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Banking rating and its impact on achieving financial stability

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Abstract

The paper examines the relationship between the banking indicators as independent variables and the financial stability of Iraqi banks (Z -Score) as a continued variable, by using a sample of 8 banks for the period 2017-2022. The results of the study showed that the percentage of capital adequacy negatively affects financial stability, while the proportion of liquid assets to obligations and loans to the deposit rate enhances financial stability. On the other hand, the NPL loan rate negatively affects stability. The study recommends the need to improve risk management, asset quality and increase liquidity ratio to achieve greater bank financial stability and enhance confidence in the banking system.

Keywords: Bank rating, financial stability, Iraqi stock markets

Introduction

Financial stability is an important factor in the permanence of the banking sector in general and the Iraqi banking sector in particular, because it contributes to enhancing confidence in the financial system and ensuring economic growth. Accordingly, the banking rating system is an effective and vital tool for measuring and evaluating bank performance. This system target to provide accurate and comprehensive indicators of financial health for banks by analyzing a set of financial and administrative standards, which helps in determining the strengths and weaknesses of each bank. The banking dotting system occupies financial institutions based on a set of indicators such as (capital efficiency, asset quality, profitability, liquidity and risk management). This punctuation provides the organizational authorities of these institutions, investors and stakeholders to make excellent decisions that contribute to increasing financial stability and reducing potential risks. For example, but not limited to, this type of study can contribute to identifying banks that may face financial problems in the future, allowing early preventive measures to take their role before these risks (Abbas, 2019) [3]. It also contributes to enhancing confidence among investors On the one hand and clients on the other hand by providing a clear and transparent picture of the financial situation of these institutions.

On the other hand, the importance of this system lies in enhancing the transparency of financial markets and helps to achieve sustainable economic stability. By monitoring and analyzing the data derived from the banking system, supervisory authorities can contribute to increasing confidence in the financial system, motivating banks to develop and improve their performance, and ensure higher and better levels of financial stability. This system also helps in identifying the necessary corrective measures and improving banking policies to enhance banking efficiency and reduce risk, by providing accurate and comprehensive indicators, this system contributes to improving transparency and enhancing financial stability, which leads to achieving sustainable economic growth and supporting comprehensive development. In addition, this system provides a strong framework for banking performance analysis and developing innovative financial strategies to improve risk efficiency and management of banks, which contributes to achieving a long -term financial and economic balance.

Problem Study

Banks and financial institutions are one of the vital sectors that directly affect the country's economy, especially the Iraqi economy, and the banking financial stability contributes to

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achieving stability the national economy and achieving profitable returns that contribute to the development and prosperity of the country in general. From here emerges the problem of the study, which can be formulated through the following questions.

- Is there a relationship between banking rating system indicators and the financial stability of banks?
- Is there a statistically significant impact of banking rating indicators on the financial stability of banks?

This study aims to explore this relationship and analyze the extent to which banking rating indicators affect the financial stability of banks, which enables supervisory authorities and investors to make informed decisions that enhance financial stability and limit potential risks.

Importance and objectives of the research

The importance of this research stems from the continuous developments and increasing complexities in the work of banks, which highlight the need for an advanced supervisory system that contributes to achieving banking stability and identifying the risks that banks face and working to avoid them. This supervisory system enables users of financial statements to evaluate the extent of banks' ability to confront risks and enhance transparency. The research seeks to achieve several goals that enhance banking stability by using the latest regulatory systems that aim to protect the banking system and achieve comprehensive financial stability. The most important of these objectives are: measuring and analyzing banking stability indicators through the use of the banking rating system, and understanding the nature of the relationship and impact of banking stability indicators using the banking rating system for the banks in the research sample. Studies indicate that effective supervisory systems play a vital role in enhancing financial stability and reducing risks (Jones, 2019; Smith & Brown, 2020) ^[11, 14].

