



The role of securitization in reducing liquidity risks in commercial banks

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Abstract

The objective of this study is to address the risks of liquidity in commercial banks and how to manage them, as the bank's activity is based on aligning profitability, liquidity and security. Further, liquidity risks arise from the discrepancy between the supply and demand of liquid assets. Furthermore, liquidity management depends on how to manage assets and liabilities in banks, allowing measurement and management of funding requirements and contingency planning. The importance of securitization is demonstrated by the fact that it is an important liquidity tool for commercial banks through a range of products and is considered to be a low-cost financing source compared to other traditional sources of finance. However, the securitization industry includes a set of risks, hence, the extent to which and how to use this industry has to be controlled.

Keyword. Liquidity, Liquidity risk, securitization, commercial banks

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1. INTRODUCTION

Liquidity risk and how it is managed are important topics in commercial banks, where the bank's activity is based on aligning profitability, liquidity and security, by maintaining sufficient liquidity.

Maintaining sufficient liquidity is vital to the continuity of a commercial bank. The 2008 global financial crisis in the banking and financial system may have given considerable attention to managing liquidity risks; Liquidity risks arise from the Bank's inability to cope with a lack of liability, or to finance an increase in assets, and when the Bank's liquidity is insufficient to obtain sufficient funds either by increasing its liabilities or by bearing the cost of rapidly converting its assets into liquidity, which affects its profitability.

Reducing the impact of liquidity risk requires estimating liquidity needs, which depends on the bank's ability to predict demand for loans, and study deposit behavior that will align liquidity requirements with profitability.

Securitization is one of the most important financial innovations that revolutionized financial markets, providing commercial banks with a new possibility to provide liquidity at minimal costs, because of the possibility of moving loans, especially those that are distressed or questionable.

The securitization process was rooted in the Third World's debt inability in 1982, the first being the state of Mexico, and the first direct impact of that crisis was the significant reduction in the volume of commercial loans; these banks found themselves reeling on the brink of collapse.

Research Question and Sub-Questions

In order to address the identified research problem, one research question was formulated followed by three sub questions:

Res. Q: To what extent does the securitization tool affect the reduction of liquidity risk in commercial banks?

Sub-Q 1: What is the concept of securitization? What are its most important products?

Sub-Q 2: What is liquidity risk in commercial banks?

Sub-Q 3: What is the role of securitization in reducing liquidity risk?

Research hypotheses:

- The securitization tool contributes to providing liquidity to commercial banks;
- Liquidity risk management is one of the most important challenges facing commercial banks;
- Securitization helps reduce liquidity risk in commercial banks;

Research methodology:

The research was based on the descriptive and analytical approach to highlighting the securitization mechanism and its most important outputs, as well as indicating the liquidity risks faced by banks, and the extent to which the mechanism contributed to the provision of liquidity for these banks.

Research Objectives:

This research is of great importance because of the important role of securitization in the performance of commercial banks, in addressing the liquidity problem and highlighting the liquidity risk phenomenon in commercial banks, especially after the global financial crisis of 2008.

Research Structure:

- The conceptual framework of securitization and its most important products;
- Bank liquidity risk; and
- The role of securitization in reducing liquidity risk.

2. Conceptual framework for securitization

2.1 Securitization concept:

Tawreeq is a word derived from paper, which is dirhams minted from gold and silver, Allah Almighty says “So send one of you with these silver coins of yours to the city, and let him find

which food is the purest” (SŪrah Alkahf, 19), And a gentleman in the sense of many dirhams (Muhammed Abi Bakr AL-Razi, 1986, p299) .Paper is money from dirhams, camels, and so on.., and the seeker who asks for paper, and Abu Obeida said silver paper is like dirhams first. (Ibn Manzoor, vol10, p10).

Securitization is an innovative financial tool, according to which a financial institution mobilizes a group of homogeneous and secured debts as assets, places them in the form of one credit-enhanced debt, and is presented to the public through a specialized institution for subscription in the form of securities to reduce risk and ensure the continuous flow of the bank's cash flow. (Ajeel Jassim Al-Nashmi, 2009, p3)

Securitization also refers to obtaining funds based on existing debt by creating new financial assets, i.e. transferring financial assets from the original lender to the public through financial firms. (Khaled Amin Abdallah,2002,p13). Meaning that the bank issues securities against the debts it has, and when repaying debts through borrowers, the holders of these securities benefit from cash flows, and this process is done through financial firms or special purpose companies.

