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Financial leverage and its impact on profitability in the Iraqi banking sector for the years (2023-2019)

Mustafa Nazar Yas
Email: mustafa.nazar@ibnsina.edu.iq

Ahmed Muthanna Sedeeq
Email: ahmed.al-bazzaz@ibnsina.edu.iq

Mahmoud Mohammed Jasim
Email: mahmoud.jasim@ibnsina.edu.iq

***Correspondence to:Ibn Sina University for Medical and Pharmaceutical Sciences**

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ABSTRACT

This study examines the impact of leverage on the profitability of the Iraqi banking sector during the period 2019-2023. Relying on audited financial data published by the Central Bank of Iraq, the research addresses an important relationship between the total debt-to-equity ratio (TDE) and profitability indicators, namely: return on assets (ROA), return on equity (ROE), and net profit margin (NPM). The research adopted a quantitative approach using multiple linear regression analysis and the Mann-Whitney U test. The results showed a statistically significant relationship between financial leverage and profitability indicators, suggesting that well-managed debt financing can enhance financial performance. However, excessive reliance on debt can lead to financial instability, particularly under conditions of weak liquidity or macroeconomic volatility. The findings support the trade-off theory, which focuses on balancing debt and equity to minimize capital costs and maximize value, while also being consistent with elements of the hierarchy theory under unstable economic conditions. The study recommends that bank managers adopt a risk-aware, strategic approach to managing leverage to support profitability and long-term sustainability.

Keywords: Financial leverage, Capital Structure, The banking industry, the Iraqi banking sector.

الرافعة المالية وأثرها على الربحية في القطاع المصرفي العراقي للسنوات (2019–2023)

م.م. مصطفى نزار ياس
Email:
mustafa.nazar@ibnsina.edu.iq

م.م. احمد مثنى صديق
Email:
ahmed.al-bazzaz@ibnsina.edu.iq

م.م. حمود محمد جاسم
Email:
mahmoud.jasim@ibnsina.edu.iq

جامعة ابن سينا للعلوم الطبية والصيدلانية

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الملخص:

تبحث هذه الدراسة في تأثير الرافعة المالية على ربحية القطاع المصرفي العراقي خلال الفترة 2019-2023. بالاعتماد على البيانات المالية المدققة الصادرة عن البنك المركزي العراقي، يتناول البحث العلاقة المهمة بين نسبة إجمالي الدين إلى حقوق الملكية ومؤشرات الربحية، وهي: العائد على الأصول(، والعائد على حقوق الملكية(، وهامش صافي الربح. اعتمد البحث على منهج كمي باستخدام تحليل الانحدار الخطي المتعدد واختبار مان-ويتني يو، أظهرت النتائج وجود علاقة ذات دلالة إحصائية بين الرافعة المالية ومؤشرات الربحية، مما يشير إلى أن التمويل بالدين المُدار جيدًا يمكن أن يُعزز الأداء المالي. ومع ذلك، فإن الاعتماد المفرط على الدين يمكن أن يؤدي إلى عدم الاستقرار المالي، لا سيما في ظل ظروف ضعف السيولة أو التقلبات الاقتصادية الكلية. تدعم النتائج نظرية المقايضة، التي تركز على موازنة الدين وحقوق الملكية لتقليل تكاليف رأس المال وتعظيم القيمة، مع الاتساق مع عناصر نظرية التسلسل الهرمي في ظل الظروف الاقتصادية غير المستقرة. توصي الدراسة مديري البنوك بتبني نهج استراتيجي واعٍ للمخاطر في إدارة الرافعة المالية لدعم الربحية والاستدامة على المدى الطويل.

الكلمات المفتاحية: الرافعة المالية، هيكل رأس المال، القطاع المصرفي، القطاع المصرفي العراقي.