Study sample and hypotheses development

Iraqi banking sector as a sample of study, where 8 banks operating in the Iraq Stock Exchange were selected according table (1) for the period from 2017 to 2022, due to the importance of this sector in financial transactions and the national economy. The study aims to analyze the relationship between banking rating indicators and the financial stability of these banks. The study was based on two main hypotheses: the first of which stipulates that there is a statistically significant relationship between banking rating and banking stability indicators. These hypotheses are based on analyzing the financial statements of the selected banks, the study sample, by focusing on the dimensions of both variables, independent and represented (capital efficiency, quality of assets, profitability, liquidity) and the dependent variable (Z - Score), which enhances the understanding of how to achieve financial stability on the Iraqi banking sector.

Rating and financial stability

The banking rating system is one of the modern systems that has evolved in response to the complications of the banking and the diversity of its operations. This system aims to measure the integrity of the financial conditions of banks through a set of vital indicators that reflect the financial and administrative performance of banks. The banking rating

system includes a set of important indicators such as (capital adequacy, liquidity, profitability, management and assets, each of which plays a vital role in assessing bank performance) and financial stability (Abbas & Hamza, 2019) ^[3]. This system has been developed by World Bank experts and is used to highlight the weaknesses and strengths in financial institutions and take appropriate measures to protect them from potential risks and enhance the hardness of financial performance (Ben Ali, 2019) ^[6].

One of the most important of these indicators is the adequacy of capital, which the Basel Committee confirmed, as it helps to enable banks to develop and develop the necessary plans to face potential crises and risks, which contribute to preserving the percentage of financial solvency (Basel Committee concerned with banking supervision, 2010) ^[4]. As for the second indicator, whose importance is not less than the adequacy of capital is the liquidity index, the liquidity index is necessary to assess the ability of banks to face their obligations in emergency conditions by assessing the proportion of liquid assets to the obligations (Diamond & Dybvig, 1983) ^[8]. Third: the profit index, it reflects The ability of banks to achieve returns through different and varied proportions, for example, the interest margin to the total national product, in addition to the return on loans and the cost of deposit (Hannan & Hanweck, 1988) ^[9]. As for the administration index, despite the difficulty of its measurement, except through interviews, it is one of the important indicators in explaining the effectiveness of the organizational management, and therefore the ability to make decisive and correct decisions (Mester, 1996) ^[12]. In addition, the assets index express the stiffness and durability of the bank's financial status or financial institution by tracking the extent of the assets portfolio of the risk (BORGER & Bouwman, 2013) ^[5].

As for banking stability, banking stability is an important factor to ensure the permanence and continued effective performance of the financial system as a whole. Banking stability indicates the ability of banks to withstand financial and monetary shocks without having an effect on the role of financial mediation and effectively directing savings to investments (Popov *et al.* 2021 ^[13] Possible and work to hedge from internal and external shocks (Ibrahim and others, 2022) ^[10]. Banking stability is playing a major role by enhancing confidence in the financial system and contributing to reducing the causes of financial crises that may lead to the deterioration of the economy (Khazraji & al-Araji, 2022) ^[1]. As for an Iraqi, Iraqi banks, similar to their counterparts in the region, are facing great challenges in achieving financial stability due to the volatile economic and political conditions in the country in recent decades. Therefore, these challenges require additional efforts that build advanced supervisory systems such as the banking dotting system to enhance transparency and evaluate risks accurately. Studies have shown that the implementation of the Iraqi banking system can help improve bank performance and reduce the risks associated with banking operations. Based on the available literature, it can be said that the banking drip system is an effective and vital tool for achieving financial stability. This system helps to determine the strengths and weaknesses of banks, which enables organizers and investors to make useful and decisive decisions to improve performance. In addition, banking stability indicators contribute to building a fortified and important basis for the financial system against shocks related to financial crises, and helping to make correct supervisory decisions.

