Al-Qadisiyah Journal for Administrative and Economic Sciences ISSN$_{Online}$: 2312-9883
QJAE, Volume 27, Issue 4 (2025) ISSN$_{Print}$: 1816-9171
DOI: https:// doi.org/ 10.33916/ qjae.2025 .04256267

Measuring the Impact of Cash Credit Balance Accounts on Financial Stability: An Analytical Study of the Commercial Bank of Baghdad for the Period (2014–2023)

Nuha Hadi Abdul Hassan Al-Ali Al-Jassim Ali Ghanem Shakir Al-Baghdadi
nuhahadig@gmail.com fina.banks.stp25.8@qu.edu.iq
University of Al-Qadisiyah

Received: 19/8/2025
Accepted: 31/8/2025
Available online: 15 /12 /2025

Corresponding Author : Nuha Hadi Abdul Hassan Al-Ali Al-Jassim

Abstract : The current research seeks to identify the impact of bank credit policy, through the accounts of credit balances, on achieving financial stability at the Commercial Bank of Baghdad, in the Iraq Stock Exchange, for the period (2014-2023). The study used the bank's published annual financial statements as a research sample. To achieve the study objectives, the descriptive approach was adopted by utilizing various sources and scientific journals to support the theoretical framework, and the inductive approach by analyzing the annual financial statements of the research sample. The study used many financial indicators to measure the study variables, where the credit balance indicator represented the bank credit policy variable. Financial stability was also measured using indicators such as the capital adequacy ratio, asset quality ratio, profitability quality ratio, and liquidity ratio. Various statistical analysis methods were employed, consistent with the research objectives, using the statistical program SPSS.V.29, which was used to test the research hypotheses. Based on these results, the research reached several important conclusions, most notably: the credit balance has a significant positive impact on the financial stability of commercial banks. This underscores the importance of improving cash credit management to enhance the stability and efficiency of financial institutions. The study concluded with a set of recommendations, including the need for institutions to focus on developing effective cash credit management strategies, including improving evaluation and monitoring mechanisms. It also recommends enhancing employee training in this area and adopting modern technologies to improve efficiency.

Keywords: Banking Credit Policy, Cash Credit Balance Accounts, Financial Stability Cash credit balance, capital adequacy‹.

INTRODUCTION: Bank credit policy plays a significant role in determining the stability of the financial system. It is directly linked to the manner in which loans and credit are granted, the associated terms, and the types of customers targeted. These factors also significantly impact banks' liquidity and their ability to meet market needs.

Financial stability is a fundamental goal pursued by banking systems, reflecting the financial system's ability to absorb shocks, maintain operational efficiency, and meet obligations. This goal requires a banking environment characterized by financial discipline and the adoption of sound credit policies that ensure the efficient allocation of financial resources, reduce risk concentration, and maintain public confidence in the banking sector.

Bank credit policy indicators are also used as analytical tools to assess the degree of credit easing or tightening within the banking system, such as cash balance analysis. Financial stability indicators are also used to monitor the security and efficiency of the financial sector, including capital adequacy ratios, asset quality ratios, profitability ratios, and liquidity ratios. When analyzing the factors affecting financial stability, bank credit emerges as one of the most important factors that enhance or undermine stability. Flexible credit policies also contribute to economic growth by providing necessary financing to small and medium-sized enterprises (SMEs), highlighting the vital role of banks in supporting economic activity. Furthermore, excessive credit expansion without adequate controls can lead to financial risks, such as increased non-performing loans, threatening the stability of banks and potentially leading to wider financial crises.

Section One – Research Methodology

First – Research Problem:

The core issue of this research revolves around uncovering the nature of the relationship between **bank credit policy**, represented by **cash credit balance accounts**, and **financial stability indicators**, as well as the extent to which the former

affects the latter. This is approached through a theoretical analysis of the factors influencing the efficiency of credit policies and their role in enhancing the financial soundness of banks.

Accordingly, the main research problem can be formulated as follows:

Does the bank credit policy, represented by cash credit balance accounts, contribute to achieving financial stability at the Commercial Bank of Baghdad (the research sample)?

Second – Research Importance:

The importance of this study stems from its contribution to understanding the relationship between **bank credit policy**—specifically **cash credit balance accounts**—and **financial stability**. This understanding aids financial and banking decision-makers in making informed decisions aimed at minimizing financial risks and enhancing financial stability. Additionally, it highlights the impact of credit policy on **market balance**, **interest rate stability**, **granted liquidity levels**, and banks' ability to withstand economic shocks.

Furthermore, analyzing the effects of credit policy enables the formulation of measures that can **protect customers and depositors** from potential financial losses.

Third – Research Objectives:

This study aims to achieve several key objectives, including:

1. Highlighting the importance of the credit policy implemented at the Commercial Bank of Baghdad (research sample).
2. Assessing the extent to which this policy aligns with global standards and benchmarks.
3. Measuring the impact of **bank credit policy**, represented by **cash credit balance accounts**, on the **financial stability** of the Commercial Bank of Baghdad.
4. Analyzing trends in **total bank credit** and **financial stability**, and identifying the type of relationship between them, based on the bank's annual financial statements for the period (2014–2023).

