2000 (it is the date of the implementation of the UN's program of the Millennium Development Objectives getting it to the 2015 award for the countries achieving the UN's program set up by the United Nations Organization for Food and Agriculture). It remains that some authors have questioned the ability of the IMF to lower poverty. They adopt a mid-position between the positive and the negative in the frame of the impact of microfinance on poverty raise the negative impact of microfinance. They cite women's exploitation, poverty's level increase, incomes' inequality increase, overwork's acceleration and even child labor. These impacts lead to obstacles which may durably affect the economic development and the local social life. What may really happen if the studies about the contribution of microfinance whose designs are aiming to lower poverty in developing countries are applied, especially, in Tunisia [7-10].

The objective behind the current paper is to study the impact of microfinance on the living conditions of the households through discriminant analysis to check its effect on lowering the level of poverty

among new and old MFI's adherents. The paper comprises two sections. The first present the theoretical framework of our research, the second will focus on the analysis and discussion of the results.

Literature Review

Financial development, as an incentive for growth, is maintained by several Researchers [11-14]. Conversely, others think that the financial development's role is strictly of minor role [15]. Regarding the present paper, the financial system of development and the economic growth are considered interdependent [16]. In this respect, the financial system influences investment. Its use efficiency, in turn, impacts the total factor productivity [12,17]. Mathins [18] argues that micro-credit may encourage non-bankable people to create their micro-enterprises. It helps in promoting incomes through self-employment. The non-affluent people are offered an access to small loans that were previously unrecognized by the financial system, in general. Crépon et al. [19] think that microfinance is considered an important program within financial development. It accentuates the role of the non-wealthy as actors with regard to a particular financial system. Microfinance services to the poor are numerous [20]. The poor enjoy getting loans, having savings and other basic financial services [6,19,21]. According to financial services' extension makes it possible for low-income people to take part in the economic market and seize the entrepreneurial opportunities by creating new enterprises or simply by increasing the activities of the existing ones. In Morocco, Crépon et al. [19] examine the effects of microfinance on rural households. Their findings are mainly reflective of the increasing size of the existing business activities. These activities grow well for agriculture and for livestock. The agricultural sales are found improved in line with profits. In addition, it is found out that the households with diversified farming activities as well as livestock products are, alike, made for sale. They do not detect any impact of micro-credit on the creation, benefits or expansion of businesses and/or the creation of new activities outside agriculture [19]. They argue that households would not be more likely to start a farming business if they were not engaged in previously. In Morocco, microfinance institutions, "Al Amana" as such, does not ever

encourage the setting up of new businesses outside the already existing activities.

In India, Banerjee et al. [1] endorse the findings that micro-credit program does not only have a beneficial impact on the creation of businesses but also on the efficient durability of small ones. It is a counter-proof to consumption such as health, education, women's empowerment, etc.

In Malaysia, with reference to 780 old and new adherents they concluded that merely women are compliance with poverty-lowering during three years.

In Nigeria, the impact of microfinance on economic growth. They accentuate the significant role of microfinance institutions to lower poverty rate and to finance small businesses through the inclusion of loans and advances [5]. The obtained results imply that micro-credit availability stimulates investments, increase productivity and income which in turn enhances the small business-undertakders' incomes. The availability of funds for investment is likely to bring out new small businesses, expand the already existing ones and increase their production.