Securitization is collecting loans of similar nature, and then selling securities on the stock exchange with the guarantee of those loans.(Mahmoud Muhyiddin,2002,p39)

Securitization is the process of converting illiquid assets through financial engineering into tradable securities in financial markets.(Daniel Liberto)

Mortgage-backed collateral is an early example of securitization, where a set of mortgages is sold by the bank to another financial institution; so that the public can invest in them.

Securitization is the process of pooling certain types of assets; a portfolio of interest-bearing assets (securities) is distributed to the securities' owners. (Andreas Jobst,2008,p48)

Securitization is a novel financial innovation based on converting loans into liquid funds by reselling securities to the public for subscription through financial intermediation. (Aqdas Hussein,2019,p321)

In addition, there is no standardized model of securitization; however, there is agreement on a set of bases:

- Cost-efficient level

- Unification of governing rules
- How to deal with bankruptcies

From the foregoing, it can be concluded that securitization is one of the financial innovations through which illiquid financial assets are converted into tradable securities in the capital markets, through financial brokerage firms to reduce risks and ensure a steady flow of liquidity for banks.

2.2 Securitization methods: Securitization is carried out in one of the following ways (Ahmed Safar, 2002, pp 101-102)

- **Debt exchange:** It is the process of transforming the original rights and obligations into new ones, and this mechanism is also used to sell debtors' financial receivables; stemming from credit cards, this method requires the consent of all parties related to the loan.
- **Waiver:** This method is used to securitize receivables arising from the sale and lease of assets; So that the assets are assigned to the interests of the lenders, and the lessor continues, within the framework of the lease and purchase contracts, to pay the installments to the original financier, who in turn either transfers them to the buyer of receivables or pays them through a series of transfers agreed upon when contracting for securitization. This method is widely used in sales contracts. Cars, or lease and purchase contracts and the like. The waiver method is of two types:
 - By means of a notice of waiver addressed to the borrower.
 - Without notice of waiver of indebtedness to others.
- **Partial participation:** This method is based on selling receivables by the original creditor to the bank or to any bank specialized in buying and financing receivables; Provided that, in this case, the seller of the debt does not bear any liability if the debtor is unable to pay. In return, the buyer of the debt must ascertain the creditworthiness and creditworthiness of the debtor, and the debtor is usually notified that its account has been sold to the bank and has to pay it directly.

Advantages that particularly attract banks to the securitization process include:

- liberalization from the constraints imposed by the balance sheet;
- Reduction of credit risk;
- Reconciliation of assets and liabilities arising from their retention; and

- The possibility of eliminating the limits of national bank financing.

3. bank liquidity risk

The problem of liquidity in commercial banks arises from the trade-off between liquidity and profitability, i.e. there is a discrepancy between the supply of and demand for liquid assets, and the liquidity provision is one of the most important difficulties facing those in charge of commercial banks, as the risks of bank liquidity are mainly related to the lack of time compatibility between assets and liabilities.

3.1 The concept of risk: risk is viewed as the possibility of loss resulting from many factors of uncertainty, such as a change in market prices, or a change in interest rates.(Joel Bessis,2015,p2)

Risk is also seen as the possibility of loss directly; Through loss of capital or business results, or indirectly through restrictions that limit the ability of banks to achieve their goals and objectives.(Jihan Al-Jammal,2014, p429)

The concept of risk is similar to the uncertainty that both bear the meaning of suspicion and probability but differ in that risk can be expected to occur while uncertainty cannot be predicted.

