

OTDK Paper

2025

HUNGARIAN UNIVERSITY OF AGRICULTURE AND LIFE SCIENCES
Faculty of Economics and Social Sciences



A hitelkockázatkezelés szerepe a hitelvesztések mérséklésében: A hagyományos és az iszlám bankok összehasonlító vizsgálata Szíriában

The Role of Credit Risk Management in Mitigating Credit Defaults: A Comparative Study of Traditional and Islamic Banks in Syria

Prepared by: Nour Al Khatib & Sabbir Ahmed
Neptun ID: CS8UN4 / GM469N
Finance, MSc
Szent István Campus

Supervisor: Dr. Zoltan Sipiczki
Associate Professor
Department of Investment, Finance and Accounting
Institute of Rural Development and Sustainable Economy
Hungarian University of Agriculture and Life Sciences

Closure date of manuscript: 15 October 2024

Content

1.Introduction.....	1
2.Literature review.....	2
2.1.The concept of credit risk.....	2
2.2.Types of Credit Risk.....	3
2.3.Credit Risk Management.....	4
2.4.Basel Accords.....	8
2.5.Credit risk within the Basel Accords.....	12
2.6.Credit risk the executives stages.....	13
2.7.Current Research Directions.....	15
3.Materials and Methods.....	19
4.Results and Discussion.....	20
The most important personal characteristics of the study sample members	26
Description of sample members' answers	28
Conclusion.....	35
References.....	37
Acknowledgments.....	39
Study appendices.....	40

1. Introduction

In a banking institution, each department is established to address specific operational needs, with varying degrees of importance based on their functional objectives. The credit risk management department, in particular, holds a critical role, given its responsibility for mitigating potential financial risks associated with the bank's core activities, such as lending and investment. Effective risk mitigation is paramount in a bank, as errors in this area can lead not only to significant financial losses but also to reputational damage and erosion of trust among investors. Consequently, the credit risk management department is central to safeguarding the bank's financial stability, as its primary function is to assess and manage the risks inherent in lending decisions and other investment activities. Due to the pivotal nature of this role, personnel in this department are selected with meticulous attention to their expertise and ability to manage complex financial risks, ensuring the bank's long-term sustainability and compliance with regulatory requirements.

Credit risk is one of the serious issues that monetary foundations face, particularly in the financial area. This credit risk will in general expand the possibilities of the chance of default, which probably occurred in the monetary emergency of 2008 (Nizam & Ahmad, 2024).

Credit risk makes financial slump as banks flop due to default risk from clients, which adversely affects the monetary advancement of numerous countries all over the planet. By definition, credit risk depicts the gamble of default by a borrower who neglects to reimburse the cash acquired. The term supporting signs the security of a business' speculations by restricting its degree of hazard, for instance, by buying an insurance contract (Muhammad et al., 2019).

In 2008, across the world, the acknowledged emergency started because of mass giving of sub-prime home loans to people in the US prompting defaults, which caused ostensibly undulating issues for monetary foundations all over the world. Sub-prime home loans and different credits with less limitations can produce surprising misfortunes including corporate disappointment and liquidation for monetary organization (Brown & Moles, 2014).

These credit decisions have a pivotal role in firms' profitability. The decision to over-extend credit to high-risk customers may increase short-term profitability for individual banks, though in aggregate, this lending behavior was seen to become a major challenge to the risk management structures of the economy as a whole. Therefore, managing risk is the most important element of a bank's operations (Muhammad et al., 2019).

Based on the above and taking into account the importance of studying credit risks and the extent of the responsibility of credit management in banks, *the study is based on a problem that*

is to answer the following question: What is the role of credit risk management in reducing the problem of credit default?

The study seeks to achieve many objectives, whether of theoretical or practical importance, including:

- Defining credit risk management, its tasks and importance in banks.
- Identifying some types of credit risks.
- Stating the role of credit risk management in reducing credit default problems.
- Reviewing some prominent literature in the field of credit risks (Arabic and foreign).
- Attempting to identify some practical data for traditional and Islamic banks in Syria.

2. Literature review

2.1. The concept of credit risk

While working in the financial business, there are three classes of dangers that the bank needs to confront, incorporate ecological, monetary, and functional dangers. Banks produce their wages overwhelmingly of credit to borrowers. In any case, this action includes a lot of credit risk. At the point when borrowers of the financial area default can't meet their obligation commitment on time, it is called credit risk (Accornero et al., 2018). At the point when there is a lot of credit default, then, it unfavorably influences the benefit of the financial area. (Berger and DeYoung, 1997) brought up that the shortfall of powerful credit risk would prompt the frequency of banking unrest and surprisingly, the monetary emergency. (Siddique et al., 2020) makes sense that NPLs relate to data hilter kilter hypothesis, head organization hypothesis and credit default hypothesis. At the point when lopsided data inconsistent conveyance of data of high NPLs is spread, quite possibly banks or monetary proclaimed bankrupt. As per (Pickson and Opare, 2016), the central office should isolate corporate proprietorship from administrative interest. Since every administration has its advantages, they need more eminence, pay addition, and need investment opportunities for the executives. Compelling administration of credit chance or nonperformance openness in the financial areas increments productivity. It improves the advancement of banking areas by satisfactory allocation of working capital in the economy (Ghosh, 2015; Khan et al., 2022).

2.2. Types of Credit Risk

There are three fundamental sorts of credit risk, the gamble of default, the gamble of credit improvement, and the gamble of acknowledged spread, as displayed underneath: (Khatywa, 2009)

- Risk of default:

The gamble that the backer of the bonds or the debt holder does not reimburse the obligation in full. The default chance can be finished where no measure of the bonds or credits is reimbursed, or it could be part of the way so that piece of obligation.

- Risk of credit improvement:

The gamble of broadly perceived factual associations decreasing their FICO score in light of an evaluation of the backer's ongoing skill to benefit against its capacity to reimburse its obligation commitments when it becomes due.

- Credit spread risk:

The gamble of cost increments on a reference cost of an obligation risk. The gamble decrease varies from the gamble of credit spread in that it connects with a conventional not set in stone by a free evaluating organization, while the first is the response of the monetary business sectors.

According to (Teka, 2012), credit risk is divided into:

- Concentration risk

Concentration risk is the gamble of a specific openness or gathering of openings with the chance of delivering misfortunes that could come down on the Bank's principal tasks and may come as a solitary fixation or convergence of the business.

- Virtual credit risk

As the name proposes, it is the gamble related with the likelihood that the individual who took the advance cannot pay it once more or will require over 90 days from the due date to reimburse. It can influence the basic business of acknowledge, like credits, protections and subordinates.

- International risks

International risks are the gamble that emerge from a circumstance where the nation has frozen unfamiliar trade installments or has neglected to meet its commitments. Credit risk executives could not possibly be more significant in the financial area. The monetary emergency of 2008

is ascribed to the inability to oversee credit risk. Many banks all over the planet put resources into people who were not deserving of credit. Banks have neglected to deal with the dangers related with conceding credits, contracts and different items. Subsequently, there was an enormous deficiency by clients (Quoted from Jubouri, 2018).

2.3. Credit Risk Management

Credit risk executives are the most responsible authority of identifying, assessing, and alleviating risks connected with loaning credit to clients. It surveys the probability of clients defaulting on their installment commitments and decide proactive measures to diminish the effect of such gamble.

One critical part of credit risk management is assessing clients' financial soundness. Group monetary will completely dissect a client's monetary history, FICO rating, pay security, and other crucial elements. This assists experts with checking a client's capacity to reimburse solicitations on time and pursue informed credit choices.

Aside from this, credit risk the management implies drawing fitting installment terms and credit lines and observing client conduct and installment examples to recognize the likelihood of expected misfortunes from delinquency. With compelling credit risk, the executives can safeguard business from monetary shocks and keep up with its general benefit (Fisher, 2022).

The target of credit risk management is to distinguish the greatest dangers to change the pace of return of the bank by keeping up with credit risk inside OK cutoff points. The credit board is expected to control the dangers related to credit deals. The intention is to oversee monetary and political dangers at the same time. (Edwards, 2004) says in his book that everybody should comprehend that credit implies endless trust should be founded on information to have any genuine importance and that consolidating, dissecting and pursuing choices in view of that information is the administration of credit.

Credit risk management is one of the main elements of any bank and is significant in light of the fact that it gives direction on how the bank manages its openness to resource risk (Battle, 2004). Credit risk management is a basic piece of banking and is finished through different openings. Most banks flop because of unfortunate credit risk management and credit risks the board essentially centers around keeping away from misfortunes and further developing gamble return (Meyer, 2005).

Credit risk management remains augmentative, as the Bank's gamble craving by keeping up with the degree of credit risk inside OK cutoff points. Furthermore, that banks' capacity to oversee credit risk in a productive way decides their capacity to contend and make due. Along these lines, it very well may be seen that credit risk management assumes as a fundamental part in banking (Casu and others, 2006). As credit extension has forever been at the core of banking activities, the focal point of administration at the bank is credit risk management, prior to going with a credit choice and circling back to credit responsibilities including all controls and detailing. The credit choice depends on fiscal reports and is assessed appraisals of market assumptions, borrowers, the board, and investors. Follow-up is brought out through intermittent survey of bank responsibilities by clients. Moreover, cautioning frameworks demonstrate a crumbling of the borrower's circumstance before default, whenever the situation allows (Hosna et al., 2009).

