Raising Cost Determinants of Microfinance in Morocco: Evidence from a Multiple Case Study

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Abstract— **The problem of microfinance high cost is subject to multiple debates both in Morocco and worldwide. This cost is charged to microcredit beneficiaries through the granting of loans at high interest rates. This article aims to raise the cost determinants of the four most representative Moroccan microfinance institutions (MFIs) of the sector. The analysis shows that the high cost of microfinance consists mainly of operating expenses. Furthermore field investigation characterizes the behavioral attributes of individuals, namely microfinance agents limited rationality and borrowers ex-ante and ex-post opportunism. The first phenomenon refers to microfinance agents inability to seize all information concerning microcredit beneficiaries and the incompleteness of the contracts signed by the borrowers. The second phenomenon related to opportunism refers, upstream, to the concealment by borrowers of their intentions and downstream to the risk of non-repayment of borrowed funds. These results agree with Williamson's transaction costs theory ([1], [2], [3]) which asserts that the limited rationality of agents and borrowers opportunism contribute to higher transaction costs. A network structure [4] involving non-profit academic incubators would reduce MFI's transaction costs by providing resources for better sustainability of funded projects.**

Keywords— **Microfinance, Cost, Transaction Costs, Networks.**

I. INTRODUCTION

"I want to have the impression that life is worth living" this is what the younger generation aspires to according to the Nobel Peace Prize, Muhammad Yunus [5]. Microfinance is a movement initiated by Mohammad Yunus, founder of the Grameen Bank[1] or "Bank of the villages" in 1976 where the repayment rate reached 95-97% in the early 1990s. These performances were affirmed by [6] because they showed that the poor can be bankable. Unfortunately, the microfinance

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[1] Grameen Bank or "The Bank of the Villages" is a micro-credit bank created by Muhammad Yunus in 1976 in Bangladesh. The institution and its founder were awarded the Nobel Peace Prize in 2006. More than half of the borrowers in Bangladesh, nearly 50 million and have emerged from poverty through their loans.

sector is characterized globally by the application of high interest rates [7] which limit the size of MFI's loans portfolios.

In Morocco, almost half of the population does not have access to formal finance [8]. Morocco, like many other countries, has embarked on the adventure of microfinance since the 1990s, its laudable experience regarding to the international community has also not lacked drifts. Today, the Moroccan microfinance sector represents an oligopolistic structure dominated by only 4 MFIs and presents risks that threaten its growth. The annual nominal interest rate reach 42% for a microcredit spread over a 12-month period [9]. The cost of microcredit follows a marked upward trend starting in 2007, which is the beginning of the microcredit crisis in Morocco [9]. Moroccan MFIs have a high operating cost ratio compared to the 10% limit set as the minimum performance threshold for MFIs [10]. Moreover, the returns of Moroccan MFIs in terms of equity and assets declined on the eve of the crisis in 2007 [9]. These statistics raise a warning flag to the need to take into account the insolvent population excluded from the traditional banking system and to push MFI's to offer loans at affordable rates while mastering their costs.

Concretely, MFI's interest rates include four key elements: resource costs, allowances for doubtful accounts, operating expenses and profits [7]. MFIs use their interest incomes to cover their costs. To reduce interest rates, one or more of the four components mentioned above must be reduced. This costs reduction includes, among other features, access to competitive resources. In theory, entrepreneurs' access to resources can be achieved mainly through social networks with the incubator as an intermediary [11]. Incubators have become, in recent years, a means for public policies to foster economic development and innovation [12]. We ask the question: How can we reduce the cost of microfinance through a university-based social incubation system?

A few studies have examined the evolution of the support processes and the structure of networks, according to the stages of business creation projects [13]. We propose to introduce social network theory ([14], [15]) in conjunction with the transaction costs theory [3] to deal with this issue. The present work falls within this framework and aims to:

- Identify the determinants of the high cost of microcredit supported by the most representative Moroccan MFIs in the sector given the transactions carried out and their attributes;
- Raise the current needs of Moroccan microfinance institutions, given the specificities of the sector;
- Theoretically explain the levers to reduce the cost of microfinance in the context of a partnership vision through the concept of incubation in terms of lowering control costs, increasing social capital and access to new resources.

