



## **Impact of Non-Performing Assets on the Profitability of Banks: With reference to Cihan Bank**

**Mohammed Mustafa Ahmed \***

Direct manager of the Office of Financial Supervision/Kurdistan Region - Iraq, Lecturer at Al-Kitab University.

### **Keywords:**

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return on assets ROA; and  
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### **\*Corresponding author:**



Mohammed Mustafa Ahmed  
Direct manager of the Office of  
Financial Supervision/Kurdistan Region  
- Iraq, Lecturer at Al-Kitab University.

**Abstract:** Banking services are subject to a variety of hazards, including credit quality, liquidity, interests' risk, market risk, operating risk, and management risk. The greatest exceptional risk is default on a loan. The level of non-performing assets or the redemption loans determine a bank's sound financial status (NPAs). And that the rise in nonperforming assets (NPAs) necessitated more judgment, resulting in poorer bank profitability overall. The main thing to remember is that decreasing the number of nonperforming assets (NPAs) is necessary for banks to increase their profitability. The impact of nonperforming assets (NPAs) on Cihan Bank's profitability is investigated in this research. This was done in order to achieve the objective of the study represented in evaluating the nonperforming assets of Cihan Bank. And their impact on profitability. As well as to determine the relationship between net profit and total net NPA, ROA, and ROE. Cihan Bank's collected from the annual report are used in this study, which spans four years from 2017 to 2020. The correlation coefficient was used to assess the data. The study discovered that the NPA characteristics and also the profitability variables have a substantial negative relationship.

## تأثير الأصول غير العاملة على ربحية البنوك: بالإشارة إلى بنك جيهان

محمد مصطفى أحمد

مدير عام ديوان الرقابة المالية/كردستان العراق  
مدرس في جامعة الكتّاب

### المستخلص

تخضع الخدمات المصرفية لمجموعة متنوعة من المخاطر، بما في ذلك جودة الائتمان والسيولة ومخاطر الفوائد ومخاطر السوق ومخاطر التشغيل ومخاطر الإدارة. أكبر خطر استثنائي هو التخلف عن سداد القرض. يحدد مستوى الأصول غير العاملة أو قروض الاسترداد الوضع المالي السليم للبنك (NPAs). وأن الارتفاع في الأصول المتعثرة (NPAs) أدى لوجود المزيد من الحكم الشخصي، مما أدى إلى ضعف ربحية البنوك بشكل عام. الشيء الرئيسي الذي يجب تذكره هو أن تقليل عدد الأصول غير العاملة (NPAs) ضروري للبنوك لزيادة ربحيتها. تم التحقيق في تأثير الأصول المتعثرة (NPAs) على ربحية بنك جيهان في هذا البحث. وتم ذلك من أجل تحقيق هدف الدراسة المتمثل في تقييم الأصول المتعثرة لبنك جيهان وتأثيرها على الربحية، وكذلك تحديد العلاقة بين صافي الربح وإجمالي صافي مع (NPA) والعائد على الأصول (ROA) والعائد على حقوق الملكية (ROE). تم استخدام بيانات بنك جيهان التي تم جمعها من التقرير السنوي في هذه الدراسة التي تمتد لأربع سنوات من عام 2017 إلى عام 2020. تم استخدام معامل الارتباط لتقييم البيانات. اكتشفت الدراسة أن خصائص (NPA) وكذلك متغيرات الربحية لها علاقة سلبية كبيرة.

**الكلمات الدالة:** الأصول غير العاملة، العائد على الأصول، العائد على حقوق الملكية، مصرف جيهان.

## 1. Introduction

The banking industry has an important role to play a vital and important in the growth of the economy by providing funds to finance projects to drive investments and economic advancement. Because non-performing assets have an impact on banks, and the economy in general, commercial banks may face the risk of loss resulting from Non-payment of loans granted to some projects. As banks may resort to reducing bank facilities and loans granted to some sectors such as small and medium enterprises and to claim them providing great guarantees. Especially in the absence of financial data for these companies adequate and accurate credit history information for these companies. The present study concentrates in determining the impact of nonperforming assets (NPAs) on profitability and performance of the banking sector by considering Cihan bank, an Islamic bank in Iraq as a sample of the study.

**1.1. The research problem:** A healthy banking industry is critical to the economy's growth. The banking business is expanding at a breakneck pace, as is the difficulties that comes with it. In truth, the level of nonperforming assets at Iraqi banks is merely a reflection of a industry's and trade's state of

health. Non-recovery of loans, as well as interest, is a major stumbling block in the credit cycle. While it is impossible to completely eliminate such losses, banks can always strive to minimize them to a minimum. Non-Performing Assets (NPAs) have been extensively debated in relation to the global financial system. A money in the banking business is harmed when a bank is unable to recover a loan or does not regularly receive payments on such a loan. NPA growth necessitates the use of provisions, lowering overall profitability and shareholder value. A failure of a banking sector could have a negative impact on related and unrelated industries. The problem of nonperforming assets (NPAs) is causing concern not just among banks, but also among the country's total wealth. It reflects the banks' reputation and performance. If the amount of nonperforming assets (NPAs) is large, there is a greater risk of credit defaults, which affects bank profitability and depreciates the asset's value. (2).