Objectives of Credit Risk Management

Credit risk management in general aims to achieve the following: (Jubouri, 2018)

- Develop an integrated framework to classify different types of loans and advances and identify the implications of credit quality and risk.
- Developing analytical tools for credit risk assessment.
- Review the exposure to risk and performance periodically.
- Develop appropriate strategies at the institutional level to achieve the required levels, issue guidelines for strategic business units, provide target standards for recovery rates, risk exposure and others.
- Develop appropriate mechanisms for monitoring and controlling risk.

Credit risk management suggests the moves toward distinguish, measure, assess, relieve, screen, report, and control credit risk. Risk management of the board starts before a client is onboard and goes on all through the business relationship with the client (Leo et al., 2022).

The essential objective of credit risk management is to upgrade a business' income and pay off terrible obligation chances. Late client installments for many times resulted in business disappointments. Credit risk management assists with recognizing conceivable credit chances and get an exhaustive perspective on business funds (Fisher, 2022).

- Guarantee convenient installments

Viable credit management recognizes clients who are probably going to miss or defer installments, empowering them to carry out proactive and opportune mediations.

- Expanded productivity

Executing pertinent credit arrangements diminishes the gamble of terrible obligations and further develops incomes. This further works on business' main concern and increments benefit.

- Further developed client connections

Mindfully organized credit risk management methodologies permit to construct clear installment assumptions, subsequently further developing client correspondences and understanding client needs.

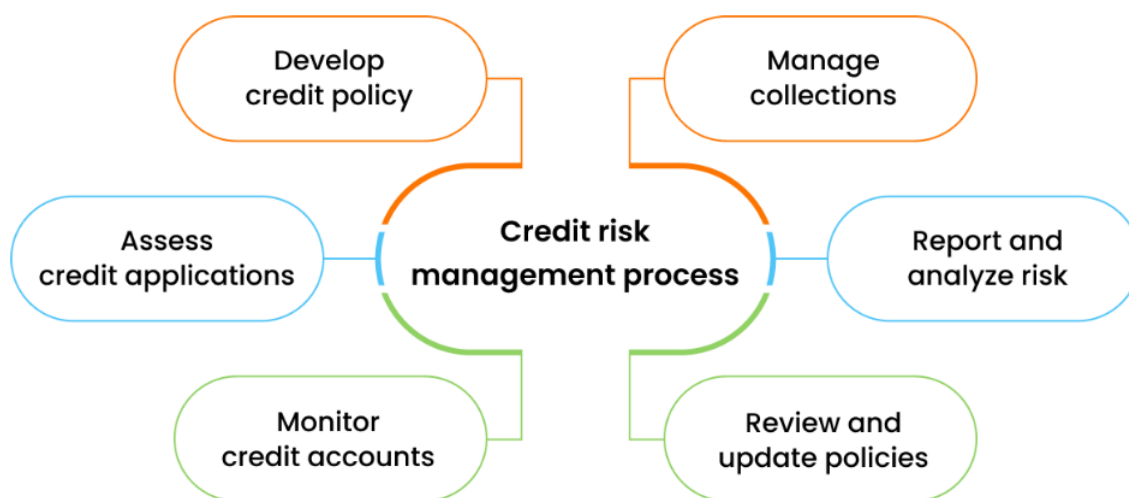
- Risk minimization

Credit risk management permits to decide a client's reliability and utilize the outcomes to draw suitable credit lines and lead credit checks. This will diminish the possibilities of likely misfortunes and safeguard in general monetary wellbeing.

- Smooth out incomes

Compelling credit risk management assists with keeping a steady income by decreasing non-installation risk and further developing assortment endeavors. It empowers to encourage better monetary preparation and client relationship management (Fisher, 2022).

In picture no. (1), credit risk management processes are shown.



Source: www.highradius.com

Below are the steps that credit risk management takes in the credit risk management processes (Leo et al., 2022):

- Foster a gamble management technique that characterizes credit risk resistance levels as per the organization's business objectives.
- Set up a gambling management hierarchical design that mirrors the organization's size, the idea of its business exercises, and credit risk capabilities. The credit risk capabilities ought to cover credit risk management, execution, oversight, and control.
- Make organization's credit strategy to archive rules for the distinguishing proof, estimation, assessment, observing, revealing, control, and moderation of credit risk. The credit strategy oversees a singular exchange and portfolio. The strategy needs to incorporate the credit risk acknowledgment rules, agreements of the credit office, adequate sorts of guarantee, credit cutoff points, and guidelines for credit survey and observing.
- Report the credit models. The credit models express the qualities of favored obligors and set up comparing credit agreements.
- Set up credit limits for individual obligors and gatherings of related obligors. If necessary, lay out credit limits for monetary areas and geological locales of the obligors to stay away from fixation risk.
- Utilize a credit risk rating framework, where it relegates a credit risk rating of obligors to mirror, the obligor's gambling profile, and the probability of misfortune. The gamble rating framework assists with seeing the gambling profile of the organization's portfolio.
- Make a strategy and interaction for credit applications by related gatherings to stay away from irreconcilable situation.
- Lay out the interaction for supporting new credits and the reestablishment of existing credits. The cycle ought to incorporate the credit evaluation of an obligor, organizing of credit, credit endorsement, finishing of legitimate documentation and payment.
- Request insurance or assurances to get the obligation, utilize monetary instruments like exchange credit protection to moderate gambling openness in exchanges.
- Set up risk checking on obligor's reliability, credit conditions, and planned utilization of credit offices. Make a sound detailing framework and get notified about dangers, changes, or issue of credits.
- Perform standard credit surveys to make sure that all conceded offices were in accordance with laid out credit strategy, intermittently survey the obligor and get resource quality.

- Carry out the arrangements to help grade and characterize resources, assess security, while setting up important arrangements' levels.
- Lay out a vigorous interaction for overseeing issued credits from answering to obligation recuperation.
- Audit credit organization's capability interaction to guarantee the culmination of documentation and recording of exchanges.
- Execute pressure testing to evaluate the effect of credit risk on resource values, credit quality, and by and large portfolio under pressure conditions.
- Have the medicinal administration process prepared when confronted with dangers.
- Great gamble management practices can assist organization with planning for risk vulnerability, immediately acclimate to new circumstances, and keep up with monetary development.

2.4. Basel Accords

The Basel Committee is the primary global standard-setter for the prudential regulation of banks, and provides a forum for cooperation on banking supervisory matters. Its mandate is to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing financial stability.

The Basel Committee is a Committee of the Bank for International Settlements (BIS), an international organization which fosters international monetary and financial cooperation and serves as a bank for central banks. Established in 1930, the BIS is owned by 63 central banks, representing countries from around the world that together account for about 95% of world's GDP. (Official website of the Basel Accords www.basel-iii-accord.com).

The Basel Committee reports to the Group of Governors and Heads of Supervision (GHOS) and seeks the endorsement of GHOS for its major decisions and its work programmes.

The Basel Committee's members come from Argentina, Australia, Belgium, Brazil, Canada, China, European Union, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

From 1993 to 2008 the total assets of a sample of what we call global systemically important banks saw a twelve-fold increase (increasing from \$2.6 trillion to just over \$30 trillion). But the capital funding of these assets only increased seven-fold, (from \$125 billion to \$890 billion).

Put differently, the average risk weight declined from 70% to below 40%. (Official website of the Basel Accords www.basel-iii-accord.com).

The problem was that this reduction did not represent a genuine reduction in risk in the banking system. One of the main reasons the economic and financial crisis became so severe was that the banking sectors of many countries had built up excessive on and off-balance sheet leverage.

This was accompanied by a gradual erosion of the level and quality of the capital base. At the same time, many banks were holding insufficient liquidity buffers. The banking system therefore was not able to absorb the resulting systemic trading and credit losses, nor could it cope with the reintermediation of large off-balance sheet exposures that had built up in the shadow banking system (Official website of the Basel Accords www.basel-iii-accord.com).

The crisis was further amplified by a procyclical deleveraging process and by the interconnectedness of systemic institutions through an array of complex transactions. During the most severe episode of the crisis, the market lost confidence in the solvency and liquidity of many banking institutions.

The weaknesses in the banking sector were rapidly transmitted to the rest of the financial system and the real economy, resulting in a massive contraction of liquidity and credit availability.

Ultimately the public sector had to step in with unprecedented injections of liquidity, capital support and guarantees, exposing taxpayers to large losses. The effect on banks, financial systems, and economies at the epicenter of the crisis was immediate.

However, the crisis also spread to a wider circle of countries around the globe. For these countries, the transmission channels were less direct, resulting from a severe contraction in global liquidity, cross-border credit availability and demand for exports.

Given the scope and speed with which the recent and previous crises have been transmitted around the globe as well as the unpredictable nature of future crises, it is critical that all countries raise the resilience of their banking sectors to both internal and external shocks.

The G20 Leaders at the Seoul Summit endorsed the Basel III framework and the Financial Stability Board's (FSB) policy framework for reducing the moral hazard of systemically important financial institutions (SIFIs), including the work processes and timelines set out in the report submitted to the Summit.

SIFIs are financial institutions whose disorderly failure, because of their size, complexity, and systemic interconnectedness, would cause significant disruption to the wider financial system and economic activity (Official website of the Basel Accords www.basel-iii-accord.com).

The objective of the Basel Accords is to promote global financial stability by standardizing banking regulations and supervisory practices across countries. There have been three versions of the Basel Accords so far: (Sarpong et al., 2023).

