

The Interaction Between Macroeconomic Factors and IFRS Disclosure Levels in Determining Credit Ratings in Iraq Banking Sector

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Abstract

The study aims to explore the interaction between macroeconomic factors and disclosure levels of standards, in addition to showing the joint impact on the credit rating of banks listed on the Iraq Stock Exchange. The official website of the Central Bank of Iraq was used to determine the number of Iraqi public and private banks for the year 2024 (7 public banks) and (74 private banks), and we relied on the data published by international credit rating agencies for the credit rating variable, while to determine the economic factors variable, we relied on the Early Warning Report for the Banking Sector for the third quarter of 2023 of the Central Bank of Iraq, while the extent of disclosure levels of international financial reporting standards provided by Iraqi banks was measured using a checklist. The study concluded that macroeconomic factors and disclosure levels of international financial reporting standards play a crucial role in determining credit ratings in the Iraqi banking sector, and the study recommends that the banking sector provide full disclosures in accordance with international financial reporting standards to meet the aspirations of users of financial statements and reports. In addition, banks in Iraq should seek to improve the reality of credit and governance and apply the highest level of compliance with international standards.

Keywords: *IFRS Disclosure Levels; Credit Ratings; Macroeconomic Factors; International agencies*

1. Introduction

The banking sector is a pillar of the global economy, contributing to financial and global stability. Furthermore, it is one of the leading industries in almost all developed and developing countries in today's diverse global economy (Hameediet, al, 2021). Therefore, it is widely recognized that credit rating is among the most important ways to assess the creditworthiness of banks. These ratings, provided by agencies such as Standard & Poor's (S&P), Moody's, and Fitch, help investors gauge the risk associated with lending to or investing in a particular entity (Cantor & Packer, 1996). The ratings range from investment-grade to speculative, reflecting the likelihood of an entity's ability to meet its debt obligations. High credit ratings indicate a lower risk of default and typically lead to lower borrowing costs, whereas lower ratings signal a higher risk and often result in higher borrowing costs (Altman, 1998). Credit ratings by international agencies are important and essential for the banking sector to enter global markets and attract

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foreign investment. Furthermore, credit ratings influence investor decisions and capital flows, making them a key factor for financial stability and economic growth (Hassouba et al ,2023).

Iraq's international innovation to prepare the production of products from several different pressures (normative, forced, and imitative) and felt pressure for example, the appropriate formation in Iraq, through the membership of the International Federation of Accountants (IFAC), and the Asian makers chose, and what was highlighted by the World Bank, the International Monetary Fund, the World Trade Organization, the World Trade Organization, the World Trade Organization, which invented the need for multinational companies and starts through stock markets(Khdir & Jaworska, 2020). Therefore, young people on World Development Day, as on the World Day, faced many challenges, including globalization, and since people working in a diverse and competitive field, as the main economic sector for development is considered, within the framework of the Global Financial Reform Initiative, it has focused its efforts with the Central Bank of Iraq and the International Monetary Fund, the government has focused its efforts in supporting major banks in private banks by applying international financial standards, seeking to open many banks to global financial markets, and Mars and capital, and through what is actually important, the motives for establishing cheese in Iraq are the few that apply financial standards (Chouaibi & Mutar, 2024). The research contribution to explore the relationship between the credit rating of Iraqi banks according to international agencies and the role of disclosure according to international financial reporting standards (IFRS) and macroeconomic indicators (GDP, inflation, Oil price) in bridging the current research gap in the literature, as well as the applied aspect in the Iraqi banking sector. Lastly, our paper provides several implications for the Iraqi banking sector, regulators, and auditors by highlighting the importance of obtaining a credit rating according to international agencies and the role of disclosure levels according to International Financial Reporting Standards (IFRS).

2. Literature Review and Hypotheses Development

Professional organizations, associations, and users of accounting information in the banking sector face challenges in adopting International Financial Reporting Standards (IFRS)(Ibreahim,2014). The main reasons for these challenges are the growth of international trade, multinational corporations, and foreign direct investment; and the development and diversification of financial markets (Sabir jaf,2022). Banks have a special nature, both in terms of their activities and the risks they face (Hamadamin, 2018). Therefore, the relationship between macroeconomic factors, IFRS adoption and credit ratings has garnered considerable attention in recent financial research in emerging markets (Bonito & Pais, 2018) (Hertikasari and Artha 2022), underscored the importance of comprehensive financial disclosures, noting that transparent reporting, particularly under IFRS, significantly reduces information asymmetry and thereby improves credit ratings. Moreover, the IFRS adoption enhances the quality of financial statements and investor confidence, which in turn leads to better credit ratings (Barth et al., 2008), similarly, the compared the financial reporting quality under IFRS and GAAP leads to more consistent financial disclosures that improve investor decision-making and ultimately credit ratings (Marques et al., 2021).

