The Strategy of Islamic Banks in Hedging Risks: The Case of Al Baraka Islamic Bank of Algeria

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Abstract :
Islamic banking is not without risks that may arise from its activities or from the environment in which it operates, and risk management is considered one of the most important topics in banking and financial management , so this study aims to analyze the credit risk management strategy of Al Baraka Bank Algeria, by defining principles on which credit risk management is based, and the methods it uses to hedge against these risks, we used the questionnaire prepared for the purpose and distributed to the employees of multiple agencies of Al Baraka Bank Algeria. The result study is that Islamic banks face credit risk higher than their classic counterpart due to some of imposed Sharia requirement that must be adhered to. It was also concluded that the risk management of Al Baraka Bank works to reduce the degree of risk to the lowest possible degree, and focuses on debt-based financing formulas for ease of use. Therefare the bank should develop the risk management system and the capabilities of employees in controlling banking hedging techniques, and expand more work in various forms of Islamic finance.
***Key Words*:** Islamic bank, Banking risk, Hedging risks , Islamic finance formulas.

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Introduction:

Islamic banks are characterized by self-immunity against risks that make them able to hedge and stabilize during financial crises thanks to their products based on non-fictitious and on real assets, as well as actual financing formulas. But this does not imply that there is no risk, Reality reveals several risks facing Islamic banking such as liquidity problem, credit risks, operational and technological risks ... and others, hence the process of risk management is considered one of the hedging tools within Islamic banks, and this process took on great importance and became an integral part of the banking system in light of adherence to the rules of Islamic Sharia and observance of laws and regulations. Applicable both locally and internationally.

In Algeria, Islamic banking is still at the very beginning, and the Algerian “Al Baraka” Islamic Bank is considered the first in terms of origin in the Algerian banking country environment, it includes the Directorate of Risk Management among those which are concerned with running its transactions. Its mission is to manage risks and hedge in order to maintain the efficiency and profitability of the bank on one hand, and to preserve its reputation and bring reassurance to its clients on the other hand.

The problematic: Of this study revolves around the following main question:

What is the strategy of Islamic banks in hedging from banking risks?

Within this query, the following questions branch out?

- What are the risks facing Islamic banks?
- How is risk managed in Al Baraka Islamic Bank of Algeria

Study hypotheses: We based our study on the following hypotheses:

- The first hypothesis: Al Baraka Bank Algeria has the principles on which risk management is based.
- The second hypothesis: Al Baraka Bank uses financing formulas with high credit risk at minimal levels as a method of hedging.
- The third hypothesis: Al Baraka Bank relies on the elements of the credit decision before granting any.

Importance of the study: The importance of this study lies in handling one of the important topics in the banking field, precisely the Islamic banking system, and its strategy in managing its risks.

Study Objectives: This study aims at the following objectives:

- Addressing the concept of banking risk and hedging.
- Standing on the various risks faced by Islamic banks and getting acquainted with the most important means of hedging and treatment methods.
- The theoretical projection of Al Baraka Bank Algeria in order to get used the practical reality of risk management how to apply the precautionary rules, as a sample from Islamic banks.

Study methodology: In order to achieve the research objectives and answer the presented problematic, we relied on the descriptive approach in presenting the theoretical side of our topic, and we also relied on the analytical approach in the applied aspect to study the case of the Algerian Islamic Bank Al Baraka.

I. The Islamic banking system and its risks.

1. Definition of the Islamic bank:

Islamic banks are defined as financial institutions that work to collect funds and employ them in accordance with the provisions of Islamic law in a way that serves society and achieves fair distribution away from the practice of interest in the mean time they should be transparent in the operation (Riba) and from every forbidden deed in Islam. Transparent in the operations and the transactions between clients, without any prejudice, damage or fraud involving all parties in profit and loss holding a form of Islamic financing (Moharib, 2011, p.84).

Islamic banks were defined by the International Federation of Islamic Banks Agreement as: “Those establishments or institutions whose establishment law and statute explicitly stipulate adherence to the principles of Islamic Sharia and nondealing with interest taking and giving (Riba) and applying Islam with all its orders and prohibitions and achieving its objectives”(Al-Ajlouni, 2017, p. 110).

2. Sources and uses of the funds of the Islamic bank:

Islamic banks work to provide their services by collecting resources and then using them in their legal ways as follows:

2.1 Sources of funds for Islamic banks: They are divided into two parts, two internal and one external, which are explained as follows:

a. Internal sources: Mainly represented in (Al-Seirafi, 2019, p. 32) as:

- The paid-up capital from the shareholders at the beginning of the bank’s establishment so that it can be approved to do business.
- Reserves, which are funds that are deducted in a certain percentage from the bank's net profits, to support its financial position and maintain the integrity of its capital, the stability of the value of its deposits, and the balance of its profits.
- Retained earnings are those profits that are surplus or remaining after the distribution process is carried out. It is also considered among the shareholders' equity.
- Provisions, which are amounts deducted from the total profits to meet the risks that may occur during the next financial period, such as the risk of non-payment, breach of trust or insolvency cases of a partner ... etc. (Amara, 2013, p. 36)

b. External sources: They are represented in the various deposits that customers place in the bank. They are considered one of the most important external sources of financing, including:

