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# **THE IMPACT OF NON-PERFORMING LOANS ON BANKING PROFITABILITY INDICATORS: AN ANALYTICAL STUDY OF A SAMPLE OF PRIVATE COMMERCIAL BANKS LISTED ON THE IRAQI STOCK EXCHANGE**

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## **Abstract**

The research aims at a fundamental objective: to identify the impact of non-performing loans on the profitability of private commercial banks. The research problem encompasses a primary question: Is there a statistically significant impact of the non-performing loans indicator on banking profitability as represented by the return on assets (ROA), return on deposits (ROD), and return on equity (ROE)? The research is based on a set of hypotheses, the most important of which is that there is a statistically significant impact of asset quality on banking profitability. The research population consists of private commercial banks, with three banks selected based on the available data in their financial reports. The hypotheses were tested using the descriptive analytical method through (Excel 13), aiming to identify the relationship between the research variables. The researchers reached several conclusions, the most important of which is that the results showed an inverse relationship between the non-performing loans indicator and profitability indicators, as an increase in the non-performing loans indicator leads to a decrease in profitability. The researchers recommended the necessity of working seriously and efficiently to resolve non-performing loans that can be recovered from debtors, in line with the standards of loan granting.

**Keywords:** Non-performing loans, banking profitability.

## **Introduction**

In the modern era, banks play the main role in financing and developing the economy in all its sectors, through the services they provide, the most important of which is the intermediary service between investors and savers. Loans are considered one of the most important banking services provided by banks. Loans are considered one of the most important sources of profitability for the bank, despite the diversity of services provided by banks. However the service of granting loans still occupies the first place among the basics of the work of banks. Through this service, the bank can embody its main role on which the structure of the

banking business was founded in the past, represented by the role of mediator between savers ,and investors, and this constitutes a large percentage of the returns that the bank obtains there is no doubt. Decisions to grant bank credit are based on scientific and studied foundations. Therefore, it is necessary to study and analyze the financial situation of customers, their reputation, their ability to repay, the surrounding circumstances, and the guarantees provided. However, there are actual cases that were not able to repay the loans ,and they defaulted, and other cases that were caused by the failure of many banks. Therefore the The level of non-performing loans to total loans is the actual measure of the success of asset management. A decrease in this ratio is a positive indicator for the bank and expresses a good reading of customer conditions and the efficiency of employee management. A high percentage of this ratio expresses a lack of specialization and negligence in studying the client's situation and failure to comply with banking standards. Therefore, the research seeks to Finding the impact of non-performing loans on banking profitability indicators, as it can help in understanding the risks of default , its importance, and ways to treat it, and then .improving banking profitability

### **The first topic**

#### **Research Methodology**

##### **The research problem - : First**

Commercial banks face many problems in the process of repaying loans resulting from the conditions that the country went through, which contributed greatly to the high degree of credit risk. This necessitated research on the extent of the impact of non-performing loans The importance of the problem .banks on profitability indicators and a study of the case of ?lies in the main question: Is there an impact of loans? Faltering in banking profitability

##### **Second : - The importance of research**

- 1- The importance of this research stems from making banks aware of the importance of applying credit regulations in the process of granting loans, increasing profitability, and . reducing risks
- 2- ,Explaining the impact of non-performing loans on the continuity of banking profits which helps banks achieve a competitive advantage to survive, continue and develop in the . face of financial crises
- 3- Studying the non-performing loans index gives a true picture of the conditions and . mechanisms by which banks operate

##### **Third: Research objectives**

- The research seeks a primary goal, which is to identify the impact of non-performing loans-1  
. on profitability in commercial banks  
. Develop a conceptual framework for non-performing loans and banking profitability -2  
,Measuring and analyzing banking profitability indicators represented by return on equity -3  
. return on assets, and return on deposits

#### **Fourth: Research hypothesis**

The research is based on the main hypothesis, which states that there is a significant effect of the non-performing loans indicator on banking profitability, from which the following hypotheses branch

- 1 There is an inversely significant effect of the non-performing loans index on the rate of return on deposits