Fourth – Research Hypotheses:

To answer the research questions, the following hypotheses have been formulated:

- **Main Hypothesis 1**: There is a statistically significant correlation between bank credit policy, represented by cash credit balance accounts, and the financial stability of the Commercial Bank of Baghdad (research sample).
- **Main Hypothesis 2**: There is a statistically significant impact of bank credit policy, represented by cash credit balance accounts, on the financial stability of the Commercial Bank of Baghdad (research sample).

Fifth – Research Population and Sample:

The research population consists of all private commercial banks listed on the Iraq Stock Exchange, totaling (23) banks. However, the research sample is limited to the Commercial Bank of Baghdad for the period (2014–2023).

Sixth – Research Boundaries:

1. Spatial Boundary: The study is applied to the Commercial Bank of Baghdad, listed on the Iraq Stock Exchange.
2. Temporal Boundary: The research is conducted over a time series covering ten years from (2014 to 2023).

Seventh – Research Methodology:

The study relies on both the deductive and inductive approaches in developing the theoretical and applied aspects of the research.

- In the theoretical part, the deductive method is used by reviewing books, academic sources, theses, dissertations, and specialized local, Arab, and international journals. In addition, online resources relevant to the topic were consulted to develop the general framework, research objectives, and hypotheses.
- In the **applied part**, the **inductive method** is employed. The study relies on the **financial reports** of the bank (research sample) to test the hypotheses. The results of the applied analysis are evaluated using **various statistical methods**, with the help of the **SPSS.V.29** statistical software to conduct analysis, draw conclusions, and formulate recommendations.

Section Two – The Conceptual Framework of Bank Credit Policy and Financial Stability

First: The Definition of Bank Credit

Bank credit is a process through which banks provide individuals or companies with access to funds or financial resources in exchange for a commitment to repay them at a later time Credit facilitates economic activities by providing the necessary financing for individuals and businesses, contributing to economic growth and project development (Ilahi et al., 2021: 137). Granting credit also depends on assessing the borrower's creditworthiness, as banks take into account several factors such as income, collateral, and credit history (Al-Salhat et al., 2024: 275).

The process of granting bank credit involves several steps, starting with the customer submitting an application, followed by the bank's assessment of the customer's financial situation. This is accomplished using credit scoring models that enable the bank to determine the customer's ability to repay the debt. Based on this assessment, the bank

may decide to grant or deny credit. If approved, the credit terms—such as the interest rate and repayment period—are determined (Nwachukwu, 2024: 633). Credit risk is one of the most important issues studied by finance experts. Risks may include the possibility of default, where the borrower may be unable to repay the amount due due to unforeseen financial circumstances (Nayli & Lahrichi, 2022: 335). On the other hand, banks rely on risk management strategies to mitigate the effects of these risks, such as diversifying the loan portfolio and using risk insurance (Gafrej & Boujelbéne, 2022: 68). Bank credit is also an important financial tool used to facilitate economic transactions, allowing individuals and businesses to obtain the funds needed to achieve their investment or consumption goals.

. At its core, it is based on the concept of trust, whereby the lender (the bank) agrees to provide a specific amount of money to the borrower (individual or company) under defined conditions, including the interest rate and repayment period. This requires the borrower to commit to repaying the amount within the specified time (Omowole et al., 2024:92).

Second: The Importance of Bank Credit

Technological and economic developments have given significant importance to bank credit due to its ability to provide and mobilize the necessary funds for production, consumption, trading, and distribution activities to drive economic activity toward full employment. This importance can be demonstrated through the following points:

1. **Increasing Production:** By establishing new industrial, agricultural, and service projects, in addition to developing existing ones, which require large funds that exceed the internal resources of these projects (Hassan, 2023:56).
2. **Increasing Consumption:** Bank credit enables consumers to acquire some durable consumer goods and other products, even if they are currently unable to pay for them (Mahdi, 2022:89).

3. Allocation of Financial Resources Across Various Economic Activities:

Credit plays an important role in directing the financial resources available to the banking system toward different sectors and economic activities. This ensures the efficient use of these resources by allocating them to projects according to their needs, in order to achieve balanced economic growth that serves both credit policy and economic policy (Al-Samarrai & Mahdi, 2021:63).

4. Mobilization of Economic Resources:

Idle funds can be utilized temporarily through short-term financing. This allows the borrower to use these resources in temporary activities that generate profitable income. In return, the lender receives a reasonable return from the use of those resources (Juhro et al., 2025:175).

5. Settlement of Transactions:

This occurs through the settlement of exchanges between two parties. Banknotes and coins represent a debt owed to the bearer by the issuing authority, while checks represent a debt owed to the bearer by the bank on which they are drawn (Geva et al., 2021:1120).

Third: Elements of Bank Credit

The elements of bank credit can be identified as follows:

1. **Personal Loan:**

Granted to individuals to meet personal financial needs, such as purchasing a car or paying for education. It is characterized by quick approval and is based on the borrower's income and credit history. It usually requires documentation proving repayment ability and has a defined repayment period with either a fixed or variable interest rate (Herd & Moynihan, 2025:133).

2. **Mortgage Loan:**

Used to purchase real estate, including houses or apartments. This type of loan is distinguished by long repayment periods—up to 30 years—with relatively low interest rates. It is based on the property’s appraisal and the borrower's income. A down payment is typically required, and the loan often includes additional fees such as insurance and appraisal costs (Melnychenko et al., 2022:27).