- Basel I (1988):

The first Basel Accord introduced a standardized approach for banks to calculate their minimum capital requirements based on the level of credit risk in their portfolios. Under Basel I, banks were required to maintain a minimum capital adequacy ratio (CAR) of 8%, with at least half of the capital in the form of Tier 1 capital (equity capital and disclosed reserves).

- Basel II (2004):

Internal risk assessments and management procedures were given more weight in the second Basel Accord's codification of a more nuanced approach to dealing with credit risk. To determine the required level of capitalization for operations, financial institutions were permitted under Basel II to use internal models developed by the institution itself, so long as the models had been approved by the relevant national regulatory authorities. As part of the framework, fresh capital requirements for operational risk and market risk were introduced.

- Basel III (2010):

The third Basel Accord was implemented after the global financial crisis of 2008 with the goal of bolstering banking system stability and enhancing risk management procedures. Minimum capital requirements were raised because of Basel III's implementation; now, the Tier 1 capital ratio must be at least 6%, while the capital conservation buffer must be at least 2.5% and the countercyclical buffer can be as high as 2.5%. It is also possible for the countercyclical buffer to reach 2.5%. New framework requirements are for both liquidity standards and stress tests.

We read in the final G20 Communiqué:

"We endorsed the landmark agreement reached by the Basel Committee on the new bank capital and liquidity framework, which increases the resilience of the global banking system by raising the quality, quantity and international consistency of bank capital and liquidity, constrains the

build-up of leverage and maturity mismatches, and introduces capital buffers above the minimum requirements that can be drawn upon in bad times.

The framework includes an internationally harmonized leverage ratio to serve as a backstop to the risk-based capital measures. With this, we have achieved far-reaching reform of the global banking system.

The new standards will markedly reduce banks' incentive to take excessive risks, lower the likelihood and severity of future crises, and enable banks to withstand - without extraordinary government support - stresses of a magnitude associated with the recent financial crisis.

This will result in a banking system that can better support stable economic growth. We are committed to adopt and implement fully these standards within the agreed timeframe that is consistent with economic recovery and financial stability.

The new framework will be translated into our national laws and regulations, and will be implemented starting on January 1, 2013 and fully phased in by January 1, 2019.

To ensure visibility of the implementation of reforms, the Basel Committee has been regularly publishing information about members' adoption of Basel III to keep all stakeholders and the markets informed, and to maintain peer pressure where necessary.

It is especially important that jurisdictions that are home to global systemically important banks (G-SIBs) make every effort to issue final regulations at the earliest possible opportunity. But simply issuing domestic rules is not enough to achieve what the G20 Leaders asked for: full, timely and consistent implementation of Basel III.

In response to this call, in 2012 the Committee initiated what has become known as the Regulatory Consistency Assessment Programme (RCAP). The regular progress reports are simply one part of this programme, which assesses domestic regulations' compliance with the Basel standards, and examines the outcomes at individual banks. The RCAP process will be fundamental to ensuring confidence in regulatory ratios and promoting a level playing field for internationally-operating banks.

It is inevitable that, as the Committee begins to review aspects of the regulatory framework in far more detail than it (or anyone else) has ever done in the past, there will be aspects of implementation that do not meet the G20's aspiration: full, timely and consistent.

The financial crisis identified that, like the standards themselves, implementation of global standards was not as robust as it should have been. This could be classed as a failure by global standard setters.

To some extent, the criticism can be justified – not enough has been done in the past to ensure global agreements have been truly implemented by national authorities. However, just as the Committee has been determined to revise the Basel framework to fix the problems that emerged from the lessons of the crisis, the RCAP should be seen as demonstrating the Committee's determination to also find implementation problems and fix them (Official website of the Basel Accords www.basel-iii-accord.com)

2.5. Credit risk within the Basel Accords

Credit risk accounts for the bulk of most banks' risk-taking activities and hence their regulatory capital requirements. The standardised approach is used by the majority of banks around the world, including in non-Basel Committee jurisdictions. The Committee's revisions to the standardised approach for credit risk enhance the regulatory framework by:

- Improving its granularity and risk sensitivity. For example, the Basel II standardised approach assigns a flat risk weight to all residential mortgages. In the revised standardised approach mortgage risk weights depend on the loan-to-value (LTV) ratio of the mortgage;
- Reducing mechanistic reliance on credit ratings, by requiring banks to conduct sufficient due diligence, and by developing a sufficiently granular non-ratings-based approach for jurisdictions that cannot or do not wish to rely on external credit ratings; and
- As a result, providing the foundation for a revised output floor to internally modelled capital requirements (to replace the existing Basel I floor) and related disclosure to enhance comparability across banks and restore a level playing field (Official website of the Basel Accords www.basel-iii-accord.com).

In summary:

- A more granular approach has been developed for unrated exposures to banks and corporates, and for rated exposures in jurisdictions where the use of credit ratings is permitted.
- For exposures to banks, some of the risk weights for rated exposures have been recalibrated. In addition, the risk-weighted treatment for unrated exposures is more granular than the existing flat risk weight. A standalone treatment for covered bonds has also been introduced.

- For exposures to corporates, a more granular look-up table has been developed. A specific risk weight applies to exposures to small and medium-sized enterprises (SMEs). In addition, the revised standardised approach includes a standalone treatment for exposures to project finance, object finance and commodities finance.
- For residential real estate exposures, more risk-sensitive approaches have been developed, whereby risk weights vary based on the LTV ratio of the mortgage (instead of the existing single risk weight) and in ways that better reflect differences in market structures.
- For retail exposures, a more granular treatment applies, which distinguishes between different types of retail exposures. For example, the regulatory retail portfolio distinguishes between revolving facilities (where credit is typically drawn upon) and transactors (where the facility is used to facilitate transactions rather than a source of credit).
- For commercial real estate exposures, approaches have been developed that are more risk sensitive than the flat risk weight which generally applies.
- For subordinated debt and equity exposures, a more granular risk weight treatment applies (relative to the current flat risk weight).
- For off-balance sheet items, the credit conversion factors (CCFs), which are used to determine the amount of an exposure to be risk-weighted, have been made more risk-sensitive, including the introduction of positive CCFs for unconditionally cancellable commitments (UCCs) (Official website of the Basel Accords www.basel-iii-accord.com).

2.6. Credit risk management stages

Fortunately, there are various CRM programming applications that offer a set-up of CRM devices. These stages are utilized by banks, monetary administrations, suppliers and worldwide partnerships to assist them with precisely evaluating and oversee credit gambles.

A large number of these fintech stages, of which there are a lot to browse, offer a similar center programming highlights, remembering instruments that help loan specialists for catching and spreading fiscal reports, as well as having the option to sit on top of existing IT frameworks to make custom interior credit score and scoring models. These stages, by examining banks information on an entire host of clients, are fit for inside and out risk evaluation that will empower the execution of perplexing loaning procedures and further develop work processes for credit start and hazard checking. Various moneylenders are starting to work closely with

innovative organizations to make progressed credit risk management frameworks that assist them with acting proactively instead of responsively limit misfortunes and lessen default risk.

As a matter of fact, back in December 2018, the Dutch moneylender ING declared that it had cooperated with Google and PwC to make a computer based intelligence fueled credit risk management framework fit for crunching huge volumes of monetary information to find stowed away signals that can make the bank aware of uplifted degrees of credit risk (Clark, 2019).

The early admonition framework investigates enormous surges of monetary data to distinguish how presented clients are subject to possible dangers, a task that is generally performed physically by risk investigators.

"Speed is of the substance in credit risk management," ING Task Pioneer Anand Autar said. "The previous we distinguish any gamble, the speedier and better we can serve clients to forestall misfortunes."

"Through AI, the EWS examines monetary and non-monetary data, like new things from everywhere around the world," he added (Clark, 2019).

The early admonition framework being created by ING is right now fit for handling anything up to 80,000 articles consistently from public news sources, with continuous market information from Refinitiv. ING trusts that as its man-made intelligence fueled framework learns over the long run it will actually want to anticipate credit takes a chance before they emerge.

"The framework gains for a fact, so in time it will turn out to be better at recognizing the feeling of information and improvements on the lookout," Head of man-made intelligence and Mechanical technology at ING Gökem Köseoğlu said. "Clients anticipate more prescient capacities in their items and administrations, so for us satisfying that client need is significant (Clark, 2019).

The financial area is an abundance making area in all economies, with business banks assuming a critical part in the turn of events and development of numerous neighborhood organizations. Credit risk management (CRM) is vital to a bank's prosperity, as it decides if a borrower is trustworthy or not. To relieve credit risk, banks should foster successful techniques like supporting, enhancement, and capital amplenness proportion the executives (Sarpong et al., 2023). Credit risk stays a basic worry for monetary foundations, particularly with regards to financial vulnerabilities and unstable economic situations (Amajuoyi et al, 2024).

Lately, after the worldwide monetary emergency, the issue of credit risk management has gotten expanded consideration from global controllers. Credit risk management structures are not much adequately incorporated inside the association, there is no bound together methodology, and there is no encompassing perspective on all dangers. Moreover, where they exist, sound gambling management rehearses have assisted establishments with enduring monetary emergencies better than others (Bhatt et al., 2023).

Among all of the world's continents, Asia is the most important continent and contributes 60% of world growth but facing the serving issue of high nonperforming loans (NPLs) (Khan et al., 2022). Therefore, the study focused on a practical study of the status of loans in one of the countries of this continent, which is Syria.

