Journal of Information Systems Engineering and Management
2025, 10(5s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

The Role of Cash Flow Statement in Reducing Liquidity Risks in a Number of Iraqi Commercial Banks

Karam Amer Khalil Al-Alaf[1], Dr. Nawal Younis Al-Murad[2], Dr. Sameer Taha Yaseen[3]
Northern Technical University , Administrative Technical College , Department of Business Administration Technologies
Karam.alalaf23@ntu.edu.iq[1]
nawal_yonis@ntu.edu.iq[2]
samitybz@ntu.edu.iq [3]

ARTICLE INFO

Received: 05 Oct 2024

Revised: 10 Dec 2024

Accepted: 24 Dec 2024

ABSTRACT

The current research aims to reveal the role of cash flow disclosure in reducing liquidity risks in a number of Iraqi commercial banks, as the research problem crystallized in identifying the appropriate financial indicators to measure and evaluate the bank liquidity ratio, which is an essential part of the research problem that stems from the lack of clear prior planning and a sound strategy that serves commercial banks, and to achieve what it aims for, the research adopted the (descriptive analytical) approach in presenting the intellectual frameworks, and processing the financial data of the banks in the study sample, which number (25) Iraqi commercial banks, so that the research reached a set of results, the most important of which is the existence of a close relationship between the quality of cash flow management and the level of banks' exposure to liquidity risks. Banks that are characterized by good management of their cash flows are able to face market fluctuations with higher efficiency.

Keywords: Cash flows, liquidity risks, Iraqi commercial banks.

INTRODUCTION:

The cash flow statement is one of the basic financial documents that must be prepared at the end of the fiscal year. It provides vital information about the movement of incoming and outgoing cash, enabling management in the banking sector to track the sources and uses of cash. This data helps to draw a clear picture of the bank's ability to achieve its goals and make financial decisions, knowing that these decisions affect the bank's performance. Therefore, evaluating the financial performance of liquidity has become an indispensable necessity. This requires starting from understanding the current situation of the bank and customers and analyzing their ability to meet obligations towards loans based on accurate and reliable information.

In the world of banking, where financial decisions affect the performance of banks, evaluating and monitoring the financial performance of banks has become indispensable. Understanding the financial position of customers and analyzing their ability to meet their obligations towards the lending bank is essential to ensuring the stability of banks and their ability to meet their customers' requests for withdrawals and provide financing for their projects. To achieve these vital goals, financial analysts rely on the cash flow statement, prepared in accordance with the seventh international standard and accounting rule (1) issued by the Accounting and Supervisory Standards Board.

This statement is divided into three categories: cash flows from operating activities, cash flows from investment operations, and cash flows from financing operations. This statement is used to provide users with comprehensive information about the company's cash revenues and expenses, which helps assess its ability to generate sufficient cash flows to meet its obligations.

Liquidity risks increase if bank managements do not give sufficient importance to preparing and analyzing the cash flow statement, which leads to difficulty in preparing and analyzing this data by the finance department employees, and relying on the historical information contained in the income and balance sheets without providing the cash flow statement. The guidance regulation issued by the Central Bank of Iraq on 12/27/2015 indicates that the loan applicant must submit a cash flow statement as part of the credit granting requirements.

1-1 Research objectives:

The research mainly aims to explore the ability of cash flow disclosure in reducing liquidity risks, and addressing the challenges facing banks in this context. Based on the importance of the study, this study seeks to achieve the following objectives:

- Clarify the implications that cash flow disclosure actually carries on the impact of the procedures that must be adopted to manage liquidity effectively without any risks.
- Reveal the nature, size and direction of the effects that cash flow disclosure leaves on reducing liquidity risks.

1-2 Research importance:

Banks seek to achieve survival, growth and continuity, but they may face multiple challenges such as liquidity risks during their life cycle, which is an undesirable problem for all stakeholders in the financial markets. The importance of the current study is highlighted by revealing the role of cash flows in reducing liquidity risks, which is considered an early warning tool that helps maintain the continuity of banks' activity and competitive position based on available information. The importance of this study can be summarized as follows:

- Focusing on the importance of disclosing cash flows in analyzing and managing liquidity risks for banks.
- Clarifying the mechanism of the impact of cash flow disclosure on banks' ability to meet their financial obligations.

1-3 Research hypothesis:

The disclosure of cash flows is likely to help diagnose the differences between Iraqi banks exposed to liquidity risks and banks not exposed to them during the period (2018-2022).