Table 1: Iraqi banks 2017-2022

No.	Banks	Cod	Source
1.	Ashor	BASH	https://www.isc.gov.iq/index.php?do=view&type=company&id=53
2.	Union Bank of Iraq	BUND	https://www.isc.gov.iq/index.php?do=view&type=news&id=1770
3.	National bank of Iraq	BNOI	https://www.isc.gov.iq/index.php?do=view&type=news&id=1930
4.	Iraqi Islamic bank	BIIB	https://www.isc.gov.iq/index.php?do=view&type=news&id=1884
5.	United for investment	UBII	https://www.isc.gov.iq/index.php?do=view&type=news&id=1923
6.	Mansour bank	BNMS	https://www.isc.gov.iq/index.php?do=view&type=news&id=1949
7.	Mosul development and investment	MBDI	https://www.isc.gov.iq/index.php?do=view&type=news&id=1854
8.	Bank of Baghdad	BBOB	https://www.isc.gov.iq/index.php?do=view&type=news&id=1880

Methodology

The paper aims to investigate the relationship between banking indicators, as an independent variables, and bank financial stability as a dependent variable. The data was extracted through the annual reports of eight banks working in the Iraq Stock Exchange for the 2017-2022. By using the 15th STATA analysis using the slope model and the correlation model to determine the effect indicators of banking rating on financial stability (Z-SCORE). The indicators used include (capital adequacy rate, liquid assets ratio to commitment, loans to deposit rates, non - performance loans and liquidity ratio).

The following spherical equation with positive influence on celebrities (Z-Score) was used.

$$Z\text{-score} = \beta_0 + \beta_1 \times \text{CAR} + \beta_2 \times \text{LATL} + \beta_3 \times \text{LDR} + \beta_4 \times \text{LR} + \beta_5 \times \text{NPL} + \epsilon$$

Where,

β_0 : Constant

β_1 : Impact factor of capital adequacy ratio

β_2 : The effect factor of the ratio of liquid assets to liabilities

β_3 : Loan-to-deposit ratio effect factor

β_4 : effect factor of Liquidity ratio

β_5 : effect factor of the non-performing loan ratio

ϵ : random error

Descriptive analysis

Figure (1) displays the performance of the Iraqi banks of the study sample during the period from 2017 to 2022, focusing on five main financial indicators: total assets, total loans, total deposits, net income, and capital. Total assets show a continuous rise over the period, indicating a growth in the amount of assets held by banks. Likewise, total loans are gradually increasing, reflecting an increase in lending activity. Total deposits are also increasing steadily, which reflects the increasing confidence of depositors in banks. On the other hand, net income shows fluctuation over the years, reflecting fluctuations in banking profitability. Finally, capital shows significant growth over the period, indicating capital enhancement of banks. These indicators reflect the development of the financial performance of Iraqi banks during the study period and highlight the growth and challenges that banks face in this period.

