

Enhancing Risk Management by using Strategic Auditing: Study for Iraqi Banks

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As a result, the expansion of banking services carried out by banks locally and internationally, the percentage of risks have been increased that faced the banks as a result of its handling of the diverse transactions as well as money laundering that spread around the world. So there has become an urgent need to enhance the functional risks management with adequate information to take the necessary measures to reduce the potential risk procedures. From here came the strategic role of audit as one of the tools that help to reduce the potential risks that can be exposed to banks. This research focused on the strategic role of audit in promoting the realization of risk management through the study and analysis of the risks experiences by a number of Iraqi banks for the years (2010 -2015). The data used in this research was based on information that disclosure in auditor's reports, also, information disclosed by government agencies such as the Iraqi Central Bank. This research will identify the strategic plans for a sample of the banks, identifying the policy of the banks and their strategic decision. It evaluates the results of its financial performance. Moreover, examine and evaluate the external and internal environment. Analyze and evaluate the strategy by using SWOT analysis. It provides implements and evaluates strategic auditing plan. The most significant conclusion reached that strategic audit plays an important role in promoting the process of risk management for banks, which in turn contributes to maximizing the value of companies.

Key words: *Iraqi private banks, Strategic auditing, and Risk management.*

Introduction

Each economic unit has a vision; mission and aim, in order to achieve its objectives, actions resulting from policies taking by executive management must be followed to meet the strategic and operational plans established by the border of directors. There are many risks that limit or impede the ability of these units to achieve their objectives. Therefore, recently many of these units have established risk management departments. Due to the failure of many economic units, this section should have been activated and its work enhancing or strengthened by providing appropriate information that contributes to its ability to anticipate the potential risks resulting from the strategic audit function.

Research Problem

The problem of research is the lack of interest in the strategic audit function which in turn contributes to the provision of information to help anticipate the potential risks that may affect economic units, thus will strengthening the work of the risk management department.

Research Importance

The adoption of strategic audit function enhances the risk management function in anticipating the potential risks to the economic unit, which contributes to taking appropriate actions to reduce or impede these risks and achieve the objectives set.

Research Goals

The research aims to achieve the following objectives:

- A. Enhancing and strengthen risk management functions with appropriate information to reduce and minimize potential risks.
- B. Finding appropriate mechanisms to improve future prospects for potential risks to economic units.

Research Hypothesis

The research is based on a basic premise that strategic auditing is an appropriate way to improve future expectations regarding potential risks to economic units.

Research Methodology

The researchers relied on a descriptive approach based on data collection, tabulation, analysis and interpretation. This approach is based on the comprehensive analysis of the problem under study, the interpretation of the influence relationships of their variables and their effects to reach their own results.

Strategic Audit

Strategic auditing plays a significant role in strengthening the management with the information needed to make decisions. It is considered as means of ensuring economic unity vigilance to achieve strategic objectives within its environment that is full of variables. Strategic auditing has been defined as examining the strategy of the economic unit in transitional times or difficult and critical times as a means of verification of strategic business activities (Suncourt, 2014, P 7). While, the strategic audit is defined as a tool to diagnose problems facing economic units in all fields and find appropriate solutions (Wheel & Hunger, 2004, P 22). Therefore, it is necessary for the strategic auditor to be familiar improve with the conditions surrounding the economic unity, whether internal or external, to the current situation by addressing the potential risks of economic unity (Bell et al, 1977, p 77). For Example: the strategic audit made U.S. government more efficacious through improve government policy, create many jobs, and develop official government services. The strategic audit helps to highlight the importance of growing U.S. economy and increasing government transparency. So, it will be the key to successfully achieving the different U.S. government goals (Kent, Potok, & Wilmer, 2018).

Importance of the Strategic Audit

The importance of strategic auditing is its contribution to discovering and reducing business risks that can affect economic unity. In addition, it is improve the broad strategic direction in decision-making and the determination of appropriate regulatory measures for an organization as a whole (Bell et al, 1977, p 77). Stockholders can get assurance about their investment when the strategic audit applied. It can assist to eliminate the environment ambiguity that resulting from variables of the environment. Moreover, strategic audit can help to develop auditing procedures through providing reverent information about the entity (Pushkin, 2003, P29).

Levels of Strategic Audit

The levels of strategic audit differ from one economic unit to another, according to the levels and stages of the strategic plans that assigned for the unit itself, and can be broadly classified into the following stages (Murad, 2015, P 393).