Economic factors significantly influence credit ratings, particularly in unstable markets. Therefore, the economic stability, measured through indicators like inflation rates, GDP growth, and currency stability, is crucial for maintaining favourable credit ratings (Nabeeh et al. 2020). Which demonstrated that sovereign credit ratings are highly sensitive to macroeconomic indicators, particularly in emerging economies (Afonso et al. (2002), This highlights the intertwined nature of economic conditions and financial disclosures in shaping creditworthiness. Moreover, the size and capital structure of firms significantly influence their credit ratings, (Heflin and Wallace 2011) established that larger firms with stable capital structures generally receive better credit ratings due to their lower perceived risk, aligning with the earlier findings of (Blume et al.1998), who argued that well-capitalised firms are better positioned to weather economic downturns. Reusens and Croux (2017) support this view by exploring the impact of firm leverage and finding that companies with higher leverage ratios are more likely to experience credit rating downgrades during periods of economic instability. Moreover, since financial metrics influence credit ratings, banks that do not have high

loan defaults have high credit ratings, which is a sign of stable future revenue streams (Liu et al.,2020). Therefore, the future revenue expectation manipulates a decisive role in credit rating valuation, because they provide a buffer against short term shocks (Fama & French,2002). On the other hand, predicting credit ratings has witnessed a remarkable development thanks to technological development. (Golbayani et al.,2020) discussed the role of artificial intelligence in predicting credit ratings of companies, and the results concluded that the models used are significantly superior to traditional statistical methods, due to their ability to deal with huge databases and analyze the relationships between financial disclosures and different market conditions. Thus, these mixed results led to the formulation of the following hypotheses:

H1: Higher IFRS disclosure levels are associated with macroeconomic factors.

H2: Macroeconomic factors have a significant association with credit ratings.

H3: IFRS disclosure levels have a significant effect on credit ratings.

H4: Macroeconomic factors and IFRS disclosure levels have a significant impact on credit ratings in Iraq's banking sector.

3. Research Design

Our basic research design is design to investigate the interaction between macroeconomic factors and IFRS disclosure levels and their combined influence on credit ratings in the Iraqi banking sector. The research period spans from 2019 to 2024, and the research relies on both secondary data (for macroeconomic factors and credit ratings) and primary data (for IFRS disclosure levels through checklist).

3.1. The population and Sample selection

The Central Bank of Iraq (CBI) official website was used to determine the number of Iraqi public and private banks for 2024 was (7 public banks) and (74 private banks)².The sample initially consisted of 10 banks that issued annual reports with IFRS adoption during the period of the current investigation. However, some of these banks had to be excluded for various reasons. First, the study omitted banks does not have credit rating from(64 Private banks) agencies (Fitch, Standard& Poor's, Moody's, Capital Intelligence). Second, the study eliminated (6 Public banks) because they comply with IFRS. The final sample of the current study includes 10 banks as shown (Table 1):

Table 1: Descriptive of Samples

No.	Banks		Classification
1.	Trade Bank of Iraq	TBI	Public
2.	Bank of Baghdad	BOB	Private
3.	Commercial Bank of Iraq	CBI	Private
4.	Gulf Commercial Bank	GCB	Private
5.	National Bank of Iraq	NBI	Private
6.	Cihan Bank for Islamic Investment and Finance	CIIB	Private
7.	Iraq Islamic Bank for Investment and Development	IIB	Private
8.	Al Mansour Bank for Investment	AMB	Private
9.	Kurdistan Bank for Investment and Development	KBI	Private
10.	Region Trade Bank for Investment and Finance	RTB	Private

² -<http://www.isx-iq.net/isxportal/portal/companyGuideList.html>

3.1.1 Results Analysis

To perform an analysis that elucidates and accomplishes the research goals, we need to follow several steps as outlined below:

3.1.2 Credit Ratings

Based on the available data that are collected from international agencies (Fitch, Standard& Poor's, Moody's, Capital Intelligence) reports. It's evident that 10 Iraqi banks received credit ratings from 2019 to 2024. There was variation in the rating levels among these Iraqi banks, as illustrated in (Table 1).

