

Determinants of the success of Islamic finance of agricultural entrepreneurship projects in Algeria

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Summary: This work aims to identify key variables that determine the success of Islamic finance of the agricultural entrepreneurship projects in Algeria. The adopted approach in the study is the prospective structural analysis using MICMAC method. After listing the data (internal and external variables) that characterize the system under study, filling in the matrix of direct influences as well analyzing the potential indirect plan, we can identify the key variables. These key variables are developing laws and legislations on some Islamic financing modes, political will, the role of the Central Bank, internal procedure for granting credit, integrity and accountability, efficiency and professionalism, confidence and clarity. We can add other regulatory variables such as the role of the Masjids, effective independent monitoring of compliance with Shari'a, preservation of capital, and the compulsory reserve

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1. Introduction:

1.1 Islamic Banking or Finance

The Islamic banking or finance is the financial system that is abided by Islamic financial rules, and it does not contain any form of "Riba". In addition, Sharia also prohibits money inflation (e.g. accumulative interest rate) where the loan amount increases if the borrower delayed the payment process. The added amount to the loan should be fixed through the whole period (Alsmadi & Zarour, 2015).

1.2 Principles of Islamic Banking

The Islamic Banking is characterized by: (Alsmadi & Zarour, 2015)

- ✓ Prohibition of Interest or Usury
- ✓ Ethical Standards
- ✓ Moral and Social Values
- ✓ Liability and Business Risk

1.3 Islamic financial formulas

1.3.1 Modharaba (profit sharing)

In Modharaba, both the bank and the client (or the investor) can invest money with the other side or partner. The business process will then be subjected to gain and loss rule and each partner will be affected by either case. Usually, the investor partner will lose the money, and the other partner will lose the effort or time.

1.3.2 Mosharaka (joint venture)

The individual can contribute to a new business with their money, support, land, tool, or any other equipment while the other partner contribute with the idea, the effort, etc. The main idea from Islamic Sharia perspective is that both partners are subjected to winning or losing (Uusmani & Taqī ‘Uṣmānī, 2002).

1.3.3 Murabaha (cost plus)

In most cases, Murabaha refers to the cases where investors decide to be a partner to the bank. The bank can use the money in many activities such as building houses, buying lands, establishing businesses, etc. The profit or loss that comes from such investment can then be shared with the investors based on their investment amount.

1.3.4 Wadeea'a (safekeeping)

In those cases, the customers hold their money in the bank for safekeeping. The Wadeea'a is fixed, and it does not inflate with interest as in other typical banking systems.

1.3.5 Ijar (leasing that ends with ownership)

This is usually used when the client buy apartments or houses. A partnership is formed between both partners where each one will pay a certain amount of money to buy the apartment or the house. The bank usually pays the majority of the capital and hence the customer pays money for the bank for renting in their part of the apartment. The renting amount keep decreasing as the customer share keep increasing and the bank share decreasing. Some Islamic banks or scholars may still not agree on this process or some of its details.

1.3.6 Gardh Hassan or free loan

Some banks offer to their customers loans with no interest at all. In some cases, processing fees are accepted, as they are not considered as add-ons on the capital but as loan processing fees.

1.3.7 Bai-Assalam

It is a contract between a buyer and a seller. The buyer pays money in advance for some good that will receive later on. This is usually applied for crops. For the process to be Approval of Islamic law, the sold items should be specified in details (Ayub, 2013).

1.3.8 Rent or Ijar

Islamic laws legalize rent with conditions that rent should specify not only payment amount but should also specify the period. The rent can be for not only a house, car, land, apartment, but it can be also for a service or for using some equipment or material.

1.3.9 Sokook or Islamic Bonds

These Islamic bonds are financial certificates that have no interest. The money in such process can be utilized under one of the legalized activities mention earlier.

1.4 Islamic formulas of the agricultural finance

Agricultural finance is characterized by a high level of risk and uncertainty. Most banks are reluctant to finance agricultural economic activities, especially in the production stage, due to the correlation of agricultural activity with weather conditions, pests and diseases on the one hand, and poor repayment rates on the other hand (Al Nabulsi, 2014). There are many types of Islamic finance:

1.4.1 Al-Salam

Is a type of sale when the price is paid immediately and the item not delivered.