- Current deposits, which are demand deposits, as they are characterized by easy withdrawal at any time. They have no minimum and maximum deposits. (Al-Hashemi, 2010, p. 166)
- Investment deposits are the funds that the client deposits with the intention of investing for a certain period in the form of a contract called a “speculative contract “ in which the client bears the profit or loss. (Ashoub, 2011, p.64)
- Savings deposits are accounts that are opened to encourage small savers. In return they get a part of the realized profits calculated on the basis of the minimum balance of the account. The saver is given a special book for withdrawals and deposits.
- Islamics sukuks representing documents of equal value for common shares in ownership or investment activity that is legally permissible according to Islamic financing formulas. (Al-Mousawi, 2011, p. 44)

2.2. Uses of Islamic banks funds: Islamic banks use and invest their fund as follows:

a. Funding formulas based on participation in return of investment: This can be summarized as follows:

a.1. Speculative financing: A way where banks finance and invest in projects on the basis of speculation. The bank is called the head of money and the obligated undertaker who does the work is called the speculator. The bank does not interfere in the details of the work. At the end of the operation, the profit is shared according to the agreement between the two parties, how ever in the case of loss, it is borne only by the bank. (Mahmoudi and Berkham, 2019, p. 36)

a.2. Participation financing: Bank and client provide money in equal or different proportions in order to contribute to an existing project or establish a new project, so that each one of them becomes the owner of a share in the capital in a fixed or diminishing manner and is entitled to his share of the profit. The loss is shared according to the participant in capital. (Gherbi, 2017, p.32)

b. Forms of financing based on indebtedness: Mentioned as follows:

b.1. Murabaha financing: It is represented by the murabahah process for the purchase order and murabahah by proxy. The first is characterized by conducting the banking process on the basis of the bank buying a specific commodity according to the specifications requested by the customer and then reselling it to him with Murabahah (earing), i.e. with its original price plus the legally retained cost and a specific profit margin according Prior agreement, Murabahah process is based on proxy for determining the dealer of this type of a certain commodity according to a specific specification and price, through which he authorizes the bank (for a certain time) to carry out the process of purchasing this commodity. (Al-Azazi, 2012, p. 29)

b.2. Financing by leasing: Islamic banks own buildings, machines, or equipment and rent them to clients for an agreed fee, this process is called leasing, with conditions to be determined with the lessee. (Abu Odah, 2006, p. 23)

b.3. Assalam financing: Peace was defined by the jurists as an expedited sale, that is, it is a financial transaction whereby the price is expedited and presented in cash to the seller who is obliged to deliver specific goods with exact specifications within a known period, so the deferred is the sold commodity described in the liability and the immediate is the price.

b.4. Financing with the good loan and Zakat: A good loan is the bank's lending money without interest to individuals in need of financial assistance in order to physically rehabilitate themselves (Jordanian, 2010, p. 11). As for zakat, it is the process of collecting funds from the clients of the Islamic bank and those who are available on the condition of zakat (reach the year and the nisaab). They spend it in its legitimate destination in order to achieve social development and to promote images of social solidarity within Muslim societies. (Zakat Service, 2020)

b.5. Financing by istisna'a: It is the case when a person asks another to manufacture something specified for him in exchange for a specific price, provided that the resources are from the manufacturer. (Al-Azazi, 2012, p. 42).

3. Definition of banking risks:

It means risk in terms of banking, as the possibility of a loss occurring directly through business results or a loss in capital, and indirectly through obstacles that hinder the bank in implementing its banking policy and limit its ability to exploit the available opportunities. (Bounekab, and Bel Atrash, 2019, p. 45)

It can also be said that banking risk is the possibility of exposing the bank to unexpected future losses, which lead to deviation of the actual results from what was previously planned, or the presence of obstacles that limit the bank's ability to achieve its goals effectively, quickly and with the least loss and cost. (Bin Amara, 2009, p. 2).

4. Risks of Islamic banks:

Islamic banks face two types of risks, risks they share with their classic counterparts resulting from the nature of the banking business, and risks resulting from the specificity of their work. We explain this in what follows:

4.1. Financial risks: These are risks related to the management of the bank's assets and liabilities, that results in financial losses, and are divided into:

a. Credit risk: Credit risk is in the form of settlement risk or payments that arise when one of the parties of transaction has to pay cash (Salam or Istisna'a contract) or to hand over assets (Murabaha sale) before receiving the corresponding assets or cash. It exposes it to a potential loss, and in the case of profit-sharing formulas (mudarabah, musharakah), credit risk comes in the form of the partner not paying the bank’s share when it is due, This problem may arise as a result of information discrepancies when banks do not have sufficient information about the real profits of business establishments that its financing came. Since the Murabaha contracts are trading contracts, credit risks arise in the form of the risks of the other party, who is the beneficiary of the financing, and whose performance in this trade has faltered, perhaps due to general external factors rather than his own. (Tahrawi, 2014, p. 28)

b. Market risk: Market risk refers to the potential effects on the economic value of the asset as a result of fluctuations in prices, such as comparative benchmark prices, foreign exchange rates, stock prices and commodity prices. Exposure to market risks may occur at some times or throughout the contract term. The risk of losses in investment centers inside and outside the balance sheet, which arise from the movement of market prices, that is, fluctuations in the value of negotiable or leasing assets (including sukuk), and in investment portfolios listed outside the financial position unilaterally. (Islamic Financial Services Board, 2005)

c. Liquidity risk: It is represented by the lack of sufficient liquidity for operating requirements or to fulfill the bank’s obligations. This risk is more severe in Islamic banks because of: (Tahrawi, 2014, p. 31)

Interest-bearing loans are not permitted in Islamic law. Therefore, Islamic banks cannot lend with interest to meet liquidity requirements when needed. Initially, it cannot sell debt except at its face value. Therefore, Islamic banks cannot bring in financial resources by selling debt-based assets.