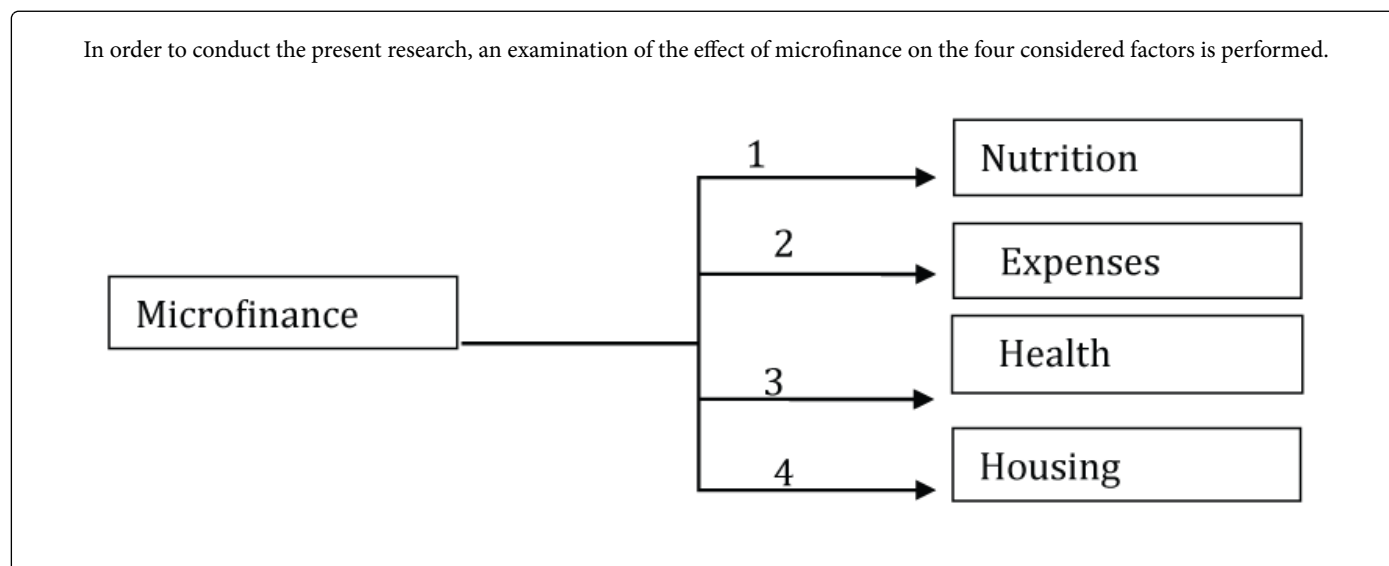
Generally, it seems that the previously mentioned findings implicates that deposits have negative impacts on economic growth. Nevertheless, deposits serve the establishment of a balance between the short and long term savings. The short-term savings have a negative impact on consumption. They do not only shrink it but also stimulate the global demand. Banerjee et al. [1] show that short term savings have ambiguous effects on microfinance. The impact on savings and consumption is timely related since the return of investment is based on the patience of the households. In other words, it depends on the level of utility derived from the current consumption compared to the future one. It is noted that when households borrow money for direct consumption or for immediate return projects, an increase in

consumption will be observed. While loans are invested in the long term return projects such as education and health, a decrease in consumption and a possible rise of short term investment are marked. Bel Hadj Miled and Ben Rejeb [22] analyze the impact of microfinance in 57 developing countries in order to check its effect on lowering poverty at the macroeconomic level. They find out that the countries with a gross loan portfolio of high MFIs per capita mark the lowest poverty ratio. These findings prove that microfinance lowers poverty at the macro level. Accordingly, some of the 57 developing countries are highly concerned with the development of their microfinance institutions. On the one hand, sets the scene that reliable institutions are necessary in order to ensure the success of the microfinance industry. On the other hand, microfinance is an essential tool for development. In this respect, despite of its modest impact, microfinance continues to be developed in Sub-Saharan Africa. There is much to say that microfinance can also be damaging. No real increase in income has been observed which, in turn, may result in hard poverty-lowering.

The Conceptual Framework of Research

Poverty threshold, in developing countries, is dealt with from a nutritional approach based on essential needs. In these countries, the non-food basic needs are considered less immediate. The equivalently needs to the nutritional approach, such as, transportation or education, are not part of the inhabitants' lifestyles argue that it would be more appropriate to measure poverty threshold for non-food requirements departing from the food poverty line as well as the average ratio of non-food expenditures in relation to its food counterpart.

The poverty's explanatory variables of the present analysis are as follows: nutritional level, regular expenses, health and housing.