1- INTRODUCTION

Banks have always played a leading and influential role in economies around the world. The banking industry is always subject to financial restrictions that require banking services and make a substantial contribution to economic growth for both those who have extra money and those who don't. Reaching the maximum level of profitability is the main objective of banking operations management. The ability of a business to turn a profit in relation to sales, capital, and total assets is known as profitability if a company's standing is determined by its earnings, either present or future. Allowing liquidity providers to use leverage is a step towards higher capital efficiency. Long-term debt, also referred to as leverage, is the foundation of any company's capital structure. Its holders are obligated to the business, which sets it apart from owners of other forms of capital. In the event that the business fails, they are entitled to their capital and are granted a fixed interest rate. Everyone agrees that information must be disclosed in order to allay concerns and appease long-term creditors. The findings regarding the correlation between integrated reporting and leverage have been inconsistent at best. Leverage is the basis of banking and a source of external financing, which banks rely on to finance their assets, which is costly and, at the same time, of great importance to the banking sector. Thus, banks' assets are a mix of debt and equity, and debt may constitute the largest proportion of the total assets of some banks. The costs of leverage are represented by the interest paid by conventional banks to the owners of these funds, which is called investment returns in Islamic banks. On the other hand, high debt refers to financial obligations over different terms that require cash liquidity. Although cash liquidity represents a bank's security in paying obligations in a limited time, an increase or decrease in liquidity compared to the bank's obligations leads to a financial situation that has an unfavorable impact on banks' returns and depositors' confidence. In financial markets, leverage happens when a borrower buys an asset using borrowed money in the hopes of earning a return higher than the loan's cost. Leverage, then, is an investing strategy that promotes the growth and expansion of businesses. The practice of taking out a loan to increase one's asset base is known as leverage. Additionally, it is a way to increase the rate of return on investment. Excessive leverage increases the likelihood of failure because it makes loan servicing more difficult. By calculating the ratio of total debt to total assets, the leverage formula provides a useful indication of a company's borrowing capacity. One common way to measure leverage is with the debt-to-asset ratio. When interest costs are lower than profits from using debt, leverage can be helpful. When steady cash flow is anticipated, debt financing works well. Budgeting for debt repayment is considerably simpler as a result. In markets with few competitors, high entry barriers, and few revolutionary product advances, stable cash flow is typical. Debt financing is the practice of businesses taking out loans to fund their ongoing operations. Corporate operations can benefit from debt financing in a number of ways, including tax deductions, enhanced financial capacity, and stable interest rates. The appropriate level of debt that banks use to create an optimal capital structure significantly affects their financial performance. Due to the fact that debt improves business performance, the traditional capital structure also encourages businesses to use debt to a certain degree. Furthermore, using debt puts banks at serious risk because defaulting on debt transfers ownership from shareholders to bondholders or creditors. Therefore, it is now crucial to research how debt impacts banks' financial performance so that different stakeholders can comprehend the relationship between debt and financial performance.

In line with the objectives of this study, the research is structured as follows:

The first part presents the theoretical framework and relevant concepts of financial leverage and profitability, the second part reviews previous studies and highlights the knowledge gap, the third part outlines the research methodology and data sources, the fourth part provides the empirical analysis and discusses the results, Finally, the fifth part presents the conclusions and recommendations derived from the findings.

2- Similar research that has been carried out previously includes:

(Kasmir, 2017) This research aims to analyze the impact of financial leverage (DFL) and operating leverage (DOL) on corporate profitability (ROE) simultaneously and partially in the banking sector subsidiaries listed in BEI for the period 2019-2022. This research was conducted using multiple linear regression analysis. It was found that DFL and DOL simultaneously affect return on equity which represents profitability. (Le, et al., 2020) This study evaluated the effects of firm size, profitability, and leverage on the value of Nigerian listed insurance businesses between 2010 and 2022. Secondary time series were gathered from 20 listed insurance companies' annual reports that were devoid of bias. At the 5%

level, unit root, Pedroni cointegration, and generic variable model approaches were used. Pedroni cointegration was used to confirm that there was no long-run form among the variables after the unit root test revealed that all variables were integrated at first difference. According to the general variable model test, long-term debt and firm size have a substantial positive impact on Tobin's quality ratio. Short-term debt and return on equity also have a positive impact, but it is not statistically significant. In order to accommodate more insurance companies and simultaneously boost their confidence level among both potential and actual investors, the study concludes that leverage and firm size are the determinants of firm value among listed insurance companies in Nigeria. It also suggests that the long-term debt ratio be maintained and that listed insurance companies be expanded in size. In order to stay competitive in their market and generate value for shareholders, insurance companies are also encouraged to repurchase shares when they are determined to be undervalued. The Central Bank of Nigeria should, finally, resume reviewing interest rate charges made by Nigerian lending institutions every two months in order to keep an eye on and enhance their performance with regard to the use of borrowed funds.

After delving into and examining the previous studies mentioned above in the field of financial leverage and financial performance, the researcher was able to establish the following observations:

2-1 Similarities and differences between previous studies and the current study

1- The current study is similar to some previous studies in choosing the banking sector as a sample for the research

2- The current study uses return on assets as a metric of profitability, which is similar to other earlier studies.