Its bank's profit, liquidity, and equity are all impacted by NPAs. Increased nonperforming assets put pressure on fund recycling, limiting banks' ability to lend more, resulting in lower interest revenue. It Will Have an Impact on Bank Liquidity and Goodwill. When the number of nonperforming assets (NPAs) rises, the bank's profitability falls, and the bank is unable to lend freely. As a result, the organization's liquidity suffers, and its goodwill suffers. In light of this, our latest study related to the level of nonperforming assets (NPA) and how it affects bank profitability.

**1.2. The research importance:** The researcher's goal in this research is to assess the impact of nonperforming assets (NPAs) on bank profitability, as well as the relationship between them. And understanding the status of the NPA in banks in Iraq. In this paper, we study the effect of NPA on profitability in Cihan Bank in the past five years. Moreover, this paper attempts to understand and focus on the problems faced by the banks in Iraq in recovering the loans and causes behind the loans to become NPA.

**1.3. The research Objective:**

- A. To determine the causes of the NPA.
- B. To investigate the impact of nonperforming assets (NPAs) on Cihan Bank's profitability.
- C. To compare Cihan Bank's non-performing assets over the course of the study's four years

#### **1.4. The Hypothesis of research:**

**H0:** There is no exceptional relationship between Non-performing assets and profitability of the banks.

**H1:** There is exceptional relationship between Non-performing assets and profitability of the banks.

**1.5. Research approaches:** In the research, two scientific approaches were adopted, namely the inductive approach and the deductive approach, in order to root the research vocabulary in a theoretical framework and to deduce the expected relationships between the research variables, and then extrapolate the reality and test these relationships in it.

## **2. Literature Review**

**2. 1. Non-performing assets (NPA):** Non-performing assets are advances, loans and debts taken from the bank for several purposes, such as buying a house, opening a new company, or other purposes, but these loans and debts were not paid on time. When a loan asset refuses to generate income, such as interest, fees, commissions, or other membership fees for the banks for more than ninety days, it is classified as a Non-Performing Asset (NPA) (<https://economictimes.indiatimes.com/>).

Nonperforming assets are defined as an advance where, on the date of the balance sheet, an amount to be paid to the bank is due for a period of 180 days. The loans which are unpaid beyond the due dates are categorized as non-performing assets or non-performing loans. Nonperforming assets can be Gross NPAs and Net NPAs. Non-performing loans raise to such an extent that revenues fall off and loan loss expenses, as well as operating costs engage all the incomes that continue. The causes of NPAs include disaster, sickness of the industries, in effective recovery process, business cycle, lending policy, absence of monitoring and follow up loan and managerial problems. The proportion of nonperforming assets on selected variables is identified with the help of the following ratios: i) Ratio of Gross NPA to Gross Advances; ii) Ratio of Net NPA to Net Advances; iii) Ratio of Gross NPA to Total Assets; iv) Ratio of Net NPA to Total Assets (Kavitha & Muthukrishna, 2019: 128-1129).

Nonperforming asset is the key term for the banking corporations. Non-Performing Assets show the efficiency of the performance of the banks. Non-Performing Assets is the amount which is not received by the bank in return of loans disbursed. The amount of Non-Performing Assets

affects not only the banking industry but the total financial system and there by the economy of the country (Kiran & Jones, 2016: 53).

In accordance with asset classification, a non-performing asset (NPA) shall be a loan or an advance, where (Balasubramaniam, 2012: 42):

- A. Interest and /or instalment of principal remain overdue for a period of more than 90 Days in respect of a Term Loan.
- B. The account remains 'out of order' for a period of more than 90 days, in respect of an overdraft/ cash credit (OD/CC).
- C. The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted.
- D. Interest and/ or instalment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purpose.
- E. Any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.

**2.2. Profitability of Banks:** Banking in modern times is the kingpin of all economic activities. It is instrumental in shaping the economic destiny of a country. Banks are considered as the nerve-centres of economics and finance of any nation and the barometer of its economic prospective. Since the banks have stupendous investment potential, they can make a significant contribution in eliminating poverty and problem of unemployment (Kavitha & Muthukrishna, 2019: 128).

To start with, performance in terms of profitability is a benchmark for any business enterprise including the banking industry (Balasubramaniam, 2012: 42).