2.7. Current Research Directions

There have been great research efforts on the subject of the study (credit risk management), and some of these research efforts have adopted a theoretical approach and some have adopted a practical approach. In the following lines, we will mention some of these studies and what they have reached.

A study stated (**Nizam & Ahmad, 2024**) the principal accentuation is to dissect the connection between credit risk management and hazard of default in the UK's financial area. For this, an optional quantitative exploration strategy was utilized, and data was gotten from five conspicuous banks in the UK, in particular Lloyds Banking Gathering, HSBC Possessions, NatWest Gathering, Barclays and Investec Plc, covering the period from 2013 to 2022. Concerning current proportion, obligation to value, ROA, and ROE were utilized as a proportion of the gambling of default, and nonperforming advance proportion, capital sufficiency proportion, nonperforming endlessly advance misfortune arrangement were utilized as a proportion of credit risk management. For information examination, clear measurements, Hausman testing, and fixed impact models were utilized. Discoveries uncovered that the Capital sufficiency proportion impacts the ongoing proportion, obligation to-value proportion, and ROE. Further, the nonperforming credit adversely affects ROA. Subsequently, discoveries in the flow examination will be fundamentally useful for policymakers in credit risk management practices and will generally diminish the possibilities of default risk.

(**Amajuoyi et al., 2024**) investigates different credit risk relief methodologies utilized by monetary organizations. These systems incorporate broadening of credit portfolios, collateralization of advances, credit subsidiaries, and credit protection. The paper examines the

benefits and impediments of every methodology and gives instances of how these techniques have been executed effectively in the financial business. Besides, the paper looks at the job of administrative experts in administering credit risk management rehearses in monetary organizations. It talks about the administrative system for credit risk management and features the significance of consistence with administrative necessities in alleviating credit risk. At last, the paper finishes up with a conversation on the eventual fate of credit risk relief techniques in monetary establishments. It underscores the requirement for persistent development and transformation to new economic situations and administrative necessities. The paper likewise focuses on the significance of coordinating credit risk management into in general gambling systems to guarantee a thorough and compelling way to deal with overseeing risk in monetary establishments. Generally speaking, this paper gives significant experiences into the significance of credit risk relief techniques in monetary organizations and offers pragmatic answers for diminishing openness to credit risk. It fills in as a helpful asset for monetary experts, controllers, and policymakers looking to improve how they might interpret credit risk management rehearses in the financial business.

As for the study (**Sarpong et al., 2023**) examined GCB Bank's case to decide what credit risk strategies mean for advance exhibition of the business of banks. The examination technique utilized in this study was an overview that had both clear and exploratory highlights. To decide the example size, the Yamane recipe was utilized. Thusly, the concentrated arbitrary examined 248 respondents out of 650 for information assortment. The survey was the examination instrument utilized for gathering information. The study basically comprised of shut finished questions. Elucidating measurements like recurrence, mean, rate, standard deviation, and mean were completely processed utilizing Microsoft Succeed. The reviews uncover a good exhibition by GCB Bank in risk evasion, risk observing, and credit execution, as seen by the respondents. Nonetheless, open doors for development were featured, explicitly in the specialized practicality and FICO score parts of chance aversion, administrative consistence inside risk observing, and the administration of advance default rates regarding credit execution. Consequently, while the bank's techniques are by and large viable, improvements here could add to a stunningly better general execution. The review suggests upgrading the examination of record as a consumer in risk evasion, underscoring monetary and economic situations in risk checking, further developing client support, and boosting convenient credit reimbursements to further develop credit execution.

As for the study (**Bhatt et al., 2023**) the ongoing review meant to look at the determinants of credit risk management and their relationship with the presentation of business banks in Nepal. It additionally looks at the intervening job of credit risk management on the exhibition of business banks in Nepal. The outcomes show that there is a positive connection between natural gambling and credit risk management. Likewise found credit evaluation estimations essentially affect credit risk management. The outcomes uncover that market risk examination fundamentally affects credit risk management. The outcomes show that credit risk process intervenes the connection between ecological gambling, credit examination estimations, market risk investigation, and the exhibition of the business of banks. Accordingly, supervisors ought to endeavor to bestow risk counteraction and control systems to lessen credit risk and accomplish great monetary execution.

(**Khan et al., 2022**) estimates NPLs and capital ampleness proportion (Vehicle), while cost-effectiveness proportion (CER), normal loaning rate (ALR) and liquidity proportion (LR) were utilized as bank-explicit elements. Then again, return on value (ROE) and return on the resource (ROA) were taken as a proportion of FP.

Optional information were gathered from 19 business banks (10 business banks from Pakistan and 9 business banks from India) in the country for a time period from 2009 to 2018. The summed up strategy for the second (GMM) is utilized for the coefficient assessment to conquer the impacts of a few endogenous factors.

The outcomes showed that NPLs, CER and LR have fundamentally adversely connected with FP (ROA and ROE), while Vehicle and ALR have essentially emphatically connected with the FP of the Asian business banks.

The ongoing review result suggests that policymakers of Asian nations ought to establish major areas of strength for a climate by carrying out that money related strategy that animates loan costs in this manner that consequently assists with dropping down the high proportion of NPLs (tied checking framework). Liquidity position ought to be very much kept up with so that even in a high rivalry climate, the business can make due in that climate.

The current paper adds to the common writing that this is a correlation concentration among created and non-industrial nations of Asia that is a one of a kind examination in light of the fact that the review targets just a single locale and afterward based on pay, the consequences of this study are looked at. Besides, the commitment of the review is to incorporate a few bookkeeping based measures and market-based proportions of the FP of business banks all at once.

The review (**Catherine, 2020**) was intended to lay out the connection between credit risk management and monetary execution of Bank of Africa Ltd. The review took on a contextual investigation approach and embraced both quantitative and subjective methodologies. The review laid out that the Bank has attempted to enhance geologically not just inside the nation despite the fact that most of advances are conceded to various locales inside the nation yet in addition into adjoining nations like Tanzania. The bank includes north of 35 branches inside the country among which 21 branches are in the focal and 14 branches up country. Solid Credit Examination puts the achievements for a compelling administration of credit hazard and gives the organizations an upper hand in the commercial center. Consequently it reasoned very well that credit evaluation characterizes a bank's endurance and productivity. The worth of changed R Square was 0.978, a sign that there was a variety of 97.8% on execution of the bank because of changes in client evaluation, credit risk control, and hazard enhancement at 95% certainty stretch. The review suggests that the administration of the Bank ought to constantly evaluate their gambling management practices to check whether they are as yet pragmatic despite a persistently changing working climate, for example the new administrative systems. The items ought to be custom-made towards the nearby language for simple comprehension of the items. The review makes the first commitment by proposing that there is a positive connection between credit risk management and execution of the bank. These experiences are helpful for scholastic comprehension and strategy plan by the chiefs of the bank.

As for the study (**Muhammad et al, 2019**) intends to distinguish risk management methodologies attempted by the business banks of Balochistan, Pakistan, to moderate or wipe out credit risk. The discoveries of the review are huge as business banks will grasp the adequacy of different gambling management systems and may apply them for limiting credit risk. This logical review examines the assessments of the representatives of chosen business banks about which procedures are valuable for alleviating credit risk. Quantitative information was gathered from 250 representatives of business banks to play out different relapse investigations, which were utilized for the examination. The outcomes recognized four areas of effect using a credit card risk management (CRM): corporate administration applies the best effect, trailed by broadening, which assumes a huge part, supporting and, at last, the bank's Capital Sufficiency Proportion. This study features these four gambling management procedures, which are basic for business banks to determine their credit risk.

About the study (**Jubouri, 2018**), the goal of this study was to decide the connection between credit risk management and monetary market pointers. The review issue is summed up as

follows: Do credit gambling with the management pointers influence monetary market pointers in confidential banks? The review depended on two fundamental speculations: the presence of a huge and critical connection and impact connection between credit risk management and monetary market pointers. The example of the review was a private business banks in Iraq comprising of eight banks. The expected data was gotten through the yearly reports of the example banks, as well as through the authority distributions of the Iraqi Stock Trade for the period (2007-2016). The review utilized the program (Microsoft Succeed 2013) notwithstanding the measurable techniques tracked down in the factual program (SPSS V.23), and the significance of the review that it arose out of the scholarly premise of the idea of the factors of the review in light of the functional truth of the factors and the capacity of these factors to accomplish the objectives. The review arrived at various resolutions, the most conspicuous of which was the presence of a contrast between the banks in the relationship of connection and effect between the factors of the review, and the concentration likewise arrived at a bunch of proposals and ideas.

3. Materials and Methods

The descriptive approach was used to describe the study problem through previous studies and theoretical information, and to describe the answers of the study individuals. As for the analytical approach, it was used to analyze the answers of the study individuals, in addition to analyzing the banking data.

The study uses the following methods in its approach to accomplish this study:

- Reviewing the modern literature related to the subject of the study, and reviewing its objectives and achievements.
- Shedding light on the most important theoretical terms and theoretical information related to credit risks, their management and strategies.
- Designing a questionnaire according to the five-point Likert scale and distributing it to a sample of workers in traditional and Islamic banks in Syria, then collecting the answers and analyzing them statistically using the EXCEL and SPSS programs.
- Drawing data from one of the traditional banks and Islamic banks and comparing them with each other through important financial ratios and analyzing them statistically using the EXCEL and SPSS programs.