3- Similar to other earlier research, the current study uses a descriptive analytical technique to comprehend the properties of the variables under investigation.

4- The current study's selection of the study's time constraints was different from those of several other investigations.

5- The Iraqi banking industry was selected as the study's spatial boundaries, which set it apart from some earlier research.

6- The current study relied on quantitative measures only in collecting data, unlike what some previous studies did in collecting data through the questionnaire method

7- By assessing the study variables, the current study varied from a previous research.

2-2 Benefiting from previous studies

Previous studies contributed to enriching the theoretical and practical aspects of the current study, and helped the study in identifying the current main variables and their dimensions, and the extent of their potential application in the Iraqi environment represented by the Iraqi banking sector, which helped the current study in identifying the knowledge gap as follows:

1- Reviewing the methodology of the studies and trying to benefit from them and enrich the theoretical aspect of our current study.
2- Reviewing the applied aspect of those studies in order to determine the type of sample appropriate for the current study.
3- Benefiting from previous studies in determining the quantitative measures of the study variables (financial leverage and profitability).
4- Knowing what those studies have reached and what are the recommendations regarding that and starting from where those studies ended
5- Reviewing the sources used in the theoretical aspect and getting to know the opinions of writers and researchers

3- RESEARCH OBJECTIVES AND HYPOTHESES

3-1 Research Objectives

The primary aim of this study is to explore the relationship between financial leverage and profitability in the Iraqi banking sector. Financial leverage is represented by the Total Debt to Equity (TDE) ratio, while profitability is measured through Return on Equity (ROE), Return on Assets (ROA), and Net Profit Margin (NPM). The study seeks to provide a theoretical explanation of leverage and its relevance to profitability, drawing on established perspectives such as the trade-off theory and the pecking order theory (Modigliani & Miller, 1963; Myers & Majluf, 1984). It further aims to examine whether leverage has a uniform impact on all profitability indicators or whether its effect differs depending on the measure used, as suggested in prior empirical findings (Abor, 2005; Akhtar et al., 2021). In addition, the study intends to contribute empirical evidence from the Iraqi banking environment, thereby enriching the broader literature on capital structure and performance while emphasizing how leverage interacts with profitability under the specific economic conditions of Iraq (Le & Ngo, 2020; Al-Aaraji, 2024; Olulu-Briggs, 2024).

3.2. RESEARCH PROBLEM

Despite the pivotal role of banks in stimulating economic growth, the Iraqi banking sector continues to face challenges related to financial leverage and its implications for profitability. While financial leverage can enhance returns and improve capital efficiency, excessive dependence on debt may increase financial risk and undermine stability. Previous studies conducted in different contexts have yielded mixed results regarding the relationship between leverage and profitability, creating a knowledge gap in the Iraqi environment. Therefore, the problem of this study is to investigate the extent to which financial leverage affects profitability indicators in the Iraqi banking sector during the period 2019–2023.

- **Research Questions**

From the research problem, the following questions are derived:

1- What is the nature of the relationship between financial leverage (Total Debt to Equity ratio) and net profit margin (NPM) in Iraqi banks?
2- To what extent does financial leverage influence return on assets (ROA) in Iraqi banks?
3- How does financial leverage affect return on equity (ROE) in Iraqi banks?
4- Does the degree of reliance on debt financing improve or weaken the financial performance of banks under the Iraqi economic conditions?

3.3. Hypotheses Development

Through the hypotheses outlined below, which will be empirically examined in the study, the author investigates the aforementioned aims. Leverage and profitability have a positive link that supports Myers and Majluf's (1984) trade-off theory and Modigliani and Miller's (1963) idea of the tax benefit of debt, while a negative relationship supports Myers and Majluf's (1984) Pecking Order theory. Since other studies have employed different profit measures and produced inconsistent results, this study uses three alternative types of profit metrics to assess the effect of leverage on profitability, as indicated in Table 1. Thus, the following are the hypotheses that were established for the study:

H0 (1) there is no relationship between total debt to equity and net profit margin
HA (1) there is a relationship between total debt to equity and net profit margin
H0 (2) there is no relationship between total debt to equity and return on assets
HA (2) there is a relationship between total debt to equity and return on assets
H0 (3) there is no relationship between total debt to equity and return on equity

