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# The impact of irregular financial risks on the financial performance of a sample of companies listed on the Iraq Stock Exchange

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#### **Abstract:**

The research aims to present and analyze the theoretical and intellectual aspects of the impact of irregular risks on the financial performance of a sample of companies listed on the Iraq Stock Exchange, and the research has assumed that there is an impact of irregular risks on the financial Performance of companies (banks) research sample. As for the research method, it was based on annual data extracted from the financial statements of the banks of the research sample for the period (2010-2023) and analyzed these data and then used (panel data) to find out the impact of irregularity risks on financial performance.

Keywords - assumed, Irregular, financial, analyzed, impact

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#### the introduction

The assessment of unsystematic risks is very important for any financial company because it represents the basic motive for the existence or non-existence of any company and is the most important factor in achieving its goals. It is also primarily related to the survival and continuity of that company, and is linked to the extent to which its goals are achieved through rational and irrational exploitation. The available resources and capabilities, and this is what is called operational efficiency, employing the available resources and capabilities to achieve the desired results and goals at the lowest possible cost and in the face of the increasing growing capabilities and financial and material resources of financial companies and then the process of measuring and evaluating the extent of financial companies

# Research problem

Do companies (banks) take into account financial risks? And Irregular? What is it? and The level at which irregular financial risks are reflected in financial performance, especially in companies (banks).

# Importance of research

- 1. The study has a special importance that stems from the intellectual framework and theoretical and applied propositions that it addressed, in addition to the scale of indicators that it adopted, which contributed to investigating the relationships linking the study variables.
- 2. The topic of performance is also of great importance in the business environment because it is the key to achieving goals in a good way at the right time and at a lower cost.

3. Hence, the importance of the study, as it aims to establish an integrated framework that helps private commercial banks operating in Iraq to develop systems for managing informal financial risks.

#### Research objectives

- 1. Knowing the impact of irregular financial risks of companies on financial performance, and reaching scientific and practical results that would help in making the financial decision to trade off between financial performance and risk, and thus choosing the right decision.RA rational investment that reflects positively on financial performance.
- 2. Knowing the reality of managing irregular risks in Iraqi companies and banks.
- 3. Knowing the extent of the impact of unsystematic risks on companies' financial returns.

#### **Independent variable indicators**

The data and indicators below were relied upon for their availability in the financial statements that were reached:

- 1-Leverage
- 2-Operating Lever

## Indicators of the dependent variable (financial performance) and is measured as follows:

The researcher relied on a model to determine the financial performance indicators. (Bankometer)

- 1- indexCapital to assets ratio (CA)
- 2- indexEquity to assets ratio (EAR)
- 3- indexCapital adequacy ratio (CAR)
- 4- indexRatio of non-performing loans to total loans (NPL)
  - 5- Loan to assets ratio (LAR)

# Temporal and spatial limits of scientific research:

A- Time frame: from (2010-2023)

**for**- Spatial boundaries: The spatial boundaries are a sample of Iraqi commercial banks listed on the Iraq Stock Exchange, namely (Bank of Baghdad, Iraqi Investment Bank, Middle East Bank, Commercial Bank of Iraq).

## First: The concept of financial risks

Financial risk is a complex and thorny concept and there is much controversy about its definition and measurement. We can understand risk as the possibility of losses resulting from events such as changes in the market and events that are unlikely to occur but may result in a high and particularly disturbing loss because they are notIt is mostly expected in the sense that risk is the potential variability of returns, as excluding risks is always possible or desirable. Understanding it is a step towardsIt is important to determine how to manage it and identify exposures and risks as the basis for the appropriate financial risk management strategy (Karen: 2008: 22).

#### Overall risk rating

**Systemic risks**Systematic Risk: These are the risks arising from fluctuations in the prices of securities, as the value of assets (shares) tends to move (up and down) according to the market's path (Al-Ardi, Al-Shammari, 2012, 188).

**unsystematic risk**(Al-Akeely:d2023:52) It expresses the risks that affect a specific company, so that these risks are specific to one company rather than another. Unsystematic risks (Mourad: 1993:20) or special risks are known as cases of uncertainty that arise due to special circumstances or factors related to a specific institution or a specific sector. They are independent of the risks of economic activity. This type of risk is usually called exceptional risks or unavoidable risks.

## Non-risk characteristicsRegular

The risks are characterized by The system has the following characteristics (Al-Azzawi: 2023:120):

- A\_ It arises due to factors related to the company itself.
- B\_ Affects only the company concerned.
- T\_ It can be avoided by diversification, by holding multiple alternative investments.
- C\_Its absolute measure is the standard deviation and variance or coefficient of variation.

# Second: The concept of financial performance

Financial performance is defined as the outputs or goals that the institution seeks to achieve. It is a concept that reflects both the goals and the means necessary to achieve them. In other words, it is a concept that shows the aspects of the institution's activity and the goals that the institution seeks to achieve through activities (Al-Saadoun, 2017, 17).