Level of Economic Unity

The strategic audit is concerned with the highest level of economic unity. The focus is on the extent to which the economic unity of the mission, the characteristics that distinguish it from others, as well as the evaluation of the unit in terms of the extent of participation between the business units in a strategic manner.



Level of Business Unity

At this level, strategic auditing focuses on the competitive environment of opportunities and threats by addressing the type, products and services offered by economic units, current and potential customers. Furthermore, it is also focus on planned segments by attempting to create new opportunities on the one hand, with suppliers and to reach the impression of the economic unity of both customers and suppliers.

Level of Activities

The focus of the strategic audit at this level is, towards the main activities carried out by the economic units as well as identifying activities that contribute significantly to achieve the message of economic unity. Also, it focusses on the internal environment by identifying the strengths and weaknesses of various levels of management through identifying the effectiveness of work between administrative levels in terms of cooperation or conflict (Rashid and Jalab, 2008, P 408-409).

Reasons for Conducting a Strategic Audit

Strategic auditing is usually used when one or more of the following reasons exist:

1. The current strategy fails to achieve the expected results.
2. Dramatic changes in the surrounding business environment.
3. Departments' desire to take preventive action against potential events (Schmidt, 2007, P 14).

Tools of Strategic Auditing

The tools of the strategic audit are varying according to the nature of the economic units and their activities. Therefore, a set of tools that can be relied on one or more to conduct the strategic audit will be reviewed and following some of these tools:

Auditing the Resources

The objective of the economic units is to achieve competitive advantages in such a way as to enable it to continue through the acquisition of various and varied resources, which are financial resources, human resources, equipment and machines tangible and intangible.

Value Chain Analysis

The analysis of the value chain is concerned with describing the basic activities and supporting activities that applied in the economic unit and analyzing the relations between

these activities and their impact on the competitive strength of the economic unit, to exclude activities that do not add value to the economic unit (Constant, 2010, P 34).

Core Competence Analysis

The objective of the administration is to focus on the competencies that affect the achievement of competitive advantages such as precedence of quality, precedence, precedence of flexibility and precedence of innovation. The basic analysis of competencies helps determine the strategic capabilities of companies.

Portfolio Analysis

Portfolio Analysis the budget covers the business unit of the company, if most large companies have operations in more than one market, and contain several units. The important thing in strategic audit is to ensure that the business portfolio is strong and that the unit requires management and investment attention.

SWOT Analysis

Analysis of (strengths, weakness, opportunities and threats) is a valuable tool for the audit of the overall strategic position of the company and its business environment: Figure 1 below portrays the SWOT analysis (Davies,1998, P 237).

Balanced Scorecard Analysis

It focuses on value engines such as customer services, financial performance, learning, growth and the internal business efficiency is in the form of a series of matrices, where the card contains performance indicators for the level of production process and improvement of methods of performance through a deeper understanding of the relationship of cause and effect as well as non-financial measures. Companies record and analyze these matrices to help them achieve strategic goals. They connect the four perspectives (finance, customers, learning and growth, internal processes) to each other according to the relationship of cause and effect and then the vision of the company becomes a strategy to achieve its objectives.

Economic Value Add Analysis

Economic value added is defined as an accounting measure of current operating performance and represents the residual income after investors have received the minimum return required to compensate them for the risks they face as a result of investing their money in the unit.

Stages of Strategic Audit

There are three stages of strategic audit:

Step 1: Diagnosis

(1) Diagnosis of basic documents:

The strategic plan, the operations plan and the organizational structure are the most important policies for resource pooling and performance measurement.

(2) Reviewing the functions (marketing, finance, operations, human resources) in Bench benchmarking.

(3) Accurate understanding of basic rules, responsibilities, relationships, decision-making processes, decision makers, relationships between managers and their subordinates, capital management, information management, technology style.

(4) Identify strategic applications (structure, systems, processes) organization and its relationship to the overall strategy.

(5) Identify the internal perspectives of management include

a - Survey the positions of the higher and middle administrations and whether they are in line with the strategy

b - Metric review of selected customer models and external relations of the organization.

(6) Identify effective strategic features, formulate hypotheses and address existing problems and identify opportunities for improvement.

Step 2: Center Analysis

(1) Test hypotheses designed to address problems and opportunities for improvement, and identify relationships affecting strategic systems.

(2) Formulate conclusions on the vulnerability of the formulation and implementation of the strategy and the level of interaction between them.

Step 3: Recommendations

(A) Developing options for problem-solving and capitalizing opportunities;

(B) Development of recommendations for integration cases, adoption of benchmarks, and adoption of the time unit as the basis for the differentiation between strategic outcomes (Janabi, 2008, P 91).