3. **Commercial Credit:**

Granted to businesses to finance daily operations or purchase equipment. It helps improve cash flow and enables companies to expand. It depends on the company's credit history and includes various types such as lines of credit and commercial loans.These are often structured based on accurate financial projections (Hofmann et al., 2021:2).

4. **Credit Cards:**

Issued to individuals or businesses to finance purchases without the need to pay the full amount immediately. They offer flexible usage with a set credit limit. Benefits include rewards and travel points, but outstanding balances must be paid on time to avoid high interest charges (Simahatie et al., 2024:1122).

5. **Lines of Credit:**Provide borrowers with access to funds as needed, up to a certain limit. Ideal for meeting variable financial needs such as emergency expenses. Interest is paid only on the amount drawn, offering repayment flexibility. However, effective management is necessary to avoid high costs (Chiu et al., 2022:444).

Fourth: Foundations for Classifying Bank Credit

There are several types of bank credit in all its forms, which may vary from one bank to another—and even more so from one country to another. However, the theoretical foundation remains the same. In the context of this research, bank credit will be classified according to the nature of the credit transaction (i.e., the subject of credit). There are two main types of credit: **cash credit** and **contingent credit**. This study will focus only on **cash credit**, which includes the following forms:

1. **Overdrawn Current Account:**

This allows the borrower to withdraw up to a specific credit limit even when their current account balance is zero. As a result, the account becomes overdrawn up to the credit amount, and repayment is typically not bound by a fixed term. Interest is calculated on the overdrawn balances based on the amount and duration of the overdraft (Yass, 2016:63).

2. **Discounted Commercial Papers:**
3. These include commercial papers due for payment at the balance sheet date. Discounting these instruments means converting them into immediate cash before their maturity date, with a deduction in value representing the cost paid by the bank for early settlement. This deduction corresponds to the period between the discounting date and the actual maturity (Al-Hasnawi & Riali, 2021:552).

4. **Loans and Advances:**

These include all secured and unsecured loans granted to individuals, as well as advances provided by commercial banks. Such loans generate significant returns, though they are associated with relatively low liquidity.

5. **Past-Due Debts:**

These are debts whose repayment is not guaranteed and remain unpaid after their due date (Houben, 2000:2).

Fifth: The Concept of Financial Stability

Despite the increasing interest in financial stability following the Southeast Asian crisis for nearly two decades, there is still no single, universally accepted definition of financial stability across all countries. Literature in this area shows two main approaches: one focusing on defining **financial stability itself** (Battiston et al., 2021:4), while the other focuses on defining its **opposite—financial instability**.

Ensuring the stability of the financial system—which plays a central role in financing development—is considered essential before any discussion of economic growth can take place. In this regard, maintaining the stability of the **banking system**, as one of the most critical components of the financial system, is seen as a necessary step toward achieving broader financial stability (Fabris, 2020:28).

Therefore, maintaining financial stability has become an increasingly important objective over the past decade in the context of economic policymaking.

More than twelve central banks and numerous financial institutions—including the International

Monetary Fund (IMF), the World Bank, and the Bank for International Settlements (BIS)—now issue regular reports on financial stability and dedicate a substantial portion of their work to studying and promoting it. The significance of financial stability goes beyond the simple notion of avoiding crises; it involves ensuring the resilience of the financial system and its capacity to support sustainable economic development (Aramonte et al., 2023:148).

The European Financial Reports defined financial stability as

"a financial system comprising financial intermediaries, markets, and market infrastructure, which is capable of withstanding shocks and financial imbalances. This reduces the likelihood of disruptions that could impede the financial intermediation process and significantly weaken the allocation of savings to profitable investment opportunities" (Drobyazko et al., 2020:301).

Hence, it can be said that financial stability reflects the system's ability to withstand economic shocks, based on its ability to continue performing its intermediary functions. (Topić-Pavković, 2024:32).

Sixth: The Importance of Financial Stability

The importance of financial stability lies in its significant role in addressing financial crises. Financial turmoil and crises are among the most prominent risks threatening the stability of the global economy. A prominent example of this is the subprime mortgage crisis that occurred in the United States in 2007, which had a significant impact on global economic stability. The problems of this crisis can be largely attributed to regulatory shortcomings, which failed to ensure the soundness of the financial system as a whole. As a result, there was insufficient preparation to confront the crisis that struck the financial sector, due to the lack of tools to assess its magnitude (Anado et al., 2020: 25).

This highlighted the necessity of **restructuring the regulatory and supervisory framework** of the financial sector, moving toward more comprehensive regulation. Hence, the importance of financial stability lies in its ability to prevent and mitigate financial crises. To this end, greater intervention in financial markets is required to **reduce risk severity**, and improve the governance of the global financial system through an integrated network of risk management authorities. This, in turn, reinforces ongoing financial stability (Phan et al., 2021:1820).

Seventh: Characteristics of Financial Stability

The key characteristics of financial stability can be summarized as follows:

1. **Efficiency in Resource Allocation:**

Facilitating the effective distribution of economic resources across geographic regions and over time, alongside other financial and economic processes such as savings, investment, lending, borrowing, liquidity creation and distribution, asset pricing, wealth accumulation, and output growth.

2. **Risk Assessment:**

The existence of effective mechanisms for dealing with financial crises when they occur.

3. **Resilience:**

The continued ability to perform essential financial functions even under external shocks or in the presence of accumulated imbalances (Mexmonov, 2020:2).