Within the framework of the applied work, the questionnaire was distributed to two conventional banks (Syria and the Gulf, International Bank for Trade and Finance) and two

Islamic banks (Syria International Islamic, Sham), the questionnaire was offered for distribution electronically on 14/10/2024 and the questionnaire was closed on 18/10/2024, where (32) answers were retrieved, all of which were valid for analysis. This number was sufficient because it represents the statistical community, since the sample number is more than (30), where the answers were statistically analyzed and (arithmetic mean, standard deviation) and what corresponds to the arithmetic mean were extracted from the categories of the five-point Likert scale, according to the law of the category length in order to extract the categories of the arithmetic mean. On the other hand, data from the two Islamic banks and the two conventional banks (such as total credit losses and expenses, net profit, assets, net shareholders' equity) for the years from 2009 to 2023 were extracted and some statistical analyses were conducted (such as extracting financial ratios, return on shareholders' equity, return on assets). Pearson's correlation test was conducted on the data and some graphs were extracted.

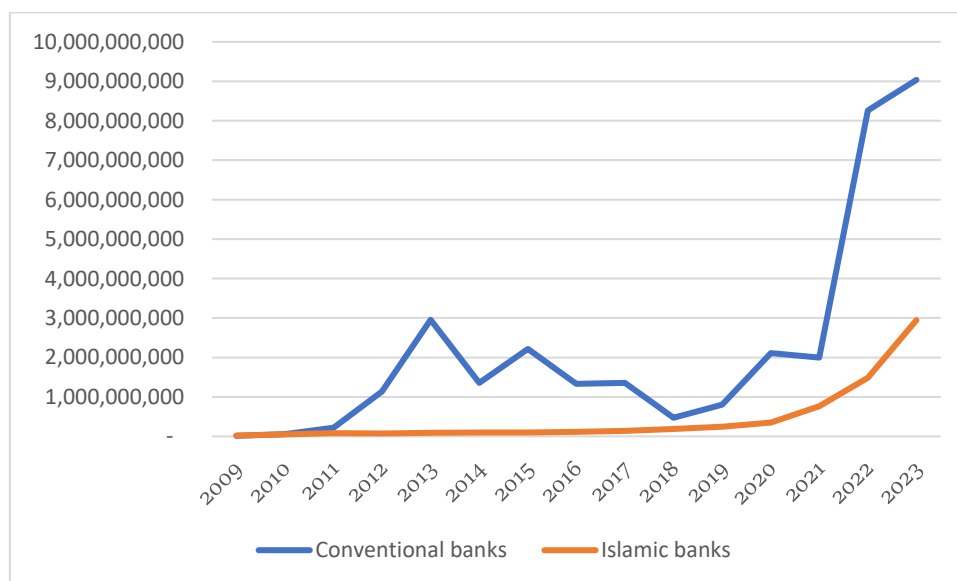
4. Results and Discussion

Banks, whether conventional or Islamic, spend money (expenses) on the process of granting credit in all its forms, but these funds have natural limits and have exaggerated limits. In addition to these expenses, there is what is called credit losses, which are the losses resulting from the beneficiary's failure to pay the dues or not paying them in full, which forces the bank to dispose of the mortgaged item. Here, losses may occur resulting from not estimating the current value of the mortgage or the absence of a mortgaged item that exceeds the amount and cost of the credit. This is what happens with banks in Syria, especially with the beginning of the crisis in Syria in 2011, where Islamic and conventional banks incurred large losses as a result of the decline in the value of the Syrian pound, as it was exchanged before the crisis (\$1 = 48 SYP), but after a year of the crisis it became (\$1 = 70 SYP), and now in 2024 it has reached very low levels and has become (\$1 = 13,500 SYP). This was unexpected for the credit risk departments in Syrian banks, which led to large losses, as shown in Table No. (1), which shows the size of the losses. Credit expenses of Islamic and conventional banks.

Table No (1) Credit losses and expenses		
Years	Conventional banks (SYP)	Islamic banks (SYP)
2009	14,680,684	21,426,659
2010	58,052,650	50,806,640
2011	219,811,555	79,395,765
2012	1,137,272,294	77,862,236
2013	2,953,816,557	89,391,075
2014	1,354,237,192	95,604,297
2015	2,218,556,691	98,759,130
2016	1,336,004,501	114,038,422
2017	1,360,328,494	140,932,108
2018	468,397,042	188,441,742
2019	803,590,258	243,487,328
2020	2,112,572,048	348,845,542
2021	2,000,255,751	766,299,832
2022	8,260,604,066	1,487,892,056
2023	9,036,035,235	2,946,967,295
Mean	2,222,281,001	450,010,008

Source: Bank data published on the official website of the Damascus Securities Exchange

Chart No (1) Credit losses and expenses (SYP)



Source: Data analysis using Excel

As shown in the previous table, the average credit losses and expenses of conventional banks were approximately 6 times greater than the credit losses and expenses of Islamic banks. As shown in graph No. 1, Islamic banks recorded much lower credit losses and expenses than conventional banks, which is an important indicator that Islamic banks bear fewer expenses and losses than conventional banks as a result of credit operations. This is due to the nature of the work of both banks and the nature of the products of each of them. The Islamic bank does not give money, but rather covers the purchase of products, while the conventional bank gives money to generate interest income.

1) The relationship between losses and credit expenses in both Islamic and conventional banks:

Conventional banks and Islamic banks bear credit losses and expenses, but conventional banks bear greater expenses and losses, as we saw previously. But is there a permanent increase in losses and expenses in both types of banks?

Table No (2) Correlations			
		Conventional banks Credit losses and expenses	Islamic banks Credit losses and expenses
Conventional banks Credit losses and expenses	Pearson Correlation	1	.906**
	Sig. (2-tailed)		.000
	N	15	15
Islamic banks Credit losses and expenses	Pearson Correlation	.906**	1
	Sig. (2-tailed)	.000	
	N	15	15
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Data analysis using SPSS

The data in Table No. (2) reveals a strong correlation between losses and credit expenses in both conventional and Islamic banks, with a correlation coefficient of 0.906. This high level of correlation indicates that as credit expenses increase, so do the associated losses in both banking systems at a nearly equivalent rate. The significance of examining this relationship lies in its implications for understanding the financial stability and risk management practices of these institutions.

For both types of banks, managing credit risk effectively is crucial, as credit losses and expenses can significantly impact their profitability and long-term viability. A strong correlation like this suggests that both conventional and Islamic banks face similar challenges in mitigating credit-related risks, despite the differences in their operational models. Understanding the underlying reasons for this relationship can help in designing more effective credit risk management strategies, potentially leading to more sustainable banking practices.

Moreover, these findings suggest that neither banking system is inherently better at managing credit risks, as both experience similar rates of credit losses. This prompts further exploration into the specific factors driving these losses and expenses, such as macroeconomic conditions, regulatory frameworks, or internal risk management processes. By identifying these factors, both conventional and Islamic banks can work towards improving their credit risk mitigation techniques, which may, in turn, lead to reduced losses and better financial performance. This research also underscores the importance of comparing different banking models to derive broader insights into global financial practices.

2) Return on Assets (ROA) between Islamic and conventional banks:

The return on assets is one of the important indicators in knowing the status of the bank and the extent of its investment of its assets. Therefore, Table No. (11) (in annex) in the study references shows the return on assets for conventional banks and shows that the return on assets was constantly growing in both banks and reached very high levels. Table No. (6) (in annex) also shows the return on assets in Islamic banks, which reached (70%) in Bank (SIIB) in 2009, while it was very weak in the other bank (CHB), which means that conventional banks are somewhat more successful in achieving profit from their assets.

Table No (3) Correlations			
		Conventional banks	Islamic banks ROA
Conventional banks ROA	Pearson Correlation	1	0.027
	Sig. (2-tailed)		0.925
	N	15	15
Islamic banks ROA	Pearson Correlation	0.027	1
	Sig. (2-tailed)	0.925	
	N	15	15

Source: Data analysis using SPSS

Table No. 3 highlights the relationship between the return on assets (ROA) ratio in both conventional and Islamic banks in Syria during the studied period. The results indicate that there is no significant relationship between the ROA ratios of the two banking systems. This is evidenced by the fact that Islamic banks was experiencing negative returns during the period, which breaks any potential correlation with conventional banks.

This lack of correlation is particularly important to examine because it suggests that Islamic and conventional banks in Syria may operate under different financial dynamics, especially in terms of profitability. The fact that an Islamic bank was experiencing negative returns implies that these banks face unique challenges, potentially due to their adherence to Shariah-compliant financial principles, where profit-loss sharing may influence their profitability models differently compared to conventional banks.

Understanding why there is no relationship between ROA in these two banking systems could help identify the distinct factors affecting profitability in each. For example, it may be necessary to explore whether differences in asset structures, risk management practices, or external economic conditions contribute to this divergence. Additionally, these findings highlight the importance of developing tailored strategies for improving financial performance in both banking sectors, rather than assuming that the same approaches will be effective across the management.

In the context of Syria, where the banking environment has been affected by economic instability, the absence of a relationship between ROA in Islamic and conventional banks suggests that different strategies may be needed to enhance asset utilization and profitability in these institutions. These insights are crucial for policymakers and bank managers aiming to

strengthen the financial stability and performance of Syrian banks, as they reflect the need for differentiated approaches to managing assets and generating returns in both banking models.

