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The Effect of Banking Risk on the Accounting Return: An Analytical Study of the Commercial Bank of Iraq

Lect. Ziad Najim Abed¹

Abstract

Purpose: The research aims to shed light on the banking risks to which banks are exposed, and the extent to which banks are able to cover and face these various risks, and what these risks can reflect in terms of achieving the accounting return. The research also aims to analyze the relationship between each of the banking risks and the return. Accounting through the use of financial indicators for both risk and return. Theoretical framework: for this research is the extent of the impact of banking risk on the banking return, so it is necessary to know the extent of the relationship between the degree of risk that the bank can bear and the amount of its impact on the return to be achieved, i. To be kept by banks to face banking risks. Method/ design/ approach: In this research, the use of financial indicators for each of the risks and returns and the use of models of complex qualitative equations are used to measure the relationship between some types of risks and accounting returns of the Commercial Bank of Iraq for the period from 2005 to 2006. Results and conclusion: The study showed that the indicators of efficiency and banking activity showed a rise in the returns achieved compared to the indicators of the accounting return, as the bank was keen to achieve good profits by exploiting the funds deposited with it in an excellent way that enabled it to obtain revenues. Results Implications: Credit risk indicators showed an increase in the amount of provision allocated to hedge against losses to face doubtful debts in the event of borrowers' failure or failure to pay them. The realized return of the bank. Originality / value: The analysis sheds light on the relationship between banking risk and bank return through the process of financial analysis that contributes to verifying the state of uncertainty and risk. Due to changes and developments in the world, the banking industry has witnessed at the present time a state of important changes as a result of the challenges facing banks with the intensification of competition, and among these challenges facing banks are banking risks.

Keywords: banking risk - accounting return - banking return - types of risk

Introduction

The importance of financial analysis in our contemporary world is increasing day after day with the increase and diversity of activities practiced by the various economic units. There is no doubt that this expansion of activities has made the managements of these units and their clients in dire need of financial indicators in order to use them in the financial analysis of the financial statements and statements attached to them in order to Monitoring and identifying deviations, then evaluating performance and making decisions. The importance of financial analysis comes from the fact that it is not limited to reading the figures shown in the financial statements and the statements attached to them, but rather goes beyond that to interpreting them and searching beyond those figures in terms of indications and meaning, which helps in evaluating the current and future performance of the economic unit, as well as the financial analysis gives the possibility of shedding light on all the various activities of the bank. (Llorent et al., 2023)

¹Business administration, Imam Al-Kadhum college (IKC), Iraq. Email: ziadnajim@alkadhum-col.edu.iq
<https://orcid.org/0000-0002-0088-1448>

Research Methodology

First: - the research problem

Financial institutions, banks, should take into account the balance between liquidity and profitability, and take into account a third and very important factor in this relationship, which is the element of risk. Lead to the possibility of its failure or collapse.

Second: - the importance of the study

The importance of the research is that it reviews the risks to which this financial sector is exposed, and the impact of these risks on the activities of the Commercial Bank of Iraq and their relationship to the accounting return, i.e. clarifying the relationship between banking risks and the accounting return.

Third: - Research objectives

The research aims to shed light on the banking risks to which banks are exposed, and the extent to which banks are able to cover and face these various risks, and what impact these risks can reflect on achieving the accounting return.

Fourth: - the hypothesis of the study

The hypothesis of the study is that there is a correlation between banking risks and accounting returns.

Banking risks

First: - the concept of banking risk

Risk, as defined by Weston, “refers to the volatility and instability of returns, or fluctuations in the market value of the bank” (Weston, et al, 2000).

Second: Types of Bank Risks

Many studies and researches classify risk at the macro level into:

Total Risk

Many studies and researches referred to the total risk as the sum of systemic risks and non-systemic risks, and it can be expressed through the following equation:

(Fischer & Jorban, 2007); (Ross, et al, 2001)

Total Risk = Systematic Risk + Unsystematic Risk

Systematic Risk

It is called general risk, and it is the risk that arises in the market in which banks operate, and it affects all banks operating in this market (Amling, 2000), and it is that part that cannot be disposed of by diversification in the portfolio (Undiversifiable Risk).