Risk Management

Risk exists in everywhere, every day we face risk in all area of our life. Witnessed banking industry a number of developments were product of financial innovation, technological

progress and liberalization of financial markets. This led to raise competitive between banks or financial institutes, also, increased the size of risks which threaten its existence and continuity. With increased and diversified risks, it was necessary for financial institutions and banks to orientation towards managing risks by creating new financial methods and techniques, in order to reduce or minimize risks. Risk management considered as an important science in the field of project management, because it ensures the identification and measurement of the risks that the economic unit's exposure to it, whether it's industrial, commercial or financial. Managing risks differs from one entity to another, according to their nature and privacy in the field of its activity. Therefore, risk management in the field of banks, includes a range of methods and strategies that commensurate with the nature of the risks that faced by the banking sector.

Risk Management is basis to grow well all business including purposes and values because it works to develop the sustainability and strength of all companies for the future. For example: the purpose to use managing risk on Bank of America is to make financial lives better for all theirs employees, shareholders, clients, and community and support them. Risk Management Subsection on Bank of America is divided to environmental and social risk policy framework (Bank of America, 2017).

Risk management is the domain that works to prevent risks and minimize losses when they occur. It works to eliminate a recurrence of the risk by examining the causes of each individual risk in order to avoid it in the future. The management of risk extends to the necessary funds to compensate the investments or economic projects for the losses that occur so as not to stop the project from work and production. The management of any project or studying any bank's investment has become a very much interest to studying and auditing the costs of risks. Risk management is undoubtedly the most serious aspect of Iraqi banks, because most of Iraqi banks do not have any risk department or responsible person of the very sensitive task of any financial institution. This applies more so as the economic units or banks in general, "in addition to general risks of banking business in Iraq such as the very high political risks and risk of rapid change in economic circumstance (fluctuations of interest rate, exchange rate etc.)" (AL-Sahrawardee, 2015, P.82).

The aim of risk management is to put the most appropriate policy in order to face expected losses at the lowest cost and in a timely manner. The function of risk management aims ***tostabilityof profits and losses*** by reducing the risks into minimum range, also, aims to ***continuity of growth***, in addition (Heffernan, 2005, P.104) aim to ***maximize bank value*** which is the final objective for the banks or any organization. The department of risk management performs a comprehensive and detailed examination, also, analysis of each type of risk that may be exposed to it through five basic steps: (1) definition of risk, (2) risk analysis, (3) risk assessment, (4) risk identification, and (5) follow up and periodic monitoring of the risk (Abdulmoneim, et al. 2008, P.6).

The importance of financial management indicates (Ghanyah, 2015, P.19) to effectiveness of the banks activities in order to achieve the objectives which can rise up the value of the bank. The importance of risk management lies in the following points:

- (1) Maintain on existing assets to protect the interests of depositor, creditors and investors.
- (2) Monitoring and controlling risks of activities.
- (3) Identified the remedy of each type of the risk.
- (4) To eliminate and reduce the losses to minimum and insured it through by converting it to the third parties or immediate controlling.
- (5) Preparation of studies before losses or after it occurs with view to preventing their recurrence.
- (6) Protect the bank by providing a suitable trust between the bank and depositors, creditors and investors, in other words to protect banks' ability to generate or create profits despite any losses that lead to a reduction in profits or failure to achieve it.

The reason of existence risk management is to find opportunities and to get rid of weaknesses. It imposes banks to look at events or weaknesses in terms of its objectives.

Define Risk

There are several definitions of risk, (Heffernan, 2005, P.103) "risk is defined as the volatility or standard deviation (the square root of the variance) of net cash flows of the firm, or, if the company is very large, a unit within it"., (Gallati, 2003, P.8) Has defined risk as "a condition in which there exists a possibility of deviation from a desired outcome that is expected or hoped for". (Jeager et al., 2001, P.17) Define risk as "a situation or event in which something of human value (including humans themselves) has been put at stake and where the outcome is uncertain". (Klinke&Renn, 2002, P.1071) define risk "as the possibility that human actions or events lead to consequences that harm aspects of things that human beings value". (Aven, 2010, P.5) Risk is also defined by expected values, and by the combination of eventualities and results. According to (M. Crouhy et. al., 2006, P.9) the risk is related to an unexpected and sudden increase of costs or new kinds of expenditures which cause losses in reserves of the bank¹⁰³. And it's different from aspect to aspect; some of references define by focus on the possibility of loss or threats to the financial institution. Others deal with errors or possibility of mistakes being made. And some of definitions concentrate on the public reactions such as stakeholder interests or some political embarrassment (<http://post.queensu.ca/~grahama/publications/TEXTPDF.pdf> P.15). The final define of risk by the Canadian institute of chartered accounts "the possibility that one or more individuals or organizations will experience adverse consequences from an event or circumstance" (Ibid. P. 15).(Holton, 2004, P.22) defines risk as exposure to a proposition of which one is uncertain. In his view, exposure and uncertainty are two essential components of risk.