Profitability can be defined as the relationship between the profits achieved by the enterprise and the investments that contributed to the realization of these profits. Profitability is measured either through the relationship between profits and sales, or through the relationship between profits and the investments that contributed to achieving them, bearing in mind that what is meant by investments is the value of assets or property rights (Nabila, 2016: 4).

**2.3. Non-performing assets and Profitability:** The result (Kiran & Jones, 2016: 53) shows that except for SBI all the other banks exhibit a negative correlation between their gross Non-Performing Assets and net profits. But

for SBI the net profit is not at all affected by Gross Non-Performing Assets and it is in continuous profits only.

However, increasing NPAs have a direct impact on profitability of banks as legally banks are not allowed to book income on such accounts and at the same time banks are forced to make provision on such assets as per the Reserve Bank of India (RBI) guidelines on Performing Asset means an asset or account of borrower. Which has been classified by a bank or financial institution as sub-standard, doubtful or loss asset, in accordance with the directions or guidelines relating to asset classification issued by RBI (Balasubramaniam, 2012: 42).

The purpose of the study (Kavitha & Muthukrishna, 2019: 128) is to measure the impact of NPAs on the profitability of Indian scheduled commercial banks for the period of ten years. The study discusses the impact of NPA on the profitability in India scheduled commercial banks for the past ten years from 2007-2008 to 2016-2017. The ratio analysis, regression analysis, tests of equality of means, cross correlogram with the help of EViews 10 software were used to identify the variables pertaining to NPAs on the profitability of the banking sector. There is an increasing trend of NPAs of Scheduled commercial banks in India. Many researchers have done research related to NPA and they find out different implications. Study (Kavitha & Muthukrishna, 2019: 128) pointed out that in banks, irrespective of profitability, liquidity and competitive functioning, NPA has a serious effect on the psychology of bankers related to disposition of funds towards credit delivery and credit expansion. insisted that, NPA affects profitability, liquidity and solvency position of banks by affecting its operational efficiency. It is essential to have a serious look on NPA, since it may affect the growth and survival of banks. Banking sector must maintain efficient NPA management system to avoid negative financial performance. emphasized 29 that, after the initiation of banking sector reforms in 1992, most of the banks are taking initiatives to maintain NPA level and try to improve their profitability position.

**2.4. Banking sector in Iraq:** Iraqi financial system is dominated by the banking sector, many private banks are in the process of developing modern banking sector, but still need further strengthening of the industry. Non-performing assets, which include non-performing loans, are most common issue in the banking industry. In comparison to the rest of the

Middle East and North Africa, Iraqi private banks are extremely liquid, with cash holdings approaching 90 percent of total liabilities in some cases. Various banking sector in Iraq are well-capitalized, allowing them to pay their short-term obligations. this research, will explain and present to you what non-performing assets are in detail, what role do non-performing assets play in banks? and what are their objectives and benefits, and many other details. It will provide a lot of information on this subject in a simple and understandable way for everyone. We selected this subject (banks non-performing assets) because the banking industry plays such a critical role in economic development by providing the required capital to finance projects that promote investments and the economy. However, commercial banks may face the risk of loss resulting from the default of loans provided to some projects, so banks may resort to reducing bank facilities and loans granted to some sectors such as small and medium enterprises, and demand them to provide large guarantees, especially in the absence of financial data for these companies, and information Adequate and accurate credit history of these companies (FSR, 2018).

**2.5. Banks in Iraq:** The banking system in Iraq consists of (71) banks as of 2018, including (7) government banks and (64) private local and foreign banks, and the largest number of them are commercial banks, which are (40) banks, followed by (25) banks, Islamic banks, and then (3) banks Specialized (<http://www.isx-iq.net/>).

**2.6. Local bank:** A financial institution approved to the Agent that holds 1 or maybe more collections account into which Servicer deposits Obligor Collections. A local bank is a commercial bank that establishes one or more Accounts receivable Accounts in the names of a Borrower and is return to the Administration Agent (such approval must not be unnecessarily withheld or delayed). Another refers to someone who conducts banking operations in Antigua underneath the authorization of an "A" license issued under the Banking Act's regulations (Mas, 2008: 1).

**2.7. Foreign bank:** A commercial bank is a financial organization that accepts deposits, provides check account management, makes various loans, and provides people and small companies with basic financial products such as deposit accounts (CDs) and savings accounts. The majority of the population do their banking with a commercial bank (Mas, 2008: 1).

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Commercial banks profit through loans like mortgages, vehicle loans, company loans, and personal loans, which they provide and earn interest on. Banks get their money from customer deposits, which allows them to offer these loans.