Farmers or any other investors need money to cover the cost of tillage, the processing of the land, the purchase of production inputs from fertilizers and seeds, and the other operational costs necessary until the end of harvesting.

1.4.2 Al-Sharikah

Al-Sharikah means any contract made by two or more parties pertaining to capital and work (management) for making profit.

1.4.3 Muzara'ah

It is an investment contract for agricultural land between the owner of the land and another person working in the investment. The crop is shared between them according to agreed quotas.

1.4.4 Musaqah

It is a partnership between the owner of the trees and another person based on the care and watering, according to an agreed share. The tree here means every plant whose assets remain in the land for more than one year.

1.4.5 Mugharassa

Is a contract between the owner of the land and another person who plant the trees or any other plant. The yield is divided according to agreed quotas.

2. Method

We will use the structural analysis

2.1 The prospective structural analysis

The structural analysis is the second step in the strategic foresight approach. In fact, the structural analysis aims to highlight the structure of the relationships that exist between the qualitative variables (quantifiable or not), which characterize the studied system. In fact, the structural analysis allows us to describe this system using a matrix with interconnects, which are their system components. The final objective of the structural analysis is the identification of key variables, which controlling the evolution of the system under study by the chosen horizon. Moreover, structural analysis has two complementary objectives: first, to obtain a representation for the system under study in order, second, to reduce systematic complexity to its main variables. In the structural analysis, a system is a set of interrelated variables. The network of the relationships between variables is very important to understand the evolution of the system in the future (Godet, 1994).

2.2 The history of the structural analysis

The first emergence of the structural analysis was in the works of Jay FORRESTER in 1961 (Godet et al, 1994). Moreover, Structural analysis is based on Leontief's input-output matrices, on

the theory of graphs and the simulation exercises in the USA to fulfil American army requirements. After that, the structural analysis was widespread through works of R Saint Paul and Teniere-Buchot P F (1974), SEMA, and J Barrand and C Gtigou (1984).

2.3 Utility of Structural analysis

J E Lefebvre (1982) indicate some structural analysis applications in several fields:

- Build systems dynamics models.
- It can be a part or a phase of an overall approach such as scenarios method or any other foresight study, which is the case in our study.
- It can help a group of researchers in a specific objective.

We can use structural analysis in two main ways:

- In decision-making. The POPOLE model of Teniere-Buchot P F (1973) is a good example.
- In forecasting (identifying key variables that characterize on the future dimension).

2.4 Description of the method

Structure analysis is carried out by a working committee consisting of experts in the field related to the studied subject. Generally, the members of foresight team are between 8 and 15. The following phases of structural analysis are as following:

Phase 1: collect the data (variables) The first step consists in collecting all the variables that characterize the studied system. Generally, the list of variables is between 70 or 80 variables. Then, we give a precise definition for each variable (Godet, 1994).

Influence of ↓	On →	Internal variables			External variables			
		V1	V2	...		V1	V2	...
Internal variables	V1							
	V2		1				2	
	...							
External variables	V1						4	
	V2		3					
	...							

- 1: relations between internal variables.
- 2: the influence of internal variables on the environment.
- 3: the influence of the environment on the internal variables.
- 4: relations between external variables.

We use two categories of variables in the structural analysis: internal variables, which characterize the studied phenomenon, and external variables that characterize the explanatory environment¹.

The list of variables should be as brief as possible. We use non-direct interviews with open questions such as “in your opinion, what are the factors which control the future evolution of such or such phenomenon?”

We should adopt several points of view about the dimension of the list of variables. The points of view are political, economic, technological and social. Therefore, we can aggregate the collected variables in homogeneous groups.

Finally, detailed information about these variables are essential in order to identify the interrelationships.

Phase 2: The degree of the influence between variables

The filling in the matrix allows starting a dialogue and exchange of views about the subject under study between the members of foresight team.

With regard to the degree of the influence between variables, there are four levels:

- 0: no direct influence.
- 1: low direct influence.
- 2: medium direct influence.
- 3: high direct influence.
- P: Potential direct influence in the future.