II. MICROFINANCE : FROM CONCEPTS TO FACTS

A. Definitions

Microfinance refers to the provision of financial services to marginalized people from the traditional banking system through different types of institutions [7][2]. This is part of the concept of financial inclusion and includes: solidarity loans [3], individual loans [4], guarantee funds, venture capital, savings, property and persons insurance, transfers for migrants and support services [16]. MFIs usually operate as an association, but may also adopt the legal status of a cooperative, a mutual, a commercial bank or a non-governmental organization.

B. Microfinance, Facts and Figures

The Middle East and North Africa account for 23% of the gross portfolio of loans followed by Latin America and South Asia, with 23% and 20% respectively [10]. Although Morocco was the leader of the microfinance sector in the MENA region and a model to follow in the 1990s, it has regressed from the end of 2007 due to uncontrolled growth and arrears' rising. Today, the Moroccan microcredit sector serve only 10% to 20% of the target market, while the population eligible to microcredit is estimated at 3.2 million [17].

The microfinance sector is characterized globally by the application of high interest rates [7]. MFIs should therefore maximize their resources to offset their losses and offer microcredits at least cost. The link between the economic and the social could be carried out via the concept of intermediation of a third party [16]. The latter will intervene to support MFIs and their clients in order to reduce the cost of the sector.

III. THE INCUBATION PROCESS AS A SUPPORTING TOOL TO A STRUGGLING INDUSTRY

A. Intermediation as a Way to Operationalize the Incubation Process

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[2] The Consultative Group to Assist the Poor (CGAP) is a multi-donor partnership for microfinance based at the World Bank. CGAP contributes to the progress of microfinance by providing commercial information and by promoting the harmonization of industry standards.
[3] Loan for a group of persons subject to a joint guarantee
[4] Loan for one person provided a personal caution or that of a third

Business incubators are structures that allow the creation, development and maintenance of enterprises during their first years of life [18]. They offer a wide range of services, such as physical spaces, capital, coaches, common services [19]. In a network structure, intermediaries are indispensable to trade [20]. Incubators support the accompaniment of projects that combine economic dimension and social dimension [21].

B. Academic Incubation

The objective is above all social, therefore we have prioritized the action of a non-profit public incubator, in this case the university incubator, also called, academic incubator. Academic and scientific incubators (IAS) are efficient catalysts that enhance the value of existing projects and resources [23]. We have tried to understand this intermediation as a phenomenon taking place at the level of interactions between actors and have explored it from the combined angle of social networks theory ([15], [4]) and the transaction costs theory ([1], [2], [3]).

IV. THE THEORITICAL FRAMEWORK

A. The Transaction Costs Theory ([1], [2], [3])

We based our study on this theory because it is a theory of contracts and organizations between economic agents providing a mutual interest to cooperate. Reference [2] suggests a reconstruction of the firm's economic theory based on the costs that economic agents bear to ensure market exchange. The author defines transaction costs as the set of costs specifically related to face-to-face management between two economic agents including the costs of contract preparation, monitoring, execution and control. He formulates two basic hypotheses: agents limited rationality and agents' opportunism. In the first case, individuals can not foresee in advance all the contingencies and the contracts they conclude will necessarily be incomplete. This entails transaction costs. In the second case, individuals show opportunistic behavior by seeking their own personal interests. Agents limited rationality and agents opportunism increase transaction costs. This raises the question of the choice of the type of institutional arrangement that minimizes transaction costs. The author distinguishes, among others, bilateral governance where assets are specific and where transactions are recurring. The relationship then takes the form of an organization within the framework of "hybrid" structures, intermediaries between the firm and the market, such as alliances, partnerships, joint ventures, subcontractor networks, etc. We also speak about strategic networks that refer to [23]. In such a configuration, the MFI will outsource certain functions in order to reduce its cost. This brings us back to the second theory, that of social networks.

B. The Social Networks Theory ([14], [15], [13])

1) Social Networks Theory and the Incubator Intermediation A social network corresponds to the nodes formed by a group of actors, groups and / or organizations ([14], [15]). The firm's competitiveness is not based on the exclusive internal control but on the dynamic capacity [24] of the company to gather resources that are difficult to transfer and imitate. The creation of an enterprise is not only based on

traditional pillars such as labor, capital and technology, but also on social goods that are usually called social capital [25]. Thus, social networks become social capital only if they mobilize external resources via intermediaries ([4], [20]). The incubator is then presented as this intermediary [11] enabling the actors of the two different groups to meet and establish mutually beneficial ties.