3) Return on Equity (ROE) between Islamic and conventional banks:

The return on equity represents the bank's ability to generate profits from the owners' money. Table No. 7 (in annex) shows that CHB achieved high rates compared to the low rates achieved by SIIB. This means that the Islamic bank is able to generate profits for the owners. On the other hand, Table No. 10(in annex) shows the return on equity rates, which recorded low rates in both banks compared to Islamic banks. This means that there are returns in conventional and Islamic banks, but they are higher in Islamic banks with regard to the return on equity.

Table No (4) Correlations			
		Conventional banks ROE	Islamic banks ROE
Conventional banks ROE	Pearson Correlation	1	.655**
	Sig. (2-tailed)		.008
	N	15	15
Islamic banks ROE	Pearson Correlation	.655**	1
	Sig. (2-tailed)	.008	
	N	15	15
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Data analysis using SPSS

It is clear from Table No. (4) that there is moderate correlation between the return on equity in both conventional banks and Islamic banks at a correlation score of (0.655). Returning to Tables (7) and (10), we see that the return on equity is growing increasingly.

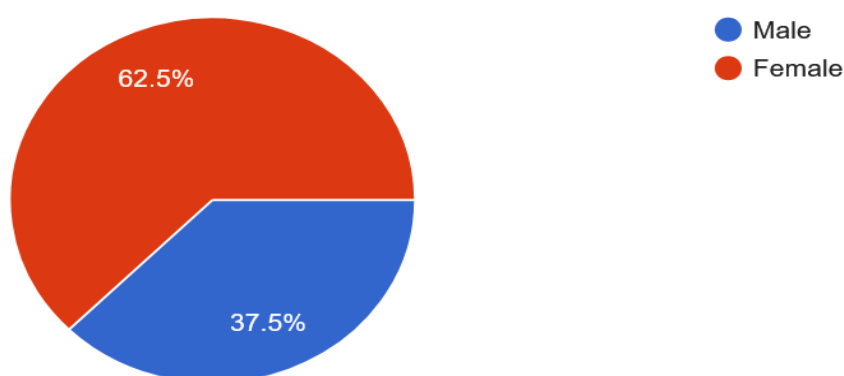
In addition to comparing macroeconomic data through correlation analysis, we considered it essential to conduct a questionnaire survey as well. This approach allows for a more comprehensive understanding of the topic by incorporating the personal experiences and insights of bankers. While macroeconomic data provides a broad, quantitative view of the trends and patterns within the banking sector, the questionnaire adds a qualitative dimension, enabling the analysis of real-world practices and challenges faced by banking professionals. By examining both objective data and subjective experiences, the research can offer more nuanced conclusions and practical recommendations, particularly regarding credit risk management and other relevant banking practices.

The most important personal characteristics of the study sample members

1) Gender

Chart No (2) Gender

32 responses



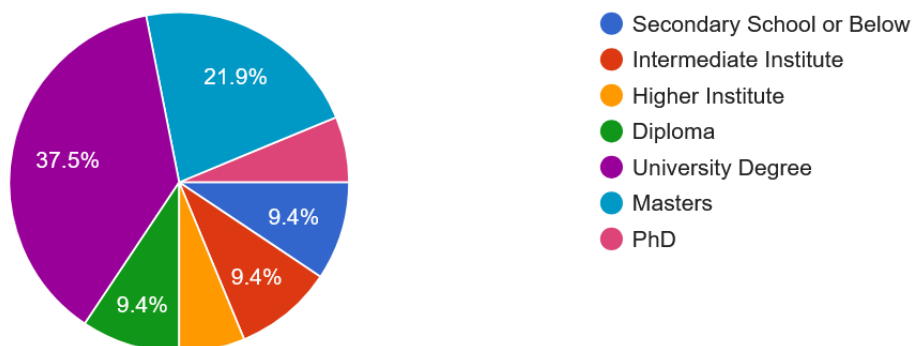
Source: Data description via Google Form

Chart No. 2 shows that the study sample consisted of more females than males, with the percentage of females reaching (62.5%) and the percentage of males (37.5%), which is normal due to the nature of the random sample, in addition to the increase in the percentage of females working in Syria in all sectors as a result of the economic conditions that the country is going through.

2) Educational Attainment:

Chart No (3) Educational Attainment

32 responses



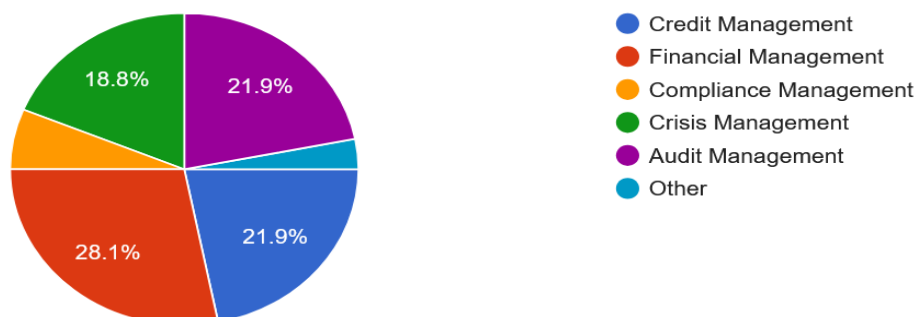
Source: Data description via Google Form

Chart No. 3 shows that the study sample members have a good level of educational attainment. The percentage of those who have a university degree is (37.5%), the percentage of those who have a master's degree is (21.9%), while those who have a diploma and an intermediate institute are (9.4%), and there are those who have a doctorate degree at a rate of (6.3%). This is considered logical according to the nature of the work of the bank's employees and the necessity of having a high level of educational attainment for vacancies in the bank, especially senior management such as the credit management and financial departments.

3) Employed in:

Chart No (4)

32 responses



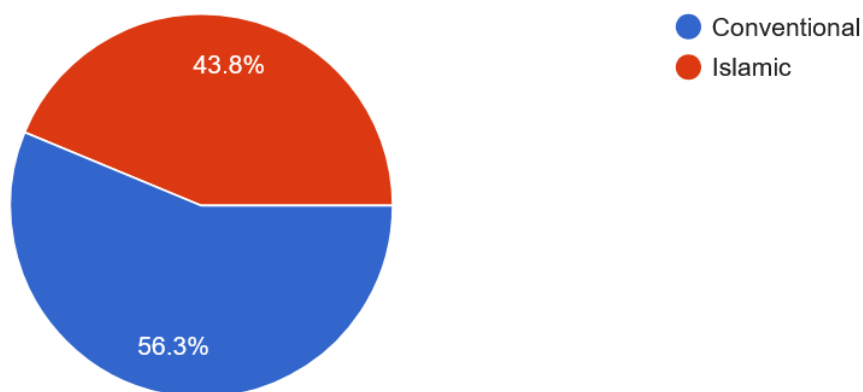
Source: Data description via Google Form

It is clear from Chart No. 4 that the study sample members hold important positions in the bank, as the percentage of workers in the financial departments is (28.1%), while those working in the auditing and credit departments are (21.9%), and those working in crisis management are (18.8%), and this enriches the study and makes the sample members' answers come from knowledge, information, and disclosure of facts in the bank.

4) The bank you work for:

Chart No (5)

32 responses



Source: Data description via Google Form

Chart No. 5 shows that the study sample members are more from conventional banks than from Islamic banks, and this is normal, given the nature of the random sample.

Description of sample members' answers

The questionnaire was distributed to the employees and the results were collected. In order to know the sample members' orientation towards the questionnaire statements, the arithmetic mean was calculated, and in order to ensure that there was no dispersion in the answers, the standard deviation was calculated.

Table No (5) Arithmetic means and standard deviations of sample members' responses

NO	Phrases	Mean	SD	Corresponding value from Likert scale
1	Credit Risk Management studies customer requests carefully	3.66	1.33	Agree
2	Credit Risk Management sets clear terms and conditions for customers	3.97	1.23	Agree
3	Credit Risk Management updates and develops procedures and requirements for the credit process according to the economic situation and changing circumstances	4.22	0.97	Strongly agree
4	There are permanent plans set by the bank through Credit Risk Management to deal with credit risks	3.97	0.97	Agree
5	There are immediate treatments for any situation that may be a source of concern for the bank regarding the credit process	4.13	1.26	Agree
6	The bank monitors global indicators and programs related to money laundering operations in order to avoid any credit problems in the future	4.28	1.11	Strongly agree
7	The bank tries to avoid some credit risks through diversification	4.00	1.34	Agree
8	The bank tries to avoid some credit risks through financial analysis of data and drawing financial predictive maps	3.91	1.20	Agree
9	The bank adheres to all international agreements and recommendations of the Basel Committee	4.16	1.11	Agree

10	The bank benefits from the mistakes and crises that competing banks have encountered in terms of credit operations.	4.00	1.27	Agree
11	The Bank's management urges its Credit Risk Management to avoid any loophole that could lead to credit default	3.97	1.23	Agree
12	There are periodic meetings between the Credit Risk Management and the Bank's Board of Directors to inform them of the latest developments regarding non-performing loans	3.94	1.16	Agree
13	The percentage of non-performing financing at the Bank hardly exceeds 5% of the total financing	4.06	1.13	Agree
14	There are efforts being made to make non-performing financing non-existent in the Bank	4.28	1.11	Strongly agree
15	The Credit Risk Management learns from previous miscalculation cases that it goes through and result in credit default	4.13	1.10	Agree
Final average of all statements		4.04	1.17	Agree

Table No. 5 shows that the study sample members responded with agreement and strongly agreement to the questionnaire statements to a greater extent, as the answers achieved arithmetic averages greater than (3.40), and the standard deviations were very close, which means that the answers were not dispersed. The total score of the questionnaire was (4.04), which is an arithmetic average corresponding to the value (agree) from the five-point Likert scale, which means that the sample members, on average, tend to agree to the questionnaire statements, which indicates that there is an effective role for credit risk management in reducing credit default.