Unsystematic Risks

It is also called the bank's risks because it is related to the characteristics of the bank itself (Totah, 2002: 53), and these risks are usually called exceptional risks or non-market risks. Diversifiable Risk) and Specific Risk (Gup, 2009; Şanlı, 2022)

We will briefly present the types of risks facing the bank as follows:

Environmental Risks

Environmental risks are the risks that the entire banking sector may be exposed to, in the sense that they are the risks that are represented by the external environment that surrounds all banking sectors, meaning that their impact includes all banks and is not limited to a specific bank without the other. It is represented by the following: - (Archer, 2005; Khalid & Nyborg, 2022)

Settlement Risk

It is called the risk of fulfilling obligations, and it is the ability of the bank to pay its net daily obligations, especially with regard to the clearing process towards other banks, as a bank may be unable to pay its net indebtedness. (Gup, 2009).

Country Risks

This type of risk is called the risk of the international banking business, and this type of risk is defined as the risk of a possible financial loss as a result of problems related to the macroeconomics of the concerned country, or as a result of political reasons.

Strategic Risks

They are the risks resulting from taking inappropriate decisions, i.e. taking incorrect decisions to manage the bank's activity, as the bank may take a wrong decision that leads to its loss and the loss of its gains, and strategic risks can appear clearly when a decision is taken by the bank to enter and exit new financial markets. (Fischer & Jordan, 2007; Marcén et al., 2022)

Legislative & Legal Risk

Legal risks are the risks resulting from the bank's departments' violations of the instructions issued by the Monetary Authority (the central bank), or the breach of the capital adequacy ratio (the minimum limits for capital adequacy) or the breach of the liquidity and employment ratios, which results in legal penalties that may reach up to Putting the bank under judicial receivership or demanding liquidation or merger. (Hammad, 2004: 272). As for the Legislative Risks, these risks refer to the impact of the legislation of the countries in which the banks operate, as well as the legal claims. Bank managements must be fully and accurately aware of the legislation of the countries in which they will open branches.

Political Risks

The political instability in a country represents a major threat to the work of banks and negatively affects their activities. Therefore, the most important danger facing banks here is coups and changing governments, and thus affects the performance of banks through state intervention in the work of banks.

Inflation Risks

They are the risks resulting from the general rise in prices and then the decline in the purchasing power of the national currency. When the national economy witnesses a rise in the general level of prices (inflation), the purchasing power of the currency decreases accordingly.

Competitive Risks

The banking industry is characterized by competition, continuous development, and the use of modern technology. Therefore, the provision of electronic banking services or activities has become obsessed with banks so that they can occupy a good position in the competition between each other. (Amling, 2000).

Economic Risks

It is expressed as the risks associated with relationships associated with the national and international economic factors so that they can affect the performance of banks, whether directly or indirectly. (Fischer & Jordan, 2007)

Human Resource Risks

This type of risk is all kinds of risks that arise from the human element and the extent of its impact on the banking business, through carrying out business and the extent of its ability to accomplish it with perfection and success for the development and continuity of the banking business. The risks of this type are as follows:- (Belkaoui, 2000)

Embezzlement, Forgery and Counterfeiting Risks

The embezzlement of cash by some employees is one of the most common forms of embezzlement, and the seriousness is represented in the losses that banks are almost exposed to as a result of these practices.

Ability Risks and Ability Risks

These are the risks that appear as a result of the fact that the employees of the bank lack the competence and ability to deal and coexist with the environmental variables in the banking community, which makes them unable to make correct and sound investment decisions and waste investment opportunities through ignorance and lack of competence and experience.

Administration Risks

Wrong practices by some employees in the management of a bank may prevent trading of its shares in the stock market, and at other times unintentional mistakes made by the bank's management lead to approaching a state of bankruptcy, so what is known as the risks of financial failure appears.

Compliance Risks

Compliance risks are the possibility of some employees violating regulatory laws and rules or not applying them properly. These risks negatively affect the bank, through exposing banks to penalties, whether in the form of financial fines or deprivation from practicing a specific activity.

Organizational Risks

The issue of profitability in banks is one of the most important elements of evaluating the financial position of banks, and the level of profitability is affected by the degree of durability and accuracy of the internal control system, internal and external auditing, and accurate and sufficient disclosure, in the sense that it is affected by the organizational structure of the bank.