There is a significant inverse effect of the non-performing loans indicator on the rate of return on assets

There is a significant inverse effect of the non-performing loans index on the rate of return on equity

#### **Fifth: Limits of research**

**Spatial boundaries:** It included a sample of private commercial banks listed on the Iraq Stock Exchange (Investment Bank of Iraq, National Bank of Iraq, Commercial Bank of Iraq)

**Time limits:** represented by the period from (2013 - 2023) and on an annual basis, due to the occurrence of many crises during this period

**Sixth :** The research population and sample

Table (1): An overview of the banks in the research sample

capital	Year of its establishment	The bank
250 billion Iraqi dinars	1995	Al-Ahli Bank
250 billion Iraqi dinars	1993	Investment Bank
250 billion Iraqi dinars	1992	Iraqi Commercial Bank

The table was prepared by the researchers based on the data published in the official reports of the banks in the research sample

#### **The second topic**

**The conceptual framework of non-performing loans and banking profitability indicators and the relationship between them**

**First: - Non-performing loans: concept - causes - treatment - settlement method**

There are many names for non-performing loans, including non-performing debts, frozen debts, outstanding debts, critical debts, non-performing debts, difficult debts, and stagnant debts, but the most common are non-performing loans, and in this section we will present the concept of the reasons for dealing with the method of settling non-performing loans

**The concept of non-performing loans -1**

These are loans in which the borrower was unable to repay on the due date, and the reason is due to the unwillingness to repay due to an exaggeration in the loan, unexpected events or problems and imbalances surrounding the borrower (Shahin, 2021: 140)

These are loans that include partial or total losses to the banking sector, and represent the cost of the loan asset, plus the loan interest, the cost of collecting and managing it, and the cost of alternative opportunities resulting from the customer's failure to pay his obligations towards the bank on the specified date for repaying the loan, whether the reason is the

customer's procrastination or reasons beyond his control. The customer (Shafieh and . (Khalaifi , 2016: 33

Through the previous definitions, the researchers define non-performing loans as the passage of a period of (90) days after the due date and the borrower does not repay the loan or visit the bank. Here, the bank will take the action of warning the borrower, and if the borrower does not attend and state the reasons for non-payment, these loans will be considered to be .among the non-performing loans to the bank

### **Reasons for loan default -2**

Loans are the primary source of banking profitability and one of its core tasks For the bank to know the reasons that lead to the default of these loans, as in

أ- **Reasons specific to the customer, which are as follows:-** (Abdul-Jabbar and Saeed, 2016 (373

✓ The customer's inability to repay the loan principal on the due date resulting from a . defect in the borrower

✓ Failure to implement the bank's directives , instructions and advice related to the loan .

✓ . The customer provides some incorrect or misleading information to the bank

ب- **Reasons specific to the bank and are represented as follows**

✓ . Not knowing the customer's eligibility sufficiently

✓ . Insufficient conditions and instructions in the concluded contract

✓ . Poor communication between the credit team and the customer

✓ . Granting bank loans for personal considerations

ت- **Reasons beyond the customer's control And the bank** chong & Ongen (2013:37 (

Reasons due to local and global economic factors, such as the global recession crisis, which is difficult to control, leading to the failure of many customers. Moreover, crises usually extend for several years. Reasons beyond the customer's control, which are due to . epidemiological factors such as emerging diseases and viruses (Corona)

**Addressing non-performing loans at the local level :-** (Al-Sayed, 2004: 17) -3

**circumstances** , reasons, and situations of borrowers that led to loans defaulting are what determine the methods and treatment of troubled loans, that is, they are determined by studies of each case separately. In this context, troubled loans are dealt with according to a set of - :methods, the most important of which are the following

أ- **Method of supporting a distressed client:** According to this method, the client's activity is supported and this is done by reviving, creating and strengthening him so that he . can pay

ب- **Floating the client:** The client or one of the borrowing clients may face the problem of default as a result of the client being exposed to temporary and not permanent emergency conditions that will have a negative impact, as this leads to non- fulfillment of obligations towards the bank, and without the bank's support, it may be difficult for the client to overcome this crisis, and it will be the focus of the evaluation process, and the bank will grant The customer has a grace period during which he postpones repayment of the debt and . its interest until a later period