Failure of central banks to play the role of the last lender to Islamic banks due to interest.

4.2. Non-financial risks: These are the risks arising from the efficiency of the bank in managing its operations, which contain a group of the following risks:

a. Operational risks: They are the risks resulting from professional or technical errors of employees, whether intentional or unintentional, such as failure to adhere to the provisions of Islamic law and the difference in the application of some transactions due to the difference in the fatwa, as well as the risks facing Islamic banks in the operation process, negligence or default. Or the executive management encroaching on the rights of others, especially towards depositors and shareholders. Operational risks arise when the Islamic bank does not have sufficient and trained human resources to carry out Islamic financial operations. (Thorsten et al, 2010, p8)

b. Legal risks: These risks are the result of errors in the texts of the contracts, or a delay in taking legal action or violating some laws or rules.
c. Political risks: Political events affect the banking business negatively as a result of some practices such as boycott and unrest.
d. Risks of the capital adequacy standard: The Basel Committee issued a number of documents and decisions, the most important is the capital adequacy standard. The importance of this criterion is that it is considered as the first comprehensive study that exists between capital in its comprehensive sense and between assets and likely contingent liabilities. Risk weights, which must not be less than 6%.
4.3. Special risks: Islamic banks use different Islamic financing formulas, that are exposed to risks. These risks can be explained through the most important formulas used as:
a. Participation formula risks: Regarding the problems of dealers, it revolves around the difficulties faced by Islamic banks in supervising projects financed in the musharakah formula, and following up on their implementation, which leads to higher costs, especially if the project is far away from the bank, The risk of participation increases due to the lack of a guarantee requirement with the possibility of an existing the wrong choice of the partner. In addition, the use of this formula may cause what is called the risks of compensating the owners of capital. This risk appears for those who provide their money to the banks in order to finance with them in the short term, when the participation system is strictly applied. All in all, this leads to a mismatch between the deadlines that they have chosen and the deadlines for implementing projects financed by the banks with participating funds, which may cause liquidity risks. (Barani Abu Shahd, 2013, p.170)
b. Risks of the speculative formula: The problem of moral vulgarity and the problem of reverse choice is one of the most important risks facing this contract. A researchers has argued that the problem of moral vulgarity is due to the absence of an element of interest, and that the outcome of the investment process depends on the effort exerted by the speculator, this is something that the bank cannot notice. Regarding the problem of reverse selection, it occurs when the speculator provides the Islamic bank with incomplete or incorrect information about his experience and competence in managing funds, or the speculator fraud in the financial accounts of the investment project. Other aspects facing this contract have also been raised, such as the event when a third party enters into managing the project, and does not adhere to the terms of the Mudaraba contract, this could be also a risk. (Adel, 2011, p. 190)
c. Risks of the Murabahah Process: Through the stages that the Murabahah contract goes, we can find a number of risks that may face the application of this Islamic formula, which are: (Barani Abu Shahd, 2013, p.
- The nature of the murabahah contract requires the bank to possess that commodity and its possession and sale of those who ordered to purchase it with the aforementioned profit, and this imposes on the Islamic bank the responsibility and risk of loss before delivery, and thus it bears all the risks of the trader in order to acquire and transfer the commodity. This process may require storing it, and hence he is a guarantor for it until the date it was delivered.

- Most of the risks arise from the lack of agreement on the nature of the contract and the legal issues that may arise, We mean here the issue of the order issued by the customer, as it does not represent a sale contract but rather a promise to buy, and this promise is not subject to agreement in terms of mandatory.

The bank faces the risk of non-payment, and the issue here is related to the client's financial position, in addition to its position in the national and global market alike in relation to its activity, as well as its availability of the qualitative human element capable of managing and avoiding the expected professional risks.

d. Risks of the Istisna'a process: Upon entering into the Istisna'a contract, the bank plays the role of the builder, the contractor, the maker and the supplier. Since the bank does not specialize in all these trades, so it relies on subcontractors, which exposes it to risks in two respects. The first is the client's failure to pay dues as for the bank, the second relates to the delivery of the industrious thing. The risks of istisna'a arise from the following sources: (Bin Nasser, 2009, p.93)

The manufacturer may prefer to deliver the manufactured thing to the bank on time or deliver it in contravention of the agreed upon specifications.

- Customer’s failure to pay in full or defaulting on payment at the time of maturity.
- Price fluctuations after being identified in the Istisna'a contract.
- Damage to the concealed item held by the bank before it is delivered.(Khasawneh, 2008, p. 149)

e. Leasing risks: Among the most important risks that a lease contract faces are: (Muhammad Abdel Halim, 2015, p.33)

- The risk of not paying the lease installments in full on time, or returning the leased assets at the end of the lease term, in the operating lease.
- Legal risks of not buying the leased property in the financial lease by the customer.
- Market risk in the case of a financial lease that the value of the leased assets in the market is higher than the contracted value.

f. Moral risks: The nature of the relationship between the Islamic bank and the investor requires a certain amount of moral qualities in the investor, such as: honesty, honesty, commitment to deadlines. These characteristics represent a basic pillar of the success of the investment. (Hammad, 2019, p.18).