The filling of the matrix is carried out using a questionnaire distributed on the experts and the members of the foresight team.

¹ Richard RUNES, Méthodes de prospective et d'analyse stratégique

http://www.lapropective.fr/dyn/francais/cours_cnam/synthese-prs201.pdf

We can use one of two methods in the description of the relationships between variables:

In rows, by identifying the influence of each variable on the other variables.

In columns, by recording the other variables influencing each variable.

It is useful to use both methods in order to compare the results and consequently identify errors made.

Therefore, we should take into consideration potential relationships between variables. A potential relationship refers to an incipient relationship that was weak in the beginning, but which could, in the future, very influential (for example, the consequence of technological change).

A best filled in the matrix of direct influences should be between 15 and 25 to 35 per cent full, depending on the size of the matrix and the decision of the foresight team.

Phase 3: Selection of important (key) variables using MICMAC technique

This phase consists in identifying the key variables that are essential to the system's development in the future, first by using direct classification, then through indirect classification.

2.5 Comparison between direct, indirect and potential classification

Direct classification: results from the short to medium-term interplay of relationships. Its horizon correspondents to less than ten years.

Potential classification: integrates chain of reactions that are necessarily take between ten and fifteen years.

Potential Indirect classification: goes farther than the potential classification, with repercussions on the system in the very long term.

3. Result and Discussion

3.1 The list of variables

We collect 18 variables that characterize the Islamic finance in Algeria. These variables are selected through interviews with experts in the field, previous studies, and reports.

3.2 The characteristics of the Matrix of Direct Influences (MID)

The 35.80% fill rate reflects the direct influences between system variables. This rate is more than 30%. It is considered a good rate of filling. The rest 64.20% represents the indirect influences between the variables of this system, of which the rest of the MICMAC method is based.

3.3 The direct Plan

Five sectors characterize this chart:

Sector 1: influential variables (determinant variables). These variables are high influential but low dependent. Sector 1' variables are the explanatory variables that condition the rest of the system. These variables are developing laws and legislations on some Islamic financing modes, political will, and the role of the Central Bank.

Sector 2: Relay variables. These variables are highly influential and highly dependent. These variables are unstable by nature, because of their repercussions on other variables. These variables are internal procedure for granting credit, integrity and accountability, efficiency and professionalism, and confidence and clarity.

Sector 3: Resultant variables. These variables are low influential and high dependent. Results variables are influenced by the determinants and the relay variables. These variables are human and social services, expand the base of banking services, and improve the quality of services to customers.

Sector 4: Excluded variables. These variables are low dependent and low influence. These variables constitute marked trends or factors that are ships with it. The autonomous development characterize these variables because they are not determinants of the future of the system under study, so, we can exclude them from the analysis. These variables are government policy, support youth agencies policy, role of the Shari'a Commission, and offers Zakat Fund.

Sector 5: Middle cluster variables. These variables are averagely influential and/or dependent variables. We can say nothing about these variables. These variables are the role of the Masjids, effective independent monitoring of compliance with Shari'a, preservation of capital, and the compulsory reserve. We can say that they are regulatory variables.

3.4 Direct Potential Plan

There are not many changes compared to the direct plan. We have the same interpretation.

3.5 Indirect Potential Plan

We have only one change: the variables internal procedure for granting credit become a determinant variable.

4. Conclusion

With the lack of sources of funding on the one hand, and the alienation of agricultural entrepreneurs from the traditional ways of financing through Riba-based banks, on the other hand, the option of Islamic financing for agricultural projects stands out as a possible alternative.

This work aims to identify the important variables that control the success of the Islamic finance of the agricultural projects. These important variables are the development of laws and legislations on some Islamic financing modes, political will, the role of the Central Bank, internal procedure for granting credit, integrity and accountability, efficiency and professionalism, confidence and clarity.

We can add other regulatory variables such as the role of the Masjids, effective independent monitoring of compliance with Shari'a, preservation of capital, and the compulsory reserve.