ثـ **Managing client activity** . This stage is usually more advanced, as it includes direct intervention by the bank and directing it towards only a client that will adhere to it in the future. It also provides appropriate advice to the client, and this is done by creating a balance . between the revenues and expenses of the borrowing project

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#### **Method of settling troubled loans -4**

,Purchasing loans for some of the client's assets to repay the loan. In special circumstances the bank may be forced to purchase some of the borrower's assets, whether within the .financed project or from its other properties

أـ **Securitization:** The bank uses this method when the customer has illiquid financial ,assets, such as loans and other assets, as they are converted into securities, stocks and bonds . that can be traded in the money market

بـ The bank waives part of the troubled loans. This is the case when the bank reaches the ,conviction that the borrower is unable to renew the loan in full dues and interest. In this case .the bank resorts to exempting the borrower from paying part of the amount owed to him The bank resorts to this solution because it is aware that judicial solutions It requires ,procedures and complications that exceed the cost of the part waived by the bank (Hebal .(181-178 :2013

#### **5- Non-performing loan index**

.is one of the main indicators for measuring the quality of assets of commercial banks index It also represents the amount of the bank's loans and advances that have become non- ) performing, which indicates the extent of the risk of defaultGizaw 2015: 61 . (

$$\text{Non-performing loans index} = \text{non-performing loans} / \text{total loans} * 100$$

If this ratio is high, it indicates that the quality of the assets is low or weak and is then reflected in the bank's profitability, which will also be low due to the increase in non- ,performing loans because it gives the bank acceptable indicators (Al-Mousawi et al .(2018:179

#### **Banking profitability :Second**

Bank profitability is one of the most prominent topics that attract the attention of commercial banks and banking policy makers, because profitability is essential for banks. Therefore, this study dealt with the concept of profitability, its importance, its sources, the factors .determining it, the factors affecting it as well, and the indicators related to profitability Commercial banks seek to achieve the greatest amount of profitability in order to ensure Achieving stability, continuity and progress in the banking system, and profits are achieved .through the acquisition of high-quality assets

## 1- The concept of banking profitability

Banking profitability: The primary goal of every investment project is to achieve the greatest amount of profitability, whether it is a bank or otherwise. The basic criterion for measuring a bank's efficiency is the size of the profits it achieves. The more highly efficient the bank's management is, the greater profits it can achieve. Banking profits are considered one of the most important. The goals that the bank seeks to achieve

What is meant by profits is the management that makes the bank more prepared in the face of obstacles, while helping it maximize the bank's ability to face the risks it may be exposed to, increasing the market value of one share, and maximizing the owners' wealth (Hawwa . (251 :2007

It is an operating concept meaning that profitability is achieved when the economic results obtained are greater than the elements used (Mustafa, Murad, 2013: 34)

It is the difference between the returns that the bank seeks to achieve and the investments that contributed to achieving it. Profitability is also the main and primary goal for judging the efficiency and quality of the financial institution in general and banks in particular )

Merciful, 2014, 39 . (

It is the relationship between the profits achieved by the establishment and the investments that contributed to achieving these profits. (Muqimih, 2014: 382)

Profitability is the bank's ability to earn profits by investing funds obtained from various sources that help in the survival, continuity and development of financial institutions especially banks. (Awad and Muhammad, 2023: 124)

Through the previous definitions, the researchers define profitability as the bank's ability to achieve profits that help it survive and continue to face potential current risks and ensure the distribution of an appropriate return to shareholders that is commensurate with the activity and level of risks that the bank bears

## 2- The importance of profitability in commercial banks

The importance of banking profitability stems from its role in the stability of the banking system and its contribution to the development of the economy. Through profitability, the bank can increase capital and provide liquidity. Profitability is also considered an indicator of the strength and durability of the bank's financial position and its ability to compete with other banks. Profitability shows the extent of the bank's ability to provide good services and improve existing services. Therefore, profitability is the primary goal that all banks seek -:Profitability is of great importance, which we explain with the following points (Muhammad, Muhammad, 2020, 262), (Awad, Muhammad, 2023: 125)