**2.8. Islamic banks:** An Islamic bank is one that follows Islamic Sharia throughout all financing, banking, and investing operations and is subject to the Central Bank's supervision and regulation as a financial organization. Islamic banks are based on the concept of interest-free banking. As a result, Islamic banks offer accounts that show profit or loss rather than interest rates. The banks put the money they've acquired into something sharia-compliant, non-harmful, and low-risk (Al-Maghrabi, 2004: 6). Incorporation of the an Islamic Bank An Islamic bank may well be created under the requirements of Corporations Law No. 21, of 1997 and National Corporations Law No. 22 of 1997, as well as Banks Law No. 94 of 2004, if the incorporators and executive regulations also include following: Commitment to engage in only those banking operations that are permitted and with which you are not involved. The amount of interest paid or received, as well as the nature of the banking Transactions that are compliant with Islamic Sharia law Both in terms of taking accounts and offering other banking services, as well as in terms of money and investment.

The Islamic bank, like any bank and branches of foreign Islamic banks, undertakes its preparation Annual budget and profit and loss accounts in accordance with international Islamic standards and Islamic Sharia standards.

An Islamic bank is liquidated in accordance with the provisions of the banks Law No. 94 of 2004 in accordance with the provisions of Islamic Sharia Under the supervision of the Sharia Supervisory Board. Creditors, depositors and Shareholders are dealt with upon liquidation of an Islamic bank as follows: (Banking law, No. 94 / 2004)

**First:** Depositors' accounts are paid into current accounts first.

**Second:** Then the dues of depositors are paid in savings and investment accounts in accordance with the special conditions of the relevant accounts, and dues to holders of specified Muqarada bonds or Investment Portfolios or Investment Funds are paid according to Terms of each version.

**Third:** Then pay the dues of the creditors of the Islamic bank.

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**Fourth** The rights of other shareholders will be liquidated on the date of Basis of sharing the remaining funds in proportion to the shares Owned by every shareholder.

General provisions for Islamic Banks First: They apply to Islamic banks established under this law Central Bank of Iraq Law No. 56 of 2004 Banking Law No. 94 of 2004, Anti-Money Laundering Law No. 93 of 2004 in effect, companies Law No. 21 of 1997 and Public Companies Law No. 22 of 1997 International Accounting Standards, Sharia and Accounting Standards issued by the Accounting and Auditing Organization for Islamic financial institutions (AAOIFI) in all cases not stipulated in this law.

Second: The Islamic Bank and the branch of the Islamic foreign bank shall be exempted from the tax and fees resulting from the contracts of transactions relating to the purchase and sale of real estate, land and cars in the transactions of the sale of Murabaha, Ijarah ended in ownership (acquisition) and Musharaka, except for the real estate belongs to it as a result of the settlement of debt or for housing of its employees.

Third: The Central Bank of Iraq may issue instructions to determine the hedge ratios that are consistent with the Islamic Banks activities.

### **3. Research application framework**

**3.1. Cihan Bank: The Profile:** Cihan Banks for Islamic Investments and Financing is founded in January 2008, in accordance with Iraqi Corporations Law No. 21-1997 as well as its revisions for the year 2004, and its offices in Erbil opened on January 1, 2009. Cihan Bank is a fully-fledged Islamic bank that has been listed in the regular market of the Iraq Share Market (ISX) as of 2017 under the acronym (BCIH) and the corporation symbol (IQ000A2DN949) in the global agency ISIN (IQ000A2DN949) and is subject to a Iraqi Securities And exchange board (ISC) and the Iraq Stock Exchange's disclosure standards, It provides a broad array of Islamic banking products and services, and we strive to provide the most accurate and unique banking services to our customers from government institutions, companies, but also individual people in the new Iraq, including the governorates in the Kurdistan region, while developing them in accordance with Islamic law principles. Cihan Bank has been a completely Islamic bank with such a comprehensive range of banking products and services since April 2009, under authentication and supervision of a Shariah Committee made up of well-known and renowned

people from all around Iraq Cihan Bank is part of the Cihan Group, one of Iraq's largest conglomerates with operations in a variety of industries including vehicle selling, construction, tea importation, education, media, insurance, and general trading. Services in Banking (<https://www.cihanbank.com.iq/>).

The banking industry is the foundation of the financial services group. It is most concerned with direct saving and lending, while the financial services sector incorporates investments, insurance, the redistribution of risk, and other financial activities. Banking services are provided by large commercial banks, community banks, credit unions, and other entities.

It is a sample for this research and this is an overview of this bank. Cihan Bank for Islamic Trade and Finance was founded in February 2008 in compliance with Iraqi Corporations Law No. 21-1997 and its revisions for the year 2004, and its offices in Erbil opened on January 1, 2009. Cihan Bank is a fully-fledged Islamic bank that has been listed just on public market of a Iraq Stock Exchange (ISX) since 2017 underneath the acronym (BCIH) and the corporation symbol (IQ000A2DN949) in the global agency ISIN (IQ000A2DN949) and is subject to the Iraqi Securities And exchange board (ISC) and the Iraq Stock Exchange's disclosure standards. It provides a broad array of Islamic banking products and services, and we strive to get the most accurate and unique banking services to our customers from government institutions, companies, and individual people inside the unique Iraq, including the governorates in the Kurdistan region, while developing them in accordance with Islamic law principles (<https://www.cihanbank.com.iq/>).