Table 2: Credit rating levels for Iraqi banks

YEAR	TBI	BOB	CBI	GCB	NBI	CIIB	IIB	ABI	KBI	RTB
2019	B-	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2020	B-	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2021	B-	B	Nil	Nil	Nil	Nil	Nil	Nil	Nil	CCC+
2022	B-	B	Nil	CCC+	B3	Nil	Nil	CCC+	Nil	CCC+
2023	B-	Caa1	CCC+	CCC+	B3	CCC+	C	CCC+	CCC+	CCC+
2024	CCC+	B	CCC+	CCC+	BB	CCC+	CCC+	B-	CCC+	CCC+

Source: Elaborated by the authors.

Table 2, presents the credit rating levels for Iraqi banks are as follows:

TBI Banks: From 2019 until 2024, TBI Bank emerged as the most credit-rated bank among Iraqi banks. All ratings were at the B- level, except in 2024 when it achieved a CCC+ rating. This can be attributed to the bank's increasing pressures on the bank's financial health, which might come from worsening macroeconomic conditions in Iraq, including persistent inflation, declining GDP, and increased default risks tied to oil price fluctuations and government expenditure reductions. The downgrade reflects heightened vulnerabilities in the bank's financial structure, suggesting that while it remains operational, its ability to meet financial obligations is now more reliant on favorable economic conditions.

BOB Bank: Starting in 2021, BOB Bank entered the credit rating system and received a B-level credit rating for the years 2021, 2022, and 2024. However, in 2023, it was rated as Caa1. It was downgraded to Caa1, A significant drop that reflects severe financial distress and a heightened risk of default. This change in rating likely indicates that BOB Bank faced critical challenges in its financial stability during 2023. However, the bank managed to partially recover in 2024, regaining a B-level rating. It is believed that this improvement was linked to the acquisition by Burgan Bank of Kuwait after the Central Bank of Iraq approved. The acquisition was likely driven by Burgan Bank's desire to strengthen its presence in the Iraqi market and capitalize on investment opportunities.

CBI & CIIB & KBI & IIB Banks: During 2023 and 2024, these banks were equally credit-rated and received a CCC+ rating, expect IIB bank was rated C in 2023 and CCC+ in 2024. During 2023 and 2024, these banks were consistently rated with a CCC+ credit rating, which signifies a high level of vulnerability and substantial credit risk. The CCC+ rating indicates that these banks were still operational but heavily dependent on favorable economic conditions to fulfill their financial obligations. However, IIB Bank was rated C in 2023, which reflects an even higher risk of default, signifying that the bank was facing severe financial distress during that year. The upgrade to CCC+ in 2024 indicates some improvement in the bank's financial situation, although it still remained in a precarious position. This rating reflects ongoing financial challenges and a significant risk of default should any adverse conditions arise. The consistent CCC+ ratings for these banks suggest they were facing similar pressures, possibly related to the overall economic environment in Iraq .

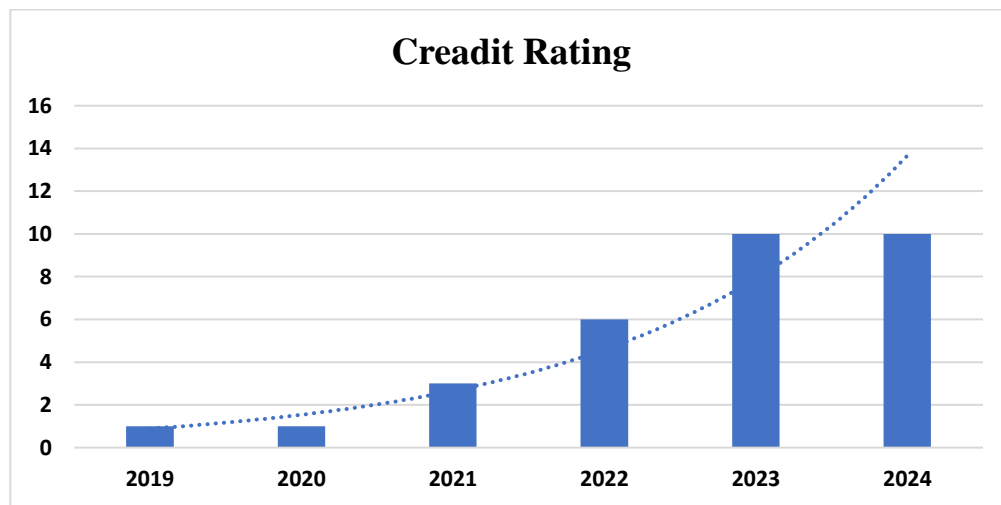
GCB Bank: received a CCC+ rating, indicating significant credit risk. The CCC+ rating suggests that the bank was highly vulnerable to adverse economic conditions and faced substantial challenges in maintaining financial stability. GCB Bank's reliance on favorable conditions to meet its financial obligations placed it in a precarious position, with any downturn in the economy likely to exacerbate its financial difficulties.