(Bessis, 2002, P.26) Risk exists only when uncertainty can have a potential adverse effect, which is a possibility of loss. (Gallati, 2003, P.8) Other definitions include the restriction that risk is based on real world event, including a combination of circumstances in the environment.

Also, Risk can be categories according into the way of the bank dealing with risk, because it will help to identify the causes of these risks, "through studying internal and external factors which influence inside and outside the bank, in addition it will help to identify their effects on the operation and success of the bank" (Al-sahrawardee, 2015, p. 87). The reason for managing risk is to reduce the chance of default and to reduce the cost of financial distress (Crouhy et. al., 2006, P.40)

Characteristics of Banking Risk Management

In general risk management characterized by a range of characteristics.

- (1) Most of risks that banks' exposure to it is financial risks, such as bankruptcy, or money laundering.
- (2) Most of these risks are vary from risk to another one, depending on the field of specialized institutions, financial institutions common in three important risks such as market risks, credit risks and liquidity risks.
- (3) Risk management has a predictive ability, especially in scope of losses identification, which it leads to looking for an optimal choice, in order to get rid of losses or to reduce it as low as possible.
- (4) Risk management characterized by finding solutions in terms of how could financial institutions will face and deal with risks.
- (5) All activities that face risks in various aspect of banks or financial institution will reflect on its rights and obligations in positive or negative way. (Crouhy et al., 2006, P.44) That's mean there are coloration between the risk management and other functions of banking systems, for instance, monitoring activities of the banks and managing assets and liabilities.

Sources and Types of Risk

Exposed business environment to several types of risks, some of it has direct affect and others are indirect effects. Risk comes from different area some time it comes from unexpected source, such as changing business environments, deterioration political, economic, errors of people, mistakes of employees, reputation, financial crime, IT risks, technology risks and etc. In addition, we can category risks according to causes of the risk. In general, banking risk can be classified into four major types for instance, financial risks, operational risks, business risks and events risks. Each of this major risks also include serious sub-risks, (Merna& Al-thany, 2008, P.16) mentioned several types of risks such as, market risk, interest-rate risk, equity price risk, exchange risk, commodity price risk, credit risk, credit spread risk, liquidity

risk, operational risk, legal and regulatory risk, strategic risk, country risk, funding risk, payments risk, capital or gearing risk, also (Moreddu, 2000, P.17) classified risks into ecological risks, institutional risk, and etc., any financial institution should recognize the root of each risk in order to avoid it and hedging it in future. Studying sources of risk internal and external factors (inside and outside the bank) will help economic units, banks or any financial institution to understand their effects on operation and success of the banks.

Risk Category

There are two categories which are differentiated according to the source of risk and some of them according to movements of market or default on payment obligations of borrowers. Each risk will focus on the following:

Financial Risks

Credit risk, is the most famous risk and important in banking, credit risk can be define as a risk of "defaulting on payment obligations"(Bessis, 2006, P.28). The components of credit risk consist of several types of risks, such as, ***default risk***, it is the borrowers failure to fulfill to their obligations related to several events for instance, obligations of delay in payments, bankruptcies, and restructuring. Also ***migration risk*** which cause change in a value. ***Exposure risk*** means the risk will increase from uncertainty because of events in the future may cause default of loan repayments. ***Recovery risk*** refers to such uncertainty that arises at the time of default". ***Spread risk*** is another component of "credit risk as viewed by the market and applies to capital market instruments, typically to bonds. And its mean it related to uncertainty and it also explain "the spread between the risky yield of a bonds and risk-free rate".

Liquidity Risk

(Chrouhy, et al 2006, p.30&Bessis, 2010 p.32) mentioned that liquidity risk consist of two component funding liquidity risks and assets liquidity risks, both of them related to liquidity risk. Funding liquidity risk depends on how risky of the funding policy that the banks or firms followed by. Also it means the ability of the banks or firms to raise the cash in order to meet their obligations or to meet the requirements of counterparties with others, and to be ready to meet the withdrawals of depositors. Asset liquidity risks its alternate source of funds for the banks than the market. Because liquid assets should be mature in short-term because the price of market are more volatile in long-term and it will exposure to losses under sale. Therefore, the banks should estimate the time when they want to liquid assets in order to avoid asset liquidity risk. Also, Liquidity risk is defined the ability of the banks to be ready to meet its all obligations with others for fund at the demands time (N. Hanmanth & Shivaji, 2014, P. 17).

