

THE IMPACT OF FINANCIAL BALANCE INDICATORS ON THE DEBT TO EQUITY RATIO - AN APPLIED STUDY OF SEVERAL BANKS IN IRAQ

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ABSTRACT

This study aims to evaluate the impact of financial balance on the debt to equity ratio of banks by using three main indicators: the liquidity indicator, the profitability indicator, and the solvency indicator. The debt to equity ratio was measured as a dependent variable.

Four commercial banks listed on the Iraq Stock Exchange were purposively selected as the sample for this study, covering the period from 2012 to 2021. Descriptive and analytical methods were used to review and analyze the financial data available from the reports and financial statements of the concerned banks. To support the applied aspect of the study, statistical analysis and financial description software such as Excel 2016 and EViews were used.

The study's results indicated that the banks in the sample exhibited a long-term inverse effect of financial balance indicators on the debt to equity ratio. Based on these results, the study recommended utilizing surplus liquidity to achieve additional returns for the bank.

Keywords: financial balance, debt to equity ratio.

INTRODUCTION

The banking sector in Iraq faces a range of significant challenges, primarily characterized by the in Balance of the financial system, poor performance of the Iraq Stock Exchange, and the negative perception of banks within the community. The importance of banks lies in their fundamental role in supporting financial systems. Hence, there is a need to study this sector, especially the banks listed on the Iraq Stock Exchange, by applying the concepts of financial balance and the debt to equity ratio.

In the context of public finance, financial balance is defined as the balance between revenues and expenditures in the general budget, achieved by following a specific fiscal policy. However, this definition does not fully describe the financial balance in banks, as it does not accurately reflect the actual financial status of a bank. This is because banks can be influenced by various financial risks such as profit decline, exchange rate fluctuations, or the adverse effects of governmental fiscal and monetary policies, in addition to changing market conditions and other factors.

In the modern approach to financial balance, it is seen as a temporary balance where borrowing can be utilized, provided that this borrowing is controlled and planned in a manner that reflects the efficiency of management in achieving returns that exceed the costs of borrowing. Management should also minimize the cash cycle as much as possible. Conversely, inefficiency in liquidity management can increase financial burdens by reducing incoming cash flows and increasing outgoing flows, such as loan installments and interest, thereby exposing banks to the risk of bankruptcy.

RESEARCH METHODOLOGY

First: Research Problem: Banks in general, and Iraqi banks in particular, face numerous issues related to financial fluctuations due to various crises, most notably financial difficulties and risks. These challenges compel banks to seek different ways to maintain their financial balance and the integrity of the financial system, as they play a crucial role in identifying potential risks. One such method is financial balance. Thus, the research problem is encapsulated in the following question: Does financial balance affect the debt to equity ratio of Iraqi banks? This main question branches into the following sub-questions:

Is there a significant impact of solvency on the debt to equity ratio?

Is there a significant impact of liquidity on the debt to equity ratio?

Is there a significant impact of profitability on the debt to equity ratio?

Second: Research Objectives: The research aims to achieve the following objectives:

Clarify the concept of financial balance and the debt to equity ratio.

Analyze and measure the debt to equity ratio.

Determine the extent to which financial balance affects the debt to equity ratio of banks.

Third: Research Significance: The significance of the research lies in:

Focusing on financial balance as a financial tool important for achieving economic growth.

Measuring the debt to equity ratio of banks to help them take necessary actions to avoid financial and economic risks, evaluate these risks, and rectify financial and administrative conditions that may threaten the debt to equity ratio, thereby ensuring the financial system's integrity.

Fourth: Research Hypothesis: The research is based on the main hypothesis: There is a statistically significant inverse effect of financial balance on the debt to equity ratio. This hypothesis branches into the following sub-hypotheses:

There is a statistically significant inverse effect of solvency on the debt to equity ratio.

There is a statistically significant inverse effect of liquidity on the debt to equity ratio.

There is a statistically significant inverse effect of profitability on the debt to equity ratio.

Fifth: Research Method: The descriptive-analytical method was applied to present the theoretical aspect and the analytical method to test the validity of the hypotheses, using a set of financial and statistical software packages.

Sixth: Research Population and Sample: The research population comprises the Iraqi banking sector. The research sample was limited to four purposively selected commercial private banks listed on the Iraq Stock Exchange: Al-Mansour Bank, Investment Bank, Iraqi Union Bank, and Iraqi National Bank.

Seventh: Research Limits:

Temporal Limits: The temporal limits of the research span from 2012 to 2021.

Spatial Limits: The spatial limits include the banks in the research sample listed on the Iraq Stock Exchange.