#### **Performance objectives Financial**

The bank's interim financial objectives differ from one stage to another in the life of banks. The main objective of the performance evaluation process for any bank is to ensure that the actual performance was in accordance with the plans drawn up and set in advance by the bank's management, to improve and develop the performance in the economic units so that they can achieve the set objectives with the least possibleNFrom the costs and the optimal use of various resources, and because performance evaluation represents an effective tool in developing performance, and performance evaluation in banks has many goals, the most important of which can be presented as follows: -

- 1 The objective of financial performance is to follow up and implement the bank's objectives in terms of quality and quantity and compare it with the drawn and established plans through the available data and information, as well as to provide the supervisory authorities with statistical data and information about the results of performance evaluation in banks and banking institutions in order to enable the supervisory authorities to conduct and implement continuous follow-up operations for the bank's activity to ensure achieving the best and optimal (Al-Hilali: 41:2022)
- 2 Determining the responsibility of all departments and branches in the bank for deviations in the activity they practice within those banks by measuring the productivity of each branch and the extent to which it achieves the planned goals, providing the necessary information and data on the results of evaluating the bank's performance to the supervisory bodies, which facilitates their ability to conduct comprehensive follow-up of the bank's activity to ensure the best performance and also facilitates their work, and also provides bank managers and decision-makers with assurance of high efficiency and completion of the planned and drawn goals at the lowest possible cost and with high returns.

## Beneficiaries of the financial performance evaluation process of banks

-Administration:- It is natural for managers to want to compare their performance over the past years with the chosen profitability and market targets and with the performance of their competitors. Management determines the goals of the organization through market share, growth in sales or unit value, and return on investment. This information is of great interest to managers at the highest administrative level, as they have many sources to obtain this information, especially from the organization's annual financial reports, i.e. the general budget and the profit and loss account.

#### - Common stockholders: They are divided into three categories:

- -Short-term investors who have a short-term view and are looking to maximize current revenues and distribute them to participants.
- -Medium-term investors who have a long-term view and are interested in retaining profits to achieve future growth in revenues and maximize capital.

- Long-term investors who have a forward-looking view and test the ability of the institution to generate profits, returns and risks of investment alternatives.

**Preferred stockholders:**They are looking for profits to stabilize at a certain level that provides adequate coverage for the dividend.

- **Bond campaign**:- Such as banks or financial institutions, individuals who focus on the level of current and future profits, profit distribution, the institution's borrowing and valuation of assets to cover their debts.
- **-Trade unions:** They compare the trends in the profits of managers.NThe shareholders and the wages received by the union members

Year	20 10	20 11	20 12	20 13	20 14	20 15	20 16	20 17	20 18	20 19	20 20	20 21	20 22	20 23	
Bank name															Aver age
Natio nal Bank	0.5 1	0.5 2	0.4 9	0.5	0.5 7	0.5 1	0.5	0.5	0.5 1	0.5 9	0.6 5	0.8	0.8 6	0.8 7	0.6
Gulf Bank	0.7 6	0.6 5	0.6 4	0.6	0.5 7	0.6	0.6	0.4 6	0.4 5	0.4 4	0.3	0.4	0.4 4	0.4 3	0.53
Bank of Bagh dad	0.8 8	0.8 4	0.8 4	0.8	0.8 4	0.8	0.7 6	0.7 5	0.7 6	0.7 6	0.8	0.7 9	0.7 9	0.8	0.8
Bank of the East	0.8 5	0.7 9	0.7 7	0.7	0.5 5	0.5 8	0.5 6	0.6 6	0.6 4	0.5 7	0.5 5	0.5 8	0.6 6	0.5 9	0.65
Avera ge	0.7 5	0.7	0.6 8	0.6 6	0.6	0.6	0.6	0.6	0.5 9	0.5 9	0.5 9	0.6 5	0.6 8	0.6 8	0.64

Table No. (1) Debt ratio for a sample of private banks listed on the Iraq Stock Exchange

- **Credit providers and bankers:** -They check the major changes in the assets of the institution, i.e. they ensure that the available assets are sufficient to provide guarantees for their claims on the institution.
- **Financial analysts, stock market speculators, investors:** -All of them are interested in comparing the valuation of the company's shares according to the financial position statement with its valuation in the stock m

## Thirdly-Measuring unsystematic risk

#### - Leverage (DOL):

The researcher used the sample of the banks to measure the irregular risks. Scientific research The financial leverage ratio resulting from dividing total liabilities by total assets, as follows:

Leverage= (Total liabilities)/(Total assets) 100%

#### View and analyze leverage indicators

The debt ratio is one of the most important indicators used to measure banking leverage in the sample of banks listed on the Iraq Stock Exchange for the period from (2010-2023). The debt ratio was analyzed using the ratio mentioned above and based on the data of the unified budgets of the banks. The results shown in Table (3) were reached, as it showed that this ratio reached (0.64%) For all the banks surveyed for all research years and according to the overall index, as this ratio indicates the extent to which banks rely on financing their assets with the money of others, and the analysis of the annual index, which is clear from Table (3), shows that the majority of the banks in the research sample have achieved high ratios according to the annual index, as the annual index for the highest debt ratio for the years (2010-2011-2012-2022-2023-2013) reached the highest average (0.75-0.70-0.68-0.68-0.66) according to the descending order of ratios. Therefore, the banks in the research sample rely on financing their assets with the money of others, and therefore it can be said that the use of large debts leads to an increase in the profits of banks, and the banks in the research sample recorded ratios lower than the general average according to the debt index during the years (2020-2019-2018) with the restAThe percentage (0.59%) and also (2016-2017) with a percentage (0.60%), and thisAIt means the inability of banks to fulfill their obligations.AFinancial on due date.

As for the analysis according to the banks' index, the results of the analysis according to the debt ratio in the table above and at the individual level for each bank in the research sample showed an increase in the debt ratio as a whole. AAnd the adult(0.64%), which are (Bank of Baghdad), (Bank of the East) and at rates of (0.80%), (0.65%) respectively according to the descending order of rates, which indicates that these banks have increased their ability to fulfill their financial obligations on their agreed due dates, and it also shows that banks rely on others' money to finance their assets, because the use of large debts leads to an increase in banks' profits, a high percentage of debt ratios can cause losses as creditors can seize the company at any time, meaning that it causes financial difficulties.