NBI Bank: was rated B3, which is a slightly better rating compared to CCC+ but still reflects a high level of risk. A B3 rating indicates that the bank was considered speculative and subject to high credit risk, but it was in a somewhat stronger financial position than banks rated at the CCC+ level. NBI Bank's B3 rating suggests that, while still risky, it may have had better capital reserves, asset quality, or liquidity compared to its peers

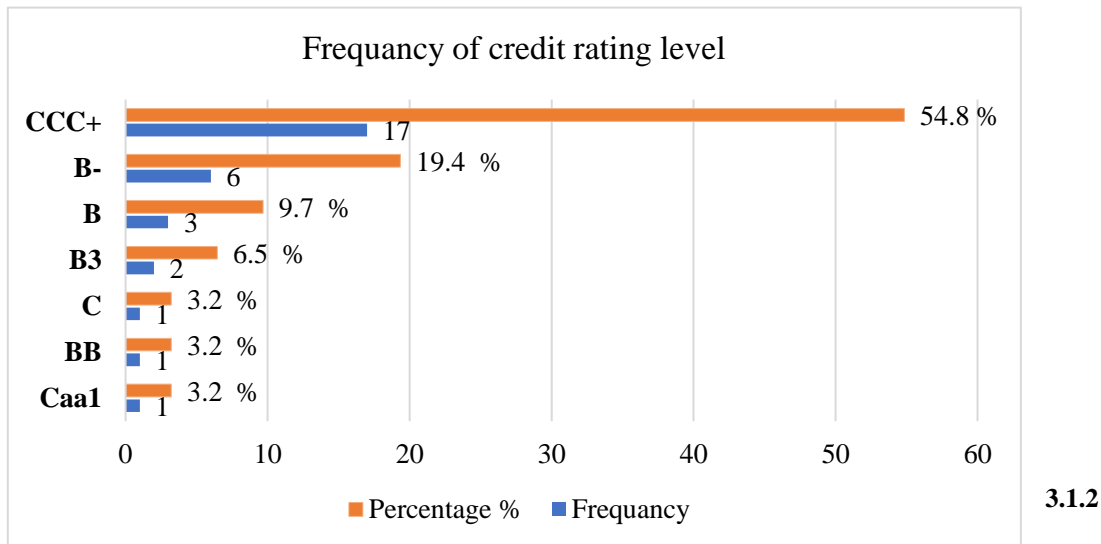
ABI Bank: achieved a CCC+ rating in both 2022 and 2023, similar to GCB Bank, indicating that it faced ongoing financial challenges and was highly dependent on positive economic conditions to meet its obligations. However, in 2024, ABI Bank's rating improved to B-, reflecting some progress in stabilizing its financial situation. This improvement to B- could be attributed to better liquidity management, successful restructuring efforts, or an improvement in the macroeconomic environment, which allowed the bank to reduce its credit risk and demonstrate a stronger ability to meet financial commitments.

RTB: Since 2021, this bank has been credit-rated and has consistently maintained a CCC+ credit rating. This rating indicates that RTB faces significant financial challenges and remains highly vulnerable to adverse economic conditions. The consistent CCC+ rating suggests that while the bank has managed to avoid further deterioration, it has not been able to improve its financial position significantly. Therefore, the credit rating for Iraqi banks was weak in 2019 and gradually increased until 2024 (Figure 1).

Figure 1: Credit Rating Levels for Iraqi Banks during 2019-2024.



During the period 2019-2024, the credit rating levels for Iraqi banks were as follows: CCC+ (54.8%): The highest credit rating, B- (19.4%): The second-highest rating, B (9.7%): Followed by this level, B3 (6.5%): Another rating category, Finally, the levels C, BB, and Caa1 accounted for 3.2% of the ratings (Figure 2).

Figure 2: Credit Rating Levels for Iraqi Banks during 2019-2024.

Microeconomic Factors

In this study, five microeconomic factors were examined (GDP Growth, Inflation, expected default rate in Iraq due to oil price decline, expected default rate due to government expenditure decline in Iraq, expected default rate due to GDP decline in Iraq)³, spanning the period from 2019 to 2024. The data was extracted from the Central Bank of Iraq and is summarized in Table 3.