1-4 Research Methodology:

To achieve the research objectives, the "descriptive analytical" approach was used, which is the scientific approach that achieves the research objectives. It is based primarily on clarifying reality as it is, so it is expressed in quantitative and qualitative formulas, and showing the relationship between each of the independent and dependent variables. Clarifying the implications of the disclosure of financial indicators of banking liquidity risks, as well as the impact of the procedures that must be adopted to manage liquidity effectively without any risks.

1-5 Research limits:

- Spatial boundaries: The research represents an application on commercial banks listed in the Iraq Stock Exchange.
- Time boundaries: The research was applied during the period from (2018-2022), due to the availability of data on the study variables.

1-6 The Research Plan:

The current research was divided into two main sections. The first section was devoted to presenting the theoretical aspect explaining cash flows and banking liquidity risks, while the second section included testing the research hypothesis and verifying its validity, in addition to presenting the most important conclusions reached by the research, and the most important proposals presented to the banks studied.

THE FIRST TOPIC / THEORETICAL FRAMEWORK OF THE STUDY:

The cash flow statement is one of the most important functions performed by the financial management to know the future financial position of the company. The cash flow statement provides indicators of the liquidity risks that companies may face. The importance of this type of statement is highlighted in helping companies make more effective strategic decisions, as it provides accurate information about the availability of cash liquidity needed to cover financial and operating obligations, which contributes to avoiding liquidity crises and ensuring the continuity of business activity. These statements also enable the financial management to forecast future cash flows and identify periods of cash deficit and surplus, thus enabling companies to plan to obtain appropriate financing or invest surpluses in a way that achieves financial returns.

2-1 The concept of cash flow statement

The cash flow statement is one of the basic financial statements determined by the organization and aims to try to clarify how cash is generated, obtained and used during a period of time. This statement is considered a tool for evaluating the organization's position and judging the efficiency of administrative performance (Bayz et al, 2021, 872).

It shows the cash receipts and cash payments that occurred during the period, i.e. it shows the source of cash and where it was spent, as well as the reasons for the change in the cash balance. This information cannot be accessed through any other financial statements (Bayz et al., 2021, 873). The purpose of the cash flow statement is to help stakeholders understand the sources and uses of cash, evaluate the organization's cash generation capabilities, and evaluate its liquidity and financial flexibility. Unlike the income statement and balance sheet, which focus on accrual accounting measures, the cash flow statement focuses only on cash transactions. It provides a clear and concise picture of the organization's cash position and cash-related activities (Dalwadi, 2023, 36).

Researchers believe that the cash flow statement is a financial document that provides a summary of the amount of cash and cash equivalents entering and leaving the company, and measures the company's success in managing its cash position, i.e. the company's success in generating cash to pay its debt obligations and finance its operating expenses. The cash flow statement is divided into three sections: operating activities, investing activities, and financing activities.

2-2 The importance of the cash flow statement

The cash flow statement is important in financial analysis for several reasons, the most important of which are the following: (Dalwadi, 2021, 39)

- Cash flow assessment: It provides a comprehensive understanding of how the organization generates and uses cash. By analyzing the cash flow statement, stakeholders can assess the sustainability and quality of the organization's cash flows, as well as its ability to generate sufficient cash to meet its obligations and finance future growth.
- Liquidity assessment: The cash flow statement helps assess an organization's liquidity position by highlighting its ability to generate cash from operations, enabling stakeholders to determine whether the organization has enough cash to cover its short-term obligations and working capital requirements.
- Financial flexibility analysis: The cash flow statement helps assess an organization's financial flexibility and its ability to respond to changing market conditions. By examining financing activities, stakeholders can understand ways to raise capital, manage debt, and allocate resources to support its strategic initiatives.
- Making investment decisions: Investors and analysts rely on the cash flow statement to evaluate the organization's ability to generate cash, which helps them understand how effectively the organization converts its sales and profits into cash and guide investment decisions based on the organization's cash flow generation potential.

2-3 Sources for preparing the cash flow statement

To accurately prepare the cash flow statement, three main sources are relied upon, derived from financial reports and available accounting information, which the researcher explains as follows: (Dergham, 2008, 49) (Kieso et al., 2001, 1313)

- Statement of financial position: This statement represents the backbone of the company's financial information, as it provides a comprehensive view of assets, liabilities, and equity. Using the statement of financial position, changes that occur throughout the fiscal year can be tracked, such as increases or decreases in inventory or accounts receivable and debts, and this information is essential because it helps determine cash flows associated with investment and financing activities. (Hakar Abu Bakr Bayez et al., 2021, 876)
- Statement of income: While the statement of financial position provides a comprehensive overview of the overall financial position, the income statement focuses on the organization's financial performance during

a specific period. It reveals details of the revenues achieved and the expenses incurred, resulting in net profit or loss. The income statement is not only limited to showing profitability, but is considered the primary source for understanding cash flows resulting from operating activities. Through this statement, we know how much cash flowed into the organization from its sales and how much was paid to cover operating costs, which provides a clear view of the available liquidity. (Al-Zubaidi, 2004, 79).