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6. Appendices

Tab.01: The Matrix of Direct Influences

	1 : Services	2 : Exp_base	3 : Capital	4 : Reserve	5 : Hm.sc.serv	6 : Procedure	7 : Polit.will	8 : Centr. Bank	9 : Masjids	10 : Laws.leg	11 : Gov. policy	12 : Sup. Agenc	13 : Integ. accu	14 : Effic. prof	15 : Conf.clar	16 : Shari'a	17 : Zakat	18 : Indip. Shar
1 : Improve the quality of services to customers.	0	2	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
2 : Expand the base of banking services.	2	0	0	0	2	0	0	0	0	0	0	0	1	1	1	0	0	0
3 : Preservation of capital	1	1	0	2	1	0	0	0	0	0	0	0	1	1	1	0	0	0
4 : The compulsory reserve	1	1	1	0	1	0	0	0	0	0	0	0	1	1	1	0	0	0
5 : Human and social services.	2	2	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0
6 : Internal procedure for granting credit	3	2	1	1	1	0	0	0	0	1	0	0	2	2	2	0	0	0
7 : Political will	1	0	0	0	0	0	0	3	2	2	2	2	0	0	0	1	2	1
8 : The role of the Central Bank	1	1	2	2	1	2	0	0	0	2	1	2	1	1	1	1	1	1
9 : The role of the Masjids	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2	2	2
10 : Developing laws and legislations on some Islamic financing modes	2	2	2	2	2	2	0	0	0	0	0	0	2	2	2	1	1	1
11 : Government policy	0	0	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0
12 : Youth support agencies policy	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
13 : Integrity and accountability	2	2	2	2	2	2	0	0	0	0	0	0	0	2	2	0	0	0
14 : Efficiency and professionalism	2	2	2	2	2	2	0	0	0	0	0	0	2	0	2	0	0	0
15 : Confidence and clarity	2	2	2	2	2	2	0	0	0	0	0	0	2	2	0	0	0	0
16 : Role of the Shari'a Commission	1	1	0	0	1	0	0	P	0	P	0	0	0	0	0	0	0	0
17 : Offers Zakat Fund	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
18 : Effective independent monitoring of compliance with Shari'a.	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0

© UPSOR-EPTA-MICMAC

Source: MICMAC outputs

Tab.02: Characteristics of the Matrix of Direct Influences

Indicateur	Valeur
Taille de la matrice	18
Nombre d'itérations	3
Nombre de zéros	208
Nombre de un	49
Nombre de deux	60
Nombre de trois	5
Nombre de P	2
Total	116
Taux de remplissage	35,80247%