The Risks of Financial Services Provided

This type represents the risks related to the activities and business that the bank seeks to carry out in order to continue its business path. The risks of this type are represented in the following:

Funding Risks

These risks are represented by the bank's inability to attract depositors, and the reluctance of other banks to deposit their money with it for reasons related to the soundness of its financial position.

Reputational Risk

Reputational risks pose a great threat to banks, because the nature of banking is based on maintaining the confidence of depositors and creditors.

Volume Risks

They are the risks arising from the increase in the volume of activities and services provided by banks or their subsidiaries due to the potentials, resources, limits and capabilities that these banks possess.

Investment Risks

It is the risk resulting from the possible decline in the market value of the bank's investments to less than its value.

Sector Risks

These are the risks that are clearly related to or affect a specific sector without harming other business sectors or are the risks that arise when the facilities or bank loans granted to a specific sector are concentrated to the exclusion of other sectors.

Confidence Risks

It is the risk of failure in safekeeping arising from negligence in managing assets for the benefit of other parties, and this means the extent of the bank's success in establishing trust between it and customers by achieving an increase in its assets, which is thus to serve its shareholders.

Operational Risks

Risks of exposure to losses that arise from inefficiency or failure of internal processes, individuals or systems, or that result from external events." This definition includes legal risks, but excludes strategic risks, reputational risks, and systemic risks.

Financial risks related to the financial statements

This type of risk represents everything related to the items of the financial statements represented by the financial position list, the results list and the lists appended to it, and the financial risks related to the financial statements are represented by the following:- (Bessis, 2002)

Financial Leverage Risks

This risk represents the financing method that finances the bank, and the financial risk is a risk that can be avoided, as the decision-maker has the freedom to rely on borrowed funds or on private funds, and banks that do not depend on borrowed funds are banks that are free from financial risk. (Fischer & Jordan, 2007).

Foreign Exchange Risks

This type of risk results from fluctuations in the exchange rate of foreign currencies, which may or may not be in favor of the bank.

Interest Rate Risk

Interest rate risk is defined as the risk resulting from the bank's exposure to losses as a result of adverse movements in interest rates in the market, which may have an impact on the bank's revenues and the economic value of its assets.

Market Risk

These are the risks to which profits or capital are exposed as a result of changes in the total market value of the securities held by the bank. (Rose, 2001).

Credit Risks

Bank credit risk refers to those “assumed risks, which are the uncertainty of the lender, the bank, that the borrower, the customer, will repay the loan he obtained on the due date.

Liquidity Risks

Liquidity risk means “the inability to obtain funds when needed, or it arises when the bank faces the problem of not having sufficient cash to meet its short-term obligations.”

Capital Risk

The risk of bank capital refers to the degree to which the value of assets can decline before harming creditors and depositors. (Hempel & Simonson, 2014)

Third: Banking risk indicators

Bank risk indicators are as follows

Leverage risk indicators

The risk of financial leverage shows us the total amounts that constitute an obligation on the bank and must be paid upon demand or on due dates, as follows: - (Brealy, 2016)

A – Equity Index to Working Assets = $\text{Equity} / \text{Working Items}$

This indicator shows us the size and amount of equity contribution in financing operating assets.

B – Index of current accounts and deposits to total assets = $\text{current accounts and deposits} / \text{total assets}$

This indicator shows us the contribution of current accounts and deposits in financing the bank's total assets.

C – Creditors index to total total assets = $\text{creditors} / \text{total total assets}$

d- The index of total indebtedness to total total assets = $\text{total indebtedness}$

The decrease in the value of this indicator is due to the relatively low volume of the bank's liabilities.

E- The index of total total assets to equity:

$\text{Index of total total assets to equity} = \text{total total assets} / \text{equity}$

The indicator of total assets to equity shows us the ability of the financial decisions taken by the management of banks regarding the use of loans in their financial structure, that is debt financing compared to equity, which leads to maximizing the rate of return on equity.

Interest rate risk indicators

The bank's interest rate risk lies in the changes that accompany interest rates, affecting the value and returns of the bank's assets and liabilities. These indicators are: - (Brigham, 2017)

a- Index of interest rate sensitive assets to interest rate sensitive liabilities = $\text{interest rate sensitive assets} / \text{interest rate sensitive liabilities}$

This indicator reflects the risk that the bank is willing to take if it is able to predict future interest rate trends. (Hample & Simonson, 1999: 67)

B- Credit current accounts index to total deposits = credit current accounts / total deposits

The purpose of this indicator is to determine the amount and size of deposits out of the total deposits that the bank deals with and can invest them without the bank paying interest in exchange for obtaining them.