- General Ledger: It is the place where all daily financial operations of the organization are recorded. It is a record that includes every financial transaction, and accurate details can be accessed about the exact sources of cash and how it is used. (Al-Hasnawi, 2018, 32). Figure (1) shows these sources as follows:

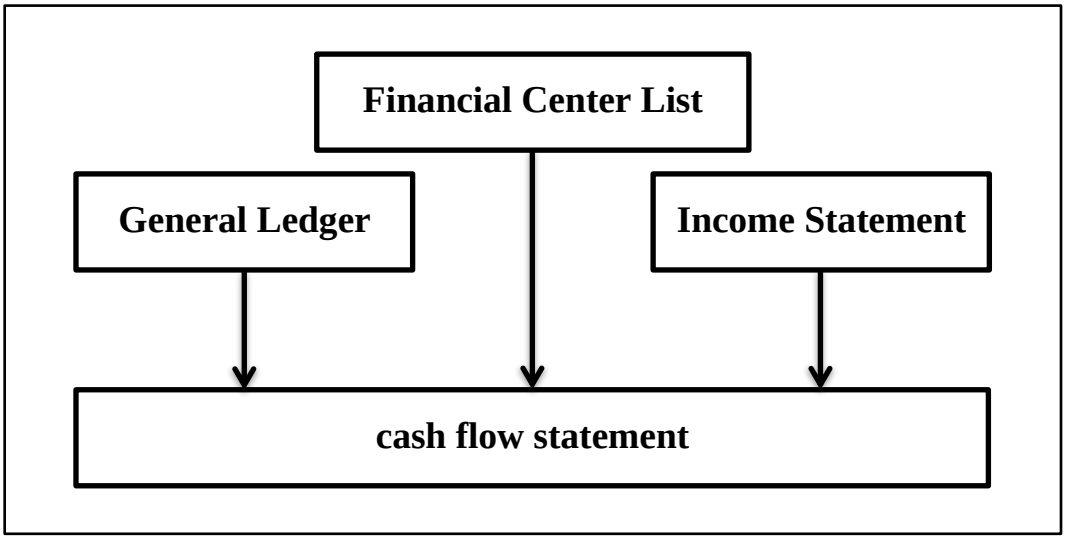

Figure (1): Sources for preparing the cash flow statement

Source: Prepared by the researchers

2-4 The importance of bank liquidity

Liquidity is of particular importance to banks, especially compared to non-financial companies, as the flow of cash balances to and from the bank is huge and fast, specifically compared to the capital base, in addition to the difficulty of anticipating or predicting the size and timing of the flow of cash out of the bank, taking into account that the largest part of the bank's resources are exposed to this flow and banks need liquidity to meet their customers' needs for money, and customers meet their liquidity needs either by withdrawing their deposits from banks or by borrowing from them, and since these needs are continuous, therefore; banks must always be prepared to meet such requirements, because this readiness gives them the following advantages (Bouabdelli and Ami Saeed, 2014, 104):

- Appearing in the risk-sensitive financial market as a safe bank capable of fulfilling its obligations.
- Enhancing the confidence of depositors and borrowers alike, and emphasizing the possibility of responding to their requirements when they arise.
- It is considered a positive indicator for the financial market, analysts, depositors and management.
- Confirming the ability to meet obligations and commitments.
- Avoiding forced sales of some assets and the negative consequences that may result from that.
- Avoiding paying higher costs of funds.
- Avoiding resorting to borrowing from the central bank.

2-5 Sources of banking liquidity and the factors affecting it

Commercial banks maintain liquidity to meet the demand for deposits of all kinds and avoid resorting to the central bank to refinance or borrow from other banks on the one hand, and on the other hand to exploit investment

opportunities, considering that banks are one of the commercial companies that seek, as a whole, to achieve the maximum possible profit (Rajaraj, 2014, 264).