2) The Role of Social Networks in Reducing Transaction Costs The works of [14] and [15] found that membership in a network is a source of competitive advantage as it helps to reduce transaction costs among network members and increase their ability to mobilize resources. When transactions are difficult to clarify at the contract level, the social network avoids opportunistic behavior and reduces transaction costs [26]. The role of networks in the establishment of relations between actors is affirmed, it remains to be seen how this networking could be established.

V. METHODOLOGY

A. Objectives and Scope

The aim of our work is not to create new theories, but rather to enrich research on the fight against poverty. In this context, we are setting up an epistemological framework of moderate constructivism as we want to build a reality: that of reducing the cost of microfinance in Morocco via a networked structure with academic incubators as intermediaries. A qualitative approach would lead us to carry out an exploratory research in order to identify the degree of possible cooperation between MFIs and Universities. We used the abductive method for an innovative theoretical exploration in order to link two unrelated theoretical fields in previous work [27]. The microfinance sector, whose aim is primarily social and that of social innovation through university incubation. The knowledge building process we use is based on the development of a framework of thought to better understand actors' representations of microfinance cost determinants on the one hand and of the possibility to reduce this cost via the concept of social university incubation on the other hand. Therefore, the knowledge project is to "build" but also "to understand".

As presented in the introduction of our study, we raise two major research questions (RQ):
RQ 1: What are the determinants of the high cost of microcredit supported by the most representative Moroccan microfinance institutions in the sector given the transactions carried out and their attributes?
RQ 2: What are the current needs of Moroccan microfinance institutions, given the specificities of the sector?

We based our analysis of the cost determinants of the most representative Moroccan MFIs on the results of the semi-directive interviews conducted with microfinance managers. The objective is to highlight the elements that increase the transaction costs of these institutions.

B. The Ground Access Strategy

1) The Choice of the Target Population and Cases Selection To approach professionals of the microfinance sector, we adopted the cases-by-interviews method [28]. The multiple case study is an instrumental approach, designed to better delineate a phenomenon from different cases, in an exploratory logic [29]. The four dominant operators (Al Amana, Attawfiq Microfinance, Al Baraka and ARDI) represent 97% of the market in terms of loan portfolio and 95% in terms of active clients. Our analysis of Moroccan MFIs cost structure was carried out on the basis of this significant majority.

2) From the Target Population to the Sample Constitution The four selected cases are sufficient for an analytical generalization following the logic of [30]. Since we conduct an exploratory qualitative study, we have the possibility to stare a sample of convenience [31]. We collected qualitative data on the basis of 30 semi-structured interviews with heterogeneous members, both hierarchically and functionally. We then proceeded to a thematic analysis of the content and then to a statistical analysis. In addition, we sought to meet the criteria of diversification and empirical saturation. Consequently, we ended the data collection when the last interviews did not add any value.

C. Data Analysis and Processing

1) The Choice of Statistical Tools We used the Statistical Package for Social Sciences software (SPSS 22) to develop and analyze a database of the four MFIs surveyed. We also used MatchWare MindView 7 which is professional mind mapping software that allows performing visual brainstorming sessions and then organizing and presenting ideas according to a specific map. We first performed a statistical analysis of the results from the qualitative investigation using SPSS 22 software and then attached it to the MindView 7 software in order to get out of the representative figures of the exposed results.

2) The Choice of Statistical Methods Firstly, we use the frequency calculation as part of the descriptive statistic to decide on the validity of a research proposal. We retained a valid percentage of responses strictly above 50%. The valid percentage represents the number of responses on a sample of 30 people excluding missing values, i.e. non-responses, neutral and ambivalent opinions. These last three characters do not give a clear overview of the respondent's opinion.