Eighth: Previous Studies**a) Study by Omran and Al-Hamdani (2022)**

Titled "Financial Balance and Its Impact on Financial Fragility: An Analysis of a Group of Commercial Banks Listed on the Iraq Stock Exchange," this study aims to evaluate the impact of financial balance on financial fragility using four main indicators: liquidity, profitability, solvency, and financial flexibility. The sample included nine commercial banks listed on the Iraq Stock Exchange. Specialized software such as Excel 2010 and SPSS V.22 were used for data analysis and statistical tests. The results revealed no statistically significant impact of liquidity, profitability, and solvency indicators on reducing financial fragility, while the financial flexibility indicator showed a significant effect in mitigating financial fragility.

b) Study by Abdulrahim (2011)

Titled "The Importance of Balancing Profitability and Liquidity in Banks - Sudan Case Study of the Animal Resources Bank 2005-2009," this study followed a case study approach to examine the relationship between profitability and liquidity balance. The study's spatial boundaries were in Sudan, with the sample being the Animal Resources Bank for the period from 2005 to 2009. The study hypothesized that increasing bank capital provides liquidity and achieves profitability, and inefficient liquidity management affects both profitability and liquidity. The study found that the bank's profitability increased in 2006, coinciding with an increase in its paid-up capital and a liquidity surplus over the five years of the study.

c) Study by Claudia et al. (2018)

Titled "Analysis Model of the Financial Balance Based on the Accounting Balance Sheet," this study aimed to develop an analytical model based on the balance sheet to study financial balance. The data used in the analysis were obtained from SC ETA SRL, a real company, for privacy reasons. Decision-making in any institution requires accurate and reliable information. The information extracted from the analysis benefits not only the company but also suppliers, customers, potential investors, and other interested parties. From the analysis of financial data from 2015 to 2017, the study focused on highlighting the main problems, especially those related to the company's financial liquidity.

d) Study by Dede Hertina et al. (2021)

Titled "The Influence of Current Ratio, Debt to Equity Ratio, and Company Size on Return on Assets," this study aims to determine the impact of the current ratio, debt to equity ratio, and company size on return on assets. The sample includes all companies in the food and beverage sector listed on the Indonesia Stock Exchange for the period from 2014 to 2018. The sample was selected using the purposive sampling method, with nine companies meeting the criteria. The study uses descriptive and verification methods, and the research type is quantitative. The Fixed Effect method of regression data analysis was used. The study results showed that the current ratio, debt to equity ratio, and company size have an overall impact on profitability. However, partially, the current ratio and debt to equity ratio do not affect return on assets, while company size has a significant negative impact on return on assets.

Theoretical Framework

First: The Concept of Financial Balance:

Financial balance is considered an advanced method in financial analysis that relies on modern techniques. This approach requires identifying the primary objectives of the analysis involved in any scientific study. This is achieved by utilizing financial ratios that help gain a deeper understanding of the financial situation. This method allows researchers to evaluate the performance of companies more accurately and effectively. By applying these methods, valuable information can be uncovered that contributes to making informed financial decisions. Therefore, financial balance highlights the key aspects that should be considered in financial analyses to ensure accuracy and effectiveness (Vasile et al., 2015, p. 325). Financial balance is the foundation of the financial health of banks and represents the opposite of bankruptcy situations. It can be said that liquidity and solvency, along with the effective use of a financial structure that balances risks and returns, are the main factors ensuring Balance, continuity, and growth, as well as meeting diverse financial needs (Yehorycheva et al., 2019, p. 191). Financial balance, which is defined as a quantitative balance focusing on the use of specific financial indicators to evaluate past and present financial performance, aims to develop corrective measures to address financial imbalances to achieve financial Balance. In contrast, economic balance represents a strategy based on quantitative and qualitative standards used by governments to achieve their overall economic objectives, relying on economic theories and systems that guide their policy formulation (Omran and Al-Hamdani, 2022, p. 23). Hence, financial balance focuses on analyzing annual financial data, which is essential for understanding the financial status and performance of a bank (Claudia et al., 2018, pp. 1-2).

Second: The Importance of Financial Balance:

The analysis of financial balance continues to attract the attention of researchers in the financial field due to its prominent importance in assessing the financial status of institutions. Studies show that the traditional representation of the financial condition of economic entities, as expressed in financial statements like the balance sheet, may no longer be sufficient. In this context, financial management has developed a set of specific practices that provide a more accurate and comprehensive picture of the financial position and other financial aspects of institutions (Ioachim, 2015, p. 325).