Bank liquidity is often distinguished between two components: present liquidity and quasi-cash liquidity. Present liquidity is represented by the cash assets owned by the bank, which is the sum of the cash it holds, whether in local or foreign currency, and cash deposits with the central bank (legal reserve), in addition to checks under collection presented by customers and deposits with other banks.(Yassen, & Alrefaee, 2022) Quasi-cash liquidity is the assets that generate a return for the bank, and can be converted into present liquidity as quickly as possible and at the lowest possible cost. It consists of assets that can be sold or mortgaged, such as: government bonds, discounted commercial papers (bill of exchange, promissory note, etc.) (Meriem & Ahmed, 2023, 96). Commercial banks can obtain liquidity either by liquidating some of their assets or by arranging obligations on them. On the assets side, liquidity is achieved through (Meriem & Ahmed, 2023, 97):

- Customers paying off due loans and their interest, and banks collecting their investments that have expired.(Yaseen, 2023)
- Selling some assets before they mature in secondary markets, such as: selling stocks, bonds and bond loans. As for the liabilities side, this is done through developing deposits (Rajraj, 2014, 264).

Regarding the factors affecting bank liquidity: There are a group of factors that have an impact on the amount of liquidity in commercial banks, the most important of which are (Institute of Banking Studies, 2012, 2):

- Deposit and withdrawal operations on deposits: Deposit withdrawal operations lead to a reduction in the cash fund and the commercial bank's reserves at the Central Bank and thus to a reduction in its liquidity. Deposit operations - i.e. converting legal currency into bank deposits - play a role in improving the liquidity of the commercial bank.
- Balance of clearing operations between banks: The liquidity of the commercial bank increases if it appears that its current account balance is in credit with the Central Bank as a result of settling its accounts with other commercial banks operating in the country. In this case, new cash resources are added to its cash reserves that it keeps at the Central Bank, which increases its cash balances.
- The position of the central bank in relation to the bank: The central bank, as a representative of the monetary authority, has the ability to influence banking liquidity by providing commercial banks with the required cash from paper and metal money. If the central bank adopts a policy of reducing the currency supply, it will work to reduce the size of the cash balances on hand or the cash reserves available to it, and reduce its ability to grant loans. This central bank policy depends on raising the rediscount rate and selling government bonds in the open market, and raising the legal cash reserve ratio. The opposite happens in the event of expanding the currency supply, because this leads to an increase in the cash balances of banks, and expands their banking liquidity, which allows for expanding their lending capacity and facing various withdrawals of currency.

2-6 Time liquidity gap

Liquidity gaps refer to the mismatch between the maturities of assets and liabilities. Gaps represent periods of time where liabilities are greater than assets or vice versa, leading to a liquidity surplus or deficit. Liquidity management is a critical task for banks to ensure their ability to meet their financial obligations on time (Bessis, 2015, 33).

In Figure (2), three basic cases of liquidity gaps are presented as follows:

- Narrow liquidity gap: where assets and liabilities are almost identical over time.
- Increasing cumulative gap: where assets and liabilities continuously exceed, leading to an increase in liquidity surplus over time.
- Widening deficit: where assets exceed liabilities, leading to increasing pressure on liquidity.

Managing these gaps is crucial for banks to ensure their ability to meet their financial obligations without falling into a liquidity crisis.

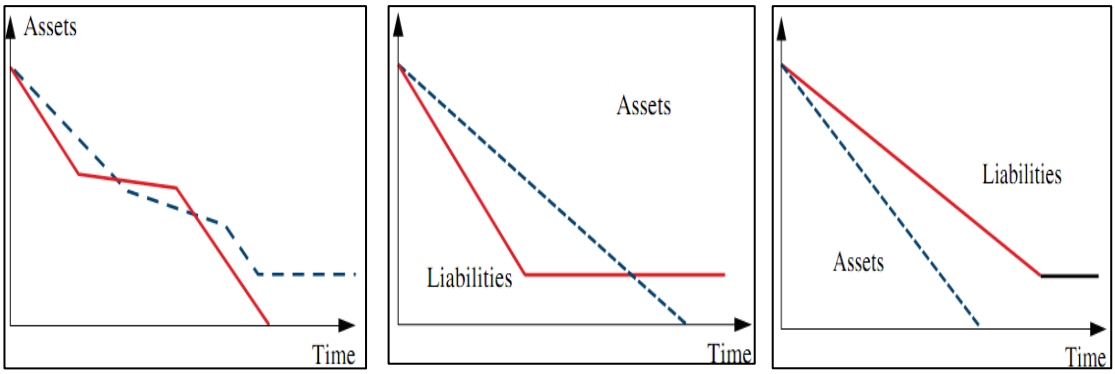

Figure (2): Time liquidity gap

Source: Bessis, J. (2015).Risk management in banking, Fourth edition.