- أ- Profitability is considered one of the most important goals pursued by the bank's management, investors, and shareholders
- ب- Profitability measures the efficiency of bank management performance
- ت- Profitability is a measure of a bank's ability to stabilize, grow and survive
- ث- Bank management seeks to achieve profitability by obtaining funds at the lowest cost and lowest possible risk
- ج- Profitability reflects the bank's ability to invest funds, whether from internal or external sources



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### 3- Sources of profitability in commercial banks

.(Al-Taie and Abdul-Hadi, 2013: 191-192), (Hazouri, 2018: 82), (Muhammad and Nimah (42 :2021

Through the services that banks provide to their customers, sources of profits can be classified

✓ **The interest rate difference** is the difference between the interest that the bank charges through granting credit facilities, loans and advances to its customers and the interest . it pays on the deposits and loans that the bank borrows

✓ **The commission** is considered one of the most important sources of profits that the .bank achieves by providing other services such as (letters of guarantee, credits) Documentary documents (which it provides to its clients, as well as money transfers carried .out by the bank on behalf of its clients...etc

✓ **The currency difference** is the profits that the bank achieves through buying and selling non-local currencies, which represents the difference between the purchase price and . the selling price and is considered one of the most important sources of banking profits

### 4- Factors affecting the profitability of commercial banks

In order to achieve their goal of maximizing profitability, commercial banks face many factors whose impact on the bank's profitability varies, as they are divided into internal and :external factors, as follows

#### 1- Internal factors

✓ **Bank management:** The profitability of commercial banks is affected by the extent to which the management of these banks is able to balance profitability and risks and to ,reduce costs and increase revenues through management experience and its ability to plan organize, direct and control. If this administration is able to achieve the required balance in its financial structure by investing the bank's resources in assets with lucrative returns, taking into account the attempt to reduce the costs of those resources while seeking to maximize the revenues of those uses, this will lead to increasing the profitability of these banks and . maximizing the wealth of their owners. (Abu Zuaiteer, 2006, 97-98)

✓ **Liquidity:** The issue of liquidity and its management is one of the most important issues that preoccupy the bank's management. Liquidity means the bank's retention of part of its assets in liquid form to varying degrees in order to confront the increase in withdrawals of deposits and withdrawals from credits open to customers so that the bank can at the same time exploit its deposits in a way that achieves the greatest potential for it. Profitability while maintaining sufficient cash to enable it to meet withdrawal requests without the slightest . delay and without causing confusion in its business (Baradi and Mohamed, 2016: 31)

#### ✓ **:paid Capital**

It is the money that the bank's shareholders actually provide when it is established, with their participation in forming its capital. Although it constitutes only a small percentage of the total money obtained by the bank, it is considered necessary to pay attention to it because it helps to increase confidence in the souls of those dealing with the bank, especially those with current deposits. Among them, and at the same time, it enhances the bank's position in various circles. (Fakhry and Qader, 2016: 154)

✓ **Bank size .**

The size of the bank refers to the total size of the banking sector and the sum of the characteristics that make it effective in meeting customer demand and expectations. Increasing the size of the bank can reduce the cost of credit provided by banks. The reason is that the size of large banks may benefit from it in improving the efficiency associated with economies of scale. One of the advantages of large banks is that they may be more diversified, which can reduce their funding costs, and recent research data reveals much stronger evidence of the importance of increasing returns in benchmarking among large banks. Many researchers confirm the relationship between performance and bank size. They pointed out that many commercial banks benefited from increased returns in measuring performance, regardless of ownership structure and banking restrictions. They found a statistically significant positive relationship between bank size and bank profitability. (Al-Yassari and Rabat, 2016: 69-70)

✓ **:Deposit size**

Deposits are the main source of funds for banks in general, as they rely heavily on them to finance their investments. They are also one of the least expensive sources of funds. An increase in the size of deposits leads to an increase in the bank's ability to grant financing and thus increases profitability rates. (Abdel Majeed, 2021: 142)

