The impact of Risk Management on Bank Sector
Analytical study on Cihan Bank

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Abstract: This study reviews theories and models on operational and strategic risk management, as well as the main frameworks and regulations on risk management. The study focused on Cihan banks and the results were conclusive that risk management impact on Cihan bank and the factors affecting banks is a committee, board, Chief executive officer (CEO). We distributing 70 questioners and obtain 50 only. The results and findings of this research are analyzed by SPSS package version 21 to build analysis and draw conclusion. The research findings showed distinctive relation between measuring dimensions and risk management.

Keywords: Risk management, Type of risk, Risk committee, Chief risk officer, Board size, Board independent, Experience of directors.

I. INTRODUCTION

A. Research Problem

The risk is very importance factor affect on banks , there are many risk factors. So the banks should understand this factors to understand the risk, the purpose of this research is to investigate the factors affect on the banks in Erbil. Therefore, the research problem is: how the factors affect on risk management in banks?

B. Research Importance

i.) To examine the relationship between the factors and risk management.
ii.) To answer research question and test the hypothesis and give conclusion and recommendation.
iii.) To present a theoretical background of the risk management and the factors.

C. Research Hypothesis

According to the research problem and importance, this study specified the basic hypothesis as below:

H0: There is a relationship between risk management and factors.

H1: There is a relationship between risk committee and risk management

H2: There is a relationship between chief risk officer and risk management

H3: There is a relationship between board independence and risk management.

H4: There is a relationship between board size and risk management.

H5: There is a relationship between the experience of director and risk management

D. Research Methods

This research uses qualitative approaches on both primary and secondary data by use the (SPSS) program. The primary data was collected from questionnaires distributed aiming customers of Cihan Bank. The secondary data was collected from books, journals and websites.

E. Research Sample

The researcher selected banks to see how banks deal with risk and how manage it. For adoption evaluation purpose, by determent some factors like board size, risk committee, chief risk officer, board independence and the experience of director.
F. Conceptual Framework

![Diagram showing the Conceptual Framework]

**Risk committee:** is about organization environment.

**Chief risk officer:** the manager who responsibility about risk management.

**Board size:** the number of the board who make decisions.

**Board independence:** the ability to control of aboard in organization.

**Experience of directors:** the background of the manager in risk management.

II. OVERVIEW OF RISK MANAGEMENT

A. Definition the Risk Management

Risk Management is an interesting topic for researchers for many decades and doesn't have universal definition yet. It has argued that, by not having overall agreement among the literatures and facing difficulties in defining and measuring it. There are too many different definitions have been given for Risk. According to (IFA, 1999) Risk has been defined as “uncertain future events that could influence the achievement of the organization’s strategic, operational and financial objectives”, while (Lhabitant & Tinguely, 2001) define risk as the exposure to uncertainty, where uncertainty is defined as the possibility of occurrence of one or several events.

According to (IRM et al., 2002) Risk can be defined as the combination of the probability of an even and its consequences.

So the risk management can be define According to (CIMA, 2005) define it as a process of understanding and managing the risks that the entity is inevitably subject to in attempting to achieve its corporate objectives. For management purposes, risks are usually divided into categories such as operational, financial, legal compliance, information and personnel. One example of an integrated solution to risk management is enterprise risk management.

(Nielsen, 2010) & (University of Vermont, 2004) define risk management as a process to identify, assess, manage, and control potential events or situations to provide reasonable assurance regarding the achievement of the organization's objectives.

B. Type of Risks

According to (Dima & Orzea, 2010) and (Danske Bank Group, 2013) the type of risk in bank sector as the following:

i) Liquidity risk

The liquidity risk of banks arises from funding of long-term assets by short-term liabilities, thereby making the liabilities subject to rollover or refinancing risk (Kumar et al., 2005), the probability of not being liquid would suggest that there is liquidity risk. The higher the probability, the higher the liquidity risk. When the probability equals unity liquidity risk reaches a maximum and illiquidity materializes. In that sense, there is a inverse relationship between liquidity and liquidity risk, given that the higher the liquidity risk, the higher the probability of becoming illiquid, and therefore, the lower the liquidity.

The liquidity risk in banks manifest in different dimensions:

a. Funding Risk: when the bank cannot obtain funds to meet cash flow obligations.

b. Time Risk: Time risk arises from the need to compensate for no receipt of expected inflows of funds performing assets turning into non-performing assets.

c. Call Risk: when a bank may not be able to have profitable business opportunities when it taken.

ii) Interest Rate Risk:

This is when the Net Interest Margin or the Market Value of Equity (MVE) of an institution is affected due to changes in the interest rates.

The following are the types of Interest Rate Risk according to (BIS, 2015):

a. Gap risk: the rate received on assets falls before the rate paid on liabilities does.

b. Yield Curve Risk: it happened when the banks price their assets in different benchmarks.

c. Basis Risk: it happened when the rate of assets, liabilities change in different magnitude.

d. Reinvested Risk: it happened on uncertainty situation in future about investment.

e. Net Interest Position Risk: it happened when the market interest rates adjust downwards and where banks have more earning assets than paying liabilities.
iii) Market Risk

The risk of adverse deviations of the mark-to-market value of the trading portfolio, due to market movements, during the period required to liquidate the transactions is termed as Market Risk (Kumar et al., 2005). There are two kinds of market risk: Forex Risk when a bank suffers losses as a result of adverse exchange rate movements, and Market Liquidity Risk when a bank is unable to make a deal in the same price in the current market price.

iv) Operational Risk

Although operational risk is by itself not a new concept, it has by far not received the same amount of attention as credit and market risk until recent years. Operational risk becomes a major constraint since involve taking appropriate measures to ensure the qualitative transactions without processing errors in order to deliver the best services to the customers.

v) Other types of risks:

(A) Strategic Risk: is the risk arising from adverse business decisions, and from the function of the compatibility of an organization's strategic goals.