Table 3. Microeconomic factors during 2019-2024

YEAR	GDP Growth(%)	Inflation (%)	*ExOiDe	**ExExDe	*** ExGDP
2019	5.51	-0.20	9.62	10.10	10.74
2020	-12.04	0.57	10.77	9.89	10.84
2021	1.50	6.04	10.77	10.77	10.77
2022	7.64	4.99	31.89	28.58	21.92
2023	-2.94	5.01	31.89	28.58	21.92
2024	4.93	4.03	33.47	26.45	24.12
Average	0.77	3.41	21.40	19.06	16.72

*ExOiDe: Expected default rate in Iraq due to **oil** price decline %.

ExExDe: Expected default rate due to government **expenditure decline in Iraq %.

*** ExGDP: Expected default rate due to **GDP** decline in Iraq %.

³ - <https://cbi.iq> , *The Early Warning Report for the Banking Sector 3rd Quarter 2023, CBI, 2023

** financial stability report, P.P 98-102, CBI, 2023

From Table 2, the following can be observed:

GDP Growth(%): The highest percentage was in 2019 (5.51%), the lowest percentage was in 2020 (-12.04%), and the average was (0.77%).

Inflation (%): The highest percentage was in 2021 (6.04%), the lowest percentage was in 2019 (-0.2%), and the average was (3.41%).

ExOiDe (%): The highest percentage was in 2024 (33.47%), the lowest percentage was in 2019 (9.62%), and the average was (21.4%).

ExExDe (%): The highest percentage was in both 2023 and 2024 (28.58%), the lowest percentage was in 2020 (9.89%), and the average was (19.06%).

ExGDP(%): The highest percentage was in 2024 (24.12%), the lowest percentage was in 2019 (10.74%), and the average was (16.72%).

3.1.3 IFRS disclosure levels

In this study, the extent of IFRS disclosure levels provided by Iraqi banks is measured using a checklist constructed by Deloitte company, we relied on five IFRS disclosure levels, which are (IFRS7, IFRS9, IFRS13, IFRS15 and IFRS16). Data were collected through a checklist consisting of 23 questions. Responses were based on “yes” or “no,”. Table 4 shows that all IFRS disclosure levels were positive, indicating the interest of Iraqi banks in achieving these IFRS disclosure levels. The order of adoption was as follows: IFRS9 (56.7%), IFRS15 (65.0%), IFRS16 (66.7%), IFRS7 (70.0%), and IFRS13 (71.7%)

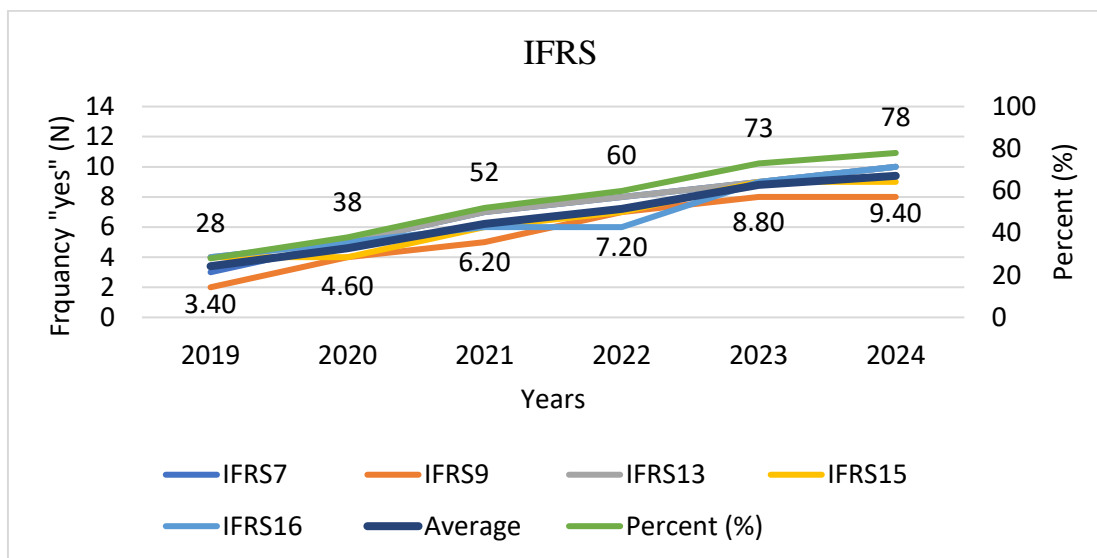
Table 4. Percent of IFRS disclosure levels

IFRS		Count	Column N %
IFRS7	No	18	30.0%
	Yes	42	70.0%
	Total	60	100.0%
IFRS9	No	26	43.3%
	Yes	34	56.7%
	Total	60	100.0%
IFRS15	No	21	35.0%
	Yes	39	65.0%
	Total	60	100.0%
IFRS16	No	20	33.3%
	Yes	40	66.7%
	Total	60	100.0%
IFRS13	No	17	28.3%
	Yes	43	71.7%
	Total	60	100.0%