3.2 Liquidity Concept: Liquidity in its absolute meaning means cash, but in the technical sense it is the ability of the asset to be converted into liquid assets without falling into losses, in order to meet the obligations due for performance, that is, liquidity expresses the relationship between cash and assets that are easy to convert into cash quickly and without loss; And between the due obligations that must be fulfilled, so the liquidity of any bank can only be determined in light of the maturities of its obligations.(Abdel Muttalib Abdel Hamid,200,p230)

Liquidity in its absolute sense means cash; in a technical sense, it is the asset's convertibility with liquid assets without loss, in order to meet obligations due to performance, i.e., liquidity expresses the relationship between cash and assets that are easy to convert into cash quickly and without loss; Of the accrued liabilities to be met, therefore, a bank's liquidity can only be determined in the light of its liability entitlements.

Risk management requires the identification, assessment and control of a financial institution's risk; Banks' risk management deals with a range of risks; the most important of which is liquidity risk.

Liquidity risk is broadly defined as the risk of being unable to raise cash when needed. (Joel Bessis,

Opcit ,p2)

Liquidity risks occur when the maturity dates for the bank's resources are shorter than the maturity dates for its uses; hence, banks are unable to face payment requests submitted by depositors, and are unable to borrow from the market. (Badawi Abdel Hafez, 1999, p320)

Through the above, liquidity risks arise from the bank's inability to meet its obligations in the short term, or the inability to invest funds appropriately, which leads to a negative impact on the bank's profitability. Especially if there is a deficiency in the Bank's cash inflows in offsetting outflows.

As financial intermediaries, banks collect deposits from the public for distribution in the form of loans to institutions and individuals. The risk in this process is that deposits are often short-term while loans are long-term. Banks, in making such transfers, bear two risks of fluctuating interest rates and liquidity risks, the latter being the possibility of rising depositors' requests for refunds of funds deposited with the bank, which are necessary to finance loans (longer term); This situation may also occur as a result of customers' loss of confidence in their banks, which incites them to withdraw their deposits from them. However, in normal cases, but in normal cases, liquidity risks remain relatively low so long as the bank retains its reputation and customer confidence.

There are two different types of liquidity risks, the first type is related to the liabilities side, and the other is related to the assets side: (Sylvie de Coussergmes, 1992, p10)

- **Funding risks (the liabilities side):** The most important resource for banks is the short-term resources, as they relate to the ability to borrow from the market, meaning that financing risks are the risks related to the bank's ability to obtain the necessary liquidity from external sources.
- **Risks of freezing uses:** repayment of loans that have reached maturity and financial assets that are being sold are considered one of the major sources of liquidity on the asset side; therefore, failure to repay these loans will lead to a liquidity crisis for the bank on the asset side, and the depreciation of financial assets will also result in a decline in the Bank's liquidity.

Liquidity risks can also be divided according to banking rules into:

- **Funding Liquidity Risks:** Funding liquidity refers to the bank's ability to obtain immediate funding through the sale of assets or re-borrowing, to meet debt obligations on maturity (Bouabdali

Ahlam, 2014, p109). These risks arise when the Bank is unable to efficiently meet current or future projected and unexpected cash flows, i.e., it is the bank's liquidity risk that it is unable to handle requests for withdrawal of deposits in cash; Whether foreseeable or unexpected without losses or endangering the bank's activity.

➤ **Market liquidity risk:** Market liquidity refers to the asset side of banks' balance sheets and determines the ease with which assets can be traded. Market liquidity risks arise when the bank is unable to sell or mortgage its assets in the market, i.e. the inability to liquidate them in the market (Bouabdali Ahlam, Opcit, p109).

➤ **Incidental Market Risk:** This risk arises from the abrupt withdrawal of customer deposits.

3.3 Basic stages of liquidity risk management:

Liquidity risk management has become one of the issues of interest to commercial bankers. The main objective of managing these risks is to provide the necessary liquidity at a reasonable cost, to meet the various demands; thus, there is a temporal alignment between the loans granted and the bank's deposit maturities; and liquidity risk management goes through four phases: (Al-Mehy, 2015, pp. 400-401).

- **Identification of causes of liquidity risk:** The first stage of liquidity risk management is to identify the causes and factors that lead to these risks; So that these risks should be identified on an ongoing basis so as not to fall into bankruptcy; as the increase in liquidity may be undesirable because it misses the opportunity to make profits and employ and invest those funds, and in return, the lack of liquidity may be fatal to the bank and the entire banking system.