Table 1.Variable Measurement		
Variable	Indicators	Referencessources
Dependent Variable		
Profitability	$ROA = \frac{profit\ after\ Tax}{Total\ assets}$	(Rahman, 2024)
Independent Variable		
Financial Leverage	$DAR = \frac{TotalLiabilities}{Total\ assets}$	(Kasmir, 2017)

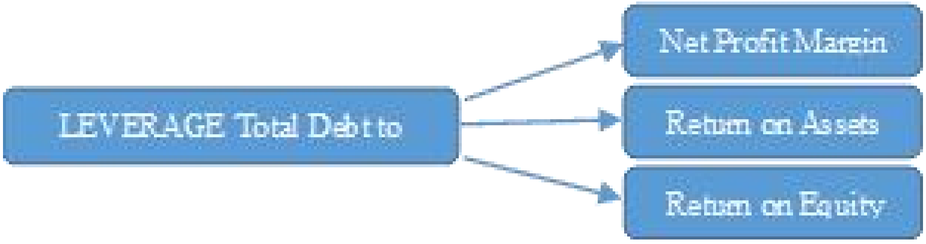
HA (3) there is a relationship between total debt to equity and return on equity

4. DATA AND RESEARCH METHODOLOGY

4.1. Research Framework

The study examines the connection between financial leverage and profitability across the whole Iraqi banking industry using the methodology depicted in Figure 1.

Figure 1: Framework of the study



Source: Researcher's preparation

4.2. Study Sample

This study focuses on a comprehensive sample of the Iraqi banking sector as a whole. Which includes the Central Bank of Iraq, government, private and foreign banks. The financial data for the periods 2019-2023 were collected from their financial reports published by the Central Bank. In addition to avoiding the 2008 financial crisis and improving reliability a few years later, the starting period was chosen because it is not very far in the future. This is because profitability in advanced and emerging economies may have been impacted differently during the financial crisis.

4.3. Study Variables

The sample's public financial statements for the years 2019–2023 provide the author with secondary data for this study. The following are some of the variables that were used in the analysis. The study's dependent variable is profitability, and it looks at three different kinds of profit measures: net profit, return on assets, and return on equity. Previous research in the literature has utilized return on equity (Abor, 2005) to evaluate the returns accessible to shareholders, while other studies have used return on assets, which represents the effectiveness of singly allocated resources in the form of the company's total assets. Some even employed metrics such Tobins Q (Aggarwal and Zhao, 2007 and Shah and Hussain, 2008) or earnings per share (Ghosh, 2008).

return on sales (Javed et al., 2014) and Kasmir (2017). According to the author, the most popular metrics for assessing profitability are net profit and return on assets (Ahmed Sheikh and Wang, 2013; Kashlami and Yazdanfar, 2016). In order to provide a more comprehensive analysis of the profitability of this relationship, this study also looks at the effectiveness of using paid-in capital using return on equity. The independent variable that measures financial leverage is total debt to equity (TDE). The variables are briefly described in Table 2 below.

Table 2: Description of the study variables			
Type of variable	Definition	Formula	Scale
Dependent Profitability	ROA: A metric used to evaluate how well resources allocated in	ROA=EBIT/Total Assets	Ratio

	the form of the firm's total assets are being used.		
	ROE: Measure to assess the efficiency in the use of shareholders capital	ROE=Net Profit/Total Shareholders' Equity	Ratio
	NPM: Metric to evaluate sales-related operational efficiency	NPM=Net Profit/Net Sales	Ratio
Independent Leverage	TDE: A measure of a company's capital structure and amount of debt financing	TDE=Total Debt/Total Equity	Ratio

4.4. Estimation Method

The research design employed in this study is quantitative, focusing on hypothesis testing. The investigation's scope is delineated by specific boundaries. Spatially, the study encompasses the Iraqi banking sector, which includes the Central Bank of Iraq, government-owned banks, and private sector banks. Temporally, the research period spans from 2019 to 2023. All data utilized in this study are secondary data, meticulously sourced from publicly available annual reports.

Regarding the methodological approach, the study adopted a descriptive approach for the theoretical framework, particularly concerning the concepts of leverage and profitability. For the empirical investigation, an analytical approach was employed to rigorously test the hypotheses and ascertain the precise relationship between the variables within the context of the Iraqi banking sector.