Interest-Rate Risk

(Heffernan, 2005, P.102) indicate to the interest rate, it is a price of money; therefore it's another form of price risk or it is the opportunity cost of holding money. Also interest rate refers to the difference between the time of rate changes and cash flow, it means the risk that comes from the bank products (Comptroller's Handbook, 2012, 30).

Foreign Exchange Risk

This type of risk affects the value of most banks assets and liabilities because of the change in the value of foreign exchange rate (N. Hanmanth&Shivaji, 2014, P. 15).

Non-Financial Risk, consist of the following (N. Hanmanth&Shivaji, 2014, P.17-18), (Bessis, 2006, P.28):

Strategic Risk, its result of political environment to shift in economy or government economic policies, also human risk.

Operational Risk, it refer to the problems comes from the processing and system errors also it comes from failures in compliance with different regulations.

Human Risk, it's comes from the unintentional or neglecting employees, which cause a losses to the bank or risks in different way.

Reputation Risk, also its very important to the banks, when the banks provide bad services or products in this case it will give a bad reputation which will affect the business relationships and cause financial losses.

Country Risk is the risk comes from disaster events happen in country such as, crisis, wars, and any other uncertain events or comes from local borrowers. Also country risks indicate to impossibility to transfer risk from the country, this related to currency that is not convertible any more, also because of legal restrictions which imposed by the governments

Risk Control Strategies

There are three main strategies most of banks are followed in order to protect banks activities against any losses and to reduce risk, as in below:

- 1- Strategy is approaches risk avoidance, it helps banks to eliminating the source of the risks which causes threat to the bank through avoiding all business activities have high – risks (Gestel& Bart, P.41)

- 2- Risk reduction this type means how could the bank deal with a risk after its occurrence. In this case, the manager has several choices to reduce risk such as: prevention, diversification, and loss reduction (borghesi&Gaudenzi, P.90) (Eddi, P.5) (Merna& Al-thani, P.53).
- 3- Risk transfer is the third type of strategy that can be shifted to third party such as the insurance company or financial institution (Gestal&baesens, P.42).
- 4- Risk retention, risk is more easily accepted when it is well diversified; investments are made in various sectors and countries, where it's impossible that high losses will happen at the same time in all economic sectors and all countries.

What is the Role of the Audit Function?

Process of risk management should be able to support better-use for risk governance. The internal auditor plays a core role through providing enterprise with assurance regarding the effectiveness of the risk management. This apply when the internal auditor is providing information that state the main business risk are being managed as well as risk management and internal framework are operating effectively (Florea, 2016, P175).

Audit function provides an independent evaluation of the styling and "implementation of the bank's risk management", in order to minimize legal and regulatory requirements. For instance, regulatory guidelines are usually called by for internal audit groups to review the risk management process in general. This means documentation should be addressing, should be adequacy, and should be effectiveness, this will lead to integrity and safety of the risk management system, "the organization of the risk control unit, the integration of risk measures into daily risk management, and so on". Also, regulatory require which are audited by internal auditor to examine "the integrity of the management information system and the independence, accuracy, and completeness of position data". As well as any domestic regulatory requirements, the main objective of auditing should be to assess the model and conceptual safety "of the risk measures (including the methodologies associated with stress testing)".

The process of verifying the accuracy of the models and ensuring their integrity is one of the functions of the internal auditor, and this is done through the back-testing process. In addition, the components of the risk management information system must be verified by the audit. Providing assurance on the design and conceptual integrity of the financial rate database is the responsibility of the audit. Moreover, the parameters that are entered into the market value at risk (VaR) and credit VaR analytic engines are generate by financial rate database. Examination of documents relating to compliance with qualitative and quantitative standards that are considered part of the regulatory guidance also consider as another of the audit functions (Crouhy et. al., 2006, P.103-104).