II. Risk management techniques and methods of hedging them in Islamic banks:

1. The concept of banking risk management strategy:

There are several concepts of risk management strategy, including: (Al-Maoufi and Abdulaziz, 2017, p. 54)

Banking risk management strategy concerns all the measures that the bank undertakes to limit the negative effects resulting from risks and keep them to a minimum. Banking risk management is defined as the process by which the bank is managed it uses practical methods to deal with risks and develops methods and procedures that reduce the incidence of losses.

It can be said that banking risk management refers to the methods and processes that can be followed by the bank to identify business policies, identify potential risks, understand their nature and methods of controlling them.

2. The importance of the banking risk management process:

The importance of banking risk management lies in: (Bouakaz, 2011, p.84)

Preserving existing assets to protect the funds of depositors, creditors and investors.

Tightening control and controlling risks in activities or businesses to which their assets are linked, such as loans, bonds and credit facilities.

Protecting the bank's image by providing confidence with dealers, by protecting its permanent ability to generate profits despite any accidental losses that may lead to diminished profits or non-realization.

Preparing studies before losses or after their occurrence, in order to prevent they happen , or the recurrence of such risks.

Determine the specific treatment for each type of risk at all levels.

3. Methods of dealing with banking risks:

Unlike the thought of risk management in a capitalist economy that is based on the transfer of risks from one party to the other, the thought of risk management in the Islamic economy is based on the principle of sharing in profit and loss, according to which risks are shared between the various parties contributing to the process. There are many methods that banks adopt in dealing with the risks they face, the most important are:

a. Avoidance of risks: The individual or institution refuses to accept the occurrence of a loss or risk, such as avoiding investing in a certain savings pool and preferring another savings pot that is less risky. In example of this is the bank's refusal to grant high-risk loans in order to avoid credit risk, or not to invest in long-term securities. (term to avoid interest rate risk).

b. Reducing risk: To reduce risk, the bank monitors loan behavior in order to know the warning signs of early stoppage problems, and reduce interest rate risk by using an asset and liability management policy that is designed for that purpose. (Belazouz, 2009, p. 335)

c. Hedging: Hedging differs from insurance in that it is a transfer of risk with assignment of profit potential. (Boukaz, 2011, p.84).

4. Techniques of Islamic banking risk management:

The most important risk management and hedging techniques in Islamic banks, can be summarized in a number of points as follows: (Student, 2020, Risk Management in Islamic Finance - Point of View, on the link: https://alghad.com)

- The promise of sale in the lease contract, as the lease contract ending with ownership is considered one of the Sharia contracts that facilitates the process of owning real estate. This type of contract is taken as long-term, so the Fiqh Council of the Organization of the Islamic Conference has dealt with issuing a decision permitting the linking of long-term rents to the market index.
- Binding of the promise, then Al-Shafei said in the context of his rejection of the binding promise: "If they pledged allegiance to it on the basis that they bind themselves, then it is void for two reasons: first, they sold it before the seller took possession of it, and secondly it was a risk.
- Determining the period in the mudaraba contract, the initial form of the mudarabah contract includes a time period for the termination of the contract, but it was

determined by the end of the commercial process of selling and disposing of the goods, and in order for the mudaraba contract to be valid as a basis for investment accounts in Islamic banks. The term of the mudaraba contract must be binding on both parties. Contemporaries and permitted to make the contract in its period if his contract stipulates that:

- The mechanism for controlling moral risks is the choice of the type of customers on the part of the Islamic bank by studying the degree of moral commitment of the customer. This can be known through the Islamic bank building a database of information on investors to clarify everything related to them, which has to do with the investment dimension, and from while pursuing his investment project and getting involved in it.
- Availability of appropriate human resources operating in the Islamic banking system is a key element of building a strategy to reduce risks in the bank's investments, given that these resources are the ones that study the subject of investment provided by the client, then assess its suitability, and then after approval these human resources are the ones that You follow up on this investment, and this risk can be addressed through employee training and employee selection at the outset.
- Hedging against liquidity risk, the nature of this risk may usually stem from long-term debt, especially in cases of deferred sales; That is, the payment of the price is deferred at the time when the institution is in need of liquidity in order to go through its immediate transactions.
- Hedging against the risk of the rate of return, or the so-called “murabaha rate,” and this requires changing the deferred payment mechanism so that the price is diversified with other payment instruments such as sukuk, stocks, or any investment units that can be negotiable and that enables their owner to easily liquidate them.
- Hedging against risks originating in the market usually caused by changes in financial market prices and rates; that is, the differences between asset prices and rates of return may also be represented by fluctuations in commodity prices or exchange rates.
- Hedging operational risks: These risks are represented by losses that are caused by or resulting from the human element and may be due to professional or technical factors related to the technological means used in the bank. These operational risks may be due to internal or external causes that lead to losses for the bank.

In this context, the Islamic bank can take steps and measures to hedge against some of the aforementioned risks, including:

- Adhering to the principle of diversifying economic and investment activities and striving to achieve a balance between returns and expenditures for these activities.
- Hedging by establishing a cooperative fund, the source of which is part of the profits made, to face any risk or unexpected loss in the bank’s business.
- Paying attention to the role of Sharia supervision and introducing elements to it with administrative and financial experience.

- Follow up the development of the internal control system, in both accounting and administrative aspects, to avoid any defect or emergency that the bank may face, or to remedy before it affects the bank's performance.
- Follow up on the scientific, technological and knowledge development in the field of banking.

Finally, the main role of the central bank's control and supervision of the performance of Islamic banks cannot be excluded, and this requires putting in place laws and legislations that are consistent with their philosophy to reformulate the relationship between them in a way that helps the Islamic bank avoid many of the risks it faces.