This study specifically focuses on quantifying the relationship between financial leverage and profitability within the Iraqi banking sector during the aforementioned period (2019–2023). To achieve this, Multiple Linear Regression was selected as the primary analytical technique. This method was instrumental in testing the formulated hypotheses and assessing the impact of the Total Debt to Equity (TDE) ratio on key profitability indicators, namely Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM).

To ensure the statistical validity and reliability of the regression model, a series of classical assumption tests were performed. These included thorough examinations for normality, multicollinearity, heteroscedasticity, and autocorrelation. Furthermore, acknowledging potential deviations from parametric assumptions, the Mann-Whitney U test, a non-parametric alternative, was also utilized to identify statistically significant differences between variables, particularly in scenarios where the normality assumption was not met. As previously stated, the entire analysis was founded on secondary data derived from the annual financial reports officially published by Iraqi banks.

5. EMPIRICAL RESULTS AND INTERPRETATIONS

The purpose of this study was to examine how financial leverage affected profitability metrics in the banking industry in Iraq between 2019 and 2023. By employing a quantitative approach using tools such as multiple linear regression and the non-parametric

Mann-Whitney U test, the research relied on secondary data extracted from the audited annual financial statements of Iraqi banks, including public, private, and foreign banks operating under the supervision of the Central Bank of Iraq.

The Total Debt to Equity ratio (TDE) and the three chosen profitability metrics—Net Profit Margin (NPM), Return on Assets (ROA), and Return on Equity (ROE)—were found to be statistically significantly correlated by the empirical results. The values obtained from the Mann-Whitney U tests were accompanied by p-values below the conventional significance level of 0.05, thereby confirming the alternative hypotheses and rejecting the null ones.

These results suggest that financial leverage plays a substantial role in shaping the financial performance of banks. An increased reliance on debt financing appears to have a direct impact on profitability—whether by enhancing the efficient use of total assets, maximizing returns for shareholders, or improving operational effectiveness. However, while leverage can contribute positively to profitability under conditions of stable liquidity and a balanced capital structure, it may also lead to financial strain if debt obligations exceed the institution's capacity to generate adequate returns.

Accordingly, the findings support classical financial theories, particularly the **Trade-off Theory**, which posits that firms—including banks—strive to achieve an optimal balance between debt and equity to minimize the overall cost of capital and maximize firm value. At the same time, the observed dynamics between leverage and profitability may also reflect elements of the **Pecking Order Theory**, especially in light of Iraq's fluctuating economic environment and its implications for financing decisions.

In light of these findings, the study recommends that banking sector decision-makers and financial managers adopt a strategic approach to managing financial leverage, ensuring it aligns with broader risk management policies and profitability goals. Furthermore, future research is encouraged to explore more detailed components of leverage (e.g., short-term vs. long-term debt) and to include additional performance indicators, such as operational efficiency and credit quality, to provide a more comprehensive understanding of leverage's role in shaping financial performance in the Iraqi banking context.

5.1. Data Analyses

The data analysis in this study was carried out using both descriptive and inferential statistical techniques. The primary characteristics of the dataset were compiled and displayed using descriptive statistics, including the means and standard deviations of the key variables: Total Debt to Equity, Net Profit Margin, Return on Assets, and Return on Equity. The descriptive results indicated moderate variability across the banks in terms of profitability and leverage levels.

To test the study's hypotheses and determine the presence of statistically significant relationships between financial leverage and profitability, the **Mann-Whitney U test** was used. This non-parametric test was selected due to the small sample size and potential violations of normality assumptions. The test was applied individually to each pair of variables:

- **TDE and NPM:** The test yielded a U value of 0.000 with a p-value of 0.009, indicating a statistically significant relationship between financial leverage and operational profitability.
- **TDE and ROA:** A U value of 0.000 and a p-value of 0.014 revealed a significant relationship between financial leverage and asset-based profitability.
- **TDE and ROE:** With a U value of 0.000 and a p-value of 0.021, a statistically significant relationship was also found between financial leverage and shareholders' return.

In all three cases, the p-values were below the 0.05 threshold, thus leading to the rejection of the null hypotheses and confirming the existence of meaningful associations between the debt-equity structure and profitability indicators.

These analytical results underscore the importance of debt structure in influencing bank performance, suggesting that strategic use of leverage can significantly impact profitability when managed effectively. The results demonstrate the significance of financial leverage in influencing the performance outcomes of banks functioning in the Iraqi financial system and offer solid empirical evidence for the theoretical framework used in the study. Multiple linear regression analysis is the data analysis strategy used. Descriptive statistics, traditional assumption tests (such as the normality, multicolonarity, heteroscedasticity, and autocorrelation tests), and hypothesis tests (such as the f, t, and coefficient of determination tests) are examples of data analysis approaches.