As observed, the IFRS disclosure levels increased during the study years. The overall average of positive responses was 3.4 (28%) in 2019, followed by 4.6 (38%) in 2020, 6.2 (52%) in 2021, 7.2 (60%) in 2022, 8.8 (73%) in 2023, and finally 9.4 (78%) in 2024. This indicates a growing commitment by Iraqi banks to adopt and comply with

(IFRS). The steady improvement in positive responses reflects the banks' efforts to enhance transparency, improve financial reporting quality, and align their practices with international standards as shown in Figure 3.

Figure 3. IFRS disclosure levels increased during 2019-2024



4. Hypotheses Test

To test **(H1)** Higher IFRS disclosure levels are associated with Macroeconomic factors, Pearson correlation coefficient was used. The results indicated that IFRS disclosure levels are statistically associated with macroeconomic factors, as follows (Table 5):

The correlation coefficient between IFRS disclosure levels and **GDP** was 0.208, indicating a weak non-significant associated. Additionally, the impact factor R^2 (0.043) suggests that 4.3% of the variation in GDP is attributable to IFRS disclosure levels. This can be attributed to general economic growth or contraction in Iraq, as measured by GDP growth, may influence banks' financial disclosures. For instance, during periods of economic growth, banks might enhance their disclosures to attract more investment or comply with increased regulatory scrutiny. Conversely, during economic downturns, disclosure levels might change as banks respond to different risks and regulatory requirements.

The correlation coefficient between IFRS disclosure levels and **Inflation** was 0.739, indicating a strong significant associated at statistical level ($\alpha \leq 0.1$). Additionally, the impact factor R^2 (0.546) suggests that 54.6% of the variation in Inflation is attributable to IFRS disclosure levels. This can be attributed to inflation impacts the purchasing power of money and can affect the financial stability of banks. High inflation might push banks to increase transparency in their reporting to manage investor confidence and regulatory expectations, which could lead to higher IFRS disclosure levels.

Table. 5 presents the correlation coefficient between disclosure levels according to International Financial Reporting Standards (IFRS) and the default rate in Iraq due to low oil prices (**ExOide**) equal to (0.893), indicating a strong and statistically significant correlation ($\alpha \leq 0.05$). Furthermore, the impact factor R^2 (0.797) indicates that 79.7% of the variance in the expected default rate in Iraq due to low oil prices is attributable to disclosure levels

according to International Financial Reporting Standards. This is attributed to the fact that oil prices have a significant impact on the Iraqi economy due to the economy's dependence on oil sales, and that price volatility in the global market is a major factor in determining a country's sovereign rating.

According to **Table. 5**, the correlation coefficient between the variable of disclosure levels according to International Financial Reporting Standards and the default rate due to low **government spending in Iraq (ExExDe)** is equal to 0.861, indicating a strong and statistically significant correlation ($\alpha \leq 0.05$). Furthermore, the coefficient of variation (R^2) is equal to 0.74, indicating that 74.1% of the variance in the default rate is due to low government spending in Iraq, which is due to the disclosure levels of financial reports according to International Financial Reporting Standards. Government spending is a major constraint in the Iraqi economy, which in turn requires the banking sector to work on increasing disclosures according to International Financial Reporting Standards and thus understand the risks to which they may be exposed.

Table. 5 shows, the relationship between disclosure levels according to International Financial Reporting Standards and the default rate due to declining GDP in Iraq (ExGDP) is equal to (0.893), which means there is a strong and statistically significant correlation ($\alpha \leq 0.05$). Furthermore, the explanatory influence factor for the relationship, R^2 , is equal to (0.797), meaning that 79.7% of the variance in the expected default rate due to declining GDP in Iraq is attributed to disclosure levels according to International Financial Reporting Standards (IFRS).A decline in GDP typically signals economic contraction, reduced consumer spending, lower business revenues, and higher unemployment—all of which increase the likelihood of loan defaults. To manage the perceptions of risk associated with such economic downturns, banks may enhance their IFRS disclosures to provide more detailed information about their financial health, risk management strategies, and provisions for potential losses. By doing so, banks aim to maintain investor confidence and meet regulatory requirements, which become even more critical during times of economic stress.