Principles of Risk Management

There are several important principles each must have risk management committee, this committee should take all principles into account, this principles will help the bank or any financial institute to hedging against risks. In order to well-functioning especially in auditing strategy we can clarify essential principles as in below (Alamiri & Alimam, 2012, 179-180):

- 1-Each bank or any economic units should have independent committee called (committee of risk management), interested in preparing the general policy, while risk management as a specialized administration should implement this policies and should measuring and monitoring risks periodically.
- 2-There must be someone who is risk officer, and should be have a good banking background.
- 3- Develop specific risk measurement system and controlling in order to determine the level of each risk.
- 5- Evaluating assets and investments as a fundamental principle for measuring risk and profitability.
- 6- Using new modern information system for risk management and appropriate safety controls.
- 7- The need for independent internal auditing units in the bank to be directly followed by the border of directors.
- 8- The board of directors should adopt risk management strategy, and encourage accepting and taking risk rationally within the framework of the policies, in order to avoid risks that are difficult assess.
- 9- Set security control for all major information's systems in order to maintain information security and safety.
- 10- Set emergency planning with preventative measurements against crises and should be approved by the bank administrative to confirm that the bank able to bear any crises.

Determine the Effect of Strategic Audit on Risk Management

This study was based on the SWOT analysis and financial analysis of the financial data extracted from the annual reports of a sample of banks. The study has been focused on the two Iraqi private banks of the period of five years (2010-2015). The data were extracted from the published annual reports when analyzing the indicators of those banks. The table summarizes the sample of the study.

Overview of the Banks

Table 1: Summary of the Sample of the Study

Name of the Bank	Commercial Bank of Iraq
Year of established	02-11-1992
Capital when establishment	66, 000,000,000 Iraqi Dinar (ID)
Branches	10
Mission	To create an unrivalled ability to meet customer needs, provide fulfillment and development the staff and deliver outstanding shareholder value
Objectives	<ul style="list-style-type: none"> • Maximize shareholder value on a sustainable basis • Maintain the highest international standards of corporate governance and regulatory compliance as well as solid capital adequacy and liquidity ratios • Entrench a disciplined risk and cost management culture • Optimize staff development through business-driven training and profit related incentive
Dar Es-Salaam Investment Bank	
Year of establishment	7-12-1998
Capital when established	75,000,000,000 Iraqi Dinar (ID)
Branches	11
Mission	leading local and global investment bank with strong and profitable private clients
Objectives	<ul style="list-style-type: none"> • Providing the best quality products and excellence in banking services to customers and maximizing owner equity. Providing best dealing services with Iraqi stock

Sources: Preparing the researchers based on the data of the Iraqi Stock Exchange.

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

The table 1 above depicts the overview of the Commercial Bank of Iraq and the Dar Es-Salaam Investment Bank. Basically, both banks are almost in same size regarding to the branches. Furthermore, the establishment of both banks has not been more than 25 years.

Strength, Weakness, Opportunities and Threats (SWOT) Analysis

The table 2 below portrays the SWOT analysis for both banks:

Table 2: SWOT Analysis

Sequence	Axes according to SWOT Analysis	Commercial Bank of Iraq		Dar Es- Salaam Investment Bank	
		Strength	Weakness	Strength	Weakness
1.	Bank legacy	×		×	
2.	Bank reputation	×		×	
3.	Accounting system used	×			×
4.	Hedging procedures against bank risks	×		×	
5.	Banking services provided	×			×
6.	Technology used in service delivery	×			×
7.	Banking coordination	×			×
8.	Potential risks		×		×
9.	Branches of the bank distribution		×		×
Axes based on SWOT Analysis		Opportunities	Threats	Opportunities	Threats
10.	Social, cultural and demographic factors	×		×	
11.	Level of banking sector	×			×
12.	Conflicts of interest		×		×
13.	Domestic production structure		×		×
14.	Crisis and recession		×		×
15.	Political stability		×		×
16.	Competition	×		×	

Sources: Preparing the researchers based on the data of the Iraqi Stock Exchange. <http://www.isx-iq.net/isxportal/portal/companyGuideList.html>

The table 2 above shows the SWOT analysis of both banks, and as follows:

1. The Commercial Bank of Iraq and the Dar Es- Salam Investment Bank is one of the leading private banks in Iraq compared to other newly established local banks.
2. Commercial Bank of Iraq is family owned business.
3. Dar Al- Salaam Bank is using the ORION FINANCE system which made him distinguish from Commercial Bank of Iraq. This system operates according to the Oracle database system and the standard operating system (Unix) and provides a lot of high quality services to the customers of the bank to enable them to complete their banking transactions through any branch of the branches of the bank regardless of the branch in which they are located, using the integrated communications network and ATMs and the possibility of paying bills from the place of service, hotels, restaurants and shops. Access to banking through electronic calculator and smart phones.
4. Both banks have a special risk management department to address potential risks.