Secondly, the binomial test allows us to say if it is reasonable to think that the proportions observed in our sample come from a population with a given value of "p". Thus, we use it to compare the observed frequencies to the theoretical frequencies as predicted by hazard. This test is applicable when the data falls into two discrete categories. In our case, discrete categories refer to a positive or negative response from respondents. We issue to each test two hypotheses:
$$\begin{cases} \text{H0: p} = 50\% \\ \text{H1: p} > 50\% \end{cases}$$
With p = the percentage of responses mentioning a given phenomenon
If the exact meaning (bilateral) <5% Then we reject H0
If the exact meaning (bilateral) >5% Then we accept H0
The binomial tests related to the analysis were carried out for a complementary purpose and did not constitute a basis of

analysis for confirming or invalidating the research proposals because the sample size is limited. However, this is a good omen for extrapolating results to the entire target population.

Finally, the Multiple Correspondence Analysis (MCA) is a factorial method of multidimensional descriptive statistics that allows us to study the association between at least two qualitative variables and to refine the analytical conclusions.

VI. RESULTS

All the tables and figures were produced by the authors on the basis of the analysis of the semi-directive interviews conducted within the four target MFIs.

A. The Cost Structure of Microfinance Institutions

1) The Main Determinants of Microcredit Cost
Proposal 1-The high cost of microcredit is mainly composed of operating costs.

TABLE I
MICROCREDIT COST COMPONENTS -OPERATING COSTS-
RESULT OF FREQUENCIES CALCULATION

		Frequency	Percentage	Valid Percentage	Cumulative percentage
Valid	Yes	28	93,3	100,0	100,0
Missing	No answer	2	6,7		
Total		30	100,0		

TABLE II
MICROCREDIT COST COMPONENTS –FINANCIAL COSTS- RESULT
OF FREQUENCIES CALCULATION

		Frequency	Percentage	Valid Percentage	Cumulative percentage
Valid	Yes	3	10,0	10,7	10,7
	No	25	83,3	89,3	100,0
	Total	28	93,3	100,0	
Missing	No answer	2	6,7		
	Total	30	100,0		

TABLE III
MICROCREDIT COST COMPONENTS- OPERATING COSTS-
BINOMIAL TEST RESULT

		Category	N	Observed Proportion	Tested Proportion	Exact Sig (bilateral)
Operating costs	Group 1	Yes	28	1,00	,50	,000
	Total		28	1,00		

2) Contribution of Individual Behavior to the Cost of Microfinance: Proposal 2-The behavior of individuals contributes to the high cost of microfinance.
Sub-Proposal 1- Agents working in the microfinance sector are of limited rationality.

TABLE IV
ENTERING ALL BENEFICIARIES' INFORMATIONS BY THE
LOAN OFFICER (*) – FREQUENCY CALCULATION RESULT

		Frequency	Percentage	Valid Percentage	Cumulative percentage
Valid	Positive	10	33,3	34,5	34,5
	Negative	19	63,3	65,5	100,0
	Total	29	96,7	100,0	
Missing	Neutral	1	3,3		
Total		30	100,0		

TABLE V
DEFINITION IN ADVANCE OF ALL THE OBLIGATIONS OF THE
PARTNERS(**)- FREQUENCY CALCULATION RESULT

		Frequency	Percentage	Valid Percentage	Cumulative percentage
Valid	Positive	5	16,7	23,8	23,8
	Negative	16	53,3	76,2	100,0
	Total	21	70,0	100,0	
Missing	No answer	9	30,0		
Total		30	100,0		

TABLE VI
PREDICTION OF ALL EVENTUALITIES REGARDING THE POSSIBLE
BEHAVIOR OF THE BORROWERS(***)– FREQUENCY
CALCULATION RESULT

		Frequency	Percentage	Valid Percentage	Cumulative percentage
Valid	Positive	6	20,0	26,1	26,1
	Negative	17	56,7	73,9	100,0
	Total	23	76,7	100,0	
Missing	No answer	7	23,3		
Total		30	100,0		

TABLE VII
CONTRIBUTION OF INDIVIDUAL BEHAVIOR TO THE COST OF
MICROFINANCE-BINOMIAL TEST RESULT

		Category	N	Observed Proportion	Tested Proportion	Exact Sig (bilateral)
(*)	Group 1	Negative	19	,66	,50	,136
	Group 2	Positive	10	,34		
	Total		29	1,00		
(**)	Group 1	Positive	5	,24	,50	,027
	Group 2	Negative	16	,76		
	Total		21	1,00		
(***)	Group 1	Positive	6	,26	,50	,035
	Group 2	Negative	17	,74		
	Total		23	1,00		

