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Research Paper

Credit risks and capital risks and their impact on banking liquidity, applied research in Al-Mansour Investment Bank and the Iraqi Investment Bank

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ABSTRACT

The research aims to shed light on the variables of the study, credit risks and capital risks, and provide an introductory framework for them and the theoretical relationship with the dependent variable on banking liquidity, and then measure those risks on commercial banks (Al-Mansour Investment Bank and the Iraqi Investment Bank) and then find statistical relationships between the variables The independent and dependent variable and then using the statistical analysis program (SPSSv.26) to find the effect relationship of credit risk and capital risk on bank liquidity. One of the most important conclusions reached by the researchers is that there is a relationship between credit risks when they rise on bank liquidity, and this is explained by the value of the correlation between credit risks and bank liquidity in commercial banks, the study sample (.957**) at a significant level (0.01). There is a relationship. between capital risks when they rise on bank liquidity, as the value of the correlation between capital risks and bank liquidity in the study sample commercial banks was (-.873**) at a significant level (0.01).

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1. INTRODUCTION

The banking sector is one of the most importance sectors in any country in the world, which contributes to the development of the financial system, The banking sector offers many banking activities, [1] and bank credit is one of the most important of those activities because of the good profits it achieves, but at the same time it is one of the activities that increase the risks of banking If it is not managed effectively and efficiently by the management of the commercial bank, as the banking activities are exposed to a lot of banking risks that may arise from factors related to the internal banking activity or from factors related to the external banking activity resulting from a change in the conditions under which commercial banks operate. Therefore, the management takes Commercial banks have a policy of caution and caution against these risks, [2] among the most important banking risks are credit risks, which are divided into systemic credit risks that are due to market factors specific to the environment surrounding the commercial bank, which cannot be avoided by diversification, including risks (inflation, political events and wars). As for credit risks, they are not Systematic risks that can be avoided and avoided by diversification. Such risks usually arise from several reasons such as competition or progress Technology or management patterns of the commercial bank and others, [3] also among the banking risks that the bank is exposed to as a result of the changes and developments witnessed by the banking sector and what is required is the use of various tools to measure capital risks and indicate the size of their impact on the performance of the bank. Which requires achieving an effective balance between the percentages of granting credit to customers and the amount of the required liquidity ratio so that this required ratio of liquidity can contribute to the ability of the commercial bank to fulfill its obligations and enhance its reputation and does not affect the profits that can be achieved and thus increase the value of the commercial bank by preserving its capital Al-Janabi, 2022).

2. RELATED WORK

2.1 The Concept of Banking Risks

The concept of banking risks indicates anything that can create problems and obstacles in the path of achieving the objectives of the commercial bank. These risks may be due to internal environmental factors or due to external environmental factors of commercial banks. [4] The types of banking risks are related to the type of goal that the bank seeks to achieve. Thus, banking risks are represented by banking phenomena and events that negatively affect the sustainability of banking activity, or they are an indicator of uncertainty about the future return of financial investments.

2.1.1 Credit Risks

Before addressing the concept of credit risks, it is necessary to address the concept of the importance of credit to the commercial bank, as it expresses bank credit in the services and funds provided to individuals and institutions, provided that they undertake to pay those funds, [5] their interests, commissions due on them, and expenses in one payment, or in installments on certain dates. Predefined. Bank credit is also considered the most effective investment for the bank's management, through which it achieves returns, and without it, the bank loses its ability as a financial intermediary between individuals and other institutions on the one hand, [6] and on the other hand, bank credit is considered the most severe because the bank bears multiple risks that may lead to its bankruptcy or liquidation. Credit risk is defined as the risk of not obtaining the principal amount or paying interest or both, whether for investments in securities or loans on time. [7] Credit risk is one of the most important and oldest types of risks. Because it reflects the size of potential losses as a result of customers' refusal or inability to pay their financial obligations to the commercial bank. Credit risks are divided into two parts:

Systemic Credit Risks: It refers to the risks that affect the credit repayment process as a result of reasons that have nothing to do with the borrower, such as those related to changes in the economic activity of the country in which the commercial bank operates. As the systemic credit risk cannot be avoided [8].