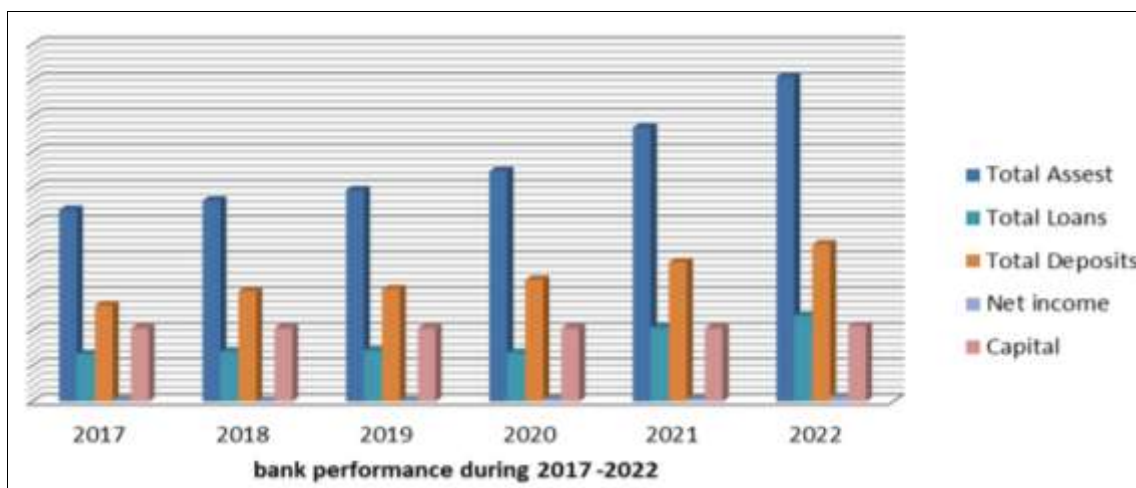


Fig 1: Performance of the Iraqi banks during 2017-2022

Table (2), showed diversity in financial performance and financial stability. BIIB and MBDI Bank are characterized by the best financial stability thanks to their very high Z-Score and high capital adequacy, which reflects a strong ability to confront risks and achieve solid financial stability. In contrast, BNOI Bank shows lower performance due to lower capital adequacy and average Z-Score, indicating a lower ability to withstand losses and achieve financial

stability. On the other hand, BBOB Bank has a high liquidity ratio, which indicates a good ability to meet short-term obligations, but it suffers from a relatively low Z-Score, which indicates less financial stability. Overall, the diversity of Z-Score and capital adequacy among banks reflects variation in risk management strategies and ability to achieve financial stability, highlighting BIIB and MBDI as leading banks in this aspect.

Table 2: Descriptive analysis, Iraqi banks for 2017-2022

Variables	Mean	P50	Min	Max	SD	Skewness	Kurtosis
Capital to Assets	0.384437	0.386816	0.111751	0.665255	0.159613	-0.01678	1.773929
Capital Adequacy Ratio	0.910563	0.6825	0.106	3.48	0.702785	2.02907	8.085442
Liquid Assets to Deposit	0.659542	0.711195	0.01817	1.437049	0.373801	-0.03292	2.087699
Liquidity Ratio	0.364885	0.382108	0.009046	0.852269	0.224111	0.185842	2.156254
Loan ratio Deposit	0.422637	0.389345	0.009373	0.95	0.270825	0.289178	1.848409
NPL	0.117735	0.045	0.007219	0.69	0.148199	2.086091	7.452915
Z-Score	5.008089	4.299505	1.173957	10.93476	2.635195	0.795347	2.518831

Table 2 provides a statistical summary of a group of important financial variables for Iraqi banks during the period from 2017 to 2022.

Capital to assets

The capital-to-assets ratio shows an average of 0.384, which indicates that the average ratio of capital held by Iraqi banks compared to their assets is about 38.4%. The average is close to the average at 0.387, which reflects a relatively balanced distribution of this ratio among banks. However, the discrepancy is clear from the minimum ratio of 0.112 and the maximum of 0.665, which indicates a significant difference between banks in this regard. A standard deviation of 0.160 reflects moderate dispersion around the mean, while a slight skew to the left (-0.017) and lower than normal kurtosis (1.774) indicate that most banks have ratios close to the mean with some outliers.

Capital adequacy ratio

The average capital adequacy ratio is 0.911, which indicates that Iraqi banks maintain a high capital-to-risk-weighted ratio. The median for this ratio is 0.683, which means that half of the banks hold a ratio below this number and the other half hold a higher ratio. The minimum ratio is 0.106, which reflects the wide variation in capital adequacy among banks. The maximum ratio is 3.480, which indicates that some banks hold too much capital relative to their risk. A standard deviation of 0.703 reflects a large dispersion around the mean, while a large positive skewness (2.029) and high kurtosis (8.085) indicate that there are some banks maintaining very high capital adequacy ratios compared to other banks.

Liquid assets to liabilities

The ratio of liquid assets to liabilities shows an average of 0.660, which indicates that banks maintain a good proportion of liquid assets to meet liabilities. The median for this ratio is 0.711, meaning that half of the banks have a ratio higher than this number. The minimum ratio is 0.018 and the maximum is 1.437, which indicates a large variation among banks in this regard. A standard deviation of 0.374 reflects moderate dispersion around the mean, while a slight skew to the left (-0.033) and kurtosis closer to normal (2.088) indicate that most banks have similar ratios.