III. The strategy of the Algerian Islamic Bank Al Baraka in risk management.

Al Baraka Islamic Bank in Algeria plays a major and important role in gathering resources from dealers and financial markets, then allocating and distributing them to various projects and programs in the various sectors of the economy, especially productivity, in order to contribute to achieving economic and social development.

1. The institutional framework of Al Baraka Islamic Bank in Algeria:

Al Baraka Islamic Bank was approved in Algeria on 05/20/1991, with a capital of 500 million Algerian dinars. Its capital was raised in 2009 to 10 billion Algerian dinars, to which the Al Baraka International Bank, based in Jeddah, Saudi Arabia, and the Algerian Agricultural and Rural Development Bank contribute. Shares of its capital were distributed by majority to the Algerian side at 51%. It is a commercial bank whose banking activity is subject to the rules and provisions of Islamic law, far from usury. (The official website of Al Baraka Bank: www.albaraka-bank.com)

See, the most important stages of Al Baraka Bank Algeria and the development of its capital in following table. We notice through this table Al Baraka Bank Algeria has gone through, a real success in the activity, represented in various Islamic financing operations for projects, individuals and institutions. We see this through the ranks that the bank occupies in the Algerian banking arena, as it was considered the best Islamic bank for the year. It was the sixth in a row in 2018. During the same year it was considered one of the best units of Al Baraka Group in terms of profitability. The bank raised its capital in 2017 to 15 billion Algerian dinars, two years later it raised its capital to 20 billion Algerian dinars.

2. The most important Islamic banking operations presented at Al Baraka Islamic Bank of Algeria:

Developmental institutions and projects need resources to increase their investments and achieve their economic goals. Therefore, Al Baraka Islamic Bank works to search by various means on sources for their financing, to apply financing formulas that are consistent with the provisions of Islamic Sharia, and to provide financial products that also comply with those provisions.

2.1. Products and services of Al Baraka Bank Algeria: Al Baraka Bank used many formulas compatible with the provisions of Islamic Sharia to finance social and economic development projects. Through these formulas, the bank finances a variety of projects in the agricultural, industrial, and infrastructure sectors. The bank finances also small and medium enterprises.

Table (1): Islamic banking products and services offer at Al Baraka bank of Algeria

Liabilites products	Assets products	
Current accounts Check accounts hard currency accounts for natural persons Hard currency accounts for legal persons	Exploitation financing	• Financing raw materials and semi-finished products • Financing goods destined for resale as they are • Financing emerging debt • Financing a pledged public deal • Pre-export financing
Debit / Payment Cards (Gold and Classic)	Investment financing	• Typical investment financing (Murabaha, Istisna'a, Musharakah) Lease financing
Savings account	Mortgage	• New housing financing • User housing financing • Self-financing of construction • Housing expansion financing • Financing a house • Financing the purchase of a plot of land for the purpose of construction
Contribution deposit account	Vehicle financing	• Financing a touristic car • Financing a utility vehicle
Contribution act (Fund act)	Microcredit financing	• Participatory financing • Financing with Qard Hassan (good loan)
	The commitment to sign	• Letter of credit • Bid bond • Ensure proper execution • Payment guarantee (advance payment)

Source: Prepared by the researcher based on the official website of Al Baraka Bank and the annual report of the bank for the year 2017.

Al Baraka Bank Algeria provides a variety of financial products for institutions, professionals and individuals to help them complete their investment projects and meet their exploitative needs, as it proposes financing formulas approved by the bank's Sharia supervisory board: murabahah, sale for sale, salam sale, leasing, Istisna, Musharakah, Mudaraba, ... Etc. Al Baraka Bank Algeria proposes to professionals wishing to develop their money comfortably and safely in various types of investment accounts and deposits, with the amounts and duration they desire. The profits are calculated according to the pre-agreed profit distribution system in line with the criteria of Sharia provisions for speculative operations. Al Baraka is a group of products that facilitate the implementation of foreign trade operations and provide effective solutions that serve the aspirations of its customers within the framework of international payment methods such as free transfer, collections, documentary credits and international guarantees.As a comprehensive bank, Al Baraka Bank Algeria proposes a list of innovative products that are in line with the latest offer of modern technology in response for the aspirations of its increasing number and requirements, for example, the electronic payment card NI CIB and SMS service, online payment service, TPE electronic payment terminals, GAB automatic counters, and remote banking by phone ... etc.

3. An applied study on a sample of the agencies of Al Baraka Bank of Algeria.

After presenting the theoretical axis of the study, we conduct a field study related to the strategy of Islamic banks in hedging against risks. As a model for the case study, we took a sample consisting of four banking agencies affiliated with the Algerian Al Baraka Bank, which are: Mostaganem, Oran, Chlef and Blida. We distributed a questionnaire to 60 employees, then we analyzed the results of come up with the conclusion at the end of the study.

3.1. Methodological procedures for the field study.

Our study relied on the questionnaire in collecting the necessary data directed to the employees of the selected banking agencies, analyzing its results using the application of statistical packages SPSS V22, and then analyzing the program outputs to arrive at the results as follows:

a. Study population and sample: The study population consists of employees of banking agencies affiliated with the Algerian Al Baraka Bank (Mostaganem, Oran, Chlef and Blida). A sample estimated at 60 employees was taken from these banking agencies, 60 questionnaires were distributed and 50 answers were retrieved, as is it is shown in the following table:

Table(2): Distribution of the forms to the employees of the banks under study

Name of the banking agency	The number of forms distributed	The number of forms recovered	The percentage of the retrieved forms
Mostaganem Agency	20	16	80%
Oran Agency	15	15	100%
Chlef Agency	12	9	75%
Blida Agency	13	10	77%
Total	60	50	83%

Source: Prepared by researchers using the questionnaire forms.