- **Measurement of liquidity risk:** Liquidity risk measurement includes three main dimensions:

- The Size of the risks
- The Duration of the risk
- The probability of occurrence of the risks

- **Liquidity risk monitoring and control:** This stage is carried out through a set of options:
 - Avoid all banking activities that generate such risks
 - Setting maximum limits for banking activities that generate such risks
 - Reducing the effects of risks, when occur
- **Liquidity risk control:** The bank's management must establish an integrated and comprehensive system to create the appropriate environment and tools for anticipating, studying, identifying and measuring potential risks, as well as quantifying the potential impact of these risks on the bank's business, assets and revenues; and thus to develop appropriate plans to avoid, curb and control these risks. Controls and supervision must be activated in accordance with the requirements of the international banking supervisory.

3.4 Regulatory decisions for measuring and evaluating liquidity risks:

The true measure of the liquidity efficiency of any bank is the extent of its ability to convert its assets into cash easily and easily, in order to avoid falling into deficit situations, as liquidity risks arise from the insufficiency of short-term assets to meet short-term liabilities.

- **Liquidity Risk Measurement:**

There are three ways to measure liquidity risk: (Sylvie de Coussergmes, 1992, p200)

- **The successive differences method:** by calculating the differences between assets and liabilities for each maturity stage, this method determines the amount, period, and deadlines for the maturity transfer process taken by the bank.
- **Combined differences method:** where each maturity period is added to the next period.
- **Method of weighted assets and liabilities:** by weighing assets and liabilities for each maturity stage by average years per stage and calculating the following ratio:

Liquidity Risk Index = Total of weighted assets / Total of weighted liabilities

If this indicator is greater than or equal to 1, this means that the entitlement of resources is greater than the entitlement of services; therefore, there is no risk of liquidity. On the other hand, if the indicator is less than 1, this means that the bank suffers from significant liquidity risks.

- **Liquidity risk measurement indicators:**

Banks rely on liquidity risk measurement on certain indicators, drawing on the financial statements of annual reports (Radjaa Rachid,2012,p126).

Liquidity risk = cash and bank balances/total assets

An increase in this indicator indicates a decrease in liquidity risk, as this reflects an increase in cash balances, whether in the fund or with banks, which the bank faces with its various obligations.

Liquidity risk = cash and short-term investments/total assets

A high in this indicator indicates a decrease in liquidity risks, so that cash and investments that the bank faces with its various liabilities can be increased.

Liquidity risk = total loans / total deposits

An increase in this indicator indicates an increase in liquidity risks, as this increases the proportion of loans that cannot be liquidated easily. On the other hand, the increase in the loan-to-deposit ratio indicates the bank's need to increase new cash sources to cover new loan requests.

Liquidity Risk = Current Assets / Total Deposits

A high in this indicator indicates a decrease in liquidity risk, as it reflects an increase in current assets against total deposits.

3.5 Liquidity risk and Basel 3 decisions

The new Basel III agreement developed by the Basel Committee on Banking Supervision aspires to enhance the solidity of banking systems by addressing many of the defects revealed by the global financial crisis, as it introduces new standards for capital, indebtedness and liquidity to strengthen the ability of the banking sector to deal with economic and financial pressures and improve management risk and increase transparency, and will be a significant contribution to financial stability and long-term growth. The Basel III agreement consists of five important axes, which are:

- The first axis: The new draft agreement provides for improving the quality, structure and transparency of the banks' capital base, limiting the concept of basic capital to subscribed capital and undistributed profits on the one hand, in addition to capital instruments that are not conditional

on returns and are not registered with a maturity date, i.e. instruments capable of absorbing losses as they occur. Supporting capital may in turn be limited to capital instruments restricted for at least five years and capable of bearing losses before deposits or before any liabilities of third parties on the bank. Basel III has dropped all other components of capital that were acceptable pursuant to previous agreements.