✓ **Number of bank branches**

The wide geographical spread of the bank is a target for the public to deal with it, especially with regard to withdrawals, deposits, and financial transfers, and increasing the number of customers, and thus will lead to an increase in the volume of banking operations and thus to (32 : increased profitability. (Sheikh Al-Souq, 2017)

✚ **External factors**

,The external factors that affect the profitability of commercial banks are as follows: (Debek (23-22 :2015

✓ **Economic and political conditions** : Political stability in any country has a significant impact on the profitability of commercial banks. The more stable the political and economic system is in the country, the more stable and large are the activities of commercial banks and thus contribute to supporting other economic activities, which is reflected in the economic performance of the country

✓ **Competition:** Competition between banks affects their profitability due to the limited assets available, which leads to paying high interest rates to obtain these assets and a low return margin, which affects net profit

✓ **interest rates**

The profitability of commercial banks increases as interest rates on loans increase, especially when interest rates on deposits are low, meaning that profitability increases as the interest rate margin increases. Interest rates play an effective role in influencing banks' investments and most commercial banks' revenues are the difference between credit interest and debit interest (Al-Islam and Saeed, 2019: 22)



## 5- Profitability indicators

### 1- ) Return on Assets ROA (Return of Assets

This indicator is one of the profitability indicators that represents the bank's management's ability to achieve profits from the assets available to them. It is also called the return on investment. A high indicator of this indicator indicates the bank's ability to invest assets and reduce the volume of operating spending. This indicator is calculated according to the ( following equation (Fakhri and Qadir, 2016: 374

Rate of return on assets = net income / total assets \* 100

### 2- ) Return on Equity ROE (Return of Equity

This indicator is used to measure the rate of return that is produced on the investment of funds provided by the owners. A rise in this indicator is clear evidence of the efficiency and effectiveness of banking management. A rise in this indicator is clear evidence of an increase in risks resulting from an increase in financial leverage. A decrease in this indicator indicates conservative financing of loans. It is calculated through the following equation (Hassoun (and Khalaf, 2021: 304

Rate of return on equity = net profit / equity \* 100

### 3- ) Rate of return on deposits ROD (Return on Deposit

This indicator indicates the success achieved by the bank's management through exploiting the money generated from deposits in the bank's possession or through its acquisition during its work according to the following equation (Abu Ahmed and Qaddouri, 2005: 352)

Rate of return on deposits = net income / total deposits \* 100

## Third: Non- performing loans and their relationship to banking profitability

The traditional way for a bank to make a profit and generate maximum operating income has been lending, which has become the heart of the banking industry. However, the lending process is exposed to many risks, especially those risks associated with non-performing .loans (Do.et al, 202:.373 )

Non-performing loans are the credit risks borne by banks, arising from several reasons such as the occurrence of risk of loss, postponement of payment, and non-payment of loans by .customers .

) The research agrees Abata , 2014: 39) In order to improve banking profitability, non-performing loans must be controlled by taking a set of steps

1- There should be an appropriate credit analysis before granting bank loans, along with setting additional conditions in order to ensure that we do not run into the risk of non-payment

- 2- There must be continuous and regular follow-up of the loan in order to ensure that the loan is not tampered with
- 3- Setting a ceiling for some types of loans so that this ceiling cannot be exceeded by credit responsibility
- 4- Establishing strict penalties in the event of failure to pay the principal of the loan with the resulting interest
- 5- There should be records by borrowers explaining the process of using the loan for follow-up and all

Non-performing loans are related to the size of the banks, as larger banks are of high quality as they contain much fewer non-performing loans and therefore have a better loan portfolio quality than small banks because they usually have clients with a high ability to repay and trade much greater than those dealing with small banks and this is due to The reason is that small banks cannot truly meet the needs of large clients, in addition to the fact that large ) banks have special regulations for settling non-performing loans Berger et, 2009; 188 .(