Source: MICMAC outputs

Fig.01 : Direct Plan

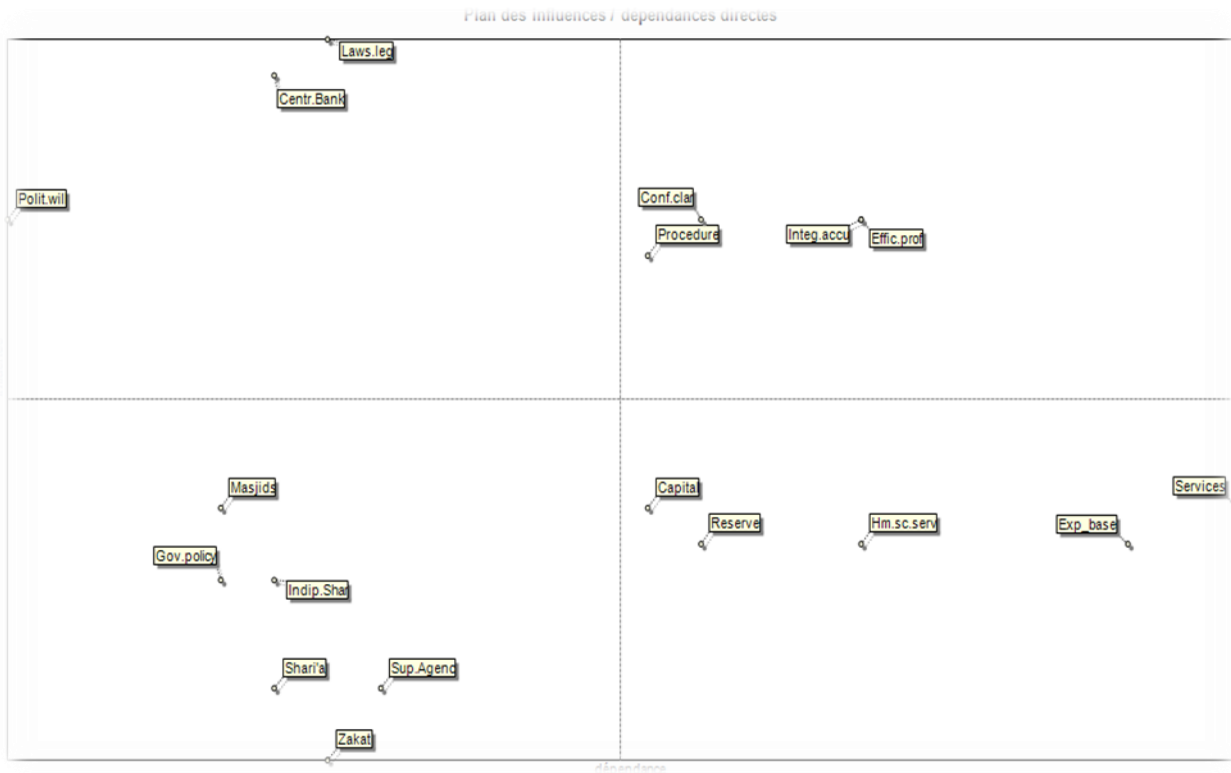


Fig.02 : Direct Potential Plan