**3.2. Sample selection and data collection:** As this research work is based on secondary data of only one bank in Kurdistan sector Cihan bank has been selected as sample for the study. The data has been taken in this study for last 4 years (2017-2020). The secondary data has been used in this study from the online sources to check the impact and the relation between NPAs and profitability in Cihan bank.

The current study depicts the relationship between NPA and profitability the banking sector in the Kurdistan region of Iraq. There are 71 banks operating in Iraq, including 11 specialized in Islamic banking

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services and having approximately 920 branches spread all over the country. Cihan Bank is one of these Islamic banks.

Cihan Bank, one of the Islamic banks in Iraq is considered for the current study which is affiliated to the Kurdistan Region of Iraq. The analysis will be carried out on the information received from the data in this bank for the five years 2017-2021.

Data was obtained from the annual Bank reports from its original website. The sample was chosen in order to obtain a valid generalizable result. Previous studies and theories were also studied to provide a description of the present Research. Research also tries to collect data in a structured form of questionnaire that will help to understand the impact of NPA on profitability the banking sector.

### 3.3. Data Analysis and Interpretations

**3.3.1. Statistical analysis using correlation coefficient:** Table 1 shows the levels of profitability in the study sample bank, as well as the levels of non-performing assets, as well as the level of correlation between NET NPA and ROA.

Table (1): Correlation between Net NPA % and % of ROA

particulars	2020	2019	2018	2017	Correlation
NET NPA	26%	13%	16%	20%	0.382287546
ROA	0.58%	0.09%	0.08%	2.07%	

It is noted that there is a positive significant relationship between the research variables, as well as the existence of an upward development in the values of both research variables over the years of the study sample, which extends from 2017 to 2020 in the bank.

This development can be clearly seen in the following figure 1.

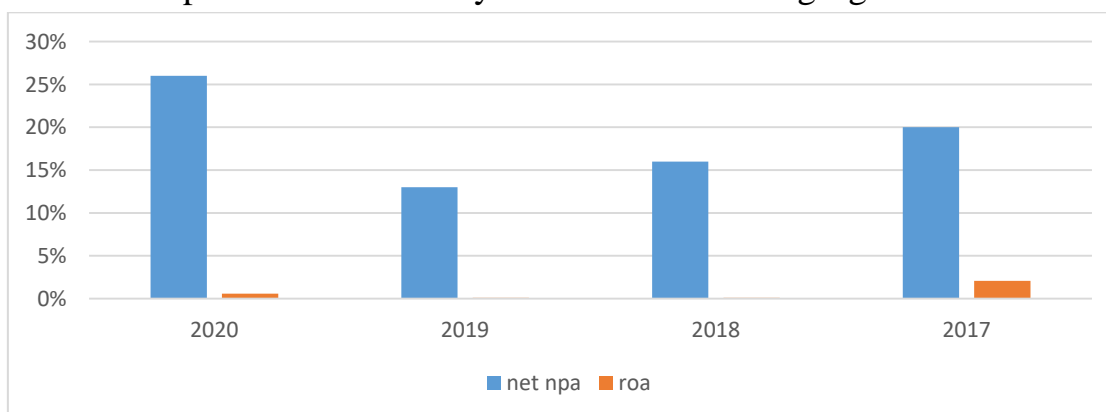


Figure (1): Evolution of profitability levels and non-performing assets in the bank

### 3.3.2. Interpretations Net NPA and ROA:

- ❖ The positive correlation coefficient between Return on Assets % and the net NPA percent is 0.38, indicating a positive relationship between the two variables.
- ❖ If one variable is increasing, the other also increasing slightly. The reason behind the positive correlation is there is a favorable effect in 2017. This may be because there is increase in the provisions for credit facilities.
- ❖ Of the four years of study of the Cihan bank, it is identified that the ROA% is less when the Net NPA% is more in the bank.
- ❖ Moreover, in the year 2020, where the cihan bank highest Net NPA% with 26% in the bank. And lowest in 2019 with 13%.

Whereas, Table 2 shows the relationship between non-performing assets and return on equity, Net NPA and ROE.

Table (2): Correlation between Net NPA % and % of ROE:

particulars	2020	2019	2018	2017	Correlation
NET NPA	26%	13%	16%	20%	0.294967327
ROE	1.41%	0.02%	1.70%	6.07%	

Figure 2 also shows the evolution of non-performing assets against the evolution of the return on equity ratio.