The third topic

Financial analysis of research variables

First: Financial analysis I Index of non-performing loans to total loans

Table ( 2 ) presents indicators of non-performing loans in the banks of the research sample for the period (2013-2023)

Non-performing loans index to total loans			
The bank is commercial	Investment bank	National Bank	the year
0.02620	0.00130	0.08353	2013
0.01454	0.00293	0.00739	2014
0.01050	0.00298	0.00688	2015
0.00358	0.00200	0.01005	2016
0.00330	0.01368	0.00968	2017
0.00303	0.01324	0.00172	2018
0.00310	0.01336	0.01030	2019
0.00292	0.01846	0.00681	2020
0.00383	0.01654	0.00196	2021
0.00421	0.01696	0.00297	2022
0.00473	0.01554	0.01350	2023
0.00839	0.01052	0.02476	Arithmetic mean
0.00730	0.00681	0.02334	standard deviation

schedule from Preparation The two researchers By credit on Reports Annual For the research sample banks during Period 2013-2023

We note from Table (2) that the National Bank of Iraq obtained the highest arithmetic mean ) of 0.02476 ) corresponding to a standard deviation of , ( 0.02334 This indicates that the . ( bank has high non-performing loans and suffers from a defect in the process of granting loans. As for the bank that obtained the lowest arithmetic mean, it is the Commercial Bank ) of Iraq. An amount of 0.00839 ) corresponds to a standard deviation of ( 0.00730 This . (

means that the bank has loans with a good credit rating compared to the other banks in the .research sample

## Second : Financial analysis of banking profitability indicators

### 1- Analysis Financial For indicators Profitability Banking Al-Ahli Bank

Table ( 3 ): A presentation of banking profitability indicators at Al-Ahli Bank for the period (2013-2023)

Return on equity	Return on deposits	Return on assets	the year
0.08232	0.04610	0.03062	2013
0.02638	0.02683	0.01473	2014
0.00881	0.01557	0.00778	2015
0.09881	0.17148	0.04800	2016
0.01038	0.03181	0.00973	2017
0.03069	-0.02945	-0.01068	2018
0.03571	0.04577	0.01812	2019
0.06452	0.05823	0.02774	2020
0.08270	0.02634	0.01777	2021
0.08290	0.15343	0.01081	2022
0.08388	0.14384	0.01056	2023
0.05519	0.06272	0.01683	Arithmetic mean
0.03323	0.06442	0.01501	standard deviation

was prepared by the researcher based on the annual reports of Al-Ahli Bank during the period .2023-2013

shows us a presentation of banking profitability indicators at Al-Ahli Bank for the period ( 3 that a commercial bank cares about the return on deposits more than We note .(2023-2013) ,the rest of the other indicators, as it obtained the highest arithmetic mean (0.06272) corresponding to a standard deviation (0.06442), but in return it obtained At the lowest corresponding to a standard deviation (0.01683 ) arithmetic mean of the return on assets of of (0.01501). This means that the bank that prefers the return on equity over the rest. The achieved the highest value in 2016 and the lowest value in 2018 return on assets index. As it achieved the highest value in the year 2016 and the lowest , for the return on deposits index while the return on equity index achieved the highest value in 2016 and the , value in 2018 lowest value in 2015. **Financial analysis of banking profitability indicators at the Investment Bank**

Table ( 4 ): Presentation of banking profitability indicators at the Investment Bank for the period (2013-2023)

Return on equity	Return on deposits	Return on assets	the year
0.16925	0.11134	0.06058	2013
0.12279	0.13571	0.06237	2014
0.07418	0.08022	0.03782	2015
0.04160	0.04746	0.02086	2016
0.01687	0.01941	0.00832	2017
0.00135	0.00160	0.00063	2018
0.00661	0.00700	0.00325	2019

0.02083	0.02054	0.00967	2020
0.00426	0.00456	0.00172	2021
0.01059	0.01087	0.00458	2022
0.00706	0.00739	0.00295	2023
0.04322	0.04055	0.01934	Arithmetic mean
0.05599	0.04738	0.02349	standard deviation