Irregular Credit Risks: It refers to the risks that the credit repayment process may be exposed to as a result of reasons directly related to the borrower himself, such as the borrower's exposure to financial hardship, and it affects the customer's desire to pay his obligation to the commercial bank. It may be a result of the borrower's failure to pay the debt. [9] The due is fully or partially if part of the debt has been paid and the other part has not been paid. Credit risk can be measured through the following equation: Credit risk = total loans / total assets.

2.1.2 Capital Risks

The commercial bank's capital has an active role in preserving the safety and solidity of banking systems in general, as it represents the barrier that prevents any unexpected losses that may affect the funds of depositors and shareholders, and the amount of capital owned by the commercial bank should be It is proportional with the size of banking risks and returns, in addition to that the amount of capital enhances the confidence of the public of depositors who deal with the bank. [10] Thus, capital risk indicators are measures that can be used to monitor risk factors and provide information on the level of risk facing banks at any time, and these indicators must be reviewed periodically to alert banks. Thus, the capital risk index, in the case of decline, reflects a decrease in the investors' desire to invest in the bank's shares. As for the case in which the ratio is high, it indicates the degree to which the value of the assets can decrease before it harms creditors and depositors. [11] The existence of these risks is due to insufficient capital. Money to absorb losses that can occur. The capital risk index can be measured through the following equation:

2.1.3 Banking Liquidity

Banking liquidity reflects the ability of the bank to fulfill its obligations towards the public of depositors and creditors, The banking liquidity index is measured by dividing the liquid assets owned by the bank by the total assets. Banking liquidity also means the ability of banks to fulfill their short-term obligations, as well as the ability to convert investment items into liquid cash quickly without exposure to losses, [12] and the high risk of banking liquidity leads to the inability of the commercial bank to obtain the necessary funds when needed, and to the inability of the bank To attract new deposits from customers or lead to resorting to bank markets whenever lending to its customers, in order to fulfill its commitments related to loan requests from bank customers, the more the bank borrows from the financial markets and that this increases the percentage of loans that cannot be easily liquidated when liquidity is needed on another level [13]. Among the most important measures of banking liquidity: is the ratio of loans to total deposits: the increase in the ratio of loans to deposits indicates the bank's need to increase new cash sources to meet new lending requests.

LTAR * L /at ×100%

LTAR = Loans to total deposits Loan =L

TA = total deposit

2.2 The Relationship between the Independent Research Variables and the Dependent Variable

Credit risks, when they rise, affect banking liquidity through the borrower's failure to fulfill its obligations, i.e. failure to pay installments on their due dates according to the agreed terms, as loans are the main source of credit risk due to commercial banks resorting to providing loans or credit to individuals and institutions to obtain returns, and therefore the demand The continuous loss of bank liquidity weakens the capital, [14] which affects the profitability of the bank and therefore its assets. Since the bank controls its assets and maintains a sufficient amount of funds available to meet urgent liabilities, especially customer deposits, the issue of banking liquidity remains linked to the extent to which the bank controls its budget items in a way that maintains its operational capacity in relation to the time factor, taking into account the volume of funds [15].

3. METHODOLOGY

This topic takes up with a brief overview of the study sample banks, as well as the analysis of the financial statements of the study sample banks from 2006-2020, as this topic was based on the analysis of the independent variables, credit risks, capital risks, and the dependent variable on bank liquidity [16].

3.1 First: A Brief Summary of the Study Sample Banks

Table 1. A Brief Summary of the Study Sample Banks

S. No	Bank Name	Year Founded	Start-Up Capital	Bank Code	Capital Upon Listing	Number of Branches	Number of Employees
1	Mansour Investment Bank	2005	55000000000	BMN S	55000000000	10	245
2	Iraqi Investment Bank	1993	100000000	BIBI	576000000	11	210

Table 2. Measurement of Credit Risk, Capital Risk, and Liquidity Index of Al-Mansour Investment Bank