4. **Transparency:**

Providing accurate and clear information about assets and liabilities, which enhances confidence in the system.

5. **Trust:**

Stability of investor confidence, which encourages both investment and borrowing (Rohilla, 2024:22).

6. Balance:

A balance between supply and demand in financial markets, which reduces extreme fluctuations (Duffie, 2023:78).

7. Price Stability:

A low inflation rate and reduced price volatility, which contribute to overall economic stability.

8. Diversity of Financial Products:

The presence of a variety of financial instruments that cater to the different needs of investors (Adem, 2023:137; Shah et al., 2024:664).

9. Effective Regulation:

The existence of strong regulatory bodies that ensure the soundness of the financial system and prevent risks (Adeniran et al., 2024:1583).

10. Global Integration:

The financial system's ability to connect with global markets in a way that reinforces stability (Djumaev, 2024:100).

Eighth: Conditions for Achieving Financial Stability

To ensure financial stability, the following conditions must be met:

1. **The banking system must be capable of withstanding negative effects and dynamic market conditions**, and it should be able to absorb shocks without triggering cumulative processes that hinder the allocation of savings to investment opportunities (Rashid & Ibrahim, 2018:47).

2. **Banks must serve as safe repositories for depositors' funds**, protecting their interests and promptly meeting their obligations to support financial stability (Kedward et al., 2023:6).

3. Banks must be prepared to raise capital in response to increased market power, as banks with higher capital ratios compensate for non-performing loans, which reduces the risk of bank failure and enhances financial stability (Suleiman, 2020: 1089).).

4. Governments and central banks must implement regulatory policies through supervisory measures that govern commercial banks, regulating the volume of credit extended and the level of risk institutions are willing to bear. This may include assessing, pricing, identifying, and managing financial risks to mitigate potential threats (Božić, 2025:2)

5. The financial system must efficiently and smoothly direct resources from savers to investors, ensuring an effective geographical distribution of economic resources. Financial risks must also be accurately assessed, reasonably priced, and efficiently managed. Furthermore, the financial system must be flexible enough to easily absorb economic and financial shocks and surprises (Najia, 2025: 233).

Ninth: The Relationship Between the Balance of Monetary Credit and Financial Stability

The relationship between credit and financial stability is crucial, as it plays a fundamental role in determining the financial system's ability to withstand crises (Bozic and Bozic, 2025:3). This ensures that the credit balance is equal to the amount of money available through borrowing, which directly affects the liquidity available to businesses and individuals, contributing to enhanced economic activity (Owino, 2021:87). When credit is high, investment and growth opportunities increase, enhancing financial stability by providing the necessary resources for businesses (Ozili and Iormber, 2024:5).

However, an increase in monetary credit may also lead to financial risks if risk management is inadequate, potentially resulting in financial crises (Bhatt et al., 2023:237).

Monetary policies play a pivotal role in determining the levels of monetary credit in the economy. When central banks adopt expansionary policies, such as lowering interest rates or purchasing assets, this leads to an increase in the balance of monetary credit (Modugu & Dempere, 2022:220). This, in turn, can enhance financial stability by supporting economic growth; however, if these policies are unbalanced, they may cause a credit bubble that negatively affects the financial system (Khan et al., 2022:305).

From the above, it can be said that the relationship between the balance of monetary credit and financial stability is reflected through its impact on inflation levels. When monetary credit increases, demand for goods and services may rise, leading to higher prices. If there is no balance between supply and demand, inflation may become excessive, threatening financial stability. On the other hand, moderate inflation can stimulate economic growth, thereby enhancing stability. Therefore, economic policymakers must carefully monitor these dynamics to ensure price and credit stability.

Section Three – Statistical Description and Results of Hypothesis Testing

Quantitative and analytical methods can be employed to fulfill the objectives and requirements of the current research by using the statistical techniques approved for this study. The main hypotheses of the current study, formulated by the researchers in accordance with the research objectives, can be confirmed or rejected by applying a set of estimation methods and hypothesis tests to arrive at appropriate statistical decisions. The financial years from 2014 to 2023 of the Commercial Bank of Iraq (the research sample) were also studied.

The study included the independent variable (cash balance) and the dependent variable (financial stability), which was measured using several indicators across four equations. The first equation represented the capital adequacy ratio, the second included the asset quality ratio, the third included the profitability quality ratio, and the fourth included the liquidity ratio.

The following section will present the general statistical description of the set of variables, as well as a normal distribution test for the data distribution of the current research variables using the Jarque-Bera test. This test is a statistical tool used to assess whether sample data follow a normal distribution by analyzing skewness and kurtosis. The test calculates a value that reflects the degree to which the sample distribution deviates from a normal distribution. In order to accept the hypothesis of normal distribution, the test value must be less than 3 at a significance level greater than 0.05, indicating that the data are normally distributed, which represents the null hypothesis. However, if the test value exceeds 3 and the significance level is less than 0.05, it can be concluded that the data are not normally distributed. This helps researchers make informed decisions about the appropriate statistical methods to use.

This part will also focus on estimating the correlation relationship between the variables of banking credit policy and financial stability according to the above equations, as well as studying the impact relationship between the banking credit policy variable and the financial stability variable with its indicators, using the statistical software (SPSS version 29).