THE SECOND TOPIC / FIELD STUDY:

This section represents the applied and practical aspect of the current research, as it includes presenting and discussing the results of testing the research hypothesis through using the two methods of factor analysis and growth to show the extent to which the financial indicators derived from the cash flow statement of the study sample banks can be used to reduce banking liquidity risks.

To obtain accurate results, the famous statistical program SPSS-27, known as the "Statistical Package for Social Sciences" or known as the "Statistical Product and Service Solution" in its advanced versions, was used to test the study hypotheses. The office program EXCEL was also used to implement the graphic forms that support the analysis of the research data.

3-1 Testing the Research Hypothesis

The third study hypothesis states that it is likely that the disclosure of cash flows will help in diagnosing the differences between Iraqi banks exposed to liquidity risks and banks not exposed to them during the period (2018-2022).

To verify this hypothesis, the logistic functions that achieved significant results, namely functions (8, 9, 10), will be used to calculate the probability of banks being exposed to liquidity risks by substituting the values of the financial indicators, which number (11) indicators in the functions mentioned above. If the calculated probability value for the bank is less than (0.5) (failure case = 0), the bank is classified as not exposed to liquidity risks. However, if the calculated probability value for the bank is greater than (0.5) (success case = 1), the bank is classified as exposed to liquidity risks.

3-1-1 Cash and Balances to Total Assets Ratio Y1

Table (1) shows the probabilities of exposure of commercial banks in the study sample to liquidity risks according to the cash and balances to total assets ratio indicator using equation (8). The table shows that the logistic function (8) succeeded in classifying (21) banks, at a rate of (84%), to their true status, while it failed to classify (4) banks, at a rate of (16%), to their non-existent status. These banks, according to the cash and balances to total assets ratio indicator, are actually classified as not exposed to liquidity risks, but they were classified on the basis that they are exposed to liquidity risks. They are: Al-Tayf Islamic Bank for Investment and Finance, Al-Qurtas Islamic Bank for Investment and Finance, Al-Mansour Investment Bank, and Al-Thiqa International Islamic Bank.

Table (1): Classification of commercial banks in the study sample according to their exposure to liquidity risks or not according to the cash and balances to total assets ratio indicator (Y1)

S	Banks	Y1 actual	Probability (P(Y1	Y1 predicted	Classification status
1	Erbil Bank	0	0.41362	0	✓
2	Mosul Bank	0	0.40809	0	✓
3	Economy Bank	1	0.60234	1	✓
4	Cihan Bank	1	0.61082	1	✓
5	Kurdistan Bank	0	0.31309	0	✓
6	Tayf Bank	0	0.69858	1	×
7	South Bank	1	0.60439	1	✓
8	Across Iraq Bank	1	0.61634	1	✓
9	Qurtas Bank	0	0.52447	1	×
10	Noor Iraq Bank	1	0.69668	1	✓
11	Al-Ahli Bank	1	0.55889	1	✓
12	United Bank	1	0.60571	1	✓
13	Mansour Bank	0	0.61527	1	×
14	World Bank	1	0.60986	1	✓
15	Sumer Bank	0	0.40546	0	✓
16	Commercial Bank	1	0.60710	1	✓
17	Gulf Bank	1	0.60692	1	✓
18	Zain Iraq Bank	1	0.60691	1	✓
19	Al-Ataa Bank	1	0.60649	1	✓
20	Credit Bank	0	0.41103	0	✓
21	Elaph Bank	1	0.61206	1	✓
22	Amin Iraq Bank	0	0.31178	0	✓
23	Development Bank	1	0.59088	1	✓
24	Middle East Bank	1	0.57533	1	✓
25	Trust Bank	0	0.58790	1	×

Source: Results of binary logistic regression for the first factor, SPSS-27 output

Table (2) shows the number of correctly classified and incorrectly classified banks with the percentage of correct classification.

Table (2): Predicting the exposure of commercial banks in the study sample to liquidity risks or not according to the indicator Ratio of cash and balances to total assets (Y1)

Classification Table				
Observed		Predicted		
		Y_1		Percentage Correct
		0.00	1.00	
Y_1	0.00	6	4	60.0
	1.00	0	15	100.0
Overall Percentage				84.0
The cut value is 0.500				

Source: Results of binary logistic regression for the first factor, SPSS-27 output

Table (2) shows that only (4) banks out of (10) banks not exposed to liquidity risk were classified as exposed to liquidity risk, meaning that the correct classification rate for banks not exposed to liquidity risk is (60%). While all (15) banks exposed to liquidity risk were classified correctly at a rate of (100%). The correct classification rate was (84%), which indicates the good suitability of the logistic model (Equation (8)) in representing the study data in the event that the liquidity risk indicator is the ratio of cash and balances to total assets.