As for the decline in the debt ratio index for the rest of the banks for the research sample compared to the general average for all banks, and for all research years, which amounted to (0.64%) and YEach of (Gulf Bank), (Ahli Bank) with rates of (0.53%), (0.60%) respectively in descending order of rates, it indicates that the lower the debt ratio, the lower the bank's ability to fulfill its obligations. A0n the due date agreed upon.

#### -Operating Leverage(OLF):

I amWorkersThe researcher for the purpose of measuring the unsystematic risks in banks sampleresearchOperating leverage ratio resulting from dividing fixed assets by total assetsThe level of operating leverage is related to the share of companies (banks) of fixed costs to total costs. When the operating leverage is greater, the ratio of fixed assets to total assets is greater, meaning that the increase in fixed assets is related to the capital intensity of companies (Naser El-Din: 2011: 58). Al-Barakat (2015: 60) believes that operating leverage is related to the results of using fixed assets in operational processes, and that using operating leverage will lead to an increase in fixed assets, which in turn will lead to a move to the break-even point higher, meaning that companies (banks) need to provide greater services or a larger sales volume in order to cover fixed assets.

Table (2) Operating leverage ratio for the sample of private banks listed on the Iraq Stock Exchange

Year															
	20 10	20 11	20 12	20 13	20 14	20 15	20 16	20 17	20 18	20 19	20 20	20 21	20 22	20 23	Ave rag e
Ban k															
nam															
e															

Nati onal Ban k	0.0 35 9	0.0 21 5	0.0 16 7	0.0 15 8	0.0 24 3	0.0 41 8	0.0 28 7	0.0 23	0.0 28 1	0.0 21 9	0.0 19 4	0.0 19 1	0.0 21 4	0.0 13 8	0.0 236
Gulf Ban k	0.0 71 7	0.0 58 5	0.0 54 5	0.0 53 4	0.0 64 1	0.0 61 6	0.0 42 6	0.0 53 6	0.0 73 1	0.0 75	0.0 77 6	0.0 60 6	0.0 62 3	0.0 58	0.0 619
Ban k of Bag hda d	0.0 31 4	0.0 38 8	0.0 33 2	0.0 32 1	0.0 31 4	0.0 21 5	0.0 26 5	0.0 34 3	0.0 38 5	0.0 44 3	0.0 39 3	0.0 39 3	0.0 42 6	0.0 27 6	0.0 343
Ban k of the East	0.1 01 5	0.0 99 5	0.0 88 6	0.1 12 9	0.1 37 3	0.1 43 7	0.2 03 4	0.1 71 2	0.1 13 5	0.1 36 2	0.1 37 9	0.1 67 4	0.1 30 1	0.1 47 6	0.1 35
Ave rage	0.0 60 1	0.0 53 1	0.0 48 2	0.0 53 5	0.0 64	0.3 68 6	0.0 75 3	0.0 70 5	0.2 77 4	0.0 69 4	0.0 68 5	0.0 71 6	0.0 64 1	0.0 61 7	0.0 637

#### Display and analyze operating leverage indicators

The level of operating leverage is related to the share of companies (banks) of fixed costs to total costs. When the operating leverage is greater, this means that the ratio of fixed costs to total costs is greater, meaning that the increase in fixed costs is related to the capital intensity of the company (bank). NInvesting money in fixed assets aims to reduce variable costs. TMMeasuring the banking operating leverage in a sample of banks listed on the Iraq Stock Exchange for the period from (2010-2023), the operating leverage ratio was analyzed using the ratio mentioned above and based on the data of the unified budgets of the banks, and the results shown in Table (4) were deduced, as it showed that this ratio reached (0.0637%) For all the banks surveyed for all research years and according to the overall index, as this ratio indicates the extent to which banks rely on financing fixed costs over variable costs, and the analysis of the annual index, which is clear from Table (4), shows that the majority of the banks in the research sample have achieved high ratios according to the annual index, as the annual index reached the highest operating leverage ratio for the years (2015-2018) and at ratios (0.3686-0.2774) according to the descending order of ratios, the high operating leverage ratios mean that the company (bank) is in a good competitive position, and operates in a market characterized by economic prosperity that allows the bank to expand, as the high value of operating leverage will be a good indicator because any small change in sales will result in a significant increase in profits, and this helps in covering variable costs.

As for the analysis according to the banks' index, the results of the analysis according to the operating leverage ratio in the table above and at the individual level for each bank in the research sample showed an increase in the ratio of the Bank of the East by a percentage of(0.1350), and we conclude from this that the Bank of the East enjoys a degree of operational leverage and can face the recession in its sales and revenues, as a slight decrease in the price will increase its sales, which will lead to an increase in its operating profits.