Furthermore, this section emphasizes analyzing the results of the (AlTMAN - Z-SCORE) model and testing the research hypotheses by examining the correlation hypothesis between banking credit represented by cash credit balance and financial stability with its indicators (capital adequacy ratio, asset quality ratio, profitability quality ratio, and liquidity ratio), as well as the impact hypothesis by measuring the effect of banking credit on financial stability.

In addition to coding and describing the research variables and their sub-indicators to facilitate the application of statistical analysis and data processing methods on the data collected from commercial banks listed on the Iraq Stock Exchange, which form the research sample. Table (1) illustrates the main research variables, their sub-dimensions,their symbols according to their English terminology, and the number of items in each dimension.

Table (1): Coding and Description of the Research Variables and Indicators

Symbol		Indicators	Variables
CRBA	CFI	Cash Credit Balance	**Bank Credit**
FIST	CAR	Capital Adequacy Ratio	**Financial Stability**
	AQR	Asset Quality Ratio	
	PQR	Profitability Quality Ratio	
	LIR	Liquidity Ratio	

Source: Prepared by the two researchers based on private data from the Iraq Stock Exchange.

First – Statistical Description and Testing the Nature of Data Distribution for the Research Variables According to Baghdad Commercial Bank:

Table (2) presents the statistical description of the research variables' arithmetic mean and standard deviation, along with the test of normal distribution for the data collected from Baghdad Commercial Bank, which is listed on the Iraq Stock ExchangeAnd the (Jarque-Bera) test was relied upon because it is more effective with small samples, while other tests such as (Shapiro-Wilk) are more effective with large samples , as shown below:

Table (2): Statistical Description and Normality Test of Research Variables Data According to Baghdad Commercial Bank For the Period (2014–2023)

Probability		Jarque-Bera		Standard Deviation		Arithmetic Mean		Indicator	Variable
0.118		1.792		2.689		5.183		CFI	Bank Credit
0.112	0.182	1.384	1.725	7.711	4.869	51.189	16.109	CAR	Financial Stability
	0.184		2.029		9.578		38.281	AQR	
	0.237		2.247		2.917		6.121	PQR	
	0.171		1.621		3.196		86.245	LIR	

Source: Prepared by the two researchers based on the statistical software (SPSS V.29).

1. Bank Credit Represented by (Cash Credit Balance - CFI)

The results of Table (2), related to the data of the Cash Credit Balance (CFI) variable for the Commercial Bank of Baghdad, indicate that the bank recorded a mean of (5.183) with a standard deviation of (2.689). To verify the normality of the data distribution, the Jarque-Bera test was applied. As observed, the test value reached (1.792) with a probability value of (0.118). This indicates that the probability value is greater than 0.05, suggesting that the data for the Cash Credit Balance variable at the Commercial Bank of Baghdad follows a normal distribution.

2. Financial Stability – First Equation (Capital Adequacy Ratio - CAR)

The results of Table (2), related to the data of the Capital Adequacy Ratio variable for the Commercial Bank of Baghdad, show that the bank achieved a mean of (16.109) with a standard deviation of (4.869). The Jarque-Bera test was used to determine the normality of the distribution. The test value was (1.725) with a probability value of (0.182). This value exceeds 0.05, indicating that the Capital Adequacy Ratio data for the Commercial Bank of Baghdad follows a normal distribution.

3. Financial Stability – Second Equation (Asset Quality Ratio - AQR)

The results of Table (2), concerning the Asset Quality Ratio variable for the Commercial Bank of Baghdad, reveal that the bank achieved a mean of (38.281) with a standard deviation of (9.578). To assess the normality of the data distribution, the Jarque-Bera test was applied, resulting in a value of (2.029) with a probability value of (0.184). Since the probability value exceeds 0.05, it can be inferred that the Asset Quality Ratio data for the Commercial Bank of Baghdad follows a normal distribution.

4. Financial Stability – Third Equation (Profitability Quality Ratio - PQR)

The results of Table (2), related to the Profitability Quality Ratio variable for the Commercial Bank of Baghdad, show a mean of (6.121) with a standard deviation of (2.917). The Jarque-Bera test was used to assess the data's normality. The test value was (2.247) with a probability value of (0.237). As the probability exceeds 0.05, this indicates that the Profitability Quality Ratio data for the bank follows a normal distribution.

5. Financial Stability – Fourth Equation (Liquidity Ratio - LIR)

According to the results of Table (2), related to the Liquidity Ratio variable for the Commercial Bank of Baghdad, the bank recorded a mean of (86.245) with a standard deviation of (3.196). The Jarque-Bera test was applied to assess the data's distribution normality, resulting in a value of (1.621) with a probability of (0.171). Since the probability is

above 0.05, it is likely that the Liquidity Ratio data for the Commercial Bank of Baghdad follows a normal distribution.

Second: Analysis of Altman Z-Score Model Results:

In this research, the Altman Z-Score model was applied to the Commercial Bank of Baghdad, the sample under study, to analyze its financial condition during the research period and to classify it based on credit risk and ability to continue operations. This analysis was based on the original formula of the model and the computed ratios derived from officially published financial statements.