- The second axis: The Basel Committee proposals emphasize covering the risks of counterparty borrowers arising from operations in derivatives, financing debt securities and repo operations by imposing additional capital requirements for the aforementioned risks, as well as to cover losses resulting from the revaluation of financial assets in the light of fluctuations in their prices in the market.
- The Basel Committee includes a new ratio, namely, the financial leverage ratio, aimed at maximizing the increasing debt ratio in the banking system, which is a small ratio, and risks that are not based on the leverage ratio complement risk-based capital requirements, on a risk basis; along with providing additional guarantees against risk models and error criteria, and serve as an supplemental reliable standard for basic risk requirements.
- fourth Axis: The aims is to prevent banks from adopting too accommodating lending policies; Excessive financing of economic activities increases during the stage of growth and prosperity, and the days of recession refrain from lending, thus, deepening the economic recession and prolonging its time.
- Fifth axis: This is due to the issue of liquidity, which during the recent global crisis demonstrated how important it is for the functioning of the entire financial system and markets, and it is clear that the Basel Committee wants to develop a global liquidity standard, proposing two ratios; the first being liquidity coverage ratio (LCR), which requires banks to maintain assets with a high degree of liquidity to cover their cash flow up to 30 days; while the second ratio (NSFR) is to measure medium and long-term liquidity, and is intended to provide banks with stable sources of funding for their activities.

- **Liquidity Coverage Ratio (LCR):**

The liquidity coverage ratio is designed to enhance the flexibility of banks liquidity, to address potential liquidity disruptions within 30 days, which require banks to retain high liquidity assets, to

cover cash flow in the event of a crisis. This ratio is calculated according to the following formula:

Net Stable Funding Ratio =

$$\text{Liquidity Coverage Ratio} = \frac{\text{High quality liquid assets}}{\text{Total net cash outflows over 30 days}} \geq 100$$

Through the previous relationship, this ratio consists of two main components:

High-quality liquid assets: assets that are cash or can be quickly converted into cash, by being sold with little or no loss of value, and a liquid asset can be included in high-quality liquid assets; if the following conditions are met: (Abdul Karim Kunduz, 2020,p112)

- to be free (unconditional)
- Meets minimum liquidity criteria
- It can be converted to liquidity when needed

Net cash outflows: It is the total projected outflows minus the total cash inflows within 30 days. The total projected cash outflows are calculated by multiplying the various balances of different categories and types of liabilities and obligations inside and outside the balance sheet by their external cash flow rates. The total projected cash inflows are calculated by multiplying the balances of financial receivables on the assets side by the expected rates of their flow.

The highly liquid assets must be at least or equal to the total net cash outflows for the last 30 days as per Basel III requirements.

- **Net Stable Funding Ratio (NSFR):**

The objective of this ratio is to ensure stable medium and long-term sources of funding for banks, to finance their financial activities for at least one year. and this ratio measures the sources of long-term funds available to the bank in order to finance its activities against asset recruitments; As well as the possibility of financing requirements arising from extra-budgetary liabilities that require stable financing available.(Heba Abdel Moneim,2022,p54)

This ratio also aims to achieve structural balance of the banks' financial statements, and to encourage the use of stable sources of financing, without resorting to short-term financing for economic units, especially in times of booming liquidity.(Rajab Muhammad,2020,p43). This

percentage is calculated as follows:

As for the value of available stable financing, it consists of the bank's capital in addition to long-term preferred shares, long-term liabilities, and unspecified stable deposits. The value of available stable financing is calculated by multiplying each category of financing by the corresponding available stable financing coefficient.

As for the value of the stable financing required, it is calculated on the basis of the total value of assets held and financed by the Bank; Weighted by the stable funding coefficient for each type of asset; In addition, off-balance sheet items are weighted by their corresponding stable funding factor.

According to the Basel Committee, this ratio must not be less than 100% in order for the Bank to be able to meet future liquidity risks, and if it is below this ratio, the Bank will suffer from long-term liquidity problems.

4. The role of securitization in reducing liquidity risks

Securitization secures many advantages for commercial banks, where it can narrow the most appropriate volume of assets by resorting to active markets, in order to reduce liquidity risk; or to obtain financing at a lower cost; and securitization allows for the conversion of commercial assets, such as loans and mortgages into disciplined and market-based products to provide cash liquidity.