# Fourthly--Financial performance measurement:

# -Capital to assets ratio analysis for banks sample(CA):

The capital to assets ratio expresses the amount of safety. I have For companies (banks) related to the capacity of its capital, it can be said that the bank has good capital and is in a stable state. and According to this AThe capital to assets ratio must be greater than or equal to (4%), and the capital to assets ratio can be represented in the table. minimum Which shows the ratios for all banks in the research sample and

listed on the Iraq Stock Exchange from the time series extending from 2010-2023 and the following agencies::

Table (3) AnalysistoCapital to assets ratio of banks in the research sample (CA)

National Bank	Bank of the East	Bank of Baghdad	Gulf Bank	The bank
%	%	%	%	Year
46.48	17.23	10.4	20.94	2010
54.15	22.45	12.89	30.23	2011
29.65	18.31	13.45	24.47	2012
18.43	32.29	14.16	38.38	2013
24.7	36.59	13.67	36.74	2014
46.66	37.03	16.13	36.99	2015
43.13	38.06	20.82	37.4	2016
41.39	32.43	22.93	49.67	2017
47.55	31.22	22.45	51.87	2018
39.5	37.98	22.07	54.38	2019
27.96	38.58	17.61	58.63	2020
13.72	39.01	16.23	55.71	2021
14.65	40.05	17.07	56.6	2022
15.52	41.33	16.09	56.3	2023

We note from the table above that the National Bank of Iraq recorded resultsCapital to assets ratio analysis(CA) is higher than the standard limit of the evaluation model of (4%) during the study years, this indicates that the National Bank of Iraq has good capital and is able to attract more investors who wish to invest in the bank, as it recorded the highest percentage (54.15%) as a maximum in the year (2011), while the year 2021 recorded the lowest percentage of (13.14%), and the reason for this is due to an increase in total assets while the capital remains the same, as for the Gulf Bank, the analysis of the capital to assets ratio (CA) recorded the highest limit (CA) in 2020, which amounted to (58.63%) and the minimum in 2010, which amounted to (20.94%), and the reason for this is the increase in total assets while the capital remains the same, as for the Middle East Bank, the bank achieved a ratio (CA) higher than the standard limit of the model of 4% throughout the period studied, this indicates that the Middle East Bank is able to attract more investors who wish to invest in the bank, as the Middle East Bank achieved a ratio (CA) in In 2010 (17.23%) as a minimum and (40.05) as a maximum in 2023. The reason for this is the increase in total assets during the study period. As for the Bank of Baghdad, it recorded a (CA) ratio higher than the standard model limit of (4%) throughout the study period, able to attract more investors who wish to invest in the bank and enjoy good and safer capital, as the ratio ranged between (10.4%) as a minimum in 2010 and (22.93%) as a maximum in 2017. The reason for this is the increase in total assets during the study period and the stability of paid-up capital.

## - Equity to assets ratio:

The ratio of equity to assets expresses the extent to which companies (banks) rely on owned capital to finance their assets. The higher the ratio, the sounder the situation. In the long term, most of the banks' assets are financed from private equity capital. According to the evaluation model, the ratio of equity to assets must be greater than or equal to (2%), and it is possibleNRepresenting the ratio of equity to assets

in the following table (4), which shows its ratios for all banks in the research sample and listed on the Iraq Stock Exchange and for the time series extending from (2010-2023) AgenciesY:

Table (4) ratiosAndEquity to assets (EAR)

National	Bank of the	Bank of	<b>Gulf Bank</b>	The bank
Bank	East	Baghdad	%	Year
%	%	%	70	Tour
49.19	14.49	12.36	23.36	2010
57.08	20.64	15.95	34.37	2011
45.58	22.92	15.93	35.09	2012
31.07	26.19	16.5	38.89	2013
42.81	44.95	16	42.37	2014
49,789	41.02	17.32	39.65	2015
49.64	43.74	23.56	39.61	2016
47.3	33.88	25.4	53.12	2017
49.04	33.4	23.95	54.37	2018
40.55	40.6	24.15	55.58	2019
34.39	40.88	19.61	60.13	2020
17.34	41.38	20.07	56.51	2021
30.06	42.89	21.87	57.76	2022
30.69	42.91	22.32	58.43	2023

We notice from the table above that the results of the analysis of the ratio (EAR) of the National Bank of Iraq was stable, indicating that the bank has a good financial position. It is also noted that the ratios recorded by the National Bank of Iraq were close, which means that the bank worked to raise the level of external financing ratio by a percentage close to the increase in the owned capital through long-term borrowing and raising the percentage of deposited funds, as it reached the lowest percentage in 2021 (17.34%), while it reached the highest percentage in 2011 (57.08%). As for Gulf Bank, it also recorded a ratio (EAR) higher than the standard limit of the evaluation model of 2% during the study period. We also notice from the table the continuous increase in the ratio of equity financing (EAR). We also find that this increase was increasing to fluctuating rates during the study period, as it reached its highest limit in 2020 (60.13%), while it reached its lowest limit in (2010) (23.36%). The reason for the increase in the ratios (EAR) is due to the increase in paid-up capital of 300 billion, which is offset by a decrease in the size of assets as a result of the decline in cash balances in other banks. As for the Middle East Bank, the results of the analysis of the (EAR) ratio were stable and higher than the standard limit for evaluating the model throughout the study period, as it reached the highest limit of the (EAR) ratio in 2014 (44.95%), and the lowest limit of the (EAR) ratio in 2010 (14.49%). We note from the table that after the increase in the equity financing ratio in 2014, this ratio began to decline due to the decrease in the size of assets as a result of the decline in the cash balance account at the Central Bank (CB). As for the Bank of Baghdad, it achieved results of the (EAR) ratio higher than the standard limit throughout the study period. The Bank of Baghdad recorded an increase in this (EAR) ratio during the study period, but this increase was at very small rates, as the lowest ratio in 2011 reached (12.36%) and the highest ratio reached in 2017 (25.4%).

This indicates that the bank is able to bear risks better, and the reason is due to its possession of more equity to absorb any problems that the bank may face.