We will review the Descriptive statistic and Hypothesis testing

Table (3) Descriptive statistic

	Means	Std.
TDE	2.71	0.52
NPM	0.48	0.35
ROE	0.76	0.31
ROA	0.75	0.34

To test the relationship between Variables, we will use the Mann-Whitney Test

1- a- Null hypothesis: There is no statistically significant relationship between total debt to equity and net profit margin.

b- Alternative hypothesis: There was a statistically significant relationship between total debt to equity and net profit margin.

Table (4) Ranks

	code	N	Mean Rank	Sum of Ranks
VAR00001	TDE	5	8.00	40.00
	NPM	5	3.00	15.00
	Total	10		

Table (5) **Test Statistics**[a]

	VAR00001
Mann – U	.000
Wilcoxon – W	15.000
Z	-2.611
Asymp. Sig. (2-tailed)	.009
Sig. [2*(1-tailed Sig.)]	.008[b]

a. Grouping Variable: code

b. Not corrected for ties.

Because the calculated Mann-Whitney U value of 0.000 and p-value of 0.009 in table (5) are below the significant level of 0.05, the alternative hypothesis is accepted and the null hypothesis is rejected. The link between NPM and total debt to equity was statistically significant.

2- a- Null hypothesis: There is no statistically significant relationship between total debt to equity and return on assets.

b- Alternative hypothesis: There was a statistically significant relationship between total debt to equity and return on assets.

Table (6) **Ranks**

	code	N	Mean Rank	Sum of Ranks
VAR00001	TDE	5	7.00	35.00
	ROA	5	2.50	10.00
	Total	10		

Table (7) **Test Statistics[a]**

	VAR00001
Mann-Whitney U	.000
Wilcoxon – W	10.000
Z	-2.460
Asymp. Sig. (2-tailed)	.014
Sig. [2*(1-tailed Sig.)]	.016[b]
a. Grouping Variable: code	
b. Not corrected for ties.	

The alternative hypothesis is accepted and the null hypothesis is rejected since table (7)'s computed Mann-Whitney U value of 0.000 and p-value of 0.009 are less than the significant level of 0.05 There was a statistically significant relationship between total debt to equity and return on assets.

3- a- Null hypothesis: There is no statistically significant relationship between total debt to equity and return on equity.

b- Alternative hypothesis: There was a statistically significant relationship between total debt to equity and return on equity.

Table (8) **Ranks**

	code	N	Mean Rank	Sum of Ranks
VAR00001	TDE	5	6.50	26.00
	ROE	5	2.50	10.00
	Total	10		

Table (9) **Test Statistics[a]**

	VAR00001
Mann – U	.000
Wilcoxon – W	10.000
Z	-2.309
Asymp. Sig. (2-tailed)	.021
Sig. [2*(1-tailed Sig.)]	.029[b]
a. Grouping Variable: code	
b. Not corrected for ties.	

The alternative hypothesis is accepted and the null hypothesis is rejected since table (9)'s computed Mann-Whitney U value of 0.000 and p-value of 0.021 are less than the significant level of 0.05 There was a statistically significant relationship between total debt to equity and ROE.