The importance of financial balance is highlighted through several points, as illustrated by (Hamza and Khairuddin 2019, p. 17):

The ability to predict future financial results through financial analysis outcomes.

Estimation of expected returns from available investments.

It serves as an important point for evaluating the overall performance of the bank by using available resources.

Third: Types of Financial Balance

Financial balance is viewed through two types (Hossam, 2016, pp. 41-42) :

Short-term Financial Balance: This type of financial balance is represented by the bank's ability to maintain the necessary liquidity to meet short-term financial obligations.

Long-term Financial Balance: This refers to the ability to meet long-term debt repayments while considering future expansion possibilities, which require long-term capital investment.

Fourth: Indicators of Financial Balance

Numerous studies and research have indicated that financial balance can be measured through financial indicators that express relationships between items on the balance sheet. For instance, (Hossam 2016, p. 59) suggested that financial balances can be measured through debt ratios, liquidity ratios, and profitability ratios. (Vasile et al. 2015, p. 325) mentioned that financial balance is a tool that allows researchers to test financial performance through financial indicators derived from balance sheet data. Dahiyat (2016, p. 30) found that financial balance is influenced by solvency, liquidity, profitability, and debt ratios, which collectively represent the financial health of a bank and are indicators for predicting financial failure.

Other studies have confirmed a causal relationship between these indicators. For example, (Ramadan and Fahmy, 2020, p. 528) noted that solvency and liquidity affect the profitability of banks, which is a primary goal and a key measure of their success. Profitability is essential for the survival, continuity, and growth of banks. The analysis of financial balance and the selection of its measurement dimensions remain a subject of debate among financial writers and researchers due to the benefits researchers aim to achieve (Vasile et al., 2015, p. 326).

Accordingly, our study aimed to identify four financial indicators to measure financial balance: liquidity, profitability, solvency, and financial flexibility. These indicators represent the researcher's view of providing a comprehensive picture of the financial situation of the studied sample. Here is an explanation of these indicators:

The importance of studying these indicators lies in their ability to reflect the safety and Balance of the financial system of banks. They help assess the extent to which the financial sector is affected by economic and financial crises. These indicators act as an early warning system in cases where the financial system is at risk and are used by central banks as a guide for implementing policies and measures to prevent crises, thus preventing banks from facing financial collapse (Ali et al., 2019, p. 73). Therefore, the importance of these indicators can be summarized as follows:

They facilitate the process of evaluating the safety of the financial system of banks according to quantitative and objective standards.

They contribute to reinforcing the principle of transparency and disclosure by making various information available to all clients.

They allow for the comparison of economic conditions between countries through a set of indicators.

They help in identifying the risks of crisis contagion and work towards mitigating their impact.

They enable the comparison of the financial conditions of banks by adopting accounting and statistical systems.

Some of the most important indicators of financial balance are:

A. Capital Adequacy Indicators

Capital adequacy is the ratio of debt to equity for banks or financial institutions, reflecting their ability to meet their obligations. It is defined as the bank's ability to settle all financial

commitments, including the rights of owners and depositors (Al-Marsoumi & Al-Daami, 2016, p. 30). Capital adequacy indicates the bank's ability to ensure the safety and Balance of the financial system, representing the funds available to provide liquidity and protect against larger losses in case of investment failures (Khasawneh & Obeidat, 2016, p. 185).

Capital is a crucial factor in assessing a bank's Balance and resilience to shocks in its balance sheet (Roman & Sargu, 2013, p. 705). The concept of capital adequacy emerges as an accounting dimension in managing the balance sheet and becomes an issue during crises or difficult conditions, such as financial distress and liquidation. Therefore, the concept of capital adequacy is linked to economic conditions. Bank management focuses on capital adequacy to attract investors, borrowers, and depositors who are interested in the bank's strength and solvency to protect their deposits by comparing capital and reserves to the size of deposits. The central bank's interest in capital adequacy stems from ensuring that the bank does not reach a state of insolvency, thereby protecting the funds of shareholders and depositors (Al-Maliki & Saeed, 2013, p. 224).

The importance of capital adequacy also lies in providing security and assurance to depositors and creditors while maintaining a reasonable return for shareholders. Interest in capital adequacy has increased due to the growth and expansion of commercial banks in lending without a corresponding coordinated increase in capital, leading to the global debt crisis that affected many banks. Capital adequacy contributes to the Balance of the financial system of the economy by reducing the risks of bank insolvency. (Odekina et al., 2019, p. 109) state that one of the most important indicators of capital adequacy is:

Owned Capital to Total Assets Ratio:

Calculated as $(\text{Owned Capital} / \text{Total Assets}) * 100$. This ratio measures the extent to which total assets are financed using owned capital without relying on debt, indicating the financial Balance and flexibility of the bank when facing financial crises and emergencies.