Market Risk Indicators

The most important indicators used in estimating the market risk to which banks are exposed centered on the following indicators: (Cooly & Roden, 2018)

A- Book value index (of the investment portfolio to the market value (of the investment portfolio) = book value of the assets/estimated market value of the investment portfolio.

B- The index of the book value of equity to the market value of equity = book value of equity / estimated market value of equity.

Credit risk indicators

Credit risks constitute the most important and largest risks to which banks are always exposed. Despite the existence of other risks, however, credit risks constitute the largest percentage of the total banking risks.

One of the most important financial indicators for estimating credit risk in banks is as follows (Elliott, 2004).

A- The index of total cash credit to total assets = total cash credit/total assets

The rise of this indicator above indicates a rise in the credit risk of the bank because this reflects the increase in cash credit represented by short-term loans and banking facilities. ((Hampel & Simonson, 2014)

B- Non-performing loans index to total cash credit = non-performing loans/total cash credit

Non-performing loans are those loans whose maturity date has passed 90 days or more, and it may exceed a year or more at times.

C- Loan Loss Provisions Index to Total Cash Credit = Loan Loss Provisions/Total Cash Credit

This indicator is one of the indicators of credit risk, which reveals how the bank is prepared to face loan losses by building provisions for loan losses.

Liquidity risk indicators:

The most important indicators used to measure and estimate liquidity risk in commercial banks are: - (Koch & McDonald, 2000).

A- The index of the total cash at the bank to the total assets = the total cash at the bank the total assets

The rise of this indicator means a decrease in liquidity risk, given that this reflects an increase in cash balances, whether in the fund or with banks, with which the bank faces its various obligations.

B- Index of short-term investments to total assets = short-term investments/total assets

C- The index of total cash and investments to total assets = total cash + investments/total assets

The increase in this indicator indicates a decrease in liquidity risk, as this reflects the increase in cash assets and investments with which the bank faces its various obligations.

d- The index of total cash credit to total total assets = total cash credit/total assets

A high in this indicator indicates a high liquidity risk, as this increases the percentage of loans that cannot be liquidated easily or at the time of need for liquidity.

E- The index of total investments to total deposits = total investments/total deposits

An increase in this indicator indicates a decrease in liquidity risk, as this reflects the increase in investments with which the bank meets its obligations.

F- The index of total cash credit to total deposits = total cash credit/total deposits

An increase in this indicator indicates an increase in liquidity risk, as this increases the percentage of loans that cannot be liquidated easily or at the time of need for liquidity.

J- Short-term assets index to total deposits = short-term assets/total deposits

The rise of this indicator indicates a decrease in liquidity because this reflects an increase in short-term assets that can be liquidated and converted into liquid cash to meet the bank's urgent obligations (Roa, 2000).

G- The index of total cash to total deposits = total cash/total deposits

A high in this indicator indicates a decrease in liquidity risk, as this reflects an increase in liquid assets.

O- Index of current assets to current liabilities = current assets/current liabilities

This indicator shows us the bank's ability to pay its short-term obligations from its current assets. A high level of this indicator indicates that the bank is able to pay its obligations from its current assets.

Indicators of capital risk

These indicators are as follows:- (Epstein & Lee 2006)

A- Equity index to total assets = equity/total assets

B- Capital to total assets index = capital/total assets

C- Equity index to risky assets = Equity (capital + reserves)/risky assets

This indicator shows the extent of protection provided by property rights to face the capital losses that the bank may be exposed to if the market value of the securities decreases.

D- Equity Index to Total Cash Credit = Equity/Total Cash Credit

This indicator indicates that it is a measure of the margin of safety in facing the risk of failure to recover part of the money invested in loans.

E- The property rights index to total deposits = property rights/total deposits

This indicator refers to the bank's ability to return deposits from the equity balance, noting that the solvency ratio is 10% (Rose & Hudgins, 2005).

f- Capital Index to Total Investments = Capital/Total Investments

This indicator shows us the extent of the bank's ability to use its money to face the losses resulting from investment without prejudice to the money of depositors, and the danger in the decline of this indicator.