Liquidity rate

The liquidity ratio shows an average of 0.365, which reflects the ability of banks to meet their short-term obligations. The average of this ratio is 0.382, which means that half of the

banks maintain liquidity higher than this number. The minimum ratio is 0.009 and the maximum is 0.852, reflecting the wide variation among banks in liquidity management. A standard deviation of 0.224 reflects moderate dispersion, while a slight skew to the right (0.186) and kurtosis closer to normal (2.156) indicate that most banks maintain good levels of liquidity.

Loan to deposit ratio

The loan-to-deposit ratio shows an average of 0.423, which indicates that banks use a large portion of their deposits to make loans. The average ratio is 0.389, which reflects that half of the banks use a higher deposit-to-loan ratio. The minimum ratio is 0.009 and the maximum is 0.950, which reflects the wide variation in lending policies among banks. A standard deviation of 0.271 reflects moderate dispersion, while a slight skew to the right (0.289) and kurtosis closer to normal (1.844) indicate that most banks maintain moderate loan-to-deposit ratios.

NPL (Non-Performing Loan Ratio)

The non-performing loan ratio shows an average of 0.118, which reflects the quality of banks' credit portfolio. The average ratio is 0.045, which means that half of the banks have lower non-performing loan ratios. The minimum ratio is 0.007 and the maximum is 0.690, reflecting the large variation in loan quality among banks. A standard deviation of 0.148 reflects a large dispersion, while a large skew to the right (2.086) and a high kurtosis (7.453) indicate that some banks have very high NPL ratios.

Z-Score (stability index)

The Z-Score shows an average of 5.008, indicating that most banks have reasonable financial stability. The average for this ratio is 4300, meaning that half of the banks have stability above this number. The minimum ratio is 1.174 and the maximum is 10.935, reflecting the wide variation in financial stability among banks. The standard deviation of 2.635 reflects high dispersion, while the right skewness (0.795) and moderate kurtosis (2.519) indicate that most banks enjoy a good level of financial stability.

The data shows a large discrepancy between Iraqi banks in various financial indicators. While some banks maintain high ratios of capital and liquid assets, others suffer from high non-performing loan ratios and wide liquidity spreads. The overall financial stability of banks shows significant variation, indicating the need for further improvement in risk management and financial strategies to enhance financial stability.

Table 3: Correlation matrix

Variables	CTA	CAR	LAD	LR	LRD	NPL	Z-Score
Capital to Assets	1						
Capital Adequacy Ratio	0.0384	1					
Liquid Assets to Deposit	0.0366	0.1968	1				
Liquidity Ratio	-0.4233	0.281	0.7089	1			
Loan ratio Deposit	-0.0409	-0.0484	-0.0946	-0.2825	1		
NPL	0.0824	0.2417	0.0645	-0.0365	0.0298	1	
Z-Score	0.5133	0.0597	0.1408	0.0686	-0.0408	-0.0563	1

The results of the correlation matrix in Table (3) indicate a noticeable variation in the relationships between the various financial variables and their impact on the financial stability of Iraqi banks during the period from 2017 to 2022. Capital Assets appears as one of the most important indicators that positively affect financial stability (Z -Score) as the correlation coefficient is (0.5133), which means that increasing the capital-to-assets ratio is associated with increasing the financial stability of the bank. This demonstrates the importance of maintaining a strong capital ratio to enhance the bank's financial stability. On the other hand, we note that the capital-to-assets ratio has a negative correlation with the liquidity ratio of (-0.4233), which indicates that banks that maintain a higher capital ratio may face some liquidity challenges.