## - Capital adequacy ratio (CAR):

This ratio indicates the solvency of companies (banks) as well as their ability to bear potential losses. According to the evaluation model, the capital adequacy ratio must be (CAR) for banks from (9% to 40%), when the capital adequacy ratio is high, this indicates that the bank has more capital available to cover losses in the event of deviations, and when the capital adequacy ratio is low, this increases the likelihood of large losses, which means that the company (bank) has little ability to withstand deviations, and the percentage of owned capital can be represented in Table (5) below, which shows its percentages for all banks in the research sample listed on the Iraq Stock Exchange and on the time series extending from (2010-2023) as follows:

Table (5) Capital adequacy ratio (CAR)

National	Bank of the	Bank of	<b>Gulf Bank</b>	The bank
Bank	East	Baghdad	%	Year
%	%	%		
124	33	25	49.2	2010
196	49	37	94.2	2011
133	53	55	60.2	2012
104.15	73.5	59	51.5	2013
111.51	109	57.5	78	2014
116.9	104	64	73.8	2015
103.22	101	88.7	74.5	2016
106.65	133	103.3	91.4	2017
82.87	110.2	127	124.6	2018
27.81	111	64	131	2019
30.91	92	28.5	148.9	2020
25.99	78	33.7	121	2021
27.69	79	35.7	125.6	2022
28.2	80	36	126	2023

We note in this table that the results of the analysis of the ratio (The CAR of the National Bank of Iraq was stable throughout the study period, indicating that the bank is safer and able to meet its financial obligations. Its highest ratio was in 2011, reaching (196%). The reason for this increase is due to the increase in regulatory capital with a decrease in the total assets weighted by regular and irregular risks. The lowest CAR ratio was in 2023 (27.69%). As for Gulf Bank, the (CAR) ratio was also stable throughout the study period, indicating that the bank is safer and able to fulfill its financial obligations and is more solid and financially sound in order to enhance the confidence of stakeholders from investors, creditors and depositors. The highest ratio was in 2020 (148.9%), and the lowest ratio was in 2010 (49.2%). As for Middle East Bank, the results of the (CAR) ratio were also stable throughout the study period, indicating that the bank has a protective barrier that prevents the losses that the bank is exposed to and is also more solid and financially sound in order to enhance the confidence of stakeholders from investors. The highest

ratio was in 2017 (133%), and the lowest ratio for the bank was in 2010 (33%). As for Baghdad Bank, the results of the (CAR) ratio analysis were stable throughout the study period, indicating that the bank is safer and able to fulfill its financial obligations and is more solid and financially sound in order to enhance the confidence of stakeholders from investors, creditors and depositors. The results reached The highest CAR ratio was in 2018 (127%). The reason for this increase is due to the increase in regulatory capital with a decrease in total risk-weighted assets. The lowest ratio was in 2010 (25%).

#### - The ratio of non-performing loans to total loans (NPL):

The ratio of non-performing loans to total loans refers to the ratio of loans that are repaid on their due date, compared to the total loans provided by banks, i.e. the ability of borrowers to meet their debts, and thus the ability of the company (bank) to bear the risks associated with the credit portfolio, i.e. the high ratio of non-performing loans to total loans affects the reputation of a bank in the financial market, and according to the evaluation model, the ratio of non-performing loans to total loans must be less than the standard ratio (15%), and this ratio of non-performing loans to total loans can be represented in the following Table (6), which shows its ratios for all banks in the research sample, listed on the Iraq Stock Exchange and for a time series extending from (2010-2023) as follows:

Table (6) The ratio of non-performing loans to total loans (NPL)

National	Bank of the	Bank of	Gulf Bank	The bank
Bank	East	Baghdad	%	Year
%	%	%	70	1041
16,279	10.39	14.86	3.84	2010
17.16	7.83	21.42	3.33	2011
11.07	7.5	26.34	4.19	2012
7.28	7.15	16.14	7.2	2013
9.37	7.88	21.04	12.71	2014
14.29	9.87	12.72	11.13	2015
23.32	13.01	12.93	15.49	2016
46.06	14.76	21.81	25.42	2017
27.39	15.65	9.88	35.75	2018
12.76	15.74	10.02	20.49	2019
10.36	17.38	12.46	24.42	2020
4.54	17.5	13.57	14.49	2021
7.24	18.80	14.47	20.48	2022
8.21	18.28	15.12	21.2	2023

This table indicates that Analysis results for the ratio(NPL) ForNational Bank of Iraq Non-performing loans to total loans ratioThe standard limit for evaluating the model, which is (15%), is exceeded during the study years, indicating an increase in (NPL) to increase the bank's non-performing loans, as it cannot collect them on their due date, which causes financial risks that negatively affect its performance. The National Bank of Iraq also recorded a percentage that slightly exceeded the standard limit during the years (2010-2011), which did not significantly affect the performance of the aforementioned bank. The National Bank of Iraq also recorded a percentage within the standard limit during the following years, as