**was prepared by the researcher based on the annual reports of the Investment Bank .during the period 2013-2023**

shows us a presentation of banking profitability indicators in the Investment Bank for the ( 4 that a commercial bank cares about return on equity more than period (2013-2023). We note ,the rest of the other indicators, as it obtained the highest arithmetic mean (0.04322) corresponding to a standard deviation (0.05599), but on the other hand It obtained the lowest corresponding to a standard deviation ,(0.01934 ) arithmetic mean for the return on assets of .of(0.02349). This means that the bank prefers the return on equity over the rest of the returns achieved the highest value in the year 2014 and the lowest value The return to assets index in2018, return to deposits index achieved the highest value in the year 2014 and while the the lowest value in2018. the return on equity index achieved the highest value in While and the lowest value in 20132018 ,

#### **Financial analysis of banking profitability indicators at Commercial Bank**

for the commercial bank Table ( 5 ) A presentation of banking profitability indicators in a period (2013-2023)

Return on equity	Return on deposits	Return on assets	the year
0.110551146	0.11457	0.03192	2013
0.08642	0.08684	0.02329	2014
0.08960	0.08250	0.01955	2015
0.02688	0.06251	0.01788	2016
0.03404	0.07376	0.02154	2017
0.03826	0.08094	0.02447	2018
0.02402	0.04455	0.01452	2019
0.11521	0.12999	0.05747	2020
0.04136	0.04769	0.02559	2021
0.06158	0.09808	0.03496	2022
0.07267	0.11039	0.04053	2023
0.06369	0.08471	0.02834	Arithmetic mean
0.03328	0.02720	0.01235	standard deviation

**was prepared by the researcher based on the annual reports of the Commercial Bank .during the period 2013-2023**

shows us a presentation of banking profitability indicators in Commercial Bank for the ( 5 that Commercial Bank cares more about the return on deposits period (2013-2023). We note ,than the rest of the other indicators, as it obtained the highest arithmetic mean (0.08471) corresponding to a standard deviation (0.02720), but in return it obtained At the lowest corresponding to a standard deviation of (0.02834 ) arithmetic mean of return on assets of .This means that the bank prefers the return on equity over the rest of the returns .(0.01235) achieved the highest value in the year 2020 and the lowest value The return to assets index

it achieved the highest value in the year 2020 , As for the return to deposits index . in 2019 while the return on equity index achieved the highest value in , and the lowest value in 2019 .and the lowest value in 2019 2020

#### fourth section

#### profitability The statistical aspect of the impact of non-performing loans on banking indicators

##### . First: testing the stationarity of the time series for the studied variables

To carry out measurement and analysis of the impact on banking profitability in the .research sample and to prove the hypotheses, the previous three steps must be performed We begin with the first step, which is testing the stability of the time series. Table (23) shows ) us the results of theLevin, Lin and Chu - LLC test, as we note that All variables stabilized ( at Level(1 :and also stabilized at the first difference (1) as follows (

**Table (23)Levin, Lin and Chu - LLC test results (2002)**

Levin, Lin & Chu t						
	At Level			At first difference		
	t-Statistic	Prob	the condition	t-Statistic	Prob	the condition
X1	-2.7854	0.0019	Intercept	5.4836-6	0.0000	Intercept
X2	-4.46421	0.0023	Intercept	-9.10892	0.0029	Intercept
Y1	-4.46421	0.0018	Intercept	-9.10892	0.0000	Intercept
Y2	-4.03032	0.0234	Intercept	-10.6608	0.0000	Intercept

Source: Table prepared by the researcher using (13 Eviews .program (

##### Second: The effect of non-performing loans on the return on assetsY1 .

#### Table (20)

Estimators and error correction between the effect of non-performing loans on return on assetsY1

Dependent Variable: D(Y1)				
Method: PMG				
Selected model: PMG(1,0,0)				
Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.7333	-0.342828	0.702260	-0.240754	X1
0.3516	0.941112	0.801715	0.754504	X2
0.61906	0.500646	0.002673	0.001338	C
0.92124	0.099372	0.721491	0.07169	COINTEQ