The Altman Z-Score model in this study is based on four main indicators:

- **X1** = Working Capital / Total Assets
- **X2** = Retained Earnings / Total Assets
- **X3** = Earnings Before Interest and Taxes (EBIT) / Total Assets
- **X4** = Market Value of Equity / Book Value of Total Liabilities

The coefficients used are from the original **1968 Altman model**, as outlined in his study on bankruptcy prediction. These coefficients were derived using linear discriminant analysis on a sample of 66 U.S. companies. The coefficients (1.2, 1.4, 3.3, 0.6) used in this study are scientifically validated and adopted accordingly:

$$Z = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.0X5$$

By applying this equation, the results were obtained as follows:

Table (3): Z-Score Calculation Results According to the Altman Model

The condition	Area	Z-Score	X4 (Market Value of Equity / Book Value of Liabilities)	X3 (Earnings Before Interest and Taxes / Total Assets)	X2 (Retained Earnings / Total Assets)	X1 (Working Capital / Total Assets)	Year	The Bank
High probability of bankruptcy	Critical	1.1498	1.1329	0.1094	0.0265	0.0772	2014	BBOB
High probability of bankruptcy	Critical	1.7189	1.7225	0.1526	0.0804	0.0971	2015	BBOB
Potential financial uncertainty	Gray	1.8674	1.4059	0.1776	0.0343	0.2113	2016	BBOB
Potential financial uncertainty	Gray	1.9135	1.4895	0.1711	0.1214	0.1457	2017	BBOB
Potential financial uncertainty	Gray	1.9382	1.4792	0.1803	0.0775	0.2237	2018	BBOB
High probability of bankruptcy	Critical	1.7783	1.6408	0.1614	0.0355	0.1709	2019	BBOB
High probability of bankruptcy	Critical	1.1730	0.5299	0.1596	0.0453	0.0806	2020	BBOB
High probability of bankruptcy	Critical	1.6923	1.2587	0.1312	0.0975	0.1374	2021	BBOB
High probability of bankruptcy	Critical	1.6678	1.7574	0.1458	0.0602	0.0808	2022	BBOB
High probability of bankruptcy	Critical	1.6434	0.9782	0.1637	0.0458	0.2304	2023	BBOB

Source: Prepared by the researchers based on custom calculations derived from the data of the sample banks.

The results of the Altman Z-Score model calculations indicate varying levels of financial stability and bankruptcy risk for the bank under study during the period (2014–2023). Based on the traditional classification of the Z-Score index, the results are interpreted according to the following levels:

- If the Z-Score is greater than 2.9, the institution is considered to be in the Safe Zone, where the probability of bankruptcy is at its lowest.
- If the Z-Score ranges between 1.81 and 2.9, the institution is considered to be in the Grey Zone, indicating financial uncertainty and moderate risks that require supervisory actions.
- If the Z-Score is less than 1.81, the institution is considered to be in the Distress Zone, indicating a high probability of bankruptcy in the future.

Reviewing the results in Table (3), it is evident that most of the bank's Z-Score values ranged between the Grey Zone and the Distress Zone, as none exceeded the 2.9 threshold. A large proportion of the scores were below 1.81, reflecting the fragility of the financial stability of the bank under study. The Commercial Bank of Baghdad recorded an average Z-Score value that mostly falls within the Distress Zone, indicating a high level of bankruptcy risk. This necessitates urgent corrective measures to strengthen capital and improve financial and operational performance.

Based on the above, the results of the Altman Z-Score model show that the banking system within the research sample suffers from varying levels of financial risk. The bank needs to reinforce its capital base and improve the quality of its assets and profitability to avoid sliding completely into the Distress Zone. This analysis underscores the importance of regularly monitoring financial performance indicators and linking them with risk management strategies to ensure the enhancement of financial stability in banks.

Below is a table illustrating the classification of safety levels according to Altman's criteria:

Table (4): Classification of the Commercial Bank of Baghdad According to the Average Z-Score

Safety Level	Average Z-Score	The Bank
Distress Zone	1.2752	Commercial Bank of Baghdad

Source: Prepared by the researchers based on custom calculations derived from the data of the sample banks.

Third: Hypothesis Testing and Analysis and Interpretation of Results:

1. Correlation Hypothesis:

Main First Hypothesis: There is a statistically significant correlation between the bank credit policy, represented by (Cash Credit Balance accounts), and financial stability indicators (Capital Adequacy Ratio, Asset Quality Ratio, Profitability Quality Ratio, and Liquidity Ratio).

The results of Table (5) show a correlation coefficient of (0.822) between the Cash Credit Balance indicator and financial stability. The strength of the correlation between this indicator and the financial stability indicators ranged from (0.587) between the Cash Credit Balance and Capital Adequacy Ratio, to (0.883) between the Cash Credit Balance and Profitability Quality Ratio. This means that the Cash Credit Balance plays an important role in enhancing financial stability, showing particularly strong correlation with profitability quality. This suggests that improving the management of cash credit can effectively enhance financial stability indicators.

Table (5): Correlation Matrix Between the Bank Credit Indicator and Financial Stability Indicators

	CFI	CAR	AQR	PQR	LIR	FIST
CFI	1					
CAR	0.587**	1				
AQR	0.809**	0.564**	1			
PQR	0.883**	0.663**	0.562**	1		
LIR	0.861**	0.834**	0.812**	0.807**	1	
FIST	0.822**	0.825**	0.662**	0.532**	0.908**	1

Source: Prepared by the researchers using the statistical software (SPSS V.29).