The Years	Total Assets (1)	Total Loans (2)	Total Deposit	Credits Risks	Capital Risk	Banking Liquidity Index
2006	64,665	150	4,269	0.23	89	3.5
2007	78,999	627	11,379	0.79	82	5.5
2008	127,734	3,488	45,548	2.7	59	7.6
2009	141,264	13,223	53,387	9.3	30	24.7
2010	172,410	20,758	83,253	12	49	24.9
2011	271,896	45,621	156,178	16.7	25	29.2
2012	407,543	49,687	136,083	12	35	36.5
2013	789,087	47,190	485,305	5.9	60	9.7
2014	883,005	56,739	568,324	6.4	65	9.98
2015	1,075,843	57,292	753,373	5.3	77	7.6
2016	1,104,063	55,845	781,009	5	80	7.15
2017	1,316,451	56,143	977,535	4.26	88	5.7
2018	1,566,367	83,497	1,239,309	5.33	86	6.7
2019	1,461,478	96,034	1,157,608	6.5	79	8.2
2020	1,287,419	95,765	965,702	7.43	59	9.9

3.2 Measuring Credit Risks, Capital Risks, and the Liquidity Index of the Investment Bank of Iraq

Table 3. Measurement of Credit Risk, Capital Risk, and Liquidity Index of the Investment Bank

The Years	Total Assets (1)	Total Loans (2)	Total Deposit	Credit Risks	Capital Risk	Banking Liquidity Index
2006	167,731	35,205	119,522	21	18.5	29.4
2007	131,112	18,274	76,236	14	29.7	23.9
2008	158,187	6,012	99,825	3.8	60	6
2009	191,558	11,603	118,951	6	56	9.7
2010	246,091	62,185	139,014	25	16	44.7
2011	327,719	96,257	187,225	29	12	51
2012	380,094	150,913	193,308	39	9	78
2013	520,596	135,484	283,287	26	7	47.8
2014	558,655	96,619	256,735	17	11	37.6
2015	551,734	79,123	260,109	14	15	30.4

2016	577,870	69,774	254,003	12	13	27.4
2017	573,706	88,766	246,005	15	8	36
2018	607,084	109,727	238,583	18	5	45.9
2019	529,829	135,487	210,962	25.5	4	64
2020	571,480	126,926	269,018	22.2	5	47

3.3 Examining the Relationship between Credit Risks and Bank Liquidity

Table 4. Matrix of Correlation Coefficients between Credit Risks and Bank Liquidity

Correlations			
	Bank Name	**Credit Risk**	**Banking Liquidity**
Credit risks	Pearson Correlation	1	.957**
	Sig. (2-tailed)		.000
	N	30	30
banking liquidity	Pearson Correlation	.957**	1
	Sig. (2-tailed)	.000	
	N	30	30
**. Correlation is significant at the 0.01 level (2-tailed).			

It is clear from the above Table 4 that there is a significant relationship between credit risk and bank liquidity, and this provides initial support for testing impact hypotheses, as the value of the correlation between credit risk and bank liquidity in commercial banks, the study sample, was (.957**) at a significant level (0.01).

3.4 Examining the Relationship between Capital Risks and Bank Liquidity

Table 5. Matrix of Correlation Coefficients between Capital Risks and Bank Liquidity

Correlations			
	Bank Name	**Credit Risk**	**Banking Liquidity**
Credit Risks	Pearson Correlation	1	-.873**
	Sig. (2-tailed)		.000
	N	30	30
Banking Liquidity	Pearson Correlation	-.873**	1
	Sig. (2-tailed)	.000	
	N	30	30

It is clear from the above Table 5 that there is a significant relationship between credit risks and bank liquidity, and this provides operational support for testing the impact hypotheses, as the value of the correlation between capital risks and bank liquidity in commercial banks, the study sample, was (-.873**) at a significant level (0.01).

3.5 Examining the Effect Relationship between Credit Risks and Bank Liquidity

Table 6. Effect Relationship between Credit Risks and Bank Liquidity

Independent Variables	**Impact Coefficient**	**T Test**	**Morale Level Sig.**	**The Decision**
fiduciary risks	0.964	0.046	0.000	
fixed limit	0.084			
R Square is the coefficient of determination	0.915			
Test F	302.582			

It is clear from the Table 6 above that the coefficient of the fixed limit was (0.084), so if the independent variable is equal to zero, that is, in the absence of credit risks for commercial banks, the

research sample, then the value of bank liquidity is equal to (0.084), while the value of (T) calculated (0.046) and when compared to its tabular counterpart The amount (1.699) we find is less than tabular T, with a degree of freedom of (29), and the coefficient of determination (R ^ 2) explained the value of (0.915) of the effects that occur in (bank liquidity) and these effects result from the influence of the independent variable (risk The credit of the banks (the research sample), while the other effects amounting to (0.085) are due to other variables that were not included in this model.