4.1 Securitization products: The main products of the securitization are

- **Mortgage-backed securities:** One of the most important reasons that led to the emergence of securitization was mortgages; with the aim of finding solutions to the financial crisis of housing system. Securities issued in exchange for mortgage loans allow their holder the right to obtain financial returns on specific dates, and they are secured by a portfolio of real estate loans, to finance the borrower to purchase a home or a real estate; hence, the issuer collects these securities and builds a portfolio of those loans.

Securities are issued and sold to buyers at the value of debts, and these securities that have been securitized can be purchased by the originators of real estate loans, as they are characterized by a good level of liquidity, and when the borrower pays the debt installments, the buyers are handed the benefits due to them. Three types of these papers can be distinguished:

- Securities paid through a broker

- Securities paid through cash flows
- Secured mortgage obligation
- **Asset-backed securities:** Referred to as non-real estate securities, which are securities that rely on their income payments and original payment on a set of assets. Expanding securitization from real estate to asset-secured loans; In order to obtain real-time cash flows; In order to obtain instant cash flows, such as consumption loans, car loans, credit cards. These securities are based on a homogeneous portfolio of assets, and include two other types of securities:
 - Secured Bond Obligation: are securities secured by a portfolio of bonds.
 - Secured Loan Commitment: are securities secured by a set of loans.
- **Collateralized Debt Obligations:** They are bonds whose income and principal payments depend on a combination of instruments; representing a variety of loans and securities. Hence, this type of obligation is similar to the secured mortgage obligation, and is distinct only from its use of a homogeneous asset portfolio.

4.2 Risks associated with the securitization process

The securitization process involves several significant risks, including:

The risk of pre-payment: The first risk of the securitization process appeared by using the mortgage. It is directed by the decisions made by the debtors (borrowers), as they wish to pay their debts before the due date, but this possibility poses a risk to the lending company; And in the possession of mortgage loans, the risk increases when the issuers of fixed-rate securities, in light of a low interest rate in the market, see that it is in their interest to pay some papers from the previous debts with new papers in more favorable conditions, and among the reasons that lead to prepayment. (Malika bin Alqama, 2016, p143)

- **Arbitration:** It is the refinancing of the loan at an appropriate rate due to financial competition; besides, it is related to the replacement of the first loan with another loan; which is condition on the relationship between the con-expendable capital of the loan and the assignment value of the financed asset.
- **Movement:** This means a change in the initial terms of the loan or a change in the

environment of the loan.

- **Covered insolvency:** This involves repaying all or part of the loan by introducing an insurance mechanism.
- **Debtors' insolvency risk:** This risk is represented by the borrower's failure to pay or credit risk, and the funded asset is sold as is the case with real estate loans or any other loans, meaning that the rate of insolvency depends mainly on the nature of the securitized loans.
- **The risk of fluctuation of cash flows:** There are two types of cash flows, the first is cash flows to shareholders, and the second is flows paid by the securitization company. If there is a time difference between these flows, it will result in a delay in payment, advance payments, error problems, or technical difficulties during payment.
- **Risk of Insolvency of the Participants:** The insolvency of any intervener in the securitization process represents a real risk for the loans relinquished.

5. Difficulties associated with the accumulation of intervening functions: The relinquished loans are no longer in the ownership of the bank, but rather have become the property of the securitization body, but the bank remains responsible for them after they are securitized, and it can also combine the functions of manager and liquidity lender; And even the guarantor of the operations carried out by the borrowers. Here, some specialists believe that this risk is certain if the same structure plays several roles in the securitization process.(Malika bin Alqama,2016,p142)

6. RESULTS AND DISCUSSION

- Securitization is a means of financing and a modern tool for managing the risks and budgets of commercial banks.
- Asset liquidity and liquidity of liabilities must be managed through balanced management that leads to effective and comprehensive liquidity management.
- Compliance with the terms of the Basel III Committee Agreement makes liquidity risk management more efficient.

- Securitization activity allows access to liquidity at the lowest possible cost, compared with its traditional counterparts, to finance bank requirements.
- Securitization activity offers a range of products that contribute to the management of the Bank's business assets and liabilities, allowing them to obtain the necessary liquidity, thereby reducing liquidity risks.
- Securitization activity involves a range of risks, thus, legislation, regulations and laws governing this process must be developed.