2. Impact Hypothesis:

Main Second Hypothesis: There is a statistically significant effect of the bank credit policy, represented by (Cash Credit Balance accounts), on financial stability indicators (Capital Adequacy Ratio, Asset Quality Ratio, Profitability Quality Ratio, and Liquidity Ratio).

The results of Table (6) show a statistically significant effect of the Cash Credit Balance indicator on financial stability at a significance level below (0.05). This means that a one-unit increase in the Cash Credit Balance indicator leads to an improvement of (0.139) in the regression coefficient for financial stability. This corresponds to a stable regression coefficient with a value of (Beta = 0.661), as expressed in the following equation:

$$y = a + b\,x$$
$$y = 0.139 + 0.661 * x$$

Where:

Y = Dependent variable (Financial Stability)

X = Independent variable (Cash Credit Balance Indicator)

It is also noted that the impact relationship achieved a calculated T-value of (26.440), indicating acceptance of the hypothesis that there is an effect of the Cash Credit Balance indicator on financial stability and its indicators (Capital Adequacy Ratio, Asset Quality Ratio, Profitability Quality Ratio, and Liquidity Ratio) in the Commercial Bank of Baghdad, the research sample.

Based on the above, it can be concluded that the Cash Credit Balance has a significant positive effect on the financial stability of commercial banks. This reflects the importance of improving the management of cash credit to enhance the stability and efficiency of financial institutions. Accordingly, the current hypothesis is accepted since the p-value is less than (0.05).

Table (6): Regression Coefficient Results of the Bank Credit Indicator on Financial Stability and Its Indicators

Probability	Financial Stability							Model
	Adjusted Coefficient of Determination	Coefficient of Determination (R^2)	Calculated F-Value	Calculated T-Value	Standard Weights		Unstandardized Weights	
					Beta Value	Error Term	Regression Coefficient Value	
0.029	0.798	0.859	36.251	26.440	0.66	0.025	0.139	Cash Credit Balance

Source: Prepared by the researchers using the statistical software (SPSS V.29).

Chapter Four – Conclusions and Recommendations

First – Conclusions:

1. The results indicate that the Cash Credit Balance has a significant positive impact on the financial stability of commercial banks. This underscores the importance of improving cash credit management to enhance the stability and efficiency of financial institutions.
2. The Commercial Bank of Baghdad, which adopted a conservative credit policy in the use of deposits and maintained moderate liquidity ratios, demonstrated more stable financial performance during periods of volatility. This confirms the necessity of linking liquidity management with lending policies within safe banking limits.
3. The results indicate that bank stability is not achieved solely through the availability of capital or liquidity. Rather, it requires an integrated approach between credit policies and other operational strategies, particularly through enhancing administrative efficiency in controlling costs, diversifying revenues, and improving the quality of the credit portfolio.
4. Baghdad Commercial Bank revealed its commitment to excellence in banking and the standards of all stakeholders, which calls for new approaches to slightly enhance performance efficiency towards more effective and sustainable business operations.

Second – Recommendations:

1. Organizations must focus on developing effective cash credit management strategies, including improving evaluation and monitoring mechanisms, enhancing employee training in this area, and adopting modern technologies to enhance operational efficiency.
2. It is important for banks to maintain high levels of liquidity to ensure safety and to prevent excessive use of deposits to finance credit. This ensures the ability to meet urgent needs and supports the financial position in line with liquidity management requirements, in line with Basel standards.
3. It is essential for banks experiencing declining profitability indicators, despite high asset quality, to periodically review their credit and operational policies and redirect their investments toward channels that generate tangible economic returns, without compromising banking soundness.
4. It is necessary to integrate credit, investment, and financing policies into a unified approach aimed at achieving comprehensive financial stability. They must also avoid treating operational indicators in isolation, as this could lead to conflicting objectives.

References

1. Adem, M. (2023). Impact of income diversification on bank stability: a cross-country analysis. Asian Journal of Accounting Research, 8(2), 133–144.
2. Adeniran, I. A., Abhulimen, A. O., Obiki-Osafiele, A. N., Osundare, O. S., Agu, E. E., & Efunniyi, C. P. (2024). Strategic risk management in financial institutions: Ensuring robust regulatory compliance. Finance & Accounting Research Journal, 6(8), 1582–1596.
3. Al-Alfi, A. A. (2021). Bank Credit and Credit Analysis. Cairo: Dar Al-Fikr Al-Jami'i.
4. Al-Bahadli, K. T. (n.d.). Bank Credit Policies in Iraq. Baghdad: Previous source, p. 146.
5. Al-Slehat, Z. A. F., Almanaseer, S. R., Al Sharif, B. M. M., Al-Haraisa, Y. E., Aloshaibat, S. D., & Almahasneh, M. A. (2024). Creditworthiness Criteria According to the 5Cs Model and Credit Decision: The Moderating Role of Intellectual Capital. International Review of Management and Marketing, 14(6), 274.
6. Anadu, K., Kruttli, M., McCabe, P., & Osambela, E. (2020). The shift from active to passive investing: Risks to financial stability? Financial Analysts Journal, 76(4), 23–39.
7. Aramonte, S., Schrimpf, A., & Shin, H. S. (2023). Non-bank financial intermediaries and financial stability (pp. 147–170). Edward Elgar Publishing.