the (NPL) percentage was limited between (12.76% - 7.24%). The decrease in this percentage during the years (2012-2023) is evidence that the bank does not have risks due to good management in granting loans. As for Gulf Bank, it obtained a (NPL) ratio that significantly exceeded the standard limit of the evaluation model of 15% during the years (2017-2018-2019-2020-2022), indicating an increase in this (NPL) ratio, which indicates an increase in financial risks and has a negative impact on the ability of Gulf Bank to provide more loans. Gulf Bank also recorded a (NPL) ratio within the standard limit of the evaluation model during the study years (2010-2011-2012-2013-2014-2015-2016-2021-2023), and the (NPL) ratio was almost stable, ranging between (3.33% - 14.87%), indicating that Gulf Bank has no risks due to good management in granting bank credit. Also, the Middle East Bank recorded a (NPL) ratio of the standard limit within the exception of the years (2020-2021-2022-2023) in which it recorded a (NPL) ratio slightly exceeding the standard limit that did not significantly affect its performance, as this ratio was limited to (7.15% - 18.28%). The decrease in the ratio indicates that the Bank of the East during that period did not have risks due to good management in granting bank credit. As for the Bank of Baghdad, it recorded a (NPL) ratio that greatly exceeded the standard limit of the evaluation model, which amounted to 15%, during the years (2011-2012). This increase indicates the poor management of the Bank of Baghdad in granting loans, while the bank recorded a ratio that slightly exceeded the standard limit in (2013), which did not significantly affect its performance. Meanwhile, the bank recorded a ratio that was within the standard limit, increasing during the recent years of the Bank of Baghdad, and the (NPL) ratio was almost stable, as it was limited between (9.88%-15.12%). The decrease in this ratio is evidence of the borrowers' ability to meet private debts during that period.

# - Cost to income ratio (CIR):

The cost-to-income ratio is an important and primary measure used in evaluating companies (banks). In evaluating banks, it shows the costs of companies as a percentage of their income, the standard limit (40%), as it compares operating expenses excluding non-cash expenses and operating income. The higher the cost-to-income ratio, the lower the banks' profits. When the cost-to-income ratio decreases, the level of banks' profits is high. The cost-to-income ratio can be represented in the following Table (7), which shows its ratios for all banks in the research sample listed on the Iraq Stock Exchange and for the time series extending from (2010-2023) as follows:

Table (7) ratiosAndCost to income (CIR)

East %	Baghdad %	%	Year
	%		
223.38	139.54	231.19	2010
116.82	110.89	119.84	2011
102.54	105.43	57.55	2012
127.91	99.12	54.45	2013
726.26	121.79	87.96	2014
536.6	302.94	177.94	2015
254.56	165.24	274.99	2016
95.88	413.55	414.78	2017
75.41	670.65	173.21	2018
92.27	316	473.28	2019
146.1	125.75	147.22	2020
	116.82 102.54 127.91 726.26 536.6 254.56 95.88 75.41	116.82       110.89         102.54       105.43         127.91       99.12         726.26       121.79         536.6       302.94         254.56       165.24         95.88       413.55         75.41       670.65         92.27       316	116.82       110.89       119.84         102.54       105.43       57.55         127.91       99.12       54.45         726.26       121.79       87.96         536.6       302.94       177.94         254.56       165.24       274.99         95.88       413.55       414.78         75.41       670.65       173.21         92.27       316       473.28

156.75	358.2	69.94	278.43	2021
160.42	355.1	88.34	250.67	2022
161	355.2	89	250	2023

In this table we note that the National Bank of Iraq showed that the results of the financial analysis (The CIR has significantly exceeded the standard limit of the evaluation model of (40%) during the study period, except for the year (2012), when the CIR ratio reached (38.07%), indicating that operating expenses increased by a greater percentage than operating income. As for Khaleeji Commercial Bank, the cost-to-income ratio (CIR) increased significantly above the standard limit of (40%) during the study period, indicating that the bank's spending on operating expenses and business management increased by a percentage exceeding operating income. Khaleeji Commercial Bank also recorded a minimum in (2013) of (54.45%), which exceeded the standard for the evaluation model and was almost stable for this bank. The decrease in the CIR ratio indicates that Khaleeji Commercial Bank achieved profits during that period as a result of good management in allocating resources as well as in managing operating expenses. As for the Middle East Bank, it recorded a (CIR) ratio that exceeded the standard limit of the evaluation of 40% during the study period. The increase in this ratio indicates a reduction in the bank's net profits, which negatively affects the bank as well as its performance. The Middle East Bank recorded a minimum in 2018 of (75.41%), which also exceeded the standard of the evaluation model. This ratio was unstable for the Middle East Bank. As for the Bank of Baghdad, the results of the cost-to-income ratio (CIR) exceeded the standard limit of the evaluation model (40%) during the study period. The Bank of Baghdad recorded a minimum in (2018) of (69.94%), which exceeded the standard limit of the evaluation model. This ratio was unstable for the bank.

Fifth: Measuring and analyzing the impact of unsystematic risks on the financial performance of Iraqi commercial banks (Bank of Baghdad, Gulf Bank, Investment Bank, Bank of the East)

#### First: Homogeneity test for (Hsiao):

To verify whether the cross-sectional time series can be applied, the homogeneity model test was applied (Hsiao)And the table(12)thecameSummarizesfor usThe results obtained through the table are:H1) represents the tendencies with the constants, (H2) represents the tendencies alone, and (H3) also represents the constants alone, meaning the tendencies are ( $\beta$ ), and the constants are (a), considering the Fisher statistic and the corresponding probability values at a significance level of (0.05), the following can be concluded: -

-theFirst hypothesis (null hypothesis): We reject the existence of thehomogeneity in the Amodel

-theThe second hypothesis (alternative hypothesis): It is the absence oftheHomogeneity, if it was ((P. Value is less than (0.05) meaning that we reject the null hypothesis, i.e. we reject the existence of homogeneity. However, if it is greater than (0.05) meaning that we accept the null hypothesis, i.e. the existence oftheHomogeneity. And through the lowest van(H1=0.869877) (H2=0.982323) (H3=0.297901)And since it wasGreater than (0.05) in this case we accept the null hypothesis meaning that there is homogeneity, i.e. the tendencies with the constants (H1) There is homogeneity and the tendencies alone (H2) There is homogeneity and so do the constants alone (H3) There is homogeneity, andatticWe can say that there is complete homogeneity in theAModel, andThen you canTo say thatAmodel(OLS)It is suitable for estimating the model..