B. Liquidity Indicators

Liquidity refers to a bank's ability to meet financial obligations, such as depositor withdrawals and loan requirements, promptly without resorting to selling securities at significant losses or borrowing at high interest rates, which can result in risks due to a lack of necessary liquidity (Mohsen, 2016, p. 365). Liquidity is the foundation of trust between the bank and its clients as it serves as a scientific test of the bank's credibility in fulfilling its commitments to depositors and borrowers. It also prevents the bank from selling unwanted assets or resorting to financial markets for funding, incurring additional costs (Dawood, 2017, p. 42).

Liquidity ratios provide an indication of the bank's liquidity status and its ability to face potential risks arising from liquidity shortages. One commonly used liquidity ratio is:

Current Assets to Total Assets Ratio: Calculated as

$(\text{Current Assets} / \text{Total Assets}) * 100$ (Al-Dheebawi & Faraj, 2022, p. 1055). This ratio measures the speed at which assets can be converted into cash while retaining their value as much as possible. It is used to evaluate the bank's liquidity and its ability to meet short-term cash obligations.

C. Profitability Indicators

These indicators are considered important ratios because they reflect a dual impact of efficiency and productivity on asset profitability and return on equity using financial leverage. A decrease in this ratio indicates a weakness in profitability that must be overcome, whereas an increase in this ratio may indicate an adoption of an investment policy in high-risk portfolios (Ahmed and Mukhtar, 2020:8). Liquidity is described as an expression of the relationship between the profits achieved by the bank and the investments that contributed to it, as profitability is the bank's main goal and an important measure to judge its efficiency. Additionally, it is considered one of the most important indicators of efficiency and financial stability or safety, as it is a primary indicator for evaluating performance and enhancing customer confidence, illustrating the bank's ability to efficiently employ resources. It is measured through the following equation (Bashir, 2020: 142) and (Al-Dhabhawi and Faraj, 2022: 1055).

Return on Total Assets = (Income / Total Assets) * 100

This ratio is used to evaluate the effectiveness of a bank in managing and utilizing its total assets to achieve potential profits. Notably, this ratio provides a clear vision of how the bank achieves returns on investment in assets and is important for investors, financial analysts, and the bank's overall performance.

Fifth: Debt to Equity Ratio

The debt to equity ratio measures a company's ability to cover its operating expenses and costs through self-generated revenues without relying on external financing. It also assesses the capability to continuously achieve financial goals without ongoing support from donors. Additionally, it encompasses enhancing efficiency, discipline, and transparency in operations, which contributes to prolonging the financial institution's lifespan and ensuring its sustainability (Chikalipah, 2017, p. 184).

The debt to equity ratio is a solvency ratio that compares the total debt a company holds to its equity (Harahap, 2010, p. 303). A smaller ratio is generally better, indicating that the amount of capital exceeds or is at least equal to the amount of debt. However, from the perspective of shareholders and company management, a higher ratio might be preferable as it indicates higher potential returns. On the flip side, a higher debt to equity ratio increases the company's liquidity risks. This study uses the debt to equity ratio as a measurement tool because it gauges the company's capital's ability to finance its debt.

In this research, the financial leverage variable, measured by the debt to equity ratio, and profitability, measured by return on assets (ROA), are reviewed. The analysis shows that both the debt to equity ratio and ROA move in the same direction. Financial leverage examines the debt policy, which may have a negative or inconsistent impact (Hertina, 2021, p. 1704).

A lower debt to equity ratio indicates the bank's ability to sustain long-term operations through income-generating activities and secure and manage sufficient resources. This enables the bank to perform its tasks effectively and continuously over time without relying on external funding sources while maintaining its ability to achieve future goals and shareholders' interests (Gakuu & Kirmi, 2014, p. 12). Many writers and researchers indicate

a set of indicators to measure the debt to equity ratio. However, in our current study, we focus on the primary ratio for evaluating the debt to equity ratio, which is the debt to equity ratio itself (Al-Ali & Al-Dheebawi, 2023, p. 657; Al-Mahmoud & Saad, 2023, p. 745). This ratio is calculated as follows:

Debt to Equity Ratio (D/E)= Total Debt/ Equity

This ratio is used to analyze and assess a company's capital structure, expressing the debt the bank uses to finance its assets compared to its equity. It is an important ratio for evaluating the debt to equity ratio through several indicators, such as assessing financial risk, financial flexibility, determining the cost of debt, and ensuring financial Balance. From the above, it is evident that the debt to equity ratio plays a crucial and vital role in supporting the bank's long-term debt to equity ratio.