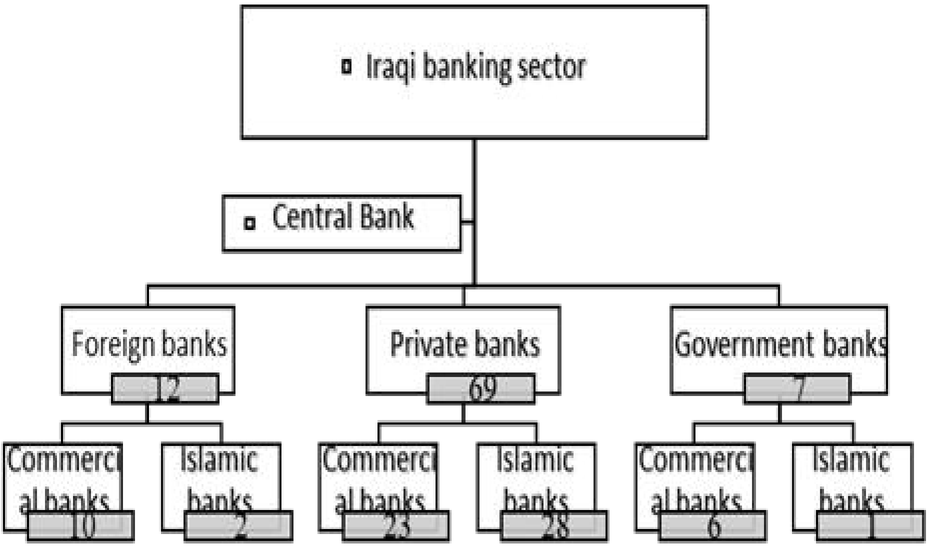
5-2 Interpretations

The Total Debt to Equity (TDE) ratio and the three chosen profitability indicators—Net Profit Margin (NPM), Return on Assets (ROA), and Return on Equity (ROE)—have a statistically significant association, according to the empirical results obtained from the application of the Mann-Whitney U test. The p-values obtained from these tests were consistently below the conventional significance level of 0.05. This statistically robust evidence allowed for the rejection of the null hypotheses and the acceptance of the alternative hypotheses for each of the three relationships examined.

These results strongly suggest that financial leverage plays a pivotal role in shaping the financial performance of banks. An increased reliance on debt financing appears to have a direct and discernible impact on profitability. This impact can manifest in several ways: it may enhance the efficient utilization of total assets, maximize returns for shareholders, or improve overall operational effectiveness.

However, it is crucial to acknowledge that while leverage can contribute positively to profitability, particularly under conditions of stable liquidity and a well-balanced capital structure, it also carries inherent risks. Excessive reliance on debt may lead to significant financial strain if debt obligations surpass the institution's capacity to generate adequate returns. This delicate balance underscores the complexity and importance of prudent financial leverage management within the banking sector.

Classical financial theories are strongly supported by the study's findings. In particular, they support the tax benefits of debt theory put forth by Modigliani and Miller (1963) and the trade-off theory put forth by Myers and Majluf (1984). These theories posit that firms, including financial institutions, strive to achieve an optimal capital structure that balances debt and equity to minimize the overall cost of capital and maximize firm value. Concurrently, Myers and Majluf's (1984) Pecking Order Theory may also be reflected in the observed relationships between leverage and profitability. especially considering Iraq's fluctuating economic environment and its implications for financing decisions.



Source: Prepared by the researcher based on the annual statistical bulletin of the Central Bank of

5-3 RECOMMENDATIONS

Based on the conclusions of this study, the following recommendations are proposed:

1- Adopt Balanced Capital Structures: Iraqi banks should strive to maintain an optimal mix of debt and equity financing to enhance profitability while minimizing the risk of financial distress.

2- Enhance Risk Management Practices: Bank managers are encouraged to strengthen their risk assessment frameworks, particularly regarding liquidity management and debt servicing capacity, to mitigate the adverse effects of excessive leverage.

3- Differentiate Between Short- and Long-Term Debt: Future financial strategies should consider the distinct impacts of short-term and long-term debt, ensuring that repayment obligations are aligned with the bank's cash flow stability.

4- Strengthen Regulatory Oversight: The Central Bank of Iraq could establish stricter monitoring mechanisms on leverage ratios across the banking sector, aiming to ensure sustainable profitability and financial stability.

5- Develop Training and Capacity Building: Bank executives and financial managers should receive continuous training on international best practices in leverage management, financial performance measurement, and corporate governance.

6- Encourage Further Research: Future studies should examine additional performance indicators such as credit quality, operational efficiency, and risk-adjusted returns to provide a more comprehensive understanding of the role of leverage in the Iraqi banking industry.

5-4 Conclusion

This study concludes that a statistically significant and impactful relationship exists between financial leverage and profitability indicators within the Iraqi banking sector for the period spanning 2019 to 2023. The empirical evidence, substantiated by the Mann-Whitney U test results, unequivocally affirms that the debt-equity structure profoundly influences the financial performance of banks. This strongly implies that the strategic and judicious deployment of financial leverage can substantially affect the profitability levels achieved by these institutions.

Based on these compelling findings, the study puts forth a key recommendation: decision-makers and financial managers within the banking sector should adopt a strategic and proactive approach to managing financial leverage. This approach must ensure that the chosen leverage levels are meticulously aligned with broader risk management policies and the overarching profitability objectives of the bank. Effective debt management is not merely a tool for asset financing; it is, in fact, a vital instrument for fostering sustainable financial performance and mitigating undue exposure to financial risks.