## the Table (12) Standard Test Form RHomogeneity for (Hsiao)

Specification Tests of Hsiao (1986)

H1 = Null Hypothesis: panel is homogeneous vs Alternative Hypothesis: H2

H2 = Null Hypothesis: H3 vs Alternative Hypothesis: panel is heterogeneous

H3 = Null Hypothesis: panel is homogeneous vs Alternative Hypothesis: panel is partially homogeneous									
	Hypotheses H1	F-Stat 0.495054	P-Value						
	Н2	0.174620	0.869877 0.982323						
	НЗ	1.260798	0.297901						

Source: Researcher's work based on the outputs of the statistical program (EViews8.1)

#### 2-Unit root testsUnit Root:

The second step is to test the stability of the model variables, as well as determine the order of joint integration of the time series and determine whether the variables are stable or not. This is done by applying the augmented Dickey-Fuller unit root test.(ADF), After the researcher conducted the expanded unit root test, we obtained the results below, shown in Table (13):YThe standard appendix presents unit root tests and significance tests.

## the Table (13The model GStandard unit root test (Unit Root)

Panel unit root test: Summary

Series: D(DOL)

Date: 05/29/24 Time: 17:08

Sample: 2010 2023

Exogenous variables: Individual effects Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0

Newey-West automatic bandwidth selection and Bartlett kernel

Balanced observations for each test

			Cross-						
Method	Statistics	Prob.**	sections	Obs					
Null: Unit root (assumes common unit root process)									
Levin, Lin & Chu t*	-5.61505	0.0000	4	48					
Null: Unit root (assumes individu	ıal unit root p	rocess)							
Im, Pesaran and Shin W-stat	-3.49470	0.0002	4	48					
ADF - Fisher Chi-square	25.5778	0.0012	4	48					
PP - Fisher Chi-square	26.8794	0.0007	4	48					

Panel unit root test: Summary

Series: D(UNIT\_ROOT\_OLF)
Date: 05/29/24 Time: 18:00

Sample: 2010 2023

Exogenous variables: Individual effects
Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0

Newey-West automatic bandwidth selection and Bartlett kernel

Balanced observations for each test

Method	Statistics	Prob.**	Cross- sections	Obs					
Null: Unit root (assumes common unit root process)									
Train offic root (assumes comin	1011 41111 1 000	processy							
Levin, Lin & Chu t*	-5.68271	0.0000	4	48					
Null: Unit root (assumes indivi	dual unit roo	ot process)							
Im, Pesaran and Shin W-stat	-3.72917	0.0001	4	48					
ADF - Fisher Chi-square	27.0940	0.0007	4	48					
PP - Fisher Chi-square	38.0468	0.0000	4	48					

Panel unit root test: Summary

Series: YP

Date: 05/29/24 Time: 17:11

Sample: 2010 2023

Exogenous variables: Individual effects, individual linear trends

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0 to  $1\,$ 

Newey-West automatic bandwidth selection and Bartlett kernel

			Cross-				
Method	Statistics	Prob.**	Sections	Obs			
Null: Unit root (assumes common unit root process)							
Levin, Lin & Chu t*	-4.85011	0.0000	4	50			
width t-status	-2.30105	0.0107	4	46			

Null: Unit root (assumes individual unit root process)

I'm, Pesaran and Shin W-stat	-2.32842	0.0099	4	50	
ADF - Fisher Chi-square	19.7295	0.0114	4	50	
PP - Fisher Chi-square	14.3326	0.0735	4	52	

Source: Researcher's work based on the outputs of the statistical program (EViews8.1)

## Morale at level(0.05):

When the null hypothesis was (The null hypothesis assumes the existence of a unit root. We note in Table (13) that most of the tests indicate the stability of the variable (DOL) At the first difference, as most of the tests (Levin, Pesaran, Fisher) because all of them were less than (0.05), and we also notice the stability HThe variable (OLF) In most tests (Levin, Pesaran, Fisher) because all tests are less than (0.05), but the variable (YP) I am stable at the level, because most tests agree on my stability. HTime series (YP) at this level.

# 3-Least squares estimation(OLS):

We note from the following table (14) that the independent variableto(OLF) is not significant since the probability isProb) is greater than(0.05) So it can't beNInterpretation of the dependent variable, as for the independent variable (DOLIt is noted that it is significant and has an inverse relationship with the dependent variable.YP) Financial performance, if the independent variable decreases (DOL) The dependent variable will increase by one unit.(YP) By the amount of (163.0205).

It is also noted that (R-squared) is (0.18), which is a very weak percentage, because (0.82) of the changes that occur in the dependent variable cannot be explained by the independent variables.