Fourth: - the concept of accounting return

The concept of accounting return differs from the concept of economic return due to the difference in analysis tools used by both the accountant and the economist. The accountant usually resorts to analysis

tools that suit the past (Ex – past analysis), while the economist relies on analysis tools that suit the future. (Horngren, 2015).

As for the accounting return, it is the amount that can be expressed as a percentage of the original capital invested for a known period. The accounting return also shows the extent of the effectiveness of the use of funds.

Definition of accounting return

The accounting return is also defined as “net profit after taxes or net cash flows after taxes” (Ramadan, 1998: 22), and the return is defined as “the method of measurement that enables us to judge that the investment or work that was done during the period was successful by obtaining profits” (Northrup, 2004: 103).

The required return is defined as the lowest return that the investor is compensated for for taking the risk and postponing current consumption to the future (Francis, 2009).

Profit in economic thought

To define the concept of profit in economic thought, we must first point out that the term “revenue” is not included in the economic dictionary and is replaced by the word “income.” There are three concepts of income: individual income, company income, and national income. Economists distinguish between “income” and therefore, we will begin by defining these multiple concepts of income for the economist to know the concept that is compatible with accounting thought (Geoff, 2007).

*** Income smoothing**

Income smoothing was defined as “management’s attempt to reduce fluctuations or variations in income over time” (Gitman, 2000).

Income for economists takes multiple concepts that can be clarified as follows

- 1 – The concept of moral (psychological) income: It is represented in the satisfaction that an individual obtains during a certain period.
- 2 – The concept of real income: It is represented in that amount of goods and services that an individual consumes during a certain period for the purpose of satisfying his various needs.
- 3 – The concept of cash income: It is represented in the net cash flows that the individual receives during the period to manage his consumption needs.

As for profit, according to economists, we see that they distinguish between two types of profit: (Golub, 2000).

- 1- Ordinary profit: It is the risk return only, i.e. the consideration for one of the factors of production, and it is the organizer who bears the risk that is due to the state of uncertainty with regard to the selling price or with regard to production expenses.
- 2- Extraordinary profit: Profit is the surplus, i.e. the excess of the selling price over all production returns, including the return of the organizer in return for the risk. Extraordinary profit is achieved in the short period and sometimes in the long period.

Accounting return indicators

The accounting return indicators are as follows:

A-Accounting profit indicators

This group includes the following indicators:

The index of return (net income) to equity: -

The formula for this indicator is:- (Jessup, 2007)

Return index (net income) to equity = net income / equity

The purpose of this indicator is to demonstrate the efficiency of the bank and its ability to exploit the owners' money in generating profits (Koch & Macdonil, 2000).

Return index (net income) to assets:

The indicator formula is:

Return index (net income) to total assets = net income / total assets

The purpose of this indicator is to determine the amount of return achieved on all the bank's assets. (Mason, 2008)

Index of return (net income) on deposits

The formula for this indicator is:

Return index (net income) to total deposits = net income / total deposits

The purpose of this indicator is that it shows us the extent to which deposits contribute to achieving returns (profits) in favor of the bank. (Mason, 2008)

Return on Resources index (net income) on available funds

The formula for this indicator is:

Return index (net income) to available funds = net income/equity + deposits

This indicator expresses the bank's ability to generate returns from the financial resources available to the bank. (Koch & Macdonil, 2000)

The indicator of the ability to pay for the available resources

The formula for this indicator is:

Revenue capacity of available resources = net income before taxes + credit interest due to the bank / equity + liabilities

The purpose of this indicator is to show the size of the bank's available resources compared to the return achieved by the bank.

The index of total revenues to total assets:

The formula for this indicator is:

Total revenue to total assets = total revenue / total assets

The purpose of this indicator is to know the extent of the bank's ability to achieve good revenues by exploiting its total assets to achieve this revenue. (Yeager & Seitz, 2000)

B- Indicators of efficiency and banking activity

This group includes the following indicators:

The indicator of the net revenues of the current activity to the operating assests:-

The formula for this indicator is:

The index of net current activity revenues to operating assets = net current activity revenues / operating assets.

The purpose of this indicator is to show the amount of revenue generated from the exploitation of these operating assets.

Net interest index to (working assets) or income-generating assets:

The formula for this indicator is: (Matten, 2001).

Index of net interest to operating assets = net interest (interest received credit – interest paid debit) / operating assets.