5. Weaknesses in both banks are due to the lack of coordination between the banking sector and the rest of the business sectors.
6. Both banks have small number of branches compared with population. For instance, each bank covers 46,632 people compared to the banking density required by law for each bank covers 10,000 people, which reflect the weaknesses of both banks.
7. The banking sector is undergoing structural and functional changes, mainly due to the adaptation of advanced technologies and increased competition for the benefit of customers and is an opportunity for Dar Es- Salaam investment bank to have high-technology banking system.
8. The most important threats facing banks is the conflicting objectives between the government and the banks.
9. Structural weaknesses such as fragmented industry structure, restrictions on capital availability and deployment, lack of institutional support infrastructure, restrictive labor laws, weak corporate governance, political pressure and ineffective regulations can have negative effect on both Banks.
10. Recession is a major threat to the country's financial system in general and to both banks especially.
11. Political stability and non-intervention of politics in the economy is one of the most crucial factors affecting the economy in general and banks in particular.
12. The lack of the current legal environment that regulates banking work. Some of the laws related to the activity of the banking system contribute significantly to reducing the contribution of the banking sector to the development process and make its activity limited to providing banking and routine banking services. Therefore, the number of service that banks provide to their customers is (15) out of (51) services that banks can perform in accordance with provision of Iraqi banking law No. 94 in 2004.
13. The existence of funds belonging to some branches operating in the Kurdistan Region amounting to about (5.6) trillion dinars without the possibility of withdrawal due to "the fiscal crisis suffered by the region (<http://www.cbi.iq>).
14. Competition from non-bank financial corporations such as insurance companies and mutual fund companies can affect the business of both banks.

Measuring the Adequacy of Capital

To measure and analyze capital adequacy and the changes of capital during the years of research, the researchers adopted the base year as a starting point for analysis in determining the changes in capital. Table 3 below depicts the rate of change in capital.

Table 3: Capital Adequacy and Developments index

Years	2010	2011	2012	2013	2014	2015	Average change
Commercial Bank of Iraq							
Capital adequacy	57%	56%	41%	48%	76%	71%	58%
Minimum capital reserve	15%	15%	15%	15%	15%	15%	
Capital (in Billion ID)	66	100	150	150	250	250	
Change index		51%	127%	127%	278%	278%	172%
Dar Es- Salaam Investment Bank							
Capital adequacy	106%	66%	75%	139%	122%	127%	106%
Minimum capital reserve	15%	15%	15%	15%	15%	15%	
Capital (in Billion ID)	75	100	100	155	155	250	
Change index		33%	33%	106%	106%	233%	102%

Sources: Preparing the researchers based on the data of the Iraqi Stock Exchange. <http://www.isx-iq.net/isxportal/portal/companyGuideList.html>

The table 3 above indicated all the following:

Both banks maintain capital adequacy rate higher than the percentage that is required by Central Bank of Iraq which is 15% as well as Basel decision which is 8% which indicate:

- Banking efficiency of these banks, which make them have cash balances that enable them to cope the emergency conditions and uncertain market situations and thus reduce the liquidity risk which consider as strength point for both banks.
- A weak point for both banks because of non-investment of cash owned and thus loss of additional opportunities to achieve higher returns.

Both banks maintain high capital because of the following:

- The profitability that both banks have.
- Shareholders and owners were raise their capital and this is what we notice before 2013. Moreover, the share price in the stock market rise to four times for the Commercial Bank of Iraq and 2.5 times for the Dar Es-Salam Investment Bank during that period and thus is considered as a strength point for both banks.

Measuring Banking Efficiency through Using the Return on Equity (ROE) Model

The ROE model will be adopted as an assessment of the efficiency of profit and expense, which reflects the return on the bank's equity to the both banks using the indicators in the analysis as shown below:

First contribution measuring the risks that associated with bank efficiently depending on the following indicators as shown in the table 4 below:

- a. Profit margin index (PM)
- b. Asset benefit index (AU)
- c. Equity multiplier index (EM)
- d. Return on Equity (ROE)
- e. Return on Assets index (ROA)

Table 4: Calculation of Efficiency Index Based on the ROE Model (First Contribution)