The F test and the sig level of significance measure the significance of the model as a whole, as it is noted that the estimated model is significant at a level of significance less than 5%. When comparing the calculated F with its tabular counterpart, we find it larger as its value reached (302.582), while the tabular F reached (2.55), either (level of significance Sig. F) For the model as a whole, it represents (0.000), which is less than (5%) that the researcher assumed, and he must accept the hypothesis of the model (there is a significant effect relationship between credit risk and bank liquidity).

3.6 Testing the Impact Relationship between Capital Risks and Bank Liquidity

Table 7. Testing the Effect Relationship between Capital Risks and Bank Liquidity

Independent Variables	Impact Coefficient B	T Test	Morale Level Sig.	The Decision
fiduciary risks	0.000	16.163	0.000	
fixed limit	49.173			
R Square is the coefficient of determination	0.762			
Test F	89.879			

It is clear from the above Table 7 that the coefficient of the fixed limit amounted to (49.173), so if the independent variable is equal to zero, that is, in the absence of capital risks for commercial banks, the research sample, then the value of bank liquidity is equal to (49.173), while the value of (T) calculated (16.163) and when compared to its counterpart The tabular value of (1.699) is greater than the tabular T, with a degree of freedom of (29), and the coefficient of determination (R^2) explained the value of (0.762) of the effects that occur in (bank liquidity), and these effects are due to the influence of the independent variable (Capital risks for banks (the research sample), while the other effects amounting to (0.238) are due to other variables that were not included in this model.

The F test and the sig level of significance measure the significance of the model as a whole, as it is noted that the estimated model is significant at a level of significance less than 5%. When comparing the calculated F with its tabular counterpart, we find it larger as its value reached (89.879), while the tabular F reached (2.55), while (the level of significance Sig. F) For the model as a whole, it represents (0.000), which is less than (5%) that the researcher assumed, and he must accept the hypothesis of the model (there is a significant effect relationship between capital risks and bank liquidity).

4. CONCLUSION

There is a relationship between credit risks when they rise on bank liquidity, and this is explained by the value of the correlation between credit risks and bank liquidity in commercial banks, the study sample (.957**) at a significant level (0.01). There is a relationship between capital risks when they rise on bank liquidity, as the value of the correlation between capital risks and bank liquidity in commercial banks, the study sample, was (-.873**) at a significant level (0.01). The first hypothesis regarding the direct impact was proven correct, as the coefficient of determination (R ^ 2) amounted to (0.915) of the effects that occur in (bank liquidity) and these effects result from the influence of the independent variable (the credit risks of banks in the research sample), while the other effects amounting to (0.085) are due to variables Others are not included in this form.

The validity of the third sub-hypothesis regarding the direct impact was confirmed, as the coefficient of determination (R ^ 2) amounted to (0.762) of the effects that occur in (bank liquidity) and

these effects result from the influence of the independent variable (capital risks of banks in the research sample), while the other effects amounting to (0.238) are due to other variables are not included in this model.

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Author Contributions Statement

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Ali Abdulamer Kadhim	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
Ahmed Jamal Kadhim	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Akeel Dakheel Kareem	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	

C : **C**onceptualization
M : **M**ethodology
So : **So**ftware
Va : **Va**lidation
Fo : **Fo**rmal analysis
I : **I**nvestigation
R : **R**esources
D : **D**ata Curation
O : Writing - **O**riginal Draft
E : Writing - Review & **E**diting
Vi : **Vi**sualization
Su : **Su**pervision
P : **P**roject administration
Fu : **Fu**nding acquisition

Conflict of Interest Statement

The authors declare that there are no conflicts of interest regarding the publication of this paper.

Informed Consent

All participants were informed about the purpose of the study, and their voluntary consent was obtained prior to data collection.

Ethical Approval

Not Applicable.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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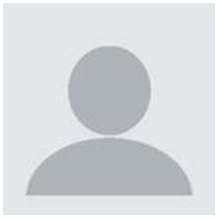
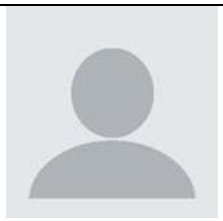
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