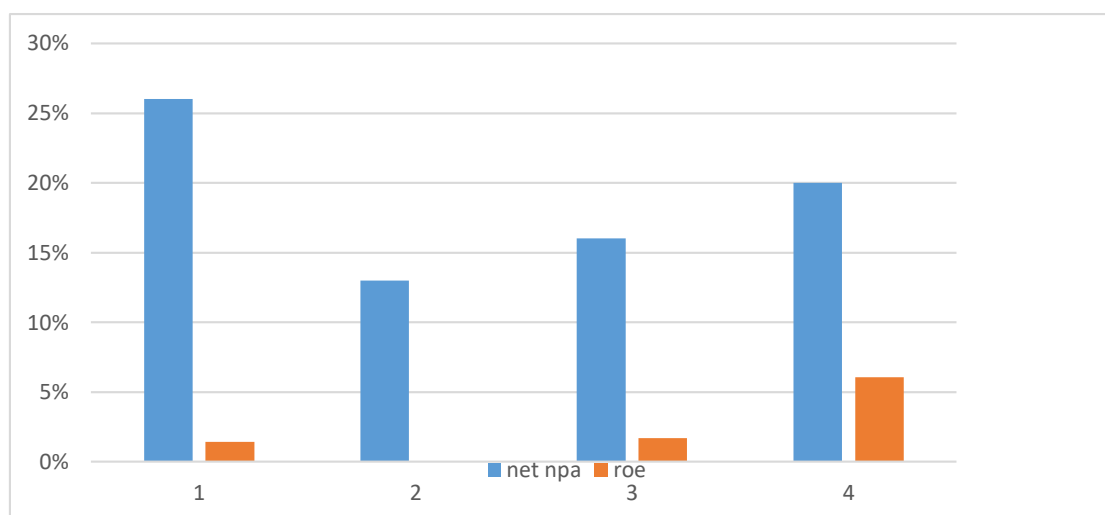


Figure (2): Evolution of the return on equity ratio of non-performing assets

**3.3.3. Interpretations Net NPA and ROE:** The association between Net NPA and ROE is shown in the table above.

- ❖ The positive correlation coefficient between Return on Equity percent and Net NPA percent is 0.29, indicating that the two variables have a positive relationship. When one variable rises, the other rises slightly as well.
- ❖ The reason behind the positive correlation is there is a favorable effect in 2017.
- ❖ It was identified that ROE is highest in 2017 same as ROA but the reasons observed are increase of provisions in that particular year.
- ❖ Later the ROE is a bit high in 2018 when Net NPA % is 16%.

Table (3) shows the relationship between the Gross non-performing assets and the return on assets, Gross NPA % and % of ROA.

Table (3): Correlation between Gross NPA % and % of ROA

particulars	2020	2019	2018	2017	Correlation
GROSS NPA	57%	24%	27.80%	26.30%	-0.076620236
ROA	0.58%	0.09%	0.08%	2.07%	

Figure (3) shows the evolution of the Gross non-performing assets, as for the percentage of return on assets

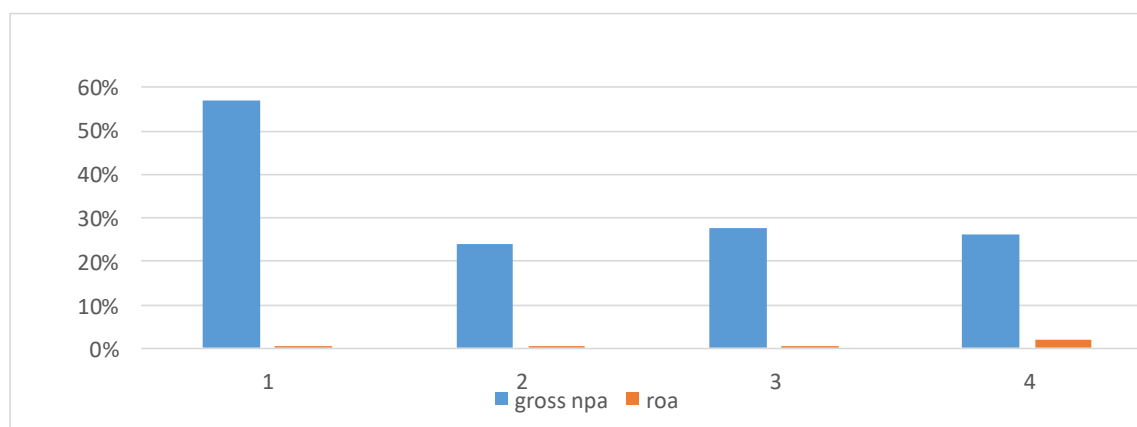


Figure (3): Evolution of Gross non-performing assets and ROA

### 3.3.4. Interpretations Gross NPA and ROA:

- ❖ This negative correlation coefficient among both Return on Assets percent and Gross NPA percent is -0.07, indicating that the two variables have a substantial negative relationship.
- ❖ When one variable increases, the other slightly decreases. The gross NPA to gross advances ratio is found to be negatively and strongly connected to return on assets and return on equity.
- ❖ Gross NPA is observed in the year 2020 equal to 57% and in the year 2017 it is 26.3%. ROA in the year 2020 is 0.58% and in 2017 it is 2.07%.