Nutrition

The positive impact of microfinance on nutrition and food safety is generally maintained. It is a finding endorsed affirms that there is no direct effect of microfinance on increasing the number of daily meals. In another orientation of the same research conduct, reinforces the positive effect of microfinance on improving food quality (meat, chicken, fish, milk, etc.) in Tanzania proves it in Rwanda [23,24]. It

remains that the same causal relation of microfinance and the type of food is marked insignificant by Doocy et al. [24] in Ethiopia and in Ghana. Accordingly, it is noted that the effect of microfinance on the food quality is changeable from one country to another. The question that poses itself is the following: is it possibly concluded that the geographical variable plays a major part in food quality through the microfinance policy that is governmentally pursued?

Expenses

It is generally considered that the level of households' expenses is a vital determinant factor of poverty. According to IKM [25], the impact of micro-credit on consumers' spending is positively and significantly regarded. It draws the conclusion that the old consumers' expenditures exceed that of the new consumers. It adds that food costs represent the largest share of the monthly expenses followed by the current housing fees.

Health

The positive impact of microfinance on health is represented by several authors [22,23,26]. The numbers of the days when households are off due to illness and disease episodes were reduced. These numbers reflect a significant increase in spending on care and hygiene.

Brannen [23] adds that micro-credit improves children's health through behavioral change of credit recipients' parents. Doocy et al. [24] maintain that the nutritional situation improves, therefore, ostensibly to obtain a micro-credit. Nutrition is an important factor for the improvement of health.

Microfinance has a significant effect on women's health, which when autonomous and have their own financial resources, become more sensitive to their sexual health and AIDS problem. In contrast, analyzing the case in Uganda, find no significant results. The sexual behavior of young boys and girls remained unchanged.

Housing

Bardos et al. [26] find that clients of micro-credit institutions become owners of their homes in greater proportion than non-clients. While for IKM [25], the proportion of old MFI clients who improved their housing conditions is certainly positive but remains insignificant compared to new clients.

Microfinance in Tunisia

The turn of 2011 has led to a discovery of an unemployment and poverty rates which far exceeds what was previously announced by the governing rulers. Recently, Tunisia has been suddenly found with thousands of young people in despair. The economic machinery of the country is too weak to create the jobs in needs (Ministry of Finance 2011). The year of 2011 certainly highlighted the structural problems besetting the country. Furthermore, it adds cyclical problems which are associated with collateral damage of the revolution. In fact, Tunisia faces continuous strikes, business closures in addition to the Libyan events that caused an unprecedented flow of refugees, a reduction in the number of Tunisians working in Libya and then a conspicuous decline in reciprocal Tunisian and Libyan trade. Ultimately, if the desertion of tourists is added, the Tunisian struggle to find out the path to economic recovery is explainable (Ministry of 2011). In this respect, microfinance is possibly an available solution in order to avoid exclusion and to ensure the dynamism of the economic fabric as long as it is a tool for accessing financial sources of both non-bankable business-undertaking and households. Microfinance is likely to protect small businesses from any vulnerable damages and sustain their potentialities for activities and growth. It also allows consumers to maintain their standard of living. Henceforth, it is noted that the clients of the microfinance organizations subsumes four groups. They are as follows: low-income people including informal micro-

enterprises/income generating activities, formal micro-enterprises, very small enterprises and micro and small farming-activities.

Microfinance in Tunisia does not date back to the events of 2011. It appeared with 'enda inter-arabs in 1995. It was ultimately installed in 1999. The amounts allocated to the business-undertakers and households are limited to 5.000TND. Furthermore, the Tunisian Solidarity Bank has played an important role in creating several Micro-credit Associations. Indeed, more than 270 operators offer micro-credit in Tunisia. Enda, as one of them, is considered the most important operator since it runs 80 million TND. It represents one third of the outstanding sector. Nevertheless, the remaining Micro-credit Associations are medium sized with ventilated clients ranging between 850 and 3.200 as a maximum (Ministry of Finance 2011). Regarding the role that Tunisian Solidarity Bank plays, a double function is identified. This bank extends direct credit to an amount less than 100.000 TND to micro-projects and at the same time it refinances the Micro-credit Associations to zero rates by taking merely a 1% management fee according to the Ministry of Finance (2011).