Practical Aspect

First: Analyzing Financial Balance Indicators and the Debt-to-Equity Ratio for the Studied Banks

Financial Balance is the cornerstone upon which the debt-to-equity ratio is built, ensuring that banks are not only able to meet current obligations but also have the capacity to sustain and grow in the future. Accordingly, a time series analysis from 2012 to 2021 was conducted for the studied banks.

A- Mansour Investment Bank

Table (1) shows the financial analysis of Financial Balance Indicators and the debt-to-equity ratio for the period from 2012-2021.

Table (1) Financial Balance Indicators and Debt-to-Equity Ratio at Mansour Bank

Years	X1: Percentage of Owned Capital to Total Assets %	X2: Percentage of Current Assets to Total Assets %	X3: Return on Total Assets % (ROA)	Y: Debt to Equity Ratio (D/E)
2012	61.45	97.81	2.86	0.63
2013	35.50	98.71	3.20	1.82
2014	31.91	98.69	1.91	2.13
2015	26.84	98.55	1.84	2.73
2016	26.04	97.99	1.17	2.84
2017	22.04	97.98	1.01	3.54
2018	19.18	98.08	1.37	4.21
2019	19.14	97.92	0.57	4.23
2020	22.41	97.69	0.55	3.46
2021	40.13	96.04	1.16	1.49
Average	30.46	97.95	1.56	2.71

Table prepared by the researcher based on the published reports of the bank in the Iraq Stock Market.

From Table (1), the following can be observed:

Owned Capital to Equity Ratio: Financial standards suggest that this ratio should range between 20% and 60%, with some studies indicating that the optimal ratio is 50%. According to Mansour Bank's analysis, all years were within the acceptable range, except for 2012 which was the highest at 61.45%, and 2019 which was the lowest at 19.14%. The average of this ratio was 30.46%, which is within the acceptable range.

Total Current Assets to Total Assets Ratio: This ratio varies by sector and industry, but an acceptable ratio is estimated at 30%. A higher ratio indicates the bank's ability to meet long-term financial obligations, while a lower ratio reflects problems in covering short-term liabilities. The analysis shows that Mansour Bank was above this standard in all years, with the highest ratio in 2013 at 98.71% and the lowest in 2021 at 96.04%, with an average of 97.955%.

Return on Total Assets: The industry standard for this ratio ranges between 5% and 20%. A higher ratio indicates effective asset management to achieve profitability, whereas a lower ratio indicates the opposite. Mansour Bank's results were below the accepted standard for all years, with the highest ratio in 2013 at 3.20% and the lowest in 2020 at 0.55%, with an average of 1.56%.

Debt-to-Equity Ratio: Typically, a ratio ranging between 1:1 or less is preferred. Analyzing this ratio is crucial for understanding risks as a higher ratio indicates higher overall risks. Mansour Bank's analyses showed that all years were within the standard, with the lowest ratio recorded in 2011 at 0.63, while the highest was in 2019 at 4.23, with an average of 2.71, indicating the bank's greater reliance on debt financing.

B-Iraqi Investment Bank

Table (2) shows the financial analysis of Financial Balance Indicators and the debt-to-equity ratio for the period from 2012 to 2021.

Table (2): Financial Balance Indicators and Debt-to-Equity Ratio in the Iraqi Investment Bank

Years	X1: Percentage of Owned Capital to Total Assets %	X2: Percentage of Current Assets to Total Assets %	X3: Return on Total Assets % (ROA)	Y: Debt to Equity Ratio (D/E)
2012	31.34	95.87	0.37	2.19
2013	35.80	97.10	5.15	1.79
2014	50.79	96.89	5.17	0.97
2015	50.98	96.99	3.17	0.96
2016	50.15	91.09	1.76	0.99
2017	49.34	92.89	0.70	1.03
2018	46.63	93.24	0.06	1.14
2019	49.19	96.55	0.00	1.24
2020	46.42	97.30	0.82	1.13
2021	40.42	97.78	0.14	1.33
Average	45.11	95.57	1.73	1.28

The table was prepared by the researcher based on reports published for the bank on the Iraq Stock Exchange.

From Table (2), the following observations can be made:

Percentage of Owned Capital to Total Assets: Financial guidelines suggest that this ratio should be between 20% and 60%, with some studies recommending an optimal ratio of up to 50%. The financial analysis of the Iraqi Investment Bank shows that the ratio remained within acceptable limits in all years, achieving the best performance in 2015 with 50.98% and the lowest performance in 2012 with 31.34%. The average ratio was 45.11%, reflecting the financial Balance of the bank.