# Table (14) Standard model for the least squares estimation test(OLS)

Dependent Variable: YP

Method: Panel Least Squares

Date: 05/27/24 Time: 02:07

Sample: 2010 2023 Periods included: 14

Cross-sections included: 4

Total panel (balanced) observations: 56

Variable	Coefficient	Std. Error	t-Statistic	Prob.
OLF	-73.47021	145.6671	-0.504371	0.6161
DOL	-163.0205	47.71170	-3.416781	0.0012
С	184.6580	34.70381	5.320972	0.0000
Root MSE	48.26870	R-squared		0.181052
Mean	dependent 74.36071	Adjusted R-squared		0.150148

#### variable

SD dependent var	53.82078	SE of regression	49.61599
Akaike info criterion	10.69859	Sum squared resid	130472.6
Black Criterion	10.80709	Log likelihood	-296.5604
Hannan-Quinn criter.	10.74065	F-statistic	5.858574
Durbin-Watson stat	2.066135	Prob(F-statistic)	0.005027

Source: Researcher's work based on the outputs of the statistical program (EViews8.1)

## 4-Estimation according to the distributed ensemble regression methodology(ARDL):

## 1- Long-term effects(Long Run Equation):

It is noted from Table No. (15) The following is the period he chose (ARDL) for the model The slowdown period is (1) for the tab variable.A(3) Any three lags for the independent variables, we notice that the effect of the independent variable (DOL) It is moral in its effect on the dependent variable.A(YP) Inversely related, as the decrease in the independent variable (DOL) by one unit means the dependent variable will increase (YP) by (445.1488), as for the independent variable (OLF) It is also noted that there is a significant effect with an inverse relationship, as the decrease in the independent variable (OLF(By one unit, the dependent variable will increase)YP) By the amount of (3665.433).

## 2- Short-term effects(Short Run Equation):

In Table (15) below, it is noted that the modification speed or error correction parameter (cointeq01) is the resultAndNegative and moral(Negative in magnitude) and significant and its magnitude is (0.0046), which indicates a long-term relationship between the independent variables and the dependent variable, (0.84779) of short-term policies can be fixed within a year and two months.

## the Table (15) Standard model for testing by cumulative regression method (ARDL)

Dependent Variable: D(YP)

Method: ARDL

Date: 05/29/24 Time: 17:25

Sample: 2013 2023

Included observations: 44

Dependent lags: 1 (Fixed)

Dynamic regressors (3 lags, fixed): DOL OLF

Fixed regressors: C

Variable	Coefficient	Std. Error	t-Statistic	Prob.*	
	Long Run Equation				
DOL	-445.1488	25.71674	-17.30969	0.0000	
OLF	-3665.433	398.6065	-9.195618	0.0000	

COINTEQ01	-0.847799	0.268563	-3.156798	0.0046
D(DOL)	49.72983	67.85732	0.732859	0.4714
D(DOL(-1))	242.1794	177.8598	1.361631	0.1871
D(DOL(-2))	40.45905	237.9786	0.170011	0.8666
D(OLF)	3701.097	1000.221	3.700279	0.0012
D(OLF(-1))	1571.327	1712.991	0.917300	0.3689
D(OLF(-2))	1165.247	1093.631	1.065485	0.2982
С	477.3403	134.7852	3.541489	0.0018
Root MSE	10.71957	Mean dependent variable		2.335000
SD dependent var	37.25614	SE of regression		17.10252
Akaike info criterion	6.956178	Sum squared resid		6434.919
Black Criterion	8.185856	Log likelihood	Log likelihood	
Hannan-Quinn criter.	7.432922			

<sup>\*</sup>Note: p-values and any subsequent tests do not account for the model selection.

Source: Researcher's work based on statistical program outputsEViews8.1

# **Conclusions:**

- 1- If it is Workers Leverage is a new way of financing instead of resorting toto Increase capital by entering the Contributors the Renew.
- 2- As well as Workers Leveraged Banks For information From debts and employ them properly in the Loans with a return Afinancial A accommodates Pay off debts and make profits for the bank.
- 3- In recent years, we have noticed an increase in the ratio of total debts to total assets.
- 4- If the banks (Baghdad, Al-Sharq, Al-Khaleej, Investment) want to improve their financial performance by increasing financial influence, they must choose the degree of financial leverage that serves investments in a way that makes them have a positive impact, whether for their shareholders or their assets.
- 5- In order to enhance the competitive strength of banks, banks must pay attention to modern developments in banking activity to increase skills and capabilities.

## **Recommendations:**

- 1- He shouldCommercial companies (banks) mustWorkersThe necessary control measures for measuring the non-systemic risks of all banking systems in order to improve banking performance and raise the value of banks.
- 2- Must toFor companies (banks) to benefit from borrowed funds and invest them correctly and benefit from the advantage of achieving tax savings, since the interest paid by those companies (banks) on borrowed funds can be deducted from taxable income.

- 3- ShouldtoCommercial banks should work on educating and training employees on how to rationalize spending and make optimal use of financial and human resources.maturity dateThe desired goals.
- 4- Should benoDependenceonA financial policy of companies (banks) that works to encourage the bank's customers to deposit their money with banks andthereforeThis will increase the banks' liquidity and the possibility of borrowing.WorkersThis liquidity and achievementtheReturntheMy money to the banks.
- 5- The importance of strivingCompanies (banks) to grant credit and thus ensure the return of the money granted to borrowers and reduce financial risks.
- 6- Work necessityCompanies (Banks)onDiversity in the fields of banking activities and the use of brevity in work in terms of introducing information technology into the bank's work, which contributes to reducing the costs of banking activities and thus increasing profitability, which is then reflected in the value of banks.
- 7- Must toCommercial companies (banks) should takeconsiderationTaking into account the successful investment decisions of the cost of financing for credit and loan granting policies and working on studying the expected returns obtained as a result of adopting that policy for the purpose of reducing banking risks represented by administrative risks, business risks and default on loan repayments.

  The necessity for companies (banks) not to expand financial leverage because this will increase the risks of financial distress and insolvency.Loyalty By GodDues to borrowers

Sixth - Sources

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