**Table No (6) Arithmetic means and standard deviations of sample members' responses
in Islamic banks**

NO	Phrases	Mean	SD	Corresponding value from Likert scale
1	Credit Risk Management studies customer requests carefully	3.64	1.65	Agree
2	Credit Risk Management sets clear terms and conditions for customers	3.79	1.76	Agree
3	Credit Risk Management updates and develops procedures and requirements for the credit process according to the economic situation and changing circumstances	4.07	1.38	Agree
4	There are permanent plans set by the bank through Credit Risk Management to deal with credit risks	4.00	1.47	Agree
5	There are immediate treatments for any situation that may be a source of concern for the bank regarding the credit process	4.57	0.95	Strongly agree
6	The bank monitors global indicators and programs related to money laundering operations in order to avoid any credit problems in the future	3.86	1.51	Agree
7	The bank tries to avoid some credit risks through diversification	4.00	1.57	Agree
8	The bank tries to avoid some credit risks through financial analysis of data and drawing financial predictive maps	3.86	1.70	Agree
9	The bank adheres to all international agreements and recommendations of the Basel Committee	3.93	1.54	Agree

10	The bank benefits from the mistakes and crises that competing banks have encountered in terms of credit operations.	4.43	0.85	Strongly agree
11	The Bank's management urges its Credit Risk Management to avoid any loophole that could lead to credit default	3.71	1.18	Agree
12	There are periodic meetings between the Credit Risk Management and the Bank's Board of Directors to inform them of the latest developments regarding non-performing loans	4.07	0.83	Agree
13	The percentage of non-performing financing at the Bank hardly exceeds 5% of the total financing	4.93	1.27	Strongly agree
14	There are efforts being made to make non-performing financing non-existent in the Bank	3.93	1.54	Agree
15	The Credit Risk Management learns from previous miscalculation cases that it goes through and result in credit default	3.71	1.49	Agree
Final average of all statements		4.03	1.38	Agree

Table No. 6 shows that the study sample members responded in Islamic banks with agreement and strongly agreement to the questionnaire statements to a greater extent, as the answers achieved arithmetic averages greater than (3.40), and the standard deviations were close, which means that the answers were not dispersed. The total score of the questionnaire was (4.03), which is an arithmetic average corresponding to the value (agree) from the five-point Likert scale, which means that the sample members In Islamic banks, on average, tend to agree to the questionnaire statements, which indicates that there is an effective role for credit risk management in reducing credit default in Islamic banks.

**Table No (7) Arithmetic means and standard deviations of sample members' responses
in conventional banks**

NO	Phrases	Mean	SD	Corresponding value from Likert scale
1	Credit Risk Management studies customer requests carefully	3.67	1.08	Agree
2	Credit Risk Management sets clear terms and conditions for customers	4.11	1.58	Agree
3	Credit Risk Management updates and develops procedures and requirements for the credit process according to the economic situation and changing circumstances	4.33	1.49	Strongly agree
4	There are permanent plans set by the bank through Credit Risk Management to deal with credit risks	3.94	1.24	Agree
5	There are immediate treatments for any situation that may be a source of concern for the bank regarding the credit process	3.78	1.52	Agree
6	The bank monitors global indicators and programs related to money laundering operations in order to avoid any credit problems in the future	4.61	1.50	Strongly agree
7	The bank tries to avoid some credit risks through diversification	4.00	1.19	Agree
8	The bank tries to avoid some credit risks through financial analysis of data and drawing financial predictive maps	3.94	1.64	Agree
9	The bank adheres to all international agreements and recommendations of the Basel Committee	4.33	1.59	Strongly agree

10	The bank benefits from the mistakes and crises that competing banks have encountered in terms of credit operations.	3.67	1.46	Agree
11	The Bank's management urges its Credit Risk Management to avoid any loophole that could lead to credit default	4.17	1.38	Agree
12	There are periodic meetings between the Credit Risk Management and the Bank's Board of Directors to inform them of the latest developments regarding non-performing loans	3.83	1.38	Agree
13	The percentage of non-performing financing at the Bank hardly exceeds 5% of the total financing	3.42	1.09	Agree
14	There are efforts being made to make non-performing financing non-existent in the Bank	4.56	1.51	Strongly agree
15	The Credit Risk Management learns from previous miscalculation cases that it goes through and result in credit default	4.44	1.41	Strongly agree
Final average of all statements		4.05	1.40	Agree

Table No.7 shows that the study sample members responded in conventional banks with agreement and strongly agreement to the questionnaire statements to a greater extent, as the answers achieved arithmetic averages greater than (3.40), and the standard deviations were close, which means that the answers were not dispersed. The total score of the questionnaire was (4.05), which is an arithmetic average corresponding to the value (agree) from the five-point Likert scale, which means that the sample members in conventional banks, on average, tend to agree to the questionnaire statements, which indicates that there is an effective role for credit risk management in reducing credit default in conventional banks.

Conclusion

After reviewing previous studies in the field of credit risk management and the importance of credit risk management in limiting credit risks, attention was paid to providing a theoretical background on the nature of credit risks and the importance of addressing them through credit risk management. As we have seen, credit risk management is of great importance in reducing the risk of credit default through studies conducted on customers and by setting specific conditions as requirements for obtaining the necessary financing, as well as linking with internal and external banks to identify the people placed on the blacklist and known for their failure to pay debts, especially those who engage in money laundering. The applied study confirmed through the questionnaire distributed to employees in Islamic and traditional banks that there is an important and effective role for credit risk management in reducing credit risks.

In this study, we explored the relationship between various financial metrics in conventional and Islamic banks, particularly focusing on Syrian banks during the examined period.

First, we identified a strong correlation between credit losses and credit expenses in both banking systems, with a correlation coefficient of 0.906. This suggests that both types of banks experience credit losses at similar rates, underscoring the importance of effective credit risk management. Despite their structural differences, neither system demonstrates a clear advantage in mitigating credit risk, prompting the need for further investigation into the drivers of these losses.

In contrast, we found no significant relationship between the return on assets (ROA) ratios in conventional and Islamic banks, largely due to one Islamic bank experiencing negative returns. This highlights the unique financial dynamics of Islamic banking and suggests that Islamic banks in Syria may face distinct profitability challenges, possibly due to their adherence to Shariah-compliant practices.

To complement these findings, we emphasize the importance of conducting a questionnaire survey among bankers. This qualitative approach would allow for the analysis of personal experiences and professional insights, adding depth to the macroeconomic data and providing a more complete understanding of the factors influencing banking practices, especially regarding credit risk management. Finally, banks, whether conventional or Islamic, need to manage credit risks and need to combine efforts through all departments in order to avoid any credit risks. The focus of the bank's work is to grant credit facilities, and here lies the danger,

but managing the risk before it occurs greatly avoids losses, and avoids paying expenses that should have been directed to developing the bank and increasing its profits.

Because the study does not only seek to shed light on the subject, but also to reform and develop as much as possible, it recommends the following:

- Diversify the products and services provided by the bank within the framework of mitigating risks through diversification.
- Adhere to the recommendations of the Basel Committee in its publications No. (2-3) regarding governance.
- Work more on the principle of hedging and calculating the capital adequacy ratio, and conduct periodic comparisons.
- Study customer files in depth, and search for the reasons that may make them unable to pay, even if they are at low rates.
- Adopt the principle of caution and care and deal seriously with any detail, even if it is not important.

References

- Accornero, M., Cascarino, G., Felici, R., Parlapiano, F., & Sorrentino, A. M. (2018). Credit risk in banks' exposures to non-financial firms. *European Financial Management*, 24(5), 775–791. <https://doi.org/10.1111/eufm.12181>
- Amajuoyi, P., et al. (2024). Effective credit risk mitigation strategies: Solutions for reducing exposure in financial institutions. *Magna Scientia Advanced Research and Reviews*, 12(1), 198–211.
- Berger, A. N., & DeYoung, R. (1997). Problem loans and cost efficiency in commercial banks. *Journal of Banking and Finance*, 21(6), 849–870. [https://doi.org/10.1016/S0378-4266\(97\)00003-4](https://doi.org/10.1016/S0378-4266(97)00003-4)
- Bhatt, T. K., et al. (2023). Examining the determinants of credit risk management and their relationship with the performance of commercial banks in Nepal. *Special Issue on Financial Applications to Business and Financial Risk Management*.
- Brown, K., & Moles, P. (Eds.). (2014). *Credit risk management*. Edinburgh: Edinburgh Business School, Heriot-Watt University.
- Catherine, N. (2020). Credit risk management and financial performance: A case of Bank of Africa (U) Limited. *Open Journal of Business and Management*, 8(1), 1–15. <https://doi.org/10.4236/ojbm.2020.81001>
- Clark, A. (2019). Credit risk management principles, tools, and techniques. Retrieved from <https://www.theglobaltreasurer.com/2019/02/07/credit-risk-management-principles-tools-and-techniques/>
- Edwards, B. (2004). *Credit management handbook*. Hants: Gower Publishing Limited.
- Fight, A. (2004). *Understanding international banking risk*. Chichester: Wiley.
- Fisher, R. (2022). What is credit risk management and why is it important?
- Ghosh, A. (2015). Banking-industry specific and regional economic determinants of non-performing loans: Evidence from US states. *Journal of Financial Stability*, 20, 93–104. <https://doi.org/10.1016/j.jfs.2015.08.004>
- Jubouri, M. A. (2018). The impact of credit risk management on financial market indicators: Analytical study in the Iraqi market for securities. *Faculty of Management and Economics, University of Babylon, Iraq*.
- Khan, Z., et al. (2022). The effect of credit risk management and bank-specific factors on the financial performance of South Asian commercial banks. *Asian Journal of Accounting Research*, 7(2). <https://doi.org/10.1108/AJAR-2021-0110>
- Khatywa, T. (2009). *Mathematical models of credit management and credit derivatives*. Cape Town: University of the Western Cape.