3-1-2 Total Loans to Total Deposits Ratio Y3

Table (3) shows the probability of exposure of commercial banks in the study sample to liquidity risks according to the indicator of the ratio of total loans to total deposits using equation (9). The table shows that the logistic function (9) succeeded in classifying (22) banks with a percentage of (88%) to their true status, while it failed to classify (3) banks only with a percentage of (12%) to their non-existent status. These banks, according to the indicator of the ratio of total loans to total deposits, are classified in a real way as not exposed to liquidity risks, but they were classified as exposed to liquidity risks, namely: Noor Al-Iraq Islamic Bank for Investment and Finance, United Investment Bank, and Trust International Islamic Bank.

Table (3): Classification of commercial banks in the study sample according to their exposure to liquidity risks or not according to the indicator of the ratio of total loans to total deposits (Y3)

S	Banks	Y1 actual	Probability (P(Y1	Y1 predicted	Classification status
1	Erbil Bank	1	0.82794	1	✓
2	Mosul Bank	1	0.80548	1	✓
3	Economy Bank	1	0.77999	1	✓
4	Cihan Bank	1	0.81683	1	✓
5	Kurdistan Bank	1	0.82588	1	✓
6	Tayf Bank	1	0.76211	1	✓
7	South Bank	1	0.78932	1	✓
8	Across Iraq Bank	0	0.43826	0	✓
9	Qurtas Bank	0	0.31365	0	✓
10	Noor Iraq Bank	0	0.75277	1	×
11	Al-Ahli Bank	1	0.52810	1	✓

12	United Bank	**0**	**0.79522**	**1**	✗
13	Mansour Bank	**1**	**0.83425**	**1**	✓
14	World Bank	**1**	**0.81292**	**1**	✓
15	Sumer Bank	**1**	**0.79408**	**1**	✓
16	Commercial Bank	**1**	**0.80124**	**1**	✓
17	Gulf Bank	**1**	**0.80048**	**1**	✓
18	Zain Iraq Bank	**1**	**0.80045**	**1**	✓
19	Al-Ataa Bank	**1**	**0.79862**	**1**	✓
20	Credit Bank	**1**	**0.81768**	**1**	✓
21	Elaph Bank	**1**	**0.82184**	**1**	✓
22	Amin Iraq Bank	**0**	**0.32070**	**0**	✓
23	Development Bank	**1**	**0.72276**	**1**	✓
24	Middle East Bank	**1**	**0.63295**	**1**	✓
25	Trust Bank	**0**	**0.70650**	**1**	✗

Source: Results of binary logistic regression for the first factor, SPSS-27 output

Table (4) shows the number of correctly classified and incorrectly classified banks with the percentage of correct classification.

Table (4): Predicting the exposure of commercial banks in the study sample to liquidity risks or not according to the indicator Total loans to total deposits (Y3)

Classification Table				
Observed		**Predicted**		
		Y_3		**Percentage Correct**
		0.00	**1.00**	
Y_3	**0.00**	**3**	**3**	**50.0**
	1.00	**0**	**19**	**100.0**
Overall Percentage				**88.0**
The cut value is 0.500				

Source: Results of binary logistic regression for the first factor, SPSS-27 output

Table (4) shows that (3) banks out of (6) banks not exposed to liquidity risks were classified as exposed to liquidity risks, meaning that the correct classification rate for banks not exposed to liquidity risks is (50%). While all banks exposed to liquidity risks, numbering (19), were correctly classified at a rate of (100%). The total correct classification rate was (88%), which indicates the good suitability of the logistic model (Equation (9)) in representing the study data in the event that the liquidity risk indicator is the ratio of total loans to total assets.

3-1-3 Ratio of financial assets to total deposits Y5

Table (5) shows the probabilities of exposure of commercial banks in the study sample to liquidity risks according to the ratio of financial assets to total deposits indicator using Equation (10). The table shows that the logistic function (10) succeeded in classifying (20) banks with a percentage of (80%) to their true status, while it failed to

classify only (5) banks with a percentage of (20%) to their non-conforming status. Four of these banks, according to the financial assets to total deposits ratio indicator, are actually classified as not exposed to liquidity risks, but they were classified as exposed to liquidity risks, namely: Noor Al-Iraq Islamic Bank for Investment and Finance, Zain Al-Iraq Islamic Bank for Investment and Finance, Elaf Islamic Bank, Amin Al-Iraq Islamic Bank for Investment and Finance. While only one bank, the National Bank of Iraq, was classified as not exposed to liquidity risks, but in fact it is exposed to liquidity risks.