Furthermore, the study encourages future research to delve into more granular components of leverage, such as a detailed comparison between short-term and long-term debt. It also suggests incorporating additional performance indicators, including operational efficiency and credit quality, into analyses in the future. A more thorough and nuanced knowledge of the complex role that financial leverage plays in influencing the financial performance outcomes of banks operating within the dynamic and difficult Iraqi financial landscape is anticipated to be produced by such potential investigations. In the changing banking landscape, this increased understanding will be crucial for creating even more accurate and successful financing plans.

Reference

1- Abor, J. (2005). The effect of capital structure on profitability: An empirical analysis of listed firms in Ghana. *Journal of Risk Finance, 6*(5), 438–445. https://doi.org/10.1108/15265940510633505

2- Akhtar, M., Yusheng, K., Haris, M., Ain, Q. U., & Javaid, H. M. (2021). Impact of financial leverage on sustainable growth, market performance, and profitability. *Economic Change and Restructuring, 55*, 737–774. https://ideas.repec.org/a/kap/ecopln/v55y2022i2d10.1007_s10644-021-09321-z.html

3- Al-Aaraji, S. T. S. (2024). The impact of cash liquidity and financial leverage on the performance of Iraqi banks: A comparative study between Islamic and conventional banks. *Journal of Economics and Administrative Sciences, 30*(143), 389–404. https://jeasiq.uobaghdad.edu.iq/index.php/JEASIQ/article/view/3562

4- Kasmir (2017) Analisis Laporan Keuangan (Edisi 1, C).Pt Raja Grafindo Persada https://www.rajagrafindo.co.id/produk/analisis-laporan-keuangan/

5- Le, T. D., & Ngo, T. (2020). The determinants of bank profitability: A cross-country analysis. Central Bank Review, 20(2), 65-73. https://www.sciencedirect.com/science/article/pii/S1303070120300172

6- Le, T. D., & Ngo, T. (2020). The determinants of bank profitability: A cross-country analysis. *Central Bank Review, 20*(2),65. https://doi.org/10.1016/j.cbrev.2020.04.001

7- Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A correction. *American Economic Review, 53*(3), 433–443. https://www.scirp.org/reference/ReferencesPapers?ReferenceID=1363843

8- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics, 13*(2), 187–221. https://www.sciencedirect.com/science/article/abs/pii/0304405X84900230

9- Olulu-Briggs, O. V. (2024). Financial Leverage, Firm Size and Profitability of Quoted Insurance Companies in Nigeria. World Economics and Finance Bulletin, 31, 117-125 . https://scholarexpress.net/index.php/wefb/article/view/3867

10- Qurochman, A. N., & Putra, A. N. A. S. (2024). The effect of financial leverage and operating leverage on company profitability. International Journal on Social Science, Economics and Art, 14(2), 228-237. https://onlinelibrary.wiley.com/doi/10.1002/sd.70238?af=R

11- Sahminan S. (2021). Impacts of global financial conditions on non-financial corporate leverage in Indonesia (No. WP/14/2021). Bank Indonesia https://ideas.repec.org/f/psa1571.html

12- Santos L. L., Gomes C., Lisboa I. (2023). The impact of macroeconomic factors on the hotel industry through the financial leverage trends: The Portuguese case. In Information Resources Management Association (Ed.), Research anthology on macroeconomics and the achievement of global stability (pp. 1565–1582). IGI Global. https://www.researchgate.net/publication/363228546_The_Impact_of_Macroeconomic_Factors_on_the_Hotel_Industry_Through_the_Financial_Leverage_Trends_The_Portuguese_Case

13- Tannady, H., Pahlawi, N., Hernawan, M. A., Arta, D. N. C., & Yusuf, S. D. (2023). Role of Stock Performance as an Intervening Variable in a Relationship Between Profitability, Leverage, Growth and Company Value. JEMSI (Jurnal Ekonomi, Manajemen, dan Akuntansi), 9(2), 220-225. https://journal.lembagakita.org/index.php/jemsi/article/view/1016

14- Rahman, M. M., & Hamid, K. T. (2024). Defining return on assets (ROA) in empirical corporate finance research: A critical review. Empirical Economics Letters, 23(1), 45–60. Retrieved from https://www.researchgate.net/publication/375757352_Defining_Return_on_Assets_ROA_in_empirical_corporate_finance_research_a_critical_review