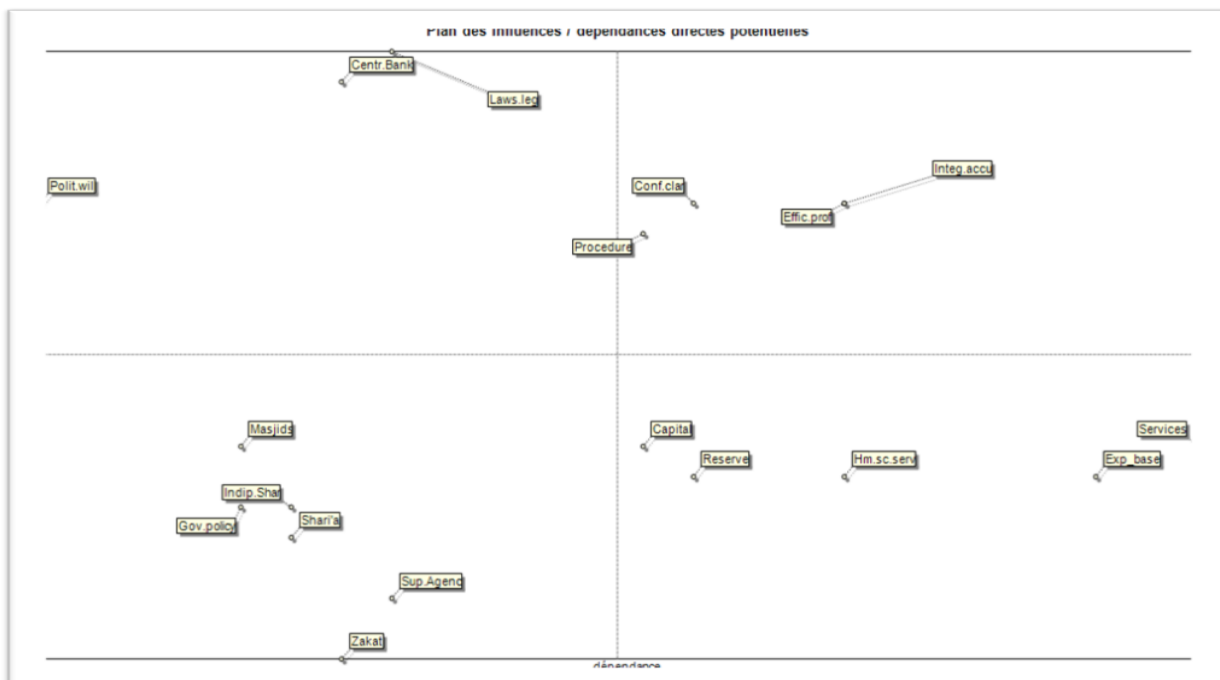
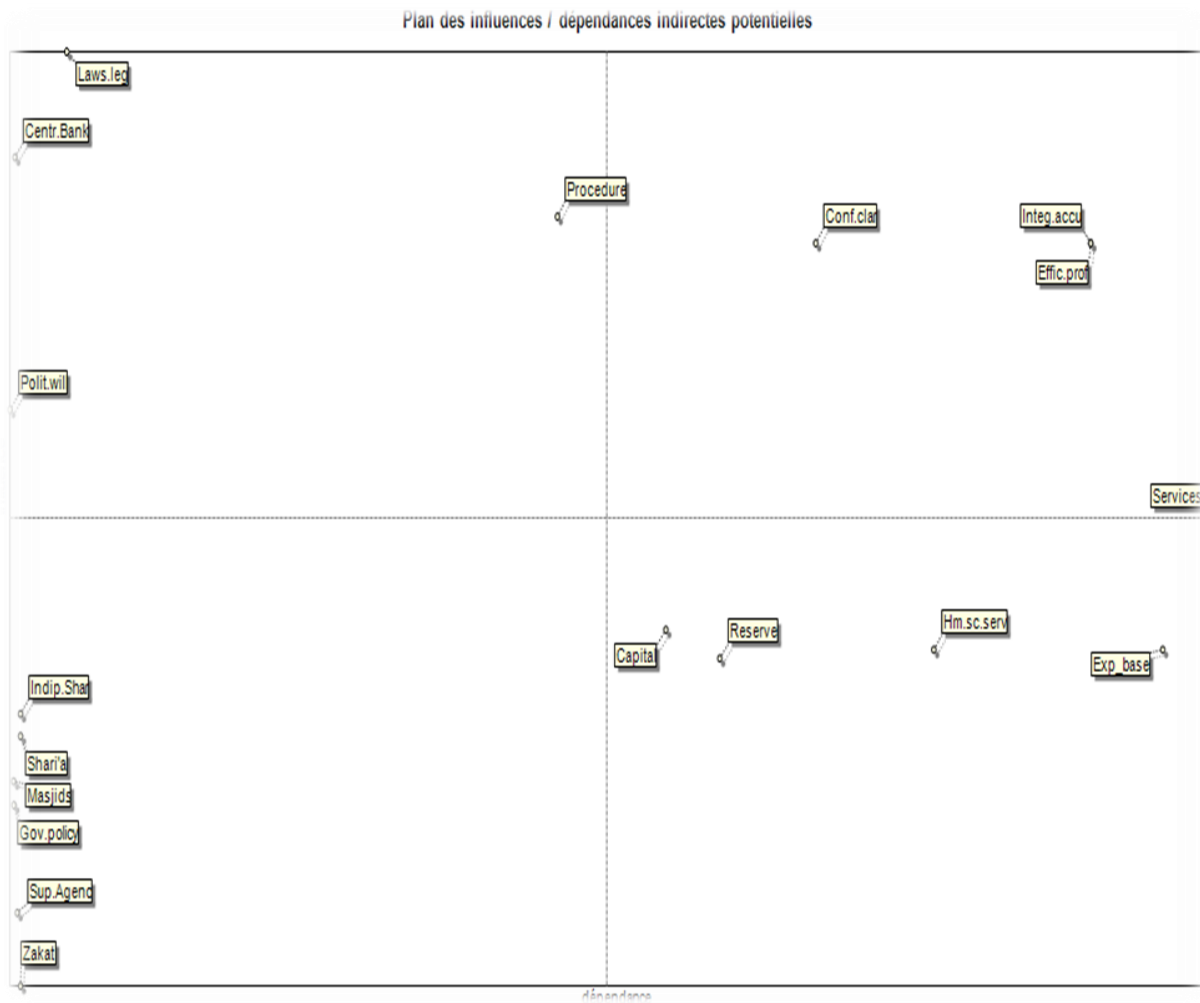


Fig.03 : Indirect Potential Plan



Source : MICMAC outputs