Table (4) shows the relationship between the Gross NPA % and % of ROE.

Table (4): Correlation between Gross NPA % and % of ROE:

particulars	2020	2019	2018	2017	Correlation
gross npa	57%	24%	27.80%	26.30%	-0.187999907
roe	1.41%	0.02%	1.70%	6.07%	

Figure (4) shows the evolution of the Gross NPA % and % of ROE

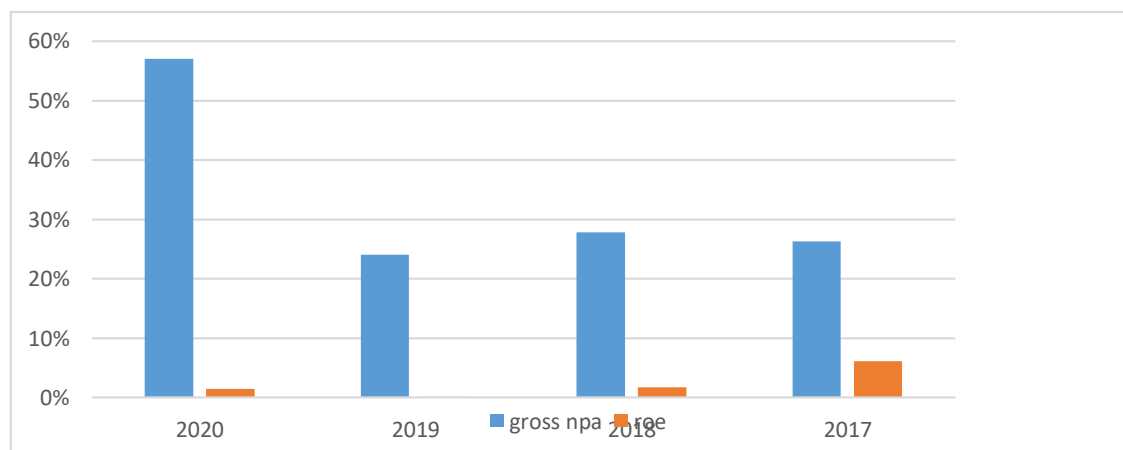


Figure (4): Evolution of Gross non-performing assets and ROE

### 3.3.5. Interpretations Gross NPA and of ROE

- ❖ The negative correlation coefficient between Return on Equity % and Gross the NPA percent is -0.18, indicating a negative relationship between the two variables. It is noted in the table above that shows the relationship between gross NPA and ROE.
- ❖ It was noted that the percentage of gross NPA increased over the years, an ascending percentage, and in contrast to ROE, the percentage decreased during the years, so the relationship between gross NPA and ROE is inverse.
- ❖ The relation among gross NPA with ROE and ROA is opposite while it is same in the case of Net NPA % but the deduction of provisions from gross NPA to obtain Net NPA resulted in minor changes in 2017.

**3.4. Statistical analysis using Regression analysis:** Table (5) shows the simple linear regression equation for the effect of non-performing assets on the return on assets.

Table (5): Regression analysis for Net NPA % and ROA%

particulars	2020	2019	2018	2017
NET NPA	26%	13%	16%	20%
ROA	0.58%	0.09%	0.08%	2.07%

<b>Regression Statistics</b>	
Multiple R	0.902322378
R Square	0.814185674
Adjusted R Square	-3
Standard Error	0.006986483
Observations	1

Table 5 presents the findings of regression analysis, with return on assets as the dependent variable and Net NPA to Net Advances ratios as the independent variable. Return on asset and Net NPA to Net Advance Ratio have an exceptional link, it can be argued.

Table (6) shows the simple linear regression equation for the effect Gross NPA % to % of ROA.

Table (6): Gross NPA % to % of ROA

<b>Years</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
GROSS NPA	57%	24%	27.80%	26.30%
ROA	0.58%	0.09%	0.08%	2.07%

<b>SUMMARY OUTPUT</b>	
<b>Regression Statistics</b>	
<b>Multiple R</b>	0.116327315
<b>R Square</b>	0.013532044
<b>Adjusted R Square</b>	-3
<b>Standard Error</b>	0.016097577
<b>Observations</b>	1

#### **Interpretations:**

- ❖ Several R. The Correlation Coefficient is a metric for determining how strong a linear link between two variables is. A correlation coefficient can have any values between -1 and 1, with the absolute value indicating the strength of the association.
- ❖ The stronger the link, the higher the absolute value. If R is more than 0.1, the relationship is positive. r square 0.01 in our case.
- ❖ This signifies that 1% of our data matches a regression analysis model.
- ❖ Because 0.01 is such a small value, any equation or analysis must be positive.