TABLE VIII
CONTRIBUTION OF INDIVIDUAL BEHAVIOR TO THE COST OF
MICROFINANCE –MCA RESULT

	Variance represented	
Cronbach's alpha	Total (eigen value)	Inertia
,810	2,174	,725
,241	1,192	,397
	3,366	1,122
,609ᵃ	1,683	,561

a. The average Cronbach's alpha is based on the average eigen value

Discrimination Measures

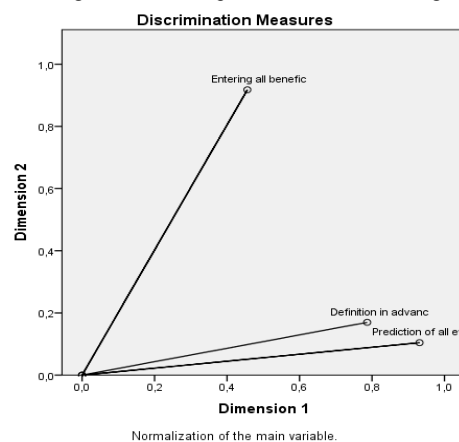Normalization of the main variable.

Fig. 1 Contribution of Individuals Behavior to the Cost of Microfinance - MCA result

Sub- Proposal 2 : Borrowers are opportunistic

TABLE IX
EX-ANTE OPPORTUNIST CHARACTER OF BORROWERS - FREQUENCY CALCULATION RESULT

		Frequency	Percentage	Valid Percentage	Cumulative percentage
Valid	Positive	27	90,0	100,0	100,0
Missing	No answer	3	10,0		
Total		30	100,0		

TABLE X
EX-POST OPPORTUNIST CHARACTER OF BORROWERS - FREQUENCY CALCULATION RESULT

		Frequency	Percentage	Valid Percentage	Cumulative percentage
Valid	Positive	19	63,3	100,0	100,0
Missing	No answer	3	10,0		
	Ambivalent	8	26,7		
	Total	11	36,7		
Total		30	100,0		

VII. DISCUSSION

A. The Main Determinants of the Cost of Microcredit

1) Operating Costs The analysis shows that the cost of microcredit is mainly composed of operating costs. These expenses are relate to bank interest and commissions paid on financial borrowings and cash loans, personnel expenses, taxes and charges, external expenses such as rental fees branches and headquarters, leasing costs, vehicle rental fees, postal and telecommunications expenses, etc., provisions for doubtful accounts and other general operating expenses such as maintenance and repair expenses for buildings, services, etc.

2) Individuals Behavioral Attributes - Microfinance Agents Limited Rationality and Borrowers Opportunism The behavioral attributes of individuals linked to exchange also contribute to the high cost of microfinance and concern two aspects according to the transaction cost theory ([1], [2], [3]) namely:

-The limited rationality of microcredit agents which concerns:
- o The inability of field workers to capture all of the beneficiaries' information;
- o The incompleteness of contracts meaning that:
  - ▪ Contracts do not define in advance all partners' obligations;
  - ▪ Contracts do not include all eventualities regarding the possible behavior of borrowers.

-Borrowers opportunism

The first concept related to agents' limited rationality concerns three variables: "Entering all beneficiaries' information by the loan officer", "Definition in advance of all the obligations of the partners", "Prediction of all eventualities regarding the possible behavior of borrowers".

The descriptive side from the frequency calculation allows us to confirm the research proposal concerning the concept of loan officers' limited rationality.

Based on decision statistics, since the binomial test -where p is the percentage of negative responses- for the first variable is not verified, it is not possible to generalize the concept of limited rationality to the whole population related to microfinance agents. Nevertheless, we can still argue that the last two variables, namely the "Definition in advance of all the obligations of the partners" and "Predicting of all eventualities regarding the possible behavior of the borrowers", representing statistically the 1st dimension and referring theoretically to the concept of incompleteness of contracts, explain the phenomenon of limited rationality of agents operating in the microfinance sector. This is validated by the MCA, the Cronbach's alpha shows that dimension 1 has an important power (of the order of 81%) to explain the phenomenon of limited rationality of agents operating in the microfinance sector. However, the decision-making side remains limited in relation to the sample considered and does not permit an objective decision concerning the extrapolation of the results to the whole population.