The purpose of this indicator is to know the amount of net credit interest in favor of the bank and achieved as a result of investing its assets represented in various investments and the total cash credit. (Yeager & Seitz, 2000)

Return index (net income) to total revenues:

The formula for this indicator is:

Return Index (Net Income) to Total Revenue = Return (Net Income) / Total Revenue

The purpose of this indicator is to know and determine the amount of net profit compared to total revenues. (Golub & Leo, 2000)

Return index (net income) to credit interest: -

The formula for this indicator is:

Return index (net income) to credit interest = return (net income) / credit interest

The purpose of this indicator is to clarify the relationship between the amount of credit interest received by the bank as a result of its investment operations. (Golub & Leo, 2000)

Credit interest index to total total assets:-

This indicator shows us the true value of the benefits that the bank obtains as a result of its investment in its various total assets. The formula for this indicator is:

Credit Interest to Total Total Assets = Credit Interest/Total Assets

The purpose of this indicator is to determine the bank's efficiency in operating its assets.

Indices based on the stock market

This group includes the following indicators:

Index of return (net income) to the number of ordinary shares:

The formula for this indicator is:- (Naylor & Vernon 2000)

Return index (net income) to the number of ordinary shares = Return (net income) / the number of ordinary shares

This indicator is called the earnings per share index.

The index of the closing price of the ordinary share to the earnings per share:

The formula for this indicator is:

It is also called the share-to-earnings index. This indicator is based on the relationship between the market price of the share and the earnings per share. (May 2005)

The achieved rate of return indicator:

The formula for this indicator is:

Index closing price of common stock – opening price of common stock = closing price of common stock – opening price of common stock / opening price of common stock

The high of this indicator shows us that the stock that is purchased at the beginning of the year has achieved profits at the end of the year, and this is a profit for the benefit of the shareholders in the event that they keep it unrealized, and a real profit in the case of selling (Breaiey & Myers, 2016).

Fifth: - Discussing the results of analyzing banking risk indicators

Discussing the results of analyzing financial leverage risk indicators.

1 – The index of property rights to working assets percentage decreased in 2006 by 37% compared to the base year 2005, and in 2007 this indicator decreased by 65% compared to the base year 2005 (this is on a fixed basis), but on a variable basis this indicator decreased In the year 2007 by 44.2% compared to the base year 2006. This indicator shows us the size and amount of the contribution of property rights in financing the assets operating in the Commercial Bank of Iraq.

2 – The index of current accounts and deposits (current accounts credited, savings accounts, fixed deposits) to total assets (current assets and fixed assets). In the base year 2005, and in 2007 it decreased by 9.6% compared to the base year 2005 (on a fixed basis), then it decreased by 9% in 2007 compared to the base year 2006 (on a variable basis). This indicator shows us the contribution of current accounts and deposits in financing the bank's total assets.

3 – The creditors' index (creditors of the current activity, the amounts received for the registration of companies, the amounts received for subscribing to the shares of companies, the amounts withheld by the official authorities) to the total assets. It was in the year 2005 by 0.138 million Iraqi dinars against one million Iraqi dinars of the total assets, meaning that the volume of creditors in the year 2005 to the total assets was 13.8%, this indicator decreased in the year 2006 to 4.3%, and then increased in year 2007 to be 8.6% compared to the total assets.

From the foregoing, it becomes clear to us that the risk in this indicator is in its rise, as the rise of this indicator means an increase in the obligations facing the bank.

4 – The index of total indebtedness (short-term liabilities represented by current accounts, deposits and creditors) to the total assets was the amount of the total indebtedness index in the year 2005 by 0.651 million Iraqi dinars compared to one million Iraqi dinars of the total assets, and thus we note that external sources of financing formed It represents 65.1% of the bank's total assets. In 2006, this indicator decreased to 55.3%, and in 2007 it decreased to 55.0%, compared to the total assets. The decrease in the value of this indicator is due to the relatively low volume of the bank's liabilities.