Commercial Bank of Iraq					
Years	PM%	AU%	ROA%	EM%	ROE%
2010	1.088%	5.9%	2.22%	2.159%	14%
2011	3.785%	0.7%	9.3%	1.830%	5.3%
2012	1.826%	2.4%	5.3%	2.049%	9.2%
2013	7.989%	0.3%	2.7%	1.703%	4.5%
2014	25.223%	0.08%	1.1%	1.579%	3.2%
2015	6.97%	0.78%	0.9%	1.434%	2.9%
Average	7.813%	1.693%	3.586%	1.792%	6.516%
Dar Es-Salam Investment Bank					
Years	PM%	AU%	ROA%	EM%	ROE%
2010	1.769%	0.1%	8.1%	7.004%	1.6%
2011	3.522%	0.3%	2.8%	7.196%	9.8%
2012	30.915%	0.07%	2.1%	5.466%	12.7%
2013	39.738%	0.05%	2.8%	4.251%	9.7%
2014	75.353%	0.018%	6.2%	4.620%	6.4%
2015	20.187%	0.012%	5.9%	4.459%	5.9%
Average	28.580%	0.091%	4.65%	5.499%	7.683%

Sources: Preparing the researchers based on the data of the Iraqi Stock Exchange. <http://www.isx-iq.net/isxportal/portal/companyGuideList.html>

The table above portrays the efficiency based on return to equity index. The return to equity for Commercial Bank of Iraq was decrease during the years from 2010 to 2015. Thus, indicate that the bank is decreasing ability to generate profit. Also, it indicates that Commercial Bank of Iraq management is less efficiency. On the other hand, the return to equity for Dar Es-Salam Investment Bank was increasing during the years 2010 to 2015. This indicates that Dar Es-Salam Investment Bank is more able to generate profit. In addition, it indicates that the bank management is more efficiency than Commercial Bank of Iraq.

Second contribution: measuring the risks that associated with bank efficiently through using the following indicators:

- a. Credit risk
- b. Liquidity risk
- c. Capital risk

d. Operational risk

An illustration is presented below to demonstrate the indicators that listed above as well as the risk that associated to banking efficiently as shown in the table 5 below.

Table 5: Calculation of Efficiency Index Based on the ROE Model (Second Contribution)

Commercial Bank of Iraq				
Years	Credit risk	Liquidity risk	Capital risk	Operational risk
2010	9%	39%	4.6%	40%
2011	42%	33%	5.4%	90%
2012	18.6%	38%	4.8%	200%
2013	11.7%	28%	5.8%	400%
2014	4.8%	26%	6.3%	590%
2015	6%	28%	6.9%	600%
Average	15.35%	32%	5.6%	320%
Dar Es-Salam Investment Bank				
Years	Credit risk	Liquidity risk	Capital risk	Operations risk
2010	5%	8%	1.4%	290%
2011	2.5%	82%	1.3%	300%
2012	1.94%	76%	1.8%	200%
2013	6%	70%	2.3%	500%
2014	2.376%	52%	2.1%	290%
2015	2.6%	49%	1.9%	270%
Average	3.40%	56.16%	1.8%	308%

Sources: Preparing the researchers based on the data of the Iraqi Stock Exchange. <http://www.isx-iq.net/isxportal/portal/companyGuideList.html>

As the chart indicates, both banks tend to provide credits in proportion to the deposits received. This is considered as serious indicator for both banks. Also, the liquidity risk for Dar Al-Salam Bank has increase significantly, while Iraq Trade Bank almost still has the same percentage.

Conclusions

- 1.1. The implementation of strategic auditing by banks leads to the enhancement of risk management function with the necessary information about potential risks.
- 1.2. The Commercial Bank of Iraq has much strength, namely good banking reputation and accounting systems used in accordance with modern technology as well as the necessary banking coordination to provide full services. However, adequate banking and location non-proliferation is one of its most important weaknesses.
- 1.3. There are many weaknesses in Dar Es-Salam Investment Bank including the accounting systems used, the technology used, as well as the banking coordination, the number of

banking services provided compared to the available banking services and adequate non-proliferation.

- 1.4. Dar Es-Salam Investment Bank has recently moved away from the field of investment and remained provide regular banking services because of the current situation and the accompanying threats.
- 1.5. The decline in the market value of the stock for Dar Es-Salam Investment Bank to below the nominal value because the lack of clarity of the economic vision and policies that unite and coordinate the monetary and financial policies, which represents a threat to banking in general.

Recommendations

- 1.6. Encourage banks to conduct a strategic audit of their impact in strengthening the risk management function.
- 1.7. Enhance the accounting systems used and the advanced technology of Dar Es-Salam which will contribute to the achievement of additional opportunities.
- 1.8. Expanding banking activity for both banks to include banks outside of Iraq, and concluding agreements with insurance companies to reduce expected risks.
- 1.9. Investing surplus funds in foreign financial markets.

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