We note from Table No.(2) that the total questionnaires retrieved amounted to 83%, which is a significant percentage that can be relied upon in the analysis and hypothesis testing.

3.2. Tests related to the study tool: The validity of the study instrument's reliability can be identified by using several tests, which we include as follows:

a. Study Tool Validity Test:

a.1. Virtual honesty: where it was presented to a group of specialized professors and some employees in banks to ensure the integrity of the statements and their compatibility with the purposes of the research, and then make the changes and corrections referred to.

a.2. The constructive validity of the study tool: The constructive validity of the study tool was calculated through the correlation matrix of the axes and the total degree as shown in the following table:

Table (3): Results of the structural validity of the study tool

Axes	Pearson coefficient	level of significance
The first axis: the principles (standards) on which credit risk management at Al Baraka Bank are based.	0.756	0.000
The second axis: credit risks in the Islamic financing formulas at Al Baraka Bank.	0.888	0.000
The third axis: the extent of application of the elements of credit decision-making at Al Baraka	0.919	0.000

Source: Prepared by researchers based on the outputs of * Spss * Statistics V23 program

The table shows the result of the Person correlation coefficient between the axes and the total score of the tool, as they are all significant, given the level of its significance, which is less than the approved level of significance 0.05, which indicates the existence of a correlation between them, and hence the constructive validity of the study tool.

b. Test the stability of the study tool: The reliability of the questionnaire was tested by adopting the "Cronbach alpha" test. The following table shows the results of the test:

Table (4): Results of the Cronbach alpha stability factor test

Variable	Coefficient of constancy Alpha Cronbach
The first axis: the principles (standards) on which credit risk management at Al Baraka Bank is based	0,854
The second axis: credit risks in the Islamic financing formulas at Al Baraka Bank	0,852
The third axis: the extent of application of the elements of credit decision-making at Al Baraka Bank	0,850
The questionnaire as a whole	0.861

Source: Prepared by researchers based on the outputs of * Spss * Statistics V23 program

It is evident from the above table that the coefficient "Alpha Cronbach" for the whole questionnaire was 0.861, and this indicates its good stability.

3.3. Description of the answers of the study sample.

a. Descriptive statistics results for the demographic variables of the study sample: The results were obtained after unpacking as shown in the following tables:

Table (5): The distribution of the sample members in terms of the demographic variables of the study sample.

Variable	Categories	Frequency	Percentage
Gender	male	32	64%
	female	18	36%
Age	From 20 years to 30 years	6	12%
	From 31 years to 40 years old	31	62%
	From 41 years to 50 years	11	22%
	51 years and over	2	4%
Academic level	Middle school	1	2%
	Secondary school	13	26%
	university	32	64%
	other	4	8%
Professional Experience	Less than 5 years	11	22%
	From 5 to 10	14	28%
	years From 11 to 15 years old	13	26%
	16 years and over	12	24%
Position	Branch Manager-Rehab	9	18%
	Teller	21	42%
	Customer Service	20	40%
	Total of the study sample	50	100%

Source: Prepared by researchers based on the outputs of * Spss * Statistics V23 program

From the above table, we not that the male category is predominant, and we also recorded the age group from 31 to 40 years old, and we note that the percentage of university degree holders tops the ranking by 64%, which is a very high percentage because the bank employs those with university degrees while we noticed that the experience rates were very close in all categories. The bank with the rank of teller has reached 42%, with a slight difference in the rank of customer service, while the percentage of managers is the lowest, which is 18%.

b. Presentation and analysis of the results of the paragraphs of the study axes.

b.1. Presentation of the answers of the sample members of the first axis: Through this axis, the principles on which credit risk management are based were identified. In the following table, the responses of the sample members are presented and analyzed:

Table (6): Presenting the answers of the sample members on the statements of the first axis.

Expressions of the first axis	SMA	standard deviation	Relative weight	Arran-ement
The first axis : ``The principles (standards) on which credit risk management at Al Baraka Bank are based	3,73	0,436	Approval	
1- The Banking Risk Department at Al Baraka Bank tries to measure the banking risk for monitoring and precaution	4,08	0,566	Approval	2
2- Al Baraka Bank uses modern technology and information systems to manage banking risks	3,50	1,035	Approval	8
3- Al Baraka Bank has staff with experience and specialization in credit risk	3,98	0,820	Approval	3
4- The assessment of Al Baraka Bank's assets is a fundamental principle for measuring risk	3,60	1,050	Approval	6
5- The degree of risk in Islamic financing formulas is less than in conventional financing formulas.	3,10	1,199	Medium approval	9
6- The risk management steps are proportional to its size at Al Baraka Bank	3,54	1,216	Approval	7
7-The risk management policy of Al Baraka Bank is characterized by a conservative tendency (prudence and caution).	4,26	0,565	High approval	1
8- Al Baraka Bank uses clear methods of managing credit risk	3,86	0,670	Approval	4
9 - There is awareness within Al Baraka Bank regarding banking risks	3,68	0,713	Approval	5

Source: Prepared by researchers based on the outputs of * Spss * Statistics V23 program