Table (5): Classification of commercial banks in the study sample according to their exposure to liquidity risks or not according to the financial assets to total deposits ratio indicator (Y5)

S	Banks	Y1 actual	Probability (P(Y1	Y1 predicted	Classification status
1	Erbil Bank	1	0.78405	1	✓
2	Mosul Bank	1	0.74652	1	✓
3	Economy Bank	1	0.70346	1	✓
4	Cihan Bank	1	0.76557	1	✓
5	Kurdistan Bank	1	0.78063	1	✓
6	Tayf Bank	1	0.67320	1	✓
7	South Bank	1	0.71926	1	✓
8	Across Iraq Bank	1	0.80103	1	✓
9	Qurtas Bank	0	0.12026	0	✓
10	Noor Iraq Bank	0	0.65743	1	×
11	Al-Ahli Bank	1	0.32248	0	×
12	United Bank	1	0.72923	1	✓
13	Mansour Bank	1	0.79446	1	✓
14	World Bank	1	0.75901	1	✓
15	Sumer Bank	1	0.72730	1	✓
16	Commercial Bank	1	0.73938	1	✓
17	Gulf Bank	1	0.73811	1	✓
18	Zain Iraq Bank	0	0.73806	1	×
19	Al-Ataa Bank	0	0.33497	0	✓
20	Credit Bank	1	0.76699	1	✓
21	Elaph Bank	0	0.77391	1	×
22	Amin Iraq Bank	0	0.77202	1	×
23	Development Bank	1	0.60721	1	✓
24	Middle East Bank	0	0.46503	0	✓
25	Trust Bank	0	0.28043	0	✓

Source: Results of binary logistic regression for the first factor, SPSS-27 output

Table (6) shows the number of correctly classified and incorrectly classified banks with the percentage of correct classification.

Table (6): Predicting the exposure of commercial banks in the study sample to liquidity risks or not according to the indicator Ratio of financial assets to total deposits (Y_5)

Classification Table				
Observed		Predicted		
		Y_5		Percentage Correct
		0.00	1.00	
Y_5	0.00	4	4	50.0
	1.00	1	16	94.1
Overall Percentage				80.0
The cut value is 0.500				

Source: Results of binary logistic regression for the first factor, SPSS-27 output

Table (6) shows that (4) out of (8) banks not exposed to liquidity risk were classified as exposed to liquidity risk, meaning that the correct classification rate for banks not exposed to liquidity risk is (50%). Only one bank out of (17) banks exposed to liquidity risk was classified as not exposed to liquidity risk, and the remaining (16) banks exposed to liquidity risk were classified correctly, meaning that the correct classification rate for banks exposed to liquidity risk is (94.1%). The total correct classification rate was (80%), which indicates the quality of the suitability of the logistic model (Equation (10)) in representing the study data in the event that the liquidity risk indicator is the ratio of financial assets to total deposits.

From the above and in light of the results of the above analysis, it can be said that the main research hypothesis, which stated that "it is likely that disclosing cash flows will help diagnose the differences between Iraqi banks exposed to liquidity risk and banks not exposed to it during the period (2018-2022)." It has been achieved.

3-2 Conclusions:

- The research results showed that financial indicators derived from the cash flow statement play a pivotal role in reducing liquidity risks in Iraqi banks registered in the Iraq Stock Exchange during the period (2018-2022). This use helps achieve long-term financial stability and reduce reliance on short-term borrowing. This highlights the importance of enhancing banks' ability to manage cash flows effectively, which supports their role in achieving sustainable growth.
- The research results showed that the large number of financial indicators derived from the cash flow statement can be reduced to a smaller set with a greater impact. This allows banks to focus their efforts on the most important indicators, which contributes to reducing complexity and achieving higher efficiency in analysis. This approach contributes to improving the quality of management decisions related to liquidity management, while saving time and resources.
- The results of the statistical analysis showed that financial indicators derived from cash flows are advanced analytical tools that enhance banks' ability to manage liquidity risks effectively. These indicators contribute to providing a comprehensive view of incoming and outgoing flows, allowing management to improve its financial policies. They also help mitigate crises that may arise as a result of a sudden shortage of liquidity.
- The results indicated that there is a close relationship between the quality of cash flow management and the level of banks' exposure to liquidity risk. Banks that are characterized by good management of their cash flows are able to face market fluctuations more efficiently. This shows that improving cash flow management should be a central part of banks' strategies to reduce risks. It also contributes to improving their financial sustainability in the long term.