Capital Adequacy shows a weak positive correlation with financial stability (Z-Score) of (0.0597), which indicates that capital adequacy plays a limited role in enhancing financial stability. However, it shows a positive correlation with the Non-Performing Loan (NPL) ratio of (0.2417), which may indicate that some banks with sufficient capital may also be exposed to higher NPL ratios, which calls for improved credit risk management. The assets-to-liabilities ratio (L Assets/Liabilities) shows a strong positive correlation with the liquidity ratio (0.7089), which reflects that banks with higher assets-to-liabilities ratios have better liquidity, which is necessary to meet short-term liabilities. However, the impact of this ratio on (Z-Score) is relatively moderate (0.141), and this indicates that the assets compared to the opponents are not the most important factor in achieving financial stability but are still important. The loan ratio to the deposit shows a weak negative attachment with (Z-Score) at a value (-0.041), which means that increasing this percentage may have a slightly negative impact on (Z-Score). This indicates the importance of maintaining the balance between the loans granted and the available deposits to maintain the stability of the bank. The (NPL) ratio shows a weak negative link with the financial stability (Z-Score) from (-0.056), indicating that the increase of NPL has a negative impact on financial stability, and this is normal, increasing the loan loans contributes to a decrease in the bank's profits and thus a decrease in General performance, which emphasizes the need for NPL efficiently to avoid its impact. Negative impact on the financial stability of the bank. In general, the results indicate that capital to assets is the strongest indicator of the financial stability of Iraqi banks, while other indicators such

as the liquidity ratio, loan-to deposit ratio, and capital adequacy show weaker effects. Therefore, banks should focus on enhancing their capital-to-asset ratio and improving credit risk management to enhance their financial stability and achieve long-term sustainability.

Empirical analysis

Table (4) for regression analysis show varying effects of bank scoring indicators on Z-Score among different banks.

Capital Adequacy Ratio

- Negative effects appear in banks such as BNOI, BASH and MBDI, which indicates that an increase in this ratio may be related to increased potential risk or less efficiency in capital management.
- In contrast, banks such as UBII, BNMS and BBOB showed positive effects, which means that increasing this ratio enhances financial stability.

Liquid assets to liabilities ratio

- Positive effects are shown in banks such as BNOI, UBII and BBOB, indicating that sufficient liquid assets help in achieving financial stability. However, its effect is not statistically significant in banks such as BASH and BIIB, indicating that the importance of this ratio varies between banks.

Loan ratio to deposit

- Positive effects are shown in banks such as BNOI, UBI, BNMS and MBDI, indicating that higher loan-to-deposit ratios are associated with increased financial stability.
- While negative effects are shown in banks such as BASH, BIIB, UBII and BBOB, indicating that high ratios may increase financial risks and reduce financial stability.

Non-Performing Loans (NPL) Ratio

- Strong negative effects are shown in banks such as BASH, UBI, UBII and BBOB, indicating that an increase in the non-performing loan ratio significantly negatively affects financial stability.
- In contrast, banks such as BIIB and MBDI showed positive effects, which may reflect effective procedures for managing non-performing loans or high quality of the credit portfolio.

Table 4: Regression analysis: Between independent variables (Banking Rating Indicators) and dependent variables bank stability (Z-score) for Iraqi banks 2017-2022

Variables	(BASH bank)	(UBI bank)	(BNOI bank)	(BIIB bank)	(UBII bank)	(BNMS bank)	(MBDI bank)	(BBOB bank)	(All banks)
	Z-score	Z-score	Z-score	Z-score	Z-score	Z-score	Z-score	Z-score	Z-score
Capital Adequacy Ratio	-0.080*	-0.080	-0.374*	-0.407	0.0239**	0.492**	-0.739	0.958**	-0.945**
	(0.920)	(0.424)	(0.159)	(0.337)	(0.0856)	(0.433)	(0.117)	(0.395)	-0.506
Liquid Assets to liabilities	-0.859	-0.0648	.0773*	-.0501	0.0534**	0.0132	-0.0107*	0.0861*	-3.961***
	(0.159)	(0.239)	(0.342)	(0.713)	(0.329)	(0.499)	(1.740)	(0.092)	-1.453
Loan ratio Deposit	-0.302**	0.442**	0.732*	-0.336**	-0.442*	0.651	0.666	-0.432***	2.487**
	(0.131)	(0.882)	(0.166)	(0.369)	(0.259)	(0.047)	(0.919)	(0.111)	-1.42
NPL	-0.256**	-0.631**	0.328*	0.850*	-0.804**	-0.417**	-0.970***	-0.908**	-0.0195*
	(3.519)	(1.014)	(0.275)	(0.977)	(0.550)	(0.837)	(0.94)	(0.505)	-2.112
Liquidity Ratio									8.25***
									-3.045
Constant	0.844**	0.772**	-0.971**	0.780**	0.142***	-0.909**	0.680**	0.607***	-5.107**
	(0.334)	(0.134)	(0.483)	(0.692)	(0.390)	(0.223)	(0.948)	(0.175)	-2.026
Observations	6	6	6	6	6	6	6	6	48
R-squared	0.534	0.553	0.599	0.594	0.597	0.432	0.422	0.491	.492