5 – The index of total assets to equity, which is called the index of financial leverage, where we note that the numerator of this indicator consists of total assets, so we find that this indicator measures for us the amount of total debt on equity. The evolution of the index of total assets to equity in percentage was in In 2006 it decreased by 16.4% compared to the base year 2005, and in 2007 it decreased by 4% compared to the base year 2005 (fixed basis), while in 2007 this indicator increased by 15% compared to the base year 2006 (variable basis). From the foregoing, it becomes clear to us that the financial leverage risk index shows us the sums that the bank obtains, and that it sometimes pays interest in exchange for obtaining it. Therefore, the process of investing these funds requires him to enter into successful investments that enable him to collect the principal amount in addition to the returns (interests).

Discussing the results of analyzing interest rate risk indicators.

Reveal No. (1)

The Commercial Bank of Iraq PJSC Analytical disclosure of interest rate risk indicators and their percentage development indicators

For the period from 2005-2007 fiscal year.

The amounts are rounded to the nearest million Iraqi dinars

Types of indicators		financial period indicators			percentile development indicators		
		2005	2006	2007			
		2	3	4	100x2:3	100x2:4	100x3:4
1							
1	An index of interest rate sensitive assets to interest rate sensitive liabilities	0.384	0.729	1.038	190%	270%	142.4%
2	Credit current accounts index to total deposits	0.674	0.767	0.638	113.8%	94.7%	83.2%

Source: - Prepared by the researcher based on the final accounts and the financial statements attached to them for the period from 2005-2007 financial year.

1 – The index of interest rate sensitive assets (short-term investments and total cash credit) to interest rate sensitive liabilities (deposits and creditors), where the index of interest rate sensitive assets in 2005 amounted to 0.384 million Iraqi dinars compared to one million Iraqi dinars of sensitive liabilities Interest rate sensitive assets, meaning that interest rate sensitive assets amounted to 38.4% of the interest rate sensitive liabilities, this indicator rose in 2006 to 72.9%, then it rose more in 2007 when it became 103.8% compared to interest rate sensitive liabilities. The reason for the development of this indicator The increase is mainly due to the increase in the volume of short-term investments.

2 – The index of credit current accounts to total deposits indicates that the volume of deposits represented by current account deposits amounted to 67.4% of the total other deposits, and this is a good indicator as these deposits do not require paying any kind of interest in exchange for keeping them. In 2006, it increased. This indicator rose to 76.7%, then decreased in 2007 to 63.8%. The evolution of the credit current accounts index to total percentage deposits increased in 2006 by 13.8% compared to the base year 2005, then decreased slightly in 2007 by 5.3% compared to the base year. 2005 (fixed basis), and decreased in 2007 by 16.8% compared to the base year 2006 (variable basis).

Discuss the results of the market risk indicators analysis.

Reveal No. (2)

The Commercial Bank of Iraq PJSC

Analytical disclosure of market risk indicators and their percentage development indicators

For the period from 2005-2007 fiscal year

The amounts are rounded to the nearest million Iraqi dinars

Types of indicators		financial period indicators			percentile development indicators		
		2005	2006	2007			
		2	3	4	100x2:3	100x2:4	100x3:4
1							
1	The index of the book value of the assets in the (investment portfolio) to the expected market value of the assets in the (investment portfolio)	0.338	1.594	1.366	411%	352%	85.7%
2	An indicator of the book value of equity to the expected market value of equity	0.050	0.769	0.741	1538%	1482%	96.4%

Source: - Prepared by the researcher based on the final accounts and the financial statements attached to them for the period from 2005-2007 financial year.

1 – The evolution of the indicator of the book value of assets in the (investment portfolio) to the expected market value of assets in the (investment portfolio) percentage rose in the year 2006 to be an increase of 311% compared to the base year 2005, and in the year 2007 it had increased by 252% compared to the base year 2005 (fixed basis), while in 2007 it decreased by 14.3% compared to the base year 2006 (variable basis).

The rise of this indicator means a decline in the expected market value of the shares of the investment portfolio, and this led the bank to incur huge losses that led to a reduction in the value of the return (profit), meaning that the last bank, through this rise in the index, was exposed to market risks and incurred significant losses.

2- The evolution of the book value of property rights index to the expected market value of percentage property rights was 1438 in 2006 and 1382 in 2007, which is very high compared to the base year 2005 (fixed basis), but in 2007 it decreased by 3.6% Compared to the base year 2006 (variable base).

In general, the decrease or rise of this indicator is due to the change in the trading prices of shares in the Iraqi market for securities, and the rise of this indicator means a decrease in the expected market value of the bank's shares, which constitute the bulk of the components of equity, and therefore this means a loss on the bank in In case the bank wants to dispose of its shares owned by it.