3-3 Proposals:

- The need to adopt an advanced analytical system for financial indicators derived from cash flows by adopting advanced analytical systems to analyze cash flows regularly, so that they provide accurate and comprehensive data to management. This procedure contributes to distinguishing between banks exposed to liquidity risks and those less exposed to them. It also helps in making decisions based on scientific foundations to reduce risks and enhance financial stability.
- Design integrated strategies for liquidity management that rely heavily on cash flow indicators. This strategy should include emergency plans to address sudden liquidity shortages and mechanisms to improve cash flows. In addition to focusing on proactive financial planning that ensures optimal readiness for market fluctuations.
- Reducing the financial indicators used in cash flow analysis without compromising analytical accuracy, while focusing on the most important and influential indicators. This enhances operational efficiency and reduces the complexity of analytical processes, making the decision-making process clearer and more effective.
- The need to organize specialized training programs for administrative cadres on the importance of cash flow management and methods of analyzing them. This helps enhance understanding of the relationship between cash flows and liquidity risks, and supports making more informed and proactive financial decisions.
- Promote cash stability through clear short- and long-term operational plans that ensure stable cash flows. It is essential that they focus on improving revenue sources and reducing unnecessary expenses. They should also be flexible enough to adapt to unexpected economic changes.

REFERENCES:

[1] Bayz, H. Hamad, H. Ali, D. (2021). The role of the cash flow statement to provide accounting information for the financial decision-making process (Case study International Islamic Bank of Kurdistan in the year 2018) Article Info Abstract Qalaai Zanist Scientific Journal A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (6), No (2).

[2] Bessis, J. (2015). Risk Management in Banking (4th ed.). John Wiley & Sons, Ltd.

[3] Bouabdelli, Ahlam; Ammi Said, Hamza. (2014). Supporting the Management of Banking Liquidity Risks in Light of the Contributions of the Third Basel Accord, Al-Wahat Journal for Research and Studies, 7(2). pp. 101-115.

[4] Dalwadi. p (2023). cash flow statement analysis: identifying red flags and warning signs for financial distress Dr. Volume 2 Issue 2.

[5] Hakar Abu Bakr Bayez, Diyari Jalal Ali, and Hawkar Anwar Hamad. (2021). "The Role of Cash Flow Statement in Providing Accounting Information for Financial Decision-Making: A Case Study of the International Islamic Bank of Kurdistan 2018". Qalaa Zanist Scientific Journal, Volume 6, Issue 2, Spring 2021, Pages 870-885.

[6] Kieso, Donald and Weygandt, Jerry and Warfield, Terry (2001) "Intermediate Accounting", Johan Wiley and sons, 10 edition.

[7] Meriem, S. Sid ahmed, Z. (2023). Banking liquidity management and its role in reducing liquidity risk, Journal of Management, Organizations and Strategy JMOS Spatial and entrepreneurial development studies laboratory. 5(1), pp: 93-104.

[8] Oral, C., & CenkAkkaya, G. (2015). Cash flow at risk: A tool for financial planning. Procedia economics and finance, 23, 262-266.

[9] Oriekhova K.V., Golovko O.Hr. (2022). Cash flow management strategy. Eco no mics and Law. 2022, № 1. P. 89—97.

[10] Petro, F., & Gean, F. (2014). "A logical approach to the statement of cash flows" . American Journal of Business Education (AJBE), 7(4), 315-324.

[11] Rajraj, Waheeba. (2014). Bank liquidity management in commercial banks and the role of the central bank in regulating it. Algerian Journal of Globalization and Economic Policies, 5(1), 261-282.

[12] Ruozi, R. Ferrari, P. (2013). Liquidity Risk Management in Banks, Economic and Regulatory Issues, P:23

[13] Ruozi, R., & Ferrari, P. (2013). Liquidity Risk Management in Banks: Economic and Regulatory Issues. SpringerBriefs in Finance.

[14] Yassen, S. T., & Alrefaee, S. A. S. (2022). the effect of financial ratios on bank credit for a sample of iraqi commercial banks. Academy of Strategic Management Journal, 21(4), 1-12.

[15] Yaseen, S. T., & Mohammed, S. B. (2023). Factors affecting the market value of the shares of a sample of companies working in the scientific field/an analytical study from 2015-2020. Res Militaris, *13*(2), 3137-3149.