Standard errors in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Overall performance of banks

- **BASH:** The bank shows negative effects on the Z-Score of capital adequacy ratio, loan-to-deposit ratio, and non-performing loan ratio, indicating that these indicators negatively affect the bank’s financial stability.
- **UBI:** The bank shows negative effects from the non-performing loan ratio and positive effects from the loan-to-deposit ratio.
- **BNOI:** The bank shows positive effects from the ratio of liquid assets to liabilities and the ratio of loans to deposits, and negative effects from the capital adequacy ratio.
- **BIIB:** The bank shows strong negative effects from the capital adequacy ratio and loan-to-deposit ratio, and a strong positive effect from the non-performing loan ratio.
- **UBII:** The bank shows weak positive effects from the capital adequacy ratio and the ratio of liquid assets to liabilities, and strong negative effects from the loan-to-deposit ratio and the non-performing loan ratio.
- **BNMS:** The bank shows strong positive effects from the capital adequacy ratio and loan-to-deposit ratio, and strong negative effects from the non-performing loan ratio.
- **MBDI:** The bank shows positive effects from the capital adequacy ratio and the loan-to-deposit ratio, and a strong positive effect from the non-performing loan ratio.
- **BBOB** The bank shows strong positive effects from the capital adequacy ratio and the ratio of liquid assets to liabilities, and negative effects from the loan-to-deposit ratio and the non-performing loan ratio.
- **Comparing performance between banks**

Based on the regression analysis, BNOI, BNMS, and MBDI banks emerge as the best banks in terms of financial stability, as they showed strong positive effects from most financial indicators which enhance their financial stability. In contrast, BASH, UBI and BBOB banks show lower performance with their Z-Score negatively affected by most financial indicators, indicating greater challenges in achieving financial stability. Accordingly, lower performing banks should focus on improving risk management strategies and increasing capital efficiency to ensure better financial stability.

Table (4) also shows the general effect of the capital adequacy ratio on the Z-Score (beta = -0.945**) for Iraqi banks operating in the stock market (study sample). This suggests that an increase in capital adequacy ratio may be associated with lower financial stability in some cases, perhaps due to challenges in investing capital efficiently affecting profitability and financial stability. On the other hand, the ratio of liquid assets to liabilities shows a significant positive effect on the Z-Score (beta = 3.961***), indicating that maintaining high levels of liquid assets enhances the ability of banks to meet contingent financial liabilities. Thus, it enhances its financial stability. Loan-to-deposit ratio shows a positive and strong impact on Z-Score (beta = 2.487***), which means that banks with high loan-to-deposit ratios are more financially stable, and this may be a result of effective loan management and collections. Higher loans. In contrast, Non-Performing Loans (NPL) ratio shows a negative impact on Z-Score (beta = -0.0195). Although the effect is not statistically significant, an increase in the NPL ratio negatively affects the financial stability of banks, since NPLs represent a significant risk and affect the quality of the credit portfolio and the bank's ability to generate revenues. In addition, Constant indicator shows a significant positive effect on the Z-Score 8.25***, which indicates that there are other important factors must cover in the model that contribute significantly to banks' financial stability.