8. Battiston, S., Dafermos, Y., & Monasterolo, I. (2021). Climate risks and financial stability. Journal of Financial Stability, 54, 100867.
9. Bhatt, T. K., Ahmed, N., Iqbal, M. B., & Ullah, M. (2023). Examining the determinants of credit risk management and their relationship with the performance of commercial banks in Nepal. Journal of Risk and Financial Management, 16(4), 235.
10. Bozic, A. (2025). Commercial Banking and Financial Stability: Evaluating Internal and External Determinants. Journal of Business and Economic Options, 8(1), 1–14.
11. Chiu, I. H. Y., Kokkinis, A., & Miglionico, A. (2022). Addressing the challenges of post-pandemic debt management in the consumer and SME sectors: A proposal for the roles of UK financial regulators. Journal of Banking Regulation, 23(4), 439–457.
12. Diamond, D. W., & Dybvig, P. H. (1983). Bank runs, deposit insurance, and liquidity. Journal of Political Economy, 91(3), 401–419.
13. Drobyazko, S., Barwinska-Malajowicz, A., Slusarczyk, B., Chubukova, O., & Bielialov, T. (2020). Risk management in the system of financial stability of the service enterprise. Journal of Risk and Financial Management, 13(12), 300.
14. Duffie, D. (2023, August). Structural Changes in Financial Markets and the Conduct of Monetary Policy. In Federal Reserve Bank of Kansas City Symposium (pp. 77–119).
15. Elahi, A. R., Ahmed, A., Majid, S., & Asif, M. F. (2021). Critical factors associated with the access to bank credit: An exploratory study. Humanities and Social Sciences Reviews, 9(3), 135–144.
16. Fabris, N. (2020). Financial stability and climate change. Journal of Central Banking Theory and Practice, 9(3), 27–43.
17. Gafrej, O., & Boujelbéne, M. (2022). The impact of performance, liquidity and credit risks on banking diversification in a context of financial stress. International Journal of Islamic and Middle Eastern Finance and Management, 15(1), 66–82.
18. Geva, B., Grünewald, S. N., & Zellweger-Gutknecht, C. (2021). The e-Banknote as a 'Banknote': A Monetary Law Interpreted. Oxford Journal of Legal Studies, 41(4), 1119–1148.
19. Hassan, H. (n.d.). Credit Indicators and Financial Stability. Baghdad: Previous source.
20. Herd, P., & Moynihan, D. (2025). Administrative Burdens in the Social Safety Net. Journal of Economic Perspectives, 39(1), 129–150.
21. Hofmann, E., Templar, S., Rogers, D., Choi, T. Y., Leuschner, R., & Korde, R. Y. (2021). Supply chain financing and pandemic: Managing cash flows to keep firms and their value networks healthy. Rutgers Business Review, 6(1), 1–23.
22. Jarr, W. (n.d.). The Role of Bank Credit in Economic Development. Baghdad: Previous source.
23. Juhro, S. M., Syarifuddin, F., & Sakti, A. (2025). Economic Implications of Islamic Social-Public Finance. In Inclusive Welfare (pp. 173–204). Springer Nature Singapore.
24. Kedward, K., Ryan-Collins, J., & Chenet, H. (2023). Biodiversity loss and climate change interactions: financial stability implications for central banks and financial supervisors. Climate Policy, 23(6), 763–781.
25. Khan, I., Khan, I., Sayal, A. U., & Khan, M. Z. (2022). Does financial inclusion induce poverty, income inequality, and financial stability? Empirical evidence from the 54 African countries. Journal of Economic Studies, 49(2), 303–314.
26. Melnychenko, O., Osadcha, T., Kovalyov, A., & Matskul, V. (2022). Dependence of housing real estate prices on inflation as one of the most important factors: Poland's case. Real Estate Management and Valuation, 30, 25–41.
27. Mexmonov, S. (2020). The Ways to Ensure the Financial Stability of Agriculture under Conditions of Modernization of the Economy. Архив научных исследований, 33(1).
28. Modugu, K. P., & Dempere, J. (2022). Monetary policies and bank lending in developing countries: evidence from Sub-Sahara Africa. Journal of Economics and Development, 24(3), 217–229.
29. Naili, M., & Lahrichi, Y. (2022). The determinants of banks' credit risk: Review of the literature and future research agenda. International Journal of Finance & Economics, 27(1), 334–360.
30. Nwachukwu, G. (2024). Enhancing credit risk management through revalidation and accuracy in financial data: The impact of credit history assessment on procedural financing. International Journal of Research Publication and Reviews, 5(11), 631–644.
31. Oino, I. (2021). Bank solvency: The role of credit and liquidity risks, regulatory capital and economic stability. Banks and Bank Systems, 16(4), 84–100.
32. Omowole, B. M., Urefe, O., Mokogwu, C., & Ewim, S. E. (2024). Integrating fintech and innovation in microfinance: Transforming credit accessibility for small businesses. International Journal of Frontline Research and Reviews, 3(1), 090–100.

33. Ozili, P. K., & Iorember, P. T. (2024). Financial stability and sustainable development. International Journal of Finance & Economics, 29(3), 2620–2646.
34. Ullah, S., Ullah, A., & Zaman, M. (2024). Nexus of governance, macroeconomic conditions, and financial stability of banks: A comparison of developed and emerging countries. Financial Innovation, 10(1), Article 5.