Table 5. Associated values between Macroeconomic factors and IFRS disclosure levels

Macroeconomic factors	IFRS disclosure levels		
	R	Sig.	R ²
GDP	0.208	0.692	0.043
Inflation	0.739***	0.093	0.546
ExOiDe	.893**	0.017	0.797
ExExDe	.861**	0.028	0.741
EXGDP	.893**	0.016	0.797

**. Correlation is significant at the 0.05 level.

***. Correlation is significant at the 0.1 level.

Table. 6 shows the results of associated between Macroeconomic factors and Credit ratings(**H2**) as follows:

The correlation coefficient between credit ratings and **GDP** was 0.367, indicating a medium non-significant associated. Additionally, the impact factor R^2 (0.135) suggests that 13.5% of the variation in GDP is attributable to credit ratings. This can be attributed to the general relationship between economic growth and the financial health of banks. In periods of economic expansion, banks may experience improved financial conditions, increased lending activity, and lower default rates, which can lead to better credit ratings. However, the impact is moderate, possibly because other factors—such as government policies, external shocks, or sector-specific risks—may have a more direct

influence on the creditworthiness of banks than GDP growth alone. Therefore, while GDP growth is important, it does not dominate the determination of credit ratings in the context of the Iraqi banking sector.

The correlation coefficient between credit ratings and **Inflation** was 0.538, indicating a medium non-significant associated. Additionally, the impact factor R^2 (0.289) suggests that 28.9% of the variation in Inflation is attributable to credit ratings. This can be attributed to the influence of inflation on the overall financial stability of banks. Inflation erodes the purchasing power of money, increases operational costs, and creates uncertainty in financial markets. These conditions can put pressure on banks' profitability and capital adequacy, potentially leading to higher default risks. Banks may also need to adjust interest rates on loans and deposits, which could affect their financial performance and, subsequently, their credit ratings. However, while inflation plays a significant role, other factors such as monetary policy responses and economic resilience may moderate its direct impact on credit ratings.

The correlation coefficient between credit ratings and **Expected default rate in Iraq due to oil price decline (ExOiDe)** was 0.998, indicating a strong significant associated at statistical level ($\alpha \leq 0.01$). Additionally, the impact factor R^2 (0.976) suggests that 97.6% of the variation in expected default rate in Iraq due to oil price decline is attributable to credit ratings. This can be attributed to Iraq's heavy reliance on oil revenues as the backbone of its economy. When oil prices decline, the country faces severe economic stress, leading to reduced government revenues, increased budget deficits, and a higher risk of defaults, especially in sectors closely tied to oil. As oil price fluctuations critically affect the entire economic landscape, banks exposed to these risks are likely to experience significant financial instability, resulting in lower credit ratings. This strong correlation highlights how deeply intertwined Iraq's financial sector is with the performance of global oil markets.

The correlation coefficient between credit ratings and **Expected default rate due to government expenditure decline in Iraq (ExExDe)** was 0.996, indicating a strong significant associated at statistical level ($\alpha \leq 0.01$). Additionally, the impact factor R^2 (0.984) suggests that 98.4% of the variation in expected default rate due to government expenditure decline in Iraq is attributable to credit ratings. This can be attributed to the central role that government spending plays in Iraq's economy. Government expenditure, particularly on public services and infrastructure, drives much of the economic activity in the country. A reduction in government spending can lead to economic slowdowns, increased unemployment, and reduced business opportunities, especially in sectors reliant on government contracts.

Table. 6 shows the correlation coefficient between credit ratings and the **expected default rate due to declining gross domestic product (ExGDP)** in Iraq, which is 0.992, indicating a strong and statistically significant association ($\alpha \leq 0.05$). Furthermore, the R^2 impact coefficient (0.984) indicates that 98.4% of the variance in the default rate due to declining GDP in Iraq is attributable to credit ratings. This suggests several factors that increase the likelihood of loan defaults as businesses and individuals struggle to meet their financial obligations. For banks, this economic downturn directly impacts their asset quality, increasing their exposure to bad debts and leading to lower credit ratings. The strong correlation underscores how intertwined the financial health of the banking sector is with Iraq's broader economic performance, making GDP a key determinant of creditworthiness.

Table 6. Associated values between Macroeconomic factors and Credit ratings

Macroeconomic factors	Credit ratings		
	R	Sig.	R ²
GDP	0.367	0.474	0.135
Inflation	0.538	0.271	0.289
ExOiDe	.998*	0.000	0.976
ExExDe	.996*	0.000	0.984
EXGDP	.992*	0.000	0.984

*. Correlation is significant at the 0.01 level.