Leo, C., et al. (2022). How to mitigate credit risk? Retrieved from <https://www.coface.com.hk/news-economy-and-insights/how-to-mitigate-credit-risk>

Meyer, P. G. (2005). The determinants of credit risk mitigation in lending to Black Economic Empowerment (BEE) companies from a banker's perspective. *Business Leadership, University of South Africa*.

Muhammad, A. R., et al. (2019). Impact of risk management strategies on the credit risk faced by commercial banks of Balochistan. *Financial Innovation*, 5(44).
<https://doi.org/10.1186/s40854-019-0157-0>

Nizam, K., & Ahmad, F. (2024). Credit risk management and default risk: Empirical evidence from the United Kingdom. *Iqra University*.

Sarpong, K. K., et al. (2023). Effect of credit risk management on loan performance of commercial banks: A case study of GCB Bank. *University of Professional Studies*.

Siddique, A., Masood, O., Javaria, K., & Huy, D. T. N. (2020). A comparative study of performance of commercial banks in Asian developing and developed countries. *Insights Into Regional Development*. [https://doi.org/10.9770/IRD.2020.6.4\(3\)](https://doi.org/10.9770/IRD.2020.6.4(3))

Teka, B. (2012). The credit risk management skills shortage in Nelson Mandela Bay Metropole. *Nelson Mandela Metropolitan University (NMMU) Business School*.

Official website of Damascus Stock Exchange: <http://www.dse.gov.sy/>

Official website of the Basel Accords: <http://www.basel-iii-accord.com>

Acknowledgments

I would like to thank the first supporters in my life

To those who guided me and gave me their energy and time (my father and mother)

And I would like to extend my sincere thanks to the esteemed university professors

(Dr. Gasper Sandor, Dr. Gergo Thalmeiner, Dr. Arnold Csonka, Dr. Peter Vanó)

And a very special thanks to the creative Dr. Zoltan Sipiczki.

Study appendices

1) Questionnaire

Greetings:

The researcher is conducting a study entitled (The role of credit risk management in reducing the problem of credit default) within the framework of increasing the balance of research contributions on this topic, and shedding light on the reality of banking work in senior management. The study needs to conduct an applied section to be parallel to the theoretical aspect, and for this purpose this questionnaire was designed. The researcher hopes that you will answer the questionnaire phrases with a realistic answer far from bias, noting that your answers will be completely confidential and will only be used for scientific research purposes.

Thank you

Section One: Personal Information

Gender:

- ☐ Male
- ☐ Female

Age Group:

- ☐ 18-30
- ☐ 31-45
- ☐ 46-60
- ☐ Over 60

Educational Attainment:

- ☐ Secondary School or Below
- ☐ Intermediate Institute
- ☐ Higher Institute
- ☐ Diploma
- ☐ University Degree
- ☐ Masters
- ☐ PhD

Employed in:

- ☐ Credit Management
- ☐ Financial Management
- ☐ Compliance Management
- ☐ Crisis Management
- ☐ Audit Management
- ☐ Other

Years of Experience:

- ☐ 1 Year or Below
- ☐ 2-5 Years
- ☐ 6-10 Years
- ☐ More than 10 Years

The bank you work for:

- ☐ Conventional
- ☐ Islamic

Section Two: Questionnaire Phrases

NO	Phrases	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Credit Risk Management studies customer requests carefully					
2	Credit Risk Management sets clear terms and conditions for customers					
3	Credit Risk Management updates and develops procedures and requirements for the credit process according to the economic situation and changing circumstances					
4	There are permanent plans set by the bank through Credit Risk Management to deal with credit risks					
5	There are immediate treatments for any situation that may be a source of concern for the bank regarding the credit process					
6	The bank monitors global indicators and programs related to money laundering operations in order to avoid any credit problems in the future					
7	The bank tries to avoid some credit risks through diversification					
8	The bank tries to avoid some credit risks through financial					

	analysis of data and drawing financial predictive maps					
9	The bank adheres to all international agreements and recommendations of the Basel Committee					
10	The bank benefits from the mistakes and crises that competing banks have encountered in terms of credit operations.					
11	The Bank's management urges its Credit Risk Management to avoid any loophole that could lead to credit default					
12	There are periodic meetings between the Credit Risk Management and the Bank's Board of Directors to inform them of the latest developments regarding non-performing loans					
13	The percentage of non-performing financing at the Bank hardly exceeds 5% of the total financing					
14	There are efforts being made to make non-performing financing non-existent in the Bank					
15	The Credit Risk Management learns from previous miscalculation cases that it goes through and result in credit default					

2) Study data

Table No (8) Islamic banks/ROA ration

Year	CHB	SIIB
2009	-3.32%	70.07%
2010	0.64%	15.35%
2011	2.93%	51.92%
2012	1.33%	58.92%
2013	4.15%	17.90%
2014	3.06%	8.59%
2015	5.46%	-6.91%
2016	4.55%	43.19%
2017	-1.88%	38.44%
2018	0.55%	-2.25%
2019	1.72%	2.02%
2020	8.22%	5.75%
2021	6.22%	9.89%
2022	2.03%	12.56%
2023	9.92%	5.16%

Source: Bank data published on the official website of the Damascus Securities Exchange

Table No (9) Islamic banks/ROE ration

Year	CHB	SIIB
2009	-20.21%	6.30%
2010	2.43%	1.15%
2011	7.90%	3.63%
2012	6.68%	3.76%
2013	31.23%	0.87%
2014	21.38%	0.65%
2015	35.80%	-0.60%
2016	35.21%	5.74%

2017	-10.87%	4.46%
2018	3.45%	-0.23%
2019	11.11%	0.21%
2020	50.88%	0.62%
2021	43.31%	1.38%
2022	15.30%	0.96%
2023	72.66%	0.42%

Source: Bank data published on the official website of the Damascus Securities Exchange

Table No (10) Islamic banks/Credit losses and expenses		
Year	CHB (SYP)	SIIB (SYP)
2009	36,374,929	6,478,388
2010	48,622,927	52,990,353
2011	61,750,589	97,040,940
2012	51,634,768	104,089,704
2013	40,340,085	138,442,064
2014	40,095,190	151,113,404
2015	37,503,273	160,014,987
2016	56,453,964	171,622,880
2017	102,279,181	179,585,034
2018	180,843,939	196,039,544
2019	222,074,727	264,899,929
2020	351,767,993	345,923,091
2021	507,529,820	1,025,069,844
2022	794,771,190	2,181,012,922
2023	2,247,336,810	3,646,597,780

Source: Bank data published on the official website of the Damascus Securities Exchange

Table No (11) Conventional banks/Credit losses and expenses		
Year	IBTF (SYP)	SGB (SYP)
2009	1,552,975	27,808,393
2010	31,455,458	84,649,841
2011	403,991,470	35,631,639
2012	1,223,121,030	1,051,423,557
2013	3,474,049,664	2,433,583,450
2014	1,823,218,483	885,255,901
2015	3,647,719,621	789,393,760
2016	579,216,483	2,092,792,519
2017	360,877,667	2,359,779,321
2018	536,773,895	400,020,189
2019	1,287,393,115	319,787,400
2020	2,987,137,104	1,238,006,991
2021	1,057,429,295	2,943,082,207
2022	2,320,948,676	14,200,259,455
2023	5,004,342,633	13,067,727,836

Source: Bank data published on the official website of the Damascus Securities Exchange

Table No (12) Conventional banks/ROE ration		
Year	IBTF	SGB
2009	17.85%	15.40%
2010	12.52%	16.30%
2011	12.91%	9.00%
2012	7.81%	7.70%
2013	0.03%	-13.30%
2014	0.06%	-39.00%
2015	0.24%	-78.00%
2016	40.39%	-115.00%
2017	13.26%	-135.00%
2018	7.64%	-261.00%
2019	3.34%	-9.00%

2020	23.58%	84.00%
2021	45.32%	64.00%
2022	19.30%	24.00%
2023	75.73%	73.00%

Source: Bank data published on the official website of the Damascus Securities Exchange

Table No (13) Conventional banks/ROA ration		
Year	IBTF	SGB
2009	1.24%	9.60%
2010	1.17%	15.40%
2011	1.64%	22.00%
2012	1.16%	-4.10%
2013	1.45%	17.40%
2014	0.01%	21.10%
2015	0.02%	-4.96%
2016	4.62%	-7.00%
2017	1.56%	-5.00%
2018	0.87%	-3.00%
2019	0.42%	-1.00%
2020	3.50%	13.00%
2021	9.18%	9.00%
2022	4.55%	3.00%
2023	22.04%	17.00%

Source: Bank data published on the official website of the Damascus Securities Exchange