Source: Table prepared by the researcher using (13Eviews .program (

– ) The regression results showed that non-performing loans to total loansX1 did not ( succeed in proving a significant impact on the return on assets(Y1) because the significance .exceeded the 5% barrier



- ) The regression results showed that non-performing loans to total assetsX2 did not ( succeed in proving a significant impact on the return on assets(Y1) because the probability .exceeded the 5% barrier
- The error correction coefficient is positive and not significant, meaning that the first and second conditions are not met, meaning that short-term errors cannot be corrected in the unit of time represented here by the year in order to return to the equilibrium situation in the .long-term

### Third: The effect of non-performing loans on the return on depositsY2

**Table (20) Estimators and error correction between the effect of non-performing loans on return on depositsY2**

Dependent Variable: D(Y2)				
Method: PMG				
Selected model: PMG(1,0,0)				
Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.2817	-1.089461	1.880136	-2.048337	X1
0.0117	2.625531	1.405045	3.688989	X2
0.0259	2.303780	0.014606	0.033649	C
0.0034	-3.070559	0.257765	-0.791484	COINTEQ

Source: Table prepared by the researcher using (13Eviews .program (

- ) The results showed that non-performing loans to total loansX1 did not succeed ( in proving a significant impact on the return on deposits(Y2) because the probability .exceeded the 5% barrier
- ) The results showed that non-performing loans to total assetsX2 ,have a positive ( ) significant impact on the return on depositsY2), Non-performing loans that is, when the .to total assets by 1%, the return on deposits rises by 3.6%
- ,( 0.791484- ) The error correction factor is negative and significant, reaching meaning that the first and second conditions are met, meaning that short-term errors can be .corrected in the unit of time represented here

### Fourth: The effect of non-performing loans on return on equity(Y3 ).

**Table (20) Estimators and error correction between the effect of non-performing loans on return on equityY3**

Dependent Variable: D(Y3)				
Method: PMG				
Selected model: PMG(1,0,0)				
Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0079	-2.777740	1.2064693	-3.351258	X1
0.0001	4.386149	1.2387066	5.433152	X2
0.0329	2.200598	0.0164065	0.036104	C
0.0004	-3.788597	0.169409	-0.641825	COINTEQ

Source: Table prepared by the researcher using (13Eviews .program (

- ) The results showed that non-performing loans to total loansX1 have an inverse (and significant effect on the return on equity(Y3). That is, when non-performing loans to total assets increase by 1%, the return on equity decreases by 3.3%
- ) The results showed that non-performing loans to total assetsX2 have a direct and (significant effect on the return on equity(Y3). That is, when non-performing loans to total assets increase by 1%, the return on equity decreases by 5.4%
- The error correction factor is negative and significant, reaching (-0.641825). This value is significant based on the probability value, which is (0.0004), which is less than meaning that the first condition has been met, noting that this value indicates that ,(0.05) of the short-term errors are It can be corrected in the unit of time, represented here by %64 the year, in order to return to the equilibrium situation in the long term

### **Conclusions**

- 1- The research showed that there is a relationship between the non-performing loan index and profitability indicators, as an increase in the non-performing loan index leads to an increase in profitability, and this is consistent with financial theory, when increasing risks .leads to an increase in profitability by the same amount
- 2- The results of the financial analysis of the profitability index showed that the Investment Bank gives priority to the return on equity index more than other indicators, in contrast to the banks, the National and Commercial Banks, which give priority to the rate of .return on deposits
- 3- There is a negative impact of non-performing loans on profitability indicators in the banks in the same research

### **Recommendations**

- 1- The banks in question should reconsider the process of granting loans in order to reduce non-performing loans. This is done by setting strict conditions for the process of granting loans, such as the age of the company, its history, type of activity, and reviewing .the borrower's credit record
- 2- It is necessary to work seriously and efficiently to settle loans that can be recovered from debtors, and to create an allowance for loan losses that is appropriate for dealing with .doubtful loans
- 3- The need for commercial banks to develop a guide that explains the developments .taking place in normalizing the application of loan granting standards

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