We notice through the table directly above that all the arithmetic averages of the expressions of the principles underlying credit risk management at Al Baraka Bank were greater than the hypothetical average (3), where the largest average of 4.26 was recorded with a standard deviation of 0.56 in Paragraph No. 7, which means agreement of the sample represented among the employees that the risk management strategy of Al Baraka Bank is characterized by a conservative tendency (wisdom and caution). Statement No. 1 ranked second with an arithmetic mean of 4.08 and a standard deviation of 0.56, which means that the risk management at Al Baraka Bank tries to measure the banking risk in order to monitor and hedge. The averages of the expressions of the first axis were somewhat close by (3.98, 3.86, 3.73, 3.60, 3.54, 3.50, 3.10) respectively, indicating that the bank's risk management aims to measure risk in order to monitor and mitigate its severity. It also encourages employee training programs In the specialty of Islamic banking risk management. We also conclude that the bank prepares reports on credit risks and relies on the creditworthiness of the customer to measure financing risks and that it uses quantitative analysis methods in assessing risks. Risks are developing appropriate plans to be reduced, and the bank uses clear methods to manage credit risk.

b.2. Presenting the answers of the sample members on the second axis: Through this axis, credit risks were identified in the Islamic financing formulas at Al Baraka Bank, according to the following table:

Table (7): Presenting the answers of the sample members on the tatements of the second axis.

Expressions of the second axis	SMA	Std.devi-ation	Relative weight	Arran-gement
The second axis`` Fiduciary risks in Islamic financing formulas at Al Baraka Bank ''	3,59	0,457	approval	
10-Al Baraka Bank uses the Musharaka formula as its minimum due to the absence of a guarantee requirement	3,40	1,278	approval	6
11-Al Baraka Bank works by making a promise to the customer	3,66	0,658	approval	5
12- Al Baraka Bank uses the Murabaha formula due to its lower risk compared to the Musharaka formula	4,22	0,679	High approval	1
13- To reduce the risks of the Istisna'a formula, Al Baraka Bank, in agreement with customers, will pay them the money in installments instead of payment in one lump sum at the beginning of the contract.	3,72	1,262	approval	3
14 - Al Baraka Bank requires guarantees and guarantees to hedge the risks of debt-based financing formulas	4,18	0,825	approval	2
15- To reduce the risk of participation, Al Baraka Bank operates as a comprehensive bank that holds shares within the components of its investment portfolio	2,88	1,206	Average approval	8
16 - Al Baraka Bank in the Istisna'a contracts bears the risks of the other party in the event that it is unable to fulfill the contract	3,30	1,216	Average approval	7
17- Failure of the lessee to pay installments regularly exposes Al Baraka Bank to losses	3,30	1,055	Average approval	7
18- Failure of clients to comply with the agreed terms will expose Al Baraka Bank to credit risk	3,68	1,019	approval	4

Source: prepared by the researcher based on the outputs of the spss program

We notice through the above table directly that the bank uses the participation formula at its minimum due to the lack of a guarantee requirement. Therefore, we find that the bank finances in this formula at a very weak rate as well because of the high credit risks. Minimal high risk as a hedging method.

b.3. Description of the answers about the third axis: Through this axis, the extent of application of the elements of credit decision-making was identified.

Table (8): Presenting the answers of the sample members on the statements of the third axis.

Expressions of the second axis	SMA	standard deviation	Relative weight	Arrangement
The third axis :The extent of application of the elements of credit decision-making at Al Baraka Bank	3,48	0,495	Approval	
19-The credit department at Al Baraka Bank examines the relationship between return and risk before granting it	3,60	1,195	Approval	3
20 - The quality of customers in terms of permanence	3,00	0,948	Average approval	9
21- Information about the client's credit facilities in other banks	3,14	0,926	Average approval	8
22- Client's financing sources and ability to pay	3,68	0,62	Approval	2
23- The guarantees provided by the client requesting credit	3,58	1,214	Approval	4
24- Advice from the Risk Center about the client's previous position	3,72	0,784	Approval	1
25- The customer’s personality, including his ability to manage the activity	3,38	1,176	Average approval	7
26 - Economic, political and social factors that affect the client's activity	3,50	0,974	Approval	5
27- Purpose of credit	3,44	1,215	Approval	6
28- The borrowing client's solvency and the ability of his ownership rights to cover the loan granted to him	3,58	1,071	Approval	4
29 - Accompanying investment projects as a matter of precaution	3,46	0,646	Approval	6
30- The guarantees provided, including the payment of a second person in the event of disability	3,72	0,536	Approval	1

Source: Prepared by researchers based on the outputs of * Spss * Statistics V23 program

We notice through the above table directly and infer that Al Baraka Bank has elements that depend on it when making a credit decision, and according to the measurement ruler for the fifth Likert scale, Al Baraka Bank depends on the elements of the credit decision before granting credit, The bank focuses primarily on the guarantees provided, including the emergence of a second person by paying in the event of deficit as a form of secured hedge to cover the possibility of a loss, as this statement No. 30 achieved the highest arithmetic average among the statements of the third axis with a value of 3.72 and a standard deviation of 0.536. The bank also focuses on the customer’s personality by conducting a personal interview, analyzing and knowing the extent of his ability to manage The successful activity of this procedure is within the framework of hedging against risks. The bank, before granting credit, collects all information about the credit facilities for the customer in other banks through a special system called the risk monitoring program for institutions and individuals. The bank cares about permanent customers dealing with them as it deals with large customers as if it was the first time.