Discussing the results of credit risk indicators analysis.

Reveal No. (3)

The Commercial Bank of Iraq PJSC

An analytical statement of credit risk indicators and their percentage development indicators

For the period from 2005-2007 fiscal year

The amounts are rounded to the nearest million Iraqi dinars

Types of indicators	financial period indicators			percentile development indicators		
	2005	2006	2007			
1	2	3	4	100x2:3	100x2:4	100x3:4
1Index of total cash credit to total total assets	0.173	0.158	0.130	91.3%	75.2%	82.2%
2Non-performing loans index to total cash credit	0.001	0.063	0.197	6300%	19700%	312.7%
3Loan loss allowance index to total cash credit	0.011	0.147	0.404	1336%	3673%	274.8%

Source: - Prepared by the researcher based on the final accounts and the financial statements attached to them for the period from 2005-2007 financial year.

1 - The index of total cash credit (short-term loans and banking facilities) to total assets (current assets and fixed assets) was in the year 2005 amounting to 0.173 million Iraqi dinars compared to one million Iraqi dinars of the total assets, meaning that cash credit constitutes an amount of 17.3 % of the total assets in the year 2005, and we note that this indicator decreased in the year 2006 to 15.8%, and decreased to 13.0% in the year 2007, compared to the total assets during the study years.

2 - The index of non-performing loans (lately repaid loans) to the total cash credit was in the year 2005 by 0.001 million Iraqi dinars against one million Iraqi dinars of the total cash credit, meaning that the volume of non-performing loans constitutes a ratio of 0.1% of the total cash credit, which is a reasonable percentage. And acceptable, in the year 2006 the non-performing loans index increased significantly to 6.3%, and it rose to 19.7% in the year 2007. We notice that there is a significant increase in the value of this indicator during the research years, especially the years 2006 and 2007.

3 - The indicator of the provision for loan losses (provision for doubtful debts) to the total cash credit, this indicator was in the year 2005 by 0.011 million Iraqi dinars against one million Iraqi dinars of the total cash credit, and the value of this indicator shows us that the provision for loan losses amounted to 1.1 % of the total value of cash credit, which is an acceptable and reasonable percentage. In 2006, the value of the loan loss allowance index (doubtful debt allowance) increased to 14.7%. In 2007, the value of this indicator increased to reach 40.4% compared to the total cash credit.

Conclusions

1. The banking sector, especially commercial banks, is one of the important financial institutions, being one of the main pillars that support the national economy through the financial services it provides to individuals.
2. The Commercial Bank of Iraq always seeks to invest the money it gets, which it sometimes pays interest in exchange for obtaining it, for the purpose of recovering the principal amount with the returns (interests).
3. The Commercial Bank of Iraq (K.K.H) sought well to obtain high benefits (credit interests) as a result of investing its assets in various investments.
4. Credit risk indicators showed an increase in the amount of provision allocated to hedge against losses to meet doubtful debts in case borrowers fail or fail to pay them.
5. Liquidity risk indicators showed that the bank sought to avoid these risks and worked to gain the confidence of its customers (depositors).
6. The Commercial Bank of Iraq worked to reduce the volume of its risky assets, by directing a large part of it towards investments, especially in the government sector

Recommendations

1. The administrations of commercial banks, especially the Commercial Bank of Iraq, must take precautions and beware of banking risks and hedge against them in line with compliance with legal legislation and regulations.
2. Attention to the provisions and their accumulation (inflation), which was due to the commitment of the bank's management to set provisions to meet the credit risks represented by non-performing loans, which were not taken into account in previous years.
3. The bank continues to operate in the same manner used in operating assets in exchange for interest rates, so as to enable it to obtain high credit interests and work to develop them.
4. Seek by the bank's management to address its credit policy in granting loans and banking facilities and work on developing them in order to avoid the danger that surrounds it.
5. Continuous follow-up by the bank's management of non-performing loans and taking more deterrent measures to enable it to reduce the significant increase in the volume of the allowance for doubtful debts.
6. The bank continued to follow its same policy method in dealing with liquidity risks, as the bank proved that it had directed its idle funds in the right direction towards investments that lead to generating rewarding returns, and thus it has achieved its goal.

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