Percentage of Current Assets to Total Assets: This ratio varies by sectors, and an acceptable ratio is estimated to be around 30%. It indicates the bank's ability to meet long-term financial obligations, and a low ratio suggests problems in covering short-term obligations. The highest ratio was in 2021 at 97.78%, and the lowest was in 2016 at 91.09%. The average was 95.57%.

Return on Total Assets % (ROA):

The industry standard for this ratio ranges between 5% and 20%. A high ratio reflects effective asset management in generating profits, while a low ratio indicates poor management. The analysis results show that the Iraqi Investment Bank did not meet the established standards for most years, with the highest ratio recorded in 2013 at 5.15% and the lowest in 2018 at 0.06%. The average ratio was 1.73%.

Debt to Equity Ratio (D/E): It is preferable for this ratio to be 1:1 or lower. It is important to analyze this ratio to understand its impact on the bank's financial Balance. The analysis showed that the Iraqi Investment Bank performed relatively well, with the lowest ratio in 2015 at 0.96, while the highest was in 2012 at 2.19. The average ratio was 1.28, indicating that the bank relies minimally on debt financing.

C-Iraqi Union Bank

Table (3) shows the financial analysis of Financial Balance Indicators and the debt-to-equity ratio for the period from 2012 to 2021

Table (3): Financial Balance Indicators and Debt-to-Equity Ratio in the Iraqi Union Bank

Years	X1: Percentage of Owned Capital to Total Assets %	X2: Percentage of Current Assets to Total Assets %	X3: Return on Total Assets % (ROA)	Y: Debt to Equity Ratio (D/E)
2012	19.58	98.16	2.92	4.11
2013	43.58	96.49	8.70	1.29
2014	38.74	97.01	2.03	1.58
2015	41.32	96.17	-0.12	1.42
2016	41.44	96.85	0.00	1.41
2017	44.28	96.60	0.02	1.26
2018	47.59	95.64	0.01	1.10
2019	54.77	95.07	0.34	0.83

Years	X1: Percentage of Owned Capital to Total Assets %	X2: Percentage of Current Assets to Total Assets %	X3: Return on Total Assets % (ROA)	Y: Debt to Equity Ratio (D/E)
2020	53.75	95.15	0.17	0.86
2021	53.79	95.13	0.21	0.86
Average	43.88	96.23	1.43	1.47

The table was prepared by the researcher based on reports published for the bank on the Iraq Stock Exchange.

From Table (3), the following observations can be made:

Percentage of Owned Capital to Total Assets: Financial guidelines suggest this ratio should be between 20% and 60%, with some studies recommending an optimal ratio of around 50%. The financial analysis of the Iraqi Union Bank shows that the ratio remained within acceptable limits during all years, except for 2012 where it was 19.58%. The best performance was recorded in 2021 with 53.79%, and the average ratio was 43.88%, indicating the financial Balance of the bank.

Percentage of Current Assets to Total Assets: This ratio varies across sectors and industries, but an acceptable ratio is estimated to be around 30%. An increase in this ratio reflects the bank's ability to meet long-term financial obligations, while a decrease indicates problems in covering short-term obligations. The analysis shows that the bank exceeded this standard in all years, with the highest value recorded in 2013 at 8.70% and the lowest value in 2019 at 95.07%. The average ratio was 96.23%.

Return on Total Assets % (ROA): The industry standard for this ratio ranges between 5% and 20%. A high ratio indicates efficient asset management to maximize profits, while a low ratio indicates inefficiency. The analysis shows that the Iraqi Union Bank did not meet the established standards in most years, except for 2013, which recorded the highest ratio within the standard at 8.70%. The lowest ratio was in 2015 at -0.12%, and the average ratio was 1.43%.

Debt to Equity Ratio (D/E): It is preferable for this ratio to be 1:1 or lower. The analysis shows that the Iraqi Union Bank maintained a ratio within the standard in most years, with the lowest ratio in 2019 at 0.83, while the highest was in 2012 at 4.11. The average ratio was 1.47, indicating that the bank relies minimally on debt financing.

D-Iraqi National Bank

Table (4) shows the financial analysis of Financial Balance Indicators and the debt-to-equity ratio for the period from 2012 to 2021.