Data and Methodology

This study is based on data collected between June and October 2015. Its population is sampled by MFI "enda inter-Arabe" 2 installed in Sfax area.

A questionnaire³ is introduced to some clients. Then, it is split into old and new ones. The employees of the "enda inter-Arabe" institution are asked kindly to distribute the questionnaire among the clients. A random process of selecting clients is pursued with a regular daily survey in order to draw and select the intended interviewees.

During the research conduct, a representative sample is constantly ensured in order to restrain potential biases. 197 questionnaires were selected 73 of which are identified as old clients. The remainder represents the new clients joining the institution of "enda inter-Arabe". The clients who have contacted this institution for at least three years are considered old [25].

A discriminant analytical method is pursued in order to select the determinants of poverty (nutrition, health, housing etc.) that may be an indicative source of the differences between the two groups in terms of poverty lowering.

The discriminant analysis evidences the connection between a categorically qualitative variable (dependent variable) and a set of explanatory quantitative variables [26]. The discriminant analysis helps to answer the following question: what are the main differences that can be determined by using the measured variables among the known groups? In order to answer the previously mentioned question, a descriptive discriminant analysis is adopted. It offers a graphical representation which visualizes the observational proximities that may belong to the same studied group or not. It also makes it possible not only to interpret the factorial axes, linear combinations of the initial variables but also to understand the characteristics which distinguish different groups. Indeed, the descriptive discriminant analysis is essentially a geometric method. It is factorial approach which is close to the Principal Component Analysis. This discriminant modal is conducive to depict and explain, partially, the difference in access to microfinance systems between old and new benefits of the MFI services.

The adopted principle is basically represented as follows:

-The qualitatively dependent variable defines the groups of individuals: G1, G2... (Individual categories: old and new clients (0/1)).

-The discriminant analysis defines the newly combinatory linearly variables which identify discreetly the best groups, with Fi (as nutrition, expenses, health and housing).

$$D1=a1F1+b1F2+C1F3+....$$

$$D2=a2F1+b2F2+C2F3+....$$

Measurement of Variables

The chosen variables of poverty are controlled in order to respond to the main question of the currently conducted research. The posed problem is conducive to sustain the most explanatory poverty assumptions such as nutrition, expenses, health and housing.

In order to maintain the internal consistency of the items forming the evidential components, 18 items are selected which are better able to describe the various determinants of poverty at Table 1. Three of them are an articulating device of nutrition (Cronbach's alpha=0.829), five measure the expenses (Cronbach's alpha=0.939), three calculate health (Cronbach's alpha=0.920) and finally, eight determine housing (Cronbach's alpha=0.964).

Almost all of the depicted items are designed according to Likert scale of 5 points. The statements of the level of the clients' agreements have been infiltrated with the following measures: 1 "strongly disagree" to 5 "total agreement".

The data processing will be performed with the SPSS data analysis software 20.

The Principal Component Analysis (PCA) helps to reducing the items used for each of the 4 elements.

Rotation Method: Varimax with Kaiser Normalization For the three PCA, the significance of Bartlett <0.001	PCA1	PCA2	PCA3	PCA4
	Nutrition	Expens es	Health	Housing
Items	F1	F2	F3	F4
1-My weekly consumption of meat, fish or luxury food has improved	0.890			
2-My daily meals are held improved	0.772			
3-The level of nutrition of my relatives (children, parents, etc.) improved	0.927			
4-My weekly food expenditure improved		0.932		
5-My week non-food expenditures are improved		0.963		
6-The share of food expenditure in the total budget is decreased		0.943		
7-The expenses of home improvements are substantial		0.901		
8-I scrupulously respect my credit maturities and rent		0.759		
9-The number of days lost due to illness is reduced			0.967	
10-The frequency of diseases related to domestic hygiene is reduced			0.943	
11-Access to medical services is satisfactory			0.902	
12-The housing surface is satisfactory				0.907
13-The state of my housing is improved				0.934
14-The electricity source is satisfactory				0.926
15-The sanitary facilities are satisfactory				0.889
16-The sleeping conditions are improved				0.965
17-I has all the necessary furniture: electrical equipment (radio, TV, telephone, electronic appliances, ...)				0.931
18-The area where I live meets the standards of quality of life (greenery, sanitation, public lighting, etc.)				0.834

Eigenvalues	2.24	4.07	2.63	5.88
Total variance explained	74.94%	81.46%	87.95%	83.37%
Cronbach alpha	0.829	0.939	0.920	0.964

Table 1: The determinants of poverty.