The inability of field workers to seize all of the beneficiaries' information may be due to a poor assessment of the credit report, a poor morality survey, a poor assessment of the client's financial capacity or a lack of compliance with procedures by the field agents also called development agents. Moreover, the existence of a range of declarative elements, clients' bad faith or the lack of material guarantees increases the risk of loan officers to omit certain information relating to beneficiaries.

The second concept is linked to borrowers' opportunism as part of their behavioral attributes. Borrowers ex-ante opportunism refers to the possibility of concealment of borrowers intentions before the signature of the loan contract. Borrowers' ex-post opportunism refers to the non-respect of the commitments by microcredits beneficiaries downstream.

The results show the presence of this character, borrowers conceal their intentions, some do not reimburse due to bad faith and convey a bad message about the feeling of impunity since the lender has the status of an association. This increases transaction costs related to the exchange.

Thus, from the frequency calculation, we can validate the proposition stating that the borrowers have an opportunistic character. Similarly, based on the results of the non-parametric tests, namely the binomial test, the opportunistic character can be extrapolated to all MFIs borrowers.

The validation of the two sub-proposals analyzed leads to the validation of the proposal stating that "Individual behavior contributes to the high cost of microfinance". Individuals here designate the parties to the exchange, namely MFIs' agents on the one hand and the borrowers on the other.

These results agree with Williamson's transaction costs theory ([1], [2], [3]) which asserts that the limited rationality of agents and borrowers opportunism contribute to higher transaction costs. Accordingly, we can answer to the research question by asserting that the operating costs and behavioral attributes of field workers and borrowers contribute to the

high cost of microcredit in particular and microfinance in general.

3) The Current Needs of Moroccan MFIs The results of the qualitative survey identified the needs of Moroccan MFIs given the specificities of the sector. MFIs need to control operating expenses and the risk level related to behavioral attributes in order to increase their loan portfolio while reducing microfinance costs. Indeed, developing a less risky client profile would help to control the portfolio level of risk.
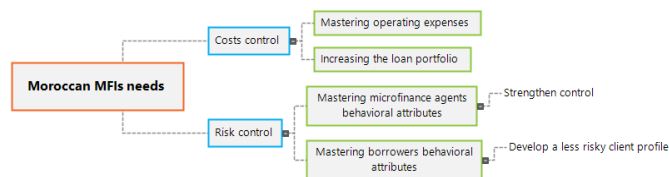

Fig.3 Current needs of Moroccan MFIs

VIII. CONCLUSIONS

Our research reveals a better understanding of the determinants of the high cost of microfinance in Morocco in order to propose a mechanism able to reduce this cost. We have voluntarily presented the results that we have achieved in a global way because the stakes of the study concern the characteristics of the entire microfinance sector and not each of the institutions taken individually.

The statistical analysis shows that the high cost of microfinance in Morocco is a function of operating costs and the behavioral attributes of individuals related to microfinance agents limited rationality and borrowers opportunism. Moroccan microfinance institutions need to control both the costs incurred and the risks taken.

Although the statistical analysis of the multi-case study of the four target MFIs is limited in terms of sample size and qualitative research, it is a good omen for the extrapolation of the results to the entire target population.

Finally, we notice that this study provides a basis for reflection on possible bilateral cooperation between two previously unrelated worlds, namely the microfinance sector and the academic world. The intermediation of a university-based social incubation system and the construction of social networks would bring resources in charge of reducing microfinance transaction costs in Morocco.