6. CONCLUSION

Liquidity risk management tends to manage the bank's liquidity or cover its liquidity requirements, where liquidity risk arises from the gap between bank 's uses and resources during a predetermined period of time. Further, liquidity risks are risks related to the bank's liquidity and risks related to the bank's solvency. The expansion of securitization activity from mortgaged mortgages to automobiles and credit cards to include most assets has been highly prosperous in the United States of America, through the regulatory texts and legislation governing it, where this financial innovation has contributed to solutions to many of the problems facing commercial banks, including liquidity risks, through a range of products that have contributed to bank liquidity management.

Bibliography List :

I. Books :

- 1- The Holy Quran;
- 2- Mohammed Abi Bakr Al-Razi, (1986), Mukhtar Al-Sehah, Library of Lebanon, Beirut;
- 3- Khaled Amin Abdallah,(2002), The Scientific and Practical Background of Securitization, Encyclopedia of Securitization 2, Union of Arab Banks, Beirut;
- 4- Mahmoud Mohieldin,(2002), Economic and Financial Dimensions of Securitization, Encyclopedia of Securitization 2, Union of Arab Banks, Beirut;
- 5- Ahmed Safar,(2002) Securitization and Capital Markets, with reference to the Lebanese experience, Encyclopedia of Securitization 2, Union of Arab Banks, Beirut;
- 6- Joel Bessis,(2015), risk management in banking, john wiley &sans LTd, fourth edition;
- 7- Jihan Abdulaziz Al-Jammal,(2014), Auditing and Corporate Governance, University Book House, first edition, Beirut;

- 8- Abd al-Muttalib Abd al-Hamid,(2000) comprehensive banks, their operations and management, University House, Alexandria;
- 9- Al-Badawi Abdel-Hafez,(1999) Management of Markets and Financial Institutions, Dar Al-Fikr Al-Arabi, Egypt;
- 10- Sylvie de Coussergmes,(1992), gestion de la banque, dumond, paris ;

II. Theses:

- Rajab Muhammad Al-Baghdadi, A proposed model for accounting measurement and financial evaluation of banking risks in light of Basel 3 and the International Financial Reporting Standards, an applied study, doctoral dissertation in commercial sciences, specialization in accounting, Faculty of Commerce, Sadat City University, Egypt, 2020.

III. Journal article :

1. Andreas Jobst,(2008), what is securitization? Back to basics, September 2008, volume 45, N3
2. Aqdas Hussein & others,(2019), The Effect of the Securitization over the Risks Management Concerning the Insurance Facility/Study for a Sample of the Commercial Banks, Journal of University of Babylon for Pure and Applied Sciences, Vol. (27), No. (3);
3. Ahlam Bouabdali, Hamza Ammi Al-Saeed,(2014), Supporting the Management of Liquidity Risks in Light of the Contributions of the Basel III Agreement, Al-Wahat Journal for Research and Studies, Ghardaia University, Volume 7, Number 2;
4. Ramadan Abdel Hamid El Meehi,(2015), Measurement and Disclosure of Banking Liquidity Risks in Light of Basel III Decisions, and International Financial Reporting Standards IFRS, A Field Study on Egyptian Commercial Banks, Journal of Accounting Thought, Faculty of Commerce, Ain Shams University, Egypt, Volume 19, Issue 4;
5. Rajaa Rashid Abdel Sattar,(2012), Evaluation of the financial performance of Rashid Bank and its importance in measuring banking liquidity risks, Baghdad College Journal of Economic Sciences, Baghdad ,Issue 31;

IV. Seminar article:

- Ajeel Jassim Al-Nashmi,(2009), Securitization and Issuance and Their Applications, International Islamic Fiqh Academy, Organization of Islamic Cooperation, Session 19 Sharjah, April 26-30 United Arab Emirates;

V. Internet websites:

-Daniel Liberto, what is securitization?
<https://www.investopedia.com/ask/answers/07/securitization.asp> 23/04/2023.