Results

The effect of microfinance on improving the client's living of an MFI " enda " appears in Tables 2 and Table 3.

Old Clients	Mean	Std. Deviation	New Clients	Mean	Std. Deviation
F1	1.119	0.418	F1	-0.658	0.556
F2	1.144	0.383	F2	-0.673	0.521
F3	1.118	0.339	F3	-0.658	0.588
F4	1.144	0.477	F4	-0.674	0.473

Table 2: Group statistics.

Analytic Variables	Wilks' Lambda	F	df1	df2	Significance
F1	0.259	558	1	195	0
F2	0.225	672	1	195	0
F3	0.26	555	1	195	0.000
F4	0.224	674	1	195	0

Table 3: Test of equality of group means.

Table 2 shows that the means of the 4 determinants of poverty among older clients is higher than the new ones with small differences between the two groups.

Table 3 reveals that 4 determinants have powerful discriminant significance by relying on statistical values of F and Wilks' Lambda.

The low intra-class variability and its high counterpart are indicative of the difference between the two groups which may be due to the time factor. The older the client is, the more the opportunity to escape poverty is guaranteed.

In the short term, microfinance enables the households to struggle for survive on a daily basis. Nevertheless, in the long run, the beneficiary concern is absolutely not to survive. It is merely to ameliorate the households' existence. It seems that the majority of the interviewed clients (81.7%) do not have credits just for borrowing and consuming. They do so in order to invest them in businesses as well as to plan their futures. These findings corroborate those of Banerjee and Mullainathan [27]. Banerjee and Mullainathan [27] emphasize that the effects of the micro-credit's policy on poverty lowering are ambiguously considered in the short term.

Group	Predicted membership	group	total
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			The new	The old	
original	count	The new The old	120	4	124
			0	73	73
	%	The new The old	96.8	3.2	100,0
			0	100	100,0

Table 4: Classification results.

In order to check the strength of the obtained results concerning the examined groups, an analysis of their levels of good ranking is carried out [28-30]. This criterion is crucial since it is an early detection of the position of the two client groups' ultimately correctly classified. Table 4 signifies that in relation to the entire sample of analysis, the clients' rate is listed in the current research chosen model is equal to 98 % ((73+120)/197).

Conclusion

It is generally admitted that the access of the poor to credit is an almost absolute necessity in order to lower poverty in developing countries. The development of MFIs, as financial intermediaries provides an access to credit for a great number of claimers, is a hope for non-bankable to be integrated into the economic activity of their countries. They also contribute to development of their ways of living. The failure of "development from above" has accelerated the rise of the MFIs in Third World countries. The MFIs offer financial services to the poor who are excluded from the banking system. The purpose of this approach is to check whether the MFIs are possibly seen as incentives for development and in turn as efficient sources of poverty lowering or not. The proposed descriptive discriminant analysis is conducive to achieve the results that microfinance has a highly significant effect on improving living standards and lowering poverty. The comparison made between the new and old clients of MFIs reveals that the older the client is, the more the opportunity to escape poverty is guaranteed. It is not noted that an ambiguity about the effects of short-term micro-credit is recorded. The time factor is proved important. The benefits of microfinance are only appreciated in the long run.

The obtained results are completely positive. It may threaten their reliability. However, the effect of geography is important. In Sfax, which is the surveyed city, small businesses are likely to succeed. The existing infrastructure as well as the environment is favorable. It is quite noteworthy that the success of the poor is not only limited to the access to micro-credit. Other factors are also decisive as the macroeconomic context, economic and the social environment and the socio-demographic factors. They may determine the effect of microfinance on poverty lowering.

The fact remains that the findings of the current research are limited. Their generalization is not practically guaranteed. Indeed, other determinants are not included in this research.

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