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REFERENCES

[1] O.E. Williamson, *Markets and Hierarchies: Analysis and Antitrust Implications*, Free Press, New York, 1975.
[2] O.E. Williamson, *The Economic Institutions of Capitalism*: Firms, Markets, Relational Contracting, Free Press, New York, 1985.
[3] O.E. Williamson, "Transaction Cost Economics: How It Works ; Where it is Going", *De Economist*, vol. 146, pp. 23-58, April. 1998.
[4] R. Burt, "The network structure of social capital", *Research in Organizational Behavior*, vol. 22, pp. 345-423, 2000.
[5] M. Yunus. (2006) Extraits du discours prononcé par Muhammad Yunus, on *Etik-Presse*. [On line]. Available : http://etik-presse.com/media/yunus_nobel__017509100_1920_18082008.pdf
[6] M. Godquin, "Finance rurale au Bangladesh et aux Philippines," Doctoral Thesis in Economic Sciences, Paris University, Paris, 2006.
[7] CGAP, "Les taux d'intérêt du microcrédit et leurs facteurs déterminants 2004-2011," Reports of CGAP and its partners, 7, 2013.
[8] World Bank Group, "Global Financial Development Report. Financial Inclusion," 1-35, 2014.
[9] S. Lebbar and M. Chami, "La microfinance comme outil de développement de la micro-entreprise : réalités et perspectives du contexte marocain", *International Journal of Business and Economic Strategy*, vol. 4, pp.182-194, 2016.
[10] Microrate Incorporated, "Guide Technique : Indicateurs Sociaux et Indicateurs de Performance pour les Institutions de Microfinance," 2014.
[11] O. Gassmann and B. Becker, "Gaining leveraged effects in knowledge modes by corporate incubators," *R&D Management*, vol. 36, pp. 1-16, 2006.
[12] A. Bergek and C. Norrman, "Incubator best pratice: A Framework", *Technovation*, vol. 28, pp. 20-28, 2008.
[13] M. Grossetti and J.F. Barthe, "Dynamique des réseaux interpersonnels et des organisations dans les créations d'entreprises", *Revue française de sociologie*, vol. 49, pp.585-612, 2010.
[14] H.C. White, "Where do market come from?," *American journal of sociology*, vol. 87, pp.517-547, 1981.
[15] M. Granovetter, "Economic Action and Social Structure: The Problem of Embeddedness," *American Journal of Sociology*, vol. 91, pp. 481-510, 1985.
[16] J.M. Servet, *Banquiers Aux Pieds Nus,* Editions Odile Jacob, pp. 224, 461-462, 2006.
[17] The Global Findex Database 2014. Measuring Financial Inclusion Around the World, World Bank Group (7255), 2015.
[18] R. Grimaldi and A. Grandi, "Business incubators and new venture creation: an assessment of incubating models," *Technovation*, vol. 25, pp. 111–121, 2005.
[19] M.T. Hansen, H.W. Chesbrough, N. Nohria and D.N. Sull, "Networked Incubators: Hothouses of the New Economy," *Harvard Business Review*, vol. 78, pp. 74-84, 2000.
[20] A. Degenne and M. Forsé, *Les réseaux sociaux*, 2nd ed, Armand Colin, Paris, 2004.
[21] R. Aernouldt, "Incubators: tool for entrepreneurship?," *Small Business Economics*, vol. 23, pp.127-135, 2004.
[22] P. Albert. (2003) Les incubateurs sont-ils au service des entrepreneurs ? Annales des Mines. [On line]. Available: http://www.annales.org/ri/2003/ri-decembre2003/albert27-29.pdf
[23] R. Gulati, N. Nohria and A. Zaheer, "Strategic Networks", *Strategic Management Journal,* vol. 21, pp. 203-215, 2000.
[24] D.J. Teece, G. Pisano and A. Shuen, "Dynamic capabilities and strategic management", *Strategic Management Journal*, vol. 18, pp. 509-533, 1997.
[25] D. Bögenhold, "Social capital as strategic element of venture creation," 2nd Annual conference of the European Academy of Management, Stockholm, 2002.
[26] C. Baret, I. Huault and T. Picq, "Management et réseaux sociaux. Jeux d'ombres et de lumières sur les organisations", *Revue Française de Gestion*, vol. 32, pp. 93-106, 2006.
[27] S. Charreire and I. Huault, "Le constructivisme dans la pratique de recherche: une évaluation à partir de seize thèses de doctorat". *Finance, contrôle, stratégie,* vol. 4, pp. 45, 2001.
[28] R. Yin, *Case study research designs and methods*, 2nd ed, Sage Publication, edition revise, pp. 29, 1989.
[29] R. Stake, *The art of case study research*, Sage Publications, 1995.
[30] K.M. Eisenhardt, "Building theory from case study research," *Academy of Management Research*, vol. 14, pp. 532-550, 1989.
[31] J. Igalens and P. Roussel, *Méthodes de recherche en gestion des ressources humaines*, Economica, pp. 70-73, 1998.