Table (8) shows the Relation between Net NPA and ROE.

Table (8): Relation between Net NPA and ROE

<b>Net NPA</b>	<b>26%</b>	<b>13%</b>	<b>16%</b>	<b>20%</b>
ROE	1.41%	0.02%	1.70%	6.07%

<b>SUMMARY OUTPUT</b>	
<b>Regression Statistics</b>	
<b>Multiple R</b>	0.98575548
<b>R Square</b>	0.971713867
<b>Adjusted R Square</b>	-3
<b>Standard Error</b>	0.007428224
<b>Observations</b>	1

**Interpretations:**

- ❖ In the above table, we note that in 2017, the percentage of the Npa is 20%, meaning the performance is 80% good this year,
- ❖ in the year 2018, the percentage of the npa is 16%, and
- ❖ in the year 2019 it is reduced to 13%, and this affects the performance, and it is good in this year, and it is 87%
- ❖ And suddenly the NPA rises to 20% in the year 2020. Roe also increases to 1.41 in the year 2020.

Table (9) shows the Relation between Gross NPA and ROE

Table (9): Gross NPA and ROE:

<b>particulars</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
GROSS NPA	57%	24%	27.80%	26.30%
ROE	1.41%	0.02%	1.70%	6.07%

<b>SUMMARY OUTPUT</b>	
<b>Regression Statistics</b>	
<b>Multiple R</b>	0.3832132
<b>R Square</b>	0.14685236
<b>Adjusted R Square</b>	-3
<b>Standard Error</b>	0.04079532
<b>Observations</b>	1

**Interpretations:**

- ❖ In the last table, we see the relationship between GROSS NPA and ROE in 2017, the percentage of GROSS NPA is 26.3%.

- ❖ in 2018, the percentage increases to 27.8%, in 2019 it decreases to 24%, and in the last year it suddenly increases to 57%.
- ❖ Multiple R equal 0.3 establishes there is a positive relationship between the variables.

Table (10) shows the Relation between Gross NPA and Net Profit

Table (10): Gross NPA and Net Profit

Details	2020	2019	2018	2017	Correlation
Gross NPA	48539652000	30646463731	35246248	40125649	-0.610247024
Net profit	3924962	592694	5084188	19280936	

Gross NPA: In 2020 Gross NPA is highest with 48539652000 while the net profit in the same year is less but the net profit of 2017 is more while the gross NPA also more.

Table (11) shows the Relation between Net NPA and Net Profit

Table (11): Net NPA and Net Profit

Details	2020	2019	2018	2017	Correlation
Net NPA	22256556000	16058577731	20658362	30537763	-0.63891
Net profit	3924962	592694	5084188	19280936	

Net NPA: In 2020 Net NPA is highest with 22256556000 while the net profit in the same year is less but the net profit of 2017 is more while the gross NPA also more.

Gross NPA%: In 2020, Gross NPA % is highest with 57% while the ROE of the same year is less but the ROE of 2017 is more while the gross NPA is less. It means it shows there is a negative impact of Gross NPA on ROE. Gross NPA%: In 2020 Gross NPA% is highest with 57% while the ROA of the same year is less but the ROA of 2017 is more while the gross NPA is less. It means it shows there is a negative impact of Gross NPA on ROA. Net NPA%: In 2020, Net NPA % is highest with 26% while the ROE of the same year is less but the ROE of 2019 is less while the Net NPA is also less. It means it shows there is a positive impact of Net NPA on ROE. Net NPA%: In 2020 Net NPA% is highest with 26% while the ROA of the same year is less but the ROA of 2019 is less while the Net NPA is also less. It means it shows there is a positive impact of Net NPA on ROA. Gross NPA and Net Profit: The correlation between Gross NPA

and Net profit is -0.6 which shows there is an exceptional negative impact of Gross NPA on the net profit of the bank. Net NPA and Net Profit: The correlation between Net NPA and Net profit is -0.6 which shows there is an exceptional negative impact of Net NPA on the net profit of the bank.

**4. Conclusion:** NPA has been identified as a major threat for banks to survive in this competitive world, since it doesn't only block the cash of the bank but also this causes a loss of banks assets. There is a dire need for the banks to overcome this problem of NPA. This paper studies the NPA of the Cihan bank, one of the Islamic banks in Iraq and its impact on profitability. The results show that there is an exceptional negative relation between the NPA and profitability. If NPA is increasing the return on assets on the bank and the ROE is decreasing. The bank is maintaining more amount of provisions but since the gross NPA is about 56%, it's been a huge burden on the bank to compensate it with the provisions. It was suggested that the banks should take better steps to overcome this problem of NPA. 2

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