4.3. Analyzing results and testing hypotheses.

Before testing hypotheses, it is necessary to know the nature of the data distribution in order to know the type of hypothesis test that will be adopted:

a. Normal Distribution Test: We will present the nature of the study's variables distribution through the following table:

Table (9): The normal distribution test for the study sample.

Axes	Kolmogorov-Smirrnov coefficient		Coefficient Shapiro-Wilk	
	The test value	the level of significance	The test value	the level of significance
First axis	0.098	0.200	0.670	0.670
Second axis	0.101	0.200	0.979	0.519
Third axis	0.081	0.200	0.962	0.108

Source: Prepared by researchers based on the outputs of * Spss * Statistics V23 program

It indicates that the study variables follow the normal distribution, and then the parameter tests can be adopted in testing the study hypotheses.

b.2. Testing and discussing the study hypotheses: The results of the hypothesis test will be analyzed through the application of one: test sample T Test Spss per sample is as follows:

The first hypothesis: ``Al Baraka Bank Algeria is available on the principles on which risk management is based. " This hypothesis has been tested through the following table.

Table (10): Results of the first hypothesis test.

The factor	The level of significance	The hypothesis	Freedom degree	T test
First hypothesis	0.00	3	49	6.906

Source: Prepared by researchers based on the outputs of * Spss * Statistics V23 program

We notice from the table that the value of the Student test reached 11.881 with a significance level of 0.00, which is less than the approved level of significance 0.05, this is what makes us reject the null hypothesis, meaning that the average of the answers is equal to 3 and accept the alternative that recognizes that the mean differs from 3, given the value of the arithmetic mean of 3.73 It is located in the field of consent, which makes us conclude that:

There is agreement among the studied sample that Al Baraka Bank has the principles on which risk management is based on.

The second hypothesis: The hypothesis content is as follows: “Al Baraka Bank uses financing formulas with high credit risks at their minimum levels as a hedging method.” This hypothesis was tested through the following table:

Table (11): Results of the second hypothesis test

The factor	The level of significance	The hypothesis	Freedom degree	T test
Second hypothesis	0.00	3	49	9.179

Source: Prepared by researchers based on the outputs of * Spss * Statistics V23 program

We notice from the table that the value of the Student test reached 9.179 with a significance level of 0.00 which is less than the approved level of significance 0.05, and this is what makes us reject the null hypothesis, meaning that the average of the answers is equal to 3 and accept the alternative that recognizes that the mean differs from 3. Given the value of the arithmetic mean of 3.59, It is located in the area of consent, which leads us to conclude that:

There is an agreement to use Al Baraka Bank financing formulas with high credit risks at their minimum as a method of hedging, according to the opinion of the studied sample.

This explains why Al Baraka Islamic Bank hedges before concluding a financial transaction with the customer through the use of financing formulas with high credit risk at their minimum.

The third hypothesis: The content of the hypothesis is as follows: “Al Baraka Bank depends on the elements of the credit decision before granting credit according to the opinion of the studied sample.” This hypothesis was tested through the following table:

Table (12): Results of the third hypothesis test

The factor	The level of significance	The hypothesis	Freedom degree	T test
third hypothesis	0.00	3	99	6.906

Source: Prepared by researchers based on the outputs of * Spss * Statistics V23 program

We note from the table that the value of the Student test reached 6.906 with a significance level of 0.00 which is less than the approved level of significance 0.05, and this is what makes us reject the null hypothesis, meaning that the average of the answers is equal to 3 and accept the alternative that recognizes that the mean differs from 3 and given the mean value of 3.424 It is located in the field of consent, which makes us conclude that:

There is an agreement that Al Baraka Bank depends on the elements of the credit decision before granting credit, according to the opinion of the studied sample where the elements of the credit decision are considered among the mechanisms of analyzing the granting of credit or not, and Al Baraka Bank relies on these elements in its activities.

Conclusion:

Banking risk is considered a matter inherent in the banking business, which required banks to establish a department in each bank tasked with managing and hedging these risks. Risks in Islamic banks are obligated to use specific means to deal with credit risks and control them within the limits of the provisions of Islamic Sharia. Tthis what highlights the limitations of the current methods used in risk management, as the essence and foundations of banking risk management in Islamic banks are not much different from traditional banks, except in contradiction with the controls of Islamic banking.

The main objective of this study centered on analyzing the strategy of Islamic banking risk management at Al Baraka Bank of Algeria, through a questionnaire that was designed and distributed electronically to a sample of Al Baraka Bank agencies across several states that included three axes for managing the banking risks in the bank, and the respondent's information.

Results: The study concluded the following results:

• Al Baraka Bank Algeria meets the criteria for managing credit risk.

• Al Baraka Bank Algeria depends on the elements of the credit decision before granting it credit.

• Al Baraka Bank uses Islamic financing formulas with high risks with minimal levels of participation and is used sparingly as a precaution.

• Al Baraka Bank of Algeria is totally directed to practice debt-based financing formulas due to the lack of credit risk in them.

• Al Baraka Bank of Algeria periodically conducts training courses in risk management.

• The risk management of Al Baraka Bank Algeria works to reduce the degree of risk to a minimum.

Recommendations: Here we present a set of recommendations:

• The risk management department of Al Baraka Bank of Algeria has to identify the most important deficiencies that may affect the work of credit risk management.

• Work to enhance the ability to predict the occurrence of risks in order to secure the funds of Al Baraka Bank.

• Keeping up with technological developments in general and introducing them to the risk management system.

• Enhancing cooperation between Islamic banks in exchanging information and in the framework of cooperation in hedging against banking risks.

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