Table (4): Financial Balance Indicators and Debt-to-Equity Ratio in the Iraqi National Bank

Years	X1: Percentage of Owned Capital to Total Assets %	X2: Percentage of Current Assets to Total Assets %	X3: Return on Total Assets % (ROA)	Y: Debt to Equity Ratio (D/E)
2012	45.83	98.24	4.57	1.18
2013	31.07	98.41	2.56	2.22
2014	42.76	97.57	1.13	1.34
2015	48.60	95.82	0.43	1.06
2016	41.09	97.10	4.06	1.22
2017	47.31	97.18	0.49	1.11
2018	49.04	96.35	-1.50	1.04
2019	40.56	95.95	1.45	1.08
2020	34.40	96.66	2.22	2.91
2021	17.34	97.18	1.43	4.77
Average	39.80	97.05	1.68	1.79

The table was prepared by the researcher based on reports published for the bank on the Iraq Stock Exchange.

From Table (4), the following observations can be made:

Percentage of Owned Capital to Total Assets: Financial guidelines suggest that this ratio should be between 20% and 60%, with some studies considering an optimal ratio to be around 50%. The financial analysis of the Iraqi National Bank shows that the ratio remained within the acceptable limits in all years except for 2021, where it was 17.34%. The best performance was recorded in 2018 at 49.04%, and the average ratio was 39.80%, reflecting the bank's financial Balance.

Percentage of Current Assets to Total Assets: This ratio varies across sectors and industries, but an acceptable ratio is estimated to be around 30%. An increase in this ratio reflects the bank's ability to meet long-term financial obligations, while a decrease indicates problems in covering short-term obligations. The analysis shows that the bank exceeded this standard in all years, with the highest value recorded in 2013 at 98.41% and the lowest in 2015 at 95.82%. The average ratio was 97.05%.

Return on Total Assets % (ROA): The industry standard for this ratio ranges between 5% and 20%. A high ratio indicates efficient asset management to maximize profits, while a low ratio indicates inefficiency. The analysis shows that the Iraqi National Bank did not meet the established standards in the surveyed years, with the lowest ratio in 2018 at -1.50% and the highest in 2012 at 4.57%. The average ratio was 1.68%.

Debt to Equity Ratio (D/E): It is preferable for this ratio to be 1:1 or lower. The analysis shows that the Iraqi National Bank maintained a ratio within the standard in some years, with the highest ratio in 2021 at 4.77 and the lowest in 2018 at 1.04. The average ratio was 1.79, indicating that the bank relies on debt financing to a moderate extent.

Secondly: Comparison of the Prefer ability Among the Researched Banks

To analyze the financial ratios of the research variables, the arithmetic mean was used for comparison between the banks, as shown in Table.(5)

Table (5): Comparison of Financial Indicators of the Researched Banks

Bank	Percentage of Owned Capital to Total Assets %	Percentage of Current Assets to Total Assets %	Return on Total Assets % (ROA)	Debt to Equity Ratio (D/E)
Al-Mansour Bank	30.46	97.95	1.56	2.71
Iraqi Investment Bank	45.11	95.57	1.73	1.28
Iraqi Union Bank	43.88	96.23	1.43	1.47

Table prepared by the researcher

The table (5) shows that the Iraqi Investment Bank has the highest percentage of owned capital to total assets among the different banks, while Al-Mansour Bank excels in the utilization of current assets relative to total assets. Additionally, the Iraqi Investment Bank also achieved the best performance in terms of return on assets (ROA). On the other hand, Al-Mansour Bank stands out with the highest debt to equity ratio among all the banks, indicating the extent of the bank's reliance on debt.

Econometric and Statistical Analysis

Firstly: Cointegration Test

This test is used to examine the long-term relationship between variables and to determine whether the independent variable has an effect on the dependent variable. Table (6) illustrates this.

Table (6): Cointegration Test

Kao Residual Cointegration Test		
Series: Y X1 X2 X3		
Date: 05/19/24 Time: 20:05		
Sample: 2012 2021		
Included observations: 40		
Null Hypothesis: No cointegration		
Trend assumption: No deterministic trend		
User-specified lag length: 1		
Newey-West automatic bandwidth selection and Bartlett kernel		
	t-Statistic	Prob.
ADF	-3.306258	0.0005
Residual variance	0.144771	
HAC variance	0.173163	

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID)				
Method: Least Squares				
Date: 05/19/24 Time: 20:05				
Sample (adjusted): 2014 2021				
Included observations: 32 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID(-1)	-0.974217	0.236992	-4.110757	0.0003
D(RESID(-1))	0.375532	0.165658	2.266908	0.0308
R-squared		0.354070		
Adjusted R-squared		0.332539		
S.E. of regression		0.308736		
Sum squared resid		2.859532		
Log likelihood		-6.764786		
Durbin-Watson stat		2.058366		
Mean dependent var		0.046432		
S.D. dependent var		0.377897		
Akaike info criterion		0.547799		
Schwarz criterion		0.639408		
Hannan-Quinn criter.		0.578165		

The table is prepared by the researcher based on the results of the electronic calculator.