Conclusion

This paper aims to investigate the analysis of the relationship between bank rating indicators as independent variables and financial stability as a dependent variable of eight banks working in the Iraqi stock market for the period 2017-2022. Using the Stata15 program, statistical test results such as the slope model and the correlation analysis of the variables have been analyzed. The results of the slope analysis showed that the percentage of the car has a negative impact on financial stability, indicating that the increase in this percentage may be related to a decrease in banking stability due to the challenges in investing the capital efficiently. On the other hand, the results showed that the proportion of liquid assets of the obligations has a major positive impact, which reflects the ability of banks that maintain high levels of liquid assets to counter emergency financial obligations and crises. The results of the analysis also showed that the loan ratio to deposits has a strong

positive effect, which means that banks that have higher levels of loan contribute more to financial stability financially, given that these loans are effective in increasing profits and thus enhancing financial stability. For NPL, it has shown a slight negative impact on financial stability, indicating that the increase in the proportion of turbulent loans negatively affects the stability of banks. The link analysis showed multiple relationships between different indicators. The percentage of equal capital has been associated with the quality and profits of assets, indicating that banks that maintain adequate capital can improve the quality and profitability of assets. The proportion of liquid assets of the obligations showed a strong positive relationship with the liquidity index, which reflects the ability of banks to maintain adequate levels of liquidity to meet emergency conditions. The loan ratio to the back showed a positive relationship with the profit index, indicating that banks that provide more loans for their deposits make a higher profit. NPL is negatively associated with all other indicators, which enhances the need for effective NPL management to ensure banking stability.

By applying these analyzes to Iraqi banks, it was found that there is a difference in financial performance and stability between banks. Some banks have shown high rates of capital and liquid assets, which contributed to their financial stability, while other banks suffered from high levels of high loans and bad assets, which negatively affected their financial stability. Based on these results, it is clear that enhancing capital efficiency, improving asset management, and increasing liquidity are the basic strategies that can enhance the financial stability of Iraqi banks. One of the restrictions on the study is that it depends only on the available data, which may not reflect long-term transformations in the Iraqi banking sector. Therefore, the study recommends the need to enhance the efficiency of risk management, improve the quality of assets, and increase the level of liquidity in Iraqi banks to achieve greater financial stability and enhance confidence in the banking system.

References

1. Al-Khazraji H, Al-Araji M. Financial stability and banking sector performance in Iraq. *Journal of Economics and International Finance*. 2022;14(1):329-346.
2. Ariffin NA, Ariffin NM, Ramly Z, Hashim MJ. The mediation role of interest rate between financial liberalization and financial stability. *Journal of Economics and International Finance*; c2021.
3. Abbas M, Hamza R. The impact of bank regulation on performance: evidence from the Iraqi banking sector. *Iraqi Journal of Economic Sciences*. 2019;37:37-49.
4. Basel Committee on Banking Supervision. *Basel III: A global regulatory framework for more resilient banks and banking systems*. Basel Committee on Banking Supervision; c2010.
5. Berger AN, Bouwman CHS. How does capital affect bank performance during financial crises? *Journal of Financial Economics*. 2013;109(1):146-176.
6. Ben Ali S. Banking regulation and stability: the role of capital requirements. *Journal of Financial Stability*. 2019;48:48-56.
7. Bouhirra Abbas USM. The role of the Algerian banking system SNB in the evaluation of banking performance - a study the case of the National Bank of Algeria and the

- Al-Salem Bank, the free foundation of the foundation of ABPR, the University of Qa Daba. University of Qa Daba; c2019.
8. Diamond DW, Dybvig PH. Bank runs, deposit insurance, and liquidity. *Journal of Political Economy*. 1983;91(3):401-419.
9. Hannan TH, Hanweck GA. Insolvency of bank risk and the market for large certificates of deposit. *Journal of Money, Credit and Banking*. 1988;20(2):203-211.
10. Ibrahim F, *et al.* Banking stability and risk management. *Journal of Financial Risk Management*. 2022;91:91-109.
11. Jones A. Financial stability and banking regulation. *Journal of Banking & Finance*; c2019.
12. Mester LJ. A study of bank efficiency taking into account risk-preferences. *Journal of Banking & Finance*. 1996;20(6):1025-1045.
13. Popov A, *et al.* Financial stability and the role of central banks. *European Central Bank Working Paper Series*. 2021;58:58-75.
14. Smith J, Brown L. Risk management in banking. *Financial Analysts Journal*; c2020.