Table. 7 results showed the correlation coefficient between IFRS disclosure levels and credit ratings (**H3**) equal 0.873, indicating a strong significant associated at statistical level ($\alpha \leq 0.05$). Additionally, the impact factor R² (0.762) suggests that 76.2% of the variation in IFRS disclosure levels is attributable to credit ratings. This can be attributed to the fact that banks with higher credit ratings tend to adopt better IFRS disclosure practices to maintain transparency, improve investor confidence, and comply with regulatory standards. Higher IFRS disclosure levels reflect a bank's commitment to providing clear and comprehensive financial information, which can positively influence its credit rating by reducing perceived risks for investors and credit rating agencies. Conversely, banks with lower credit ratings may have less comprehensive disclosures, reflecting underlying financial challenges. Thus, there is a significant feedback loop where strong financial health encourages better disclosure, which in turn supports higher credit ratings.

Table 7. Correlation values between Macroeconomic factors and Credit ratings

IFRS disclosure levels	Credit ratings		
	R	Sig.	R ²
IFRS	0.873**	0.023	0.762
**. Correlation is significant at the 0.05 level.			

4.1 Analysis of Variance (ANOVA)

R-squared, a measure in statistical modeling, gauges how well a model predicts an outcome variable. It represents the proportion of variance explained by the model's predictions. R-squared values range from 0% to 100%, with 0% implying no improvement over the mean prediction, and 100% indicating perfect fit. However, remember that high R-squared values have limitations and should be interpreted cautiously.

Table. 8 shows that the probability values (P-value) were smaller than 0.05 and therefore all research hypotheses were statistically significant and the results were as follows:

Table 8: Results of Analysis of variance

Hypo.	Variables	Constant (β_0)	Beta (β_1)	Beta (β_2)	ANOVA)		R ²	Remarks
					(F-statistic)	P-value		
H1	IFRS Disclosure → Macroeconomic Factors (Combined)	1.813	0.419	-	42.180	0.000	0.576	Supported
H2	Macroeconomic Factors → Credit Ratings	1.101	0.649	-	204.549	0.000	0.984	Supported
H3	IFRS Disclosure → Credit Ratings	1.865	0.439	-	7.138	0.000	0.762	Supported
H4	Macroeconomic & IFRS Disclosure → Credit Ratings	0.705	0.558	0.218	123.942	0.000	0.540	Supported

The results shows that all hypotheses(H_1, H_2, H_3, H_4) are significantly associated as evidenced by a strong F-statistic of (42.180, 204.549, 7.183, 123,942) and a P-value of 0.000.

5. Conclusion

5.1 Conclusion and Recommendation

The study aims to explore the interaction between macroeconomic factors and disclosure levels according to International Financial Reporting Standards (IFRS) in determining credit ratings in the Iraqi banking sector. The results showed that macroeconomic factors (GDP, inflation, oil prices, government Ex, and defaults) influence the credit ratings obtained by banks according to international agencies. This indicates that the more stable economic indicators are, the more they help reduce the risk of a credit rating downgrade. Economic fluctuations, such as changes in oil prices on the global market, directly impact the country's sovereign rating and the banking sector as well. Therefore, the Iraqi government should support the banking sector and maintain economic stability by diversifying revenue sources and not relying solely on oil. The paper demonstrated that the level of disclosure according to International Financial Reporting Standards(IFRS) plays a key role in credit ratings as a moderating variable. The results indicated that the higher the level of disclosure, the less impact macroeconomic factors have on credit ratings. Therefore, Iraqi banks should work to increase and improve disclosure in financial statements and reports prepared in accordance with IFRS. The study presents a set of recommendations, including:

1. Enhancing and adhering to the implementation of International Financial Reporting Standards (IFRS) by Iraqi banks regarding disclosure of risks to which the banking sector may be exposed, in accordance with IFRS 7, to enhance the confidence of international credit rating agencies in the issued financial statements and reports.
2. The banking sector's supervisory bodies, represented by the Central Bank of Iraq, should continuously evaluate and review the level of disclosure in accordance with IFRS for the banking sector.
3. Continuous monitoring and analysis of macroeconomic factors by the banking sector to determine their impact on credit ratings according to international agencies.

5.2 Limitation

The study faced many challenges, the most important of which was obtaining a credit rating according to international agencies, as these reports are published by the agencies on their official websites and at a material cost. Furthermore, the banking sector has recently entered credit ratings.

5.2 Suggestion

The study proposes increasing the number of years of study in the future, especially after many Iraqi banks have been granted credit ratings by international agencies. It is also possible to link credit ratings by international agencies to their role in attracting foreign investment to Iraq.

6. Conflict of Interest

The authors declare that they have no conflict of interest.

7. Funding Declaration

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