From Table (6), it is evident that there is an inverse effect of financial balance indicators on the debt-to-equity ratio, as shown by the t-value of -4.11 and a significance level of less than 5%. This is consistent with the main hypothesis, which states that there is a statistically significant inverse effect of financial balance on the debt-to-equity ratio. This means that as the financial balance indicators increase, the debt-to-equity ratio decreases, reducing the need for borrowing.

Second: Testing the Long-term Impact of Financial Balance Indicators on the Debt-to-Equity Ratio

Table (7) illustrates the impact tests for both the short-term and long-term.

Table (7): Impact Test of Financial Balance Indicators on the Debt-to-Equity Ratio

Dependent Variable: D(Y)	
Method:	ARDL
Date:	05/19/24 Time: 20:06
Sample:	2013 2021

Dependent Variable: D(Y)				
Included observations:	36			
Maximum dependent lags:	1 (Automatic selection)			
Model selection method:	Akaike info criterion (AIC)			
Dynamic regressors (1 lag, automatic):	X1, X2, X3			
Fixed regressors:	C			
Number of models evaluated:	1			
Selected Model:	ARDL(1, 1, 1, 1)			
Note:	Final equation sample is larger than selection sample			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Long Run Equation				
X1	-0.045433	0.000520	-87.29898	0.0000
X2	-0.030827	0.003619	-8.517133	0.0000
X3	-0.015445	0.001882	-8.208805	0.0000
Root MSE	0.278123			
Mean dependent var	0.009444			
S.D. dependent var	0.848100			
S.E. of regression	0.426621			
Akaike info criterion	-1.415886			
Sum squared resid	3.094095			
Schwarz criterion	-0.444780			
Log likelihood	51.31772			
Hannan-Quinn criter.	-1.064765			

The table is prepared by the researcher based on the results of the electronic calculator.

Interpretation of Table(7)

It is evident from the long-term impact test that the financial balance indicators (the ratio of owned capital to total assets, the ratio of current assets to total assets, and the return on total assets %ROA) have a significant inverse effect on the debt-to-equity ratio. This finding aligns with the sub-hypotheses derived from the main hypothesis. The t-statistic value for the ratio of owned capital to total assets is -87.29898, with a significance level of less than 5%. This indicates that as the ratio of owned capital to total assets increases, the debt-to-equity ratio decreases.

Similarly, the t-statistic value for the ratio of current assets to total assets is -8.517133, with a significance level of less than 5%. This implies that as the ratio of current assets to total assets increases, the debt-to-equity ratio decreases.

Moreover, the t-statistic value for the return on total assets is -8.208805, with a significance level of less than 5%. This suggests that as the return on total assets increases, the debt-to-equity ratio decreases.

Discuss The Result

In a detailed financial analysis conducted over several years on the concerned banks, significant findings were revealed regarding the capital structure and asset management. Initially, the data shows that the ratio of owned capital to total assets was conservative and stable across all banks during the research period, reflecting a healthy financing condition for these institutions.

On the other hand, there was a noticeable increase in the ratio of current assets compared to total assets, indicating high liquidity that was not sufficiently utilized, adversely affecting profitability and inventory management efficiency. Additionally, there was a significant decrease in the return on total assets ratio, suggesting that the banks did not use their funds efficiently enough to maximize profits.

The debt analysis presented interesting results, where it was found that there was a reverse effect of long-term financial indicators on the debt-to-equity ratio. Nevertheless, the debt-to-equity ratio in the studied banks remained within acceptable limits and did not rise much above the established standard.

From this perspective, several recommendations emerge to improve the financial performance of the banks. Firstly, it is essential to enhance operational efficiency to maximize profitability. Secondly, a balance between liquidity and profitability needs to be found to ensure optimal use of available resources. Thirdly, a reevaluation of the strategies for managing current assets is necessary to reduce the high levels of unused liquidity. Fourthly, there should be a focus on effective debt management to avoid excessive reliance on borrowing. Finally, it would be beneficial to conduct an assessment or reassessment of the assets to ensure they are achieving the desired returns and effectively contributing to the overall financial performance of the banks. The debt-to-equity ratio in the studied banks was not significantly higher than the accepted standard.

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