(B) Reputation Risk: is the risk arising from negative public opinion. Like financial loss or decline in customer base.

C. Direct risk in individual, global risk

(CLUSIF 2009) mention that the risk can be classified in two kinds:

i.) Direct risk and individual risk

This approach is known that the way in which build the risk management policy, and aims to:

- Identify all the risks to which the company is expected.
- Determine the level of each risk.
- Take measure to reduce the level of each risk identify as unacceptable to acceptable level.
- Ensure that each individual risk is well managed and that a decision has been taken to accept, reduce, or transfer each risk.
- Ensure constant monitoring of risks and levels of risk using the appropriate tools, as the figure (1) show:

![Figure (1) Direct risk and individual risk](Source: CLUSIF 2009, risk management – concept and methods, 14)

This model is used in the management-oriented activities and interests of individuals, and there must be a consensus among the members of the team to achieve success in risk management and work on these risks.

ii.) Direct risk and Global risk

This approach is depending on developing the security policy based on evaluating risks and aim to:

- Identify the certain elements that can lead to risks
- Classify these elements by order of importance
- Determine the policy and security objectives that should be achieved
- Use appropriate tools in monitoring risks and level of risk, as figure (2) show:

![Figure (2) Direct risk and Global risk](Source: CLUSIF 2009, risk management – concept and methods, 15)

This model is depend on technology more than people in determine risks level.

D. The factors that affect on risk management

According to (Aebi & Others, 2011), the factors that affect to risk management are: Risk Committee, CRO, Board independence, Board size, Directors with experience. So we depend on these factors as a factors affect to risk management.

i.) Risk Committee

(Salter, 2015) define the risk committee as a risk depends on the size of the organization, the industry, regulations and expectations set by the organization’s board of directors, and divided the risk committee to three types:

(Type A) Committee of the Board: The Committee of the Board is designed to address the board’s oversight
responsibility for risk management including long-term strategic risks. Occasionally, this type of risk committee would be actively involved in strategic decisions. A Committee of the Board is most appropriate for an organization that truly understands that management of their risks is an important ingredient for achieving strategy.

(Type B) C-Suite Risk Committee: is more common in smaller organizations and may consist of the entire C-suite or just a few members. In larger organizations, the C-Suite Risk Committee would include one or two members of the C-suite—possibly the chief risk officer or the chief financial officer—and members of the risk management team.

(Type C) Operational Risk Committee: This type of risk committee includes a mix of vice presidents and directors. And, as the name suggests, the purpose of this committee is to address operational risks as opposed to strategic, long-range risks.

The Operational Risk Committee can have three primary oversight responsibilities:

- Identifying the organization’s exposures
- Developing a risk control program
- Influencing the risk financing strategy.

ii.) Chief Risk Officer (CRO)

CRO is responsible for implementation and management of programs and requirements for risk management and implementation of the planned solutions to them. And for achieve these solution the CRO must have experience to deal with any kind of problems, because value of organization, stakeholder interest take from organization a years to build.

The CRO need a high level of cooperation between the risk management team and him by allowing each person gives opinions on the proposed solutions level. (Protiviti, 2013) According to (Protiviti, 2013) there are six factors for CRO successful:

- CRO is viewed as a peer with business line leader.
- CRO must give reports to the board or committee with no constraints to any kind of reports.
- Manager, the board believes that management risk is organization imperative and everyone job.
- Risk management in terms of importance is equal as opportunities management.
- CRO must focus to the risk and monitoring the change in the risk.
- CRO should be knew his position to enhance the objects or solutions of the problem.

iii.) Board Independence (BI)

The BI is a number of directors in organization owe duties of care, loyalty and good faith, there is two type of board members “executive” (or “internal”) and “non-executive” (or “external”) and there are three types of non-executive board members: Independent board members, a category recognized in all jurisdictions, Board members who are, or are related to, significant shareholders, Other non-executive board members these “other board members” cannot be simply classified as independent or non-independent as different concepts and criteria are employed. (IOSCO, 2007)

iv.) Board Size

The two most important functions of the board of directors are those of advising and monitoring. First the advisory function involves the provision of expert advice to the CEO and access to critical information and resources. The advantage of larger board size is the greater collective information that the board subsequently possesses and hence larger boards will lead to higher performance. Secondly, the board has the responsibility to monitor, discipline, and remove ineffective management teams, to ensure that managers pursue the interests of shareholders.

However, there are eventually disadvantages of large boards in the form of coordination costs and free rider problems. Firstly, coordination and communication problems arise because it is more difficult to arrange board meetings, leading to slower and less-efficient decision-making. Secondly, board cohesiveness is undermined because board members will be less likely to share a common purpose, communicate with each other clearly. Thirdly, director free-riding increases because the cost to any individual Lipton and Lorsch (1992) argue that a board size of eight or nine directors is optimal, whilst Jensen (1993) argues that the optimum board size should be around seven or eight directors.

v.) The Experience of Director

According to (Mkrtchyan,2012) the Experience of Director, and it affects on risk management depending on two factors First, Select Target, the director choose targets with higher synergies to avoid large loss acquisitions. Second, Negotiation Expertise, whenever the director possesses the skills to negotiate whenever negotiations were effective and thus check to the aim intended to.
III. THEORETICAL FRAMEWORK

i.) Data Collection:

It has been cleared that this research examines the probability between factors affecting on risk management, two statistical approaches used in this research which are Multiple Regression and Reliability analysis, in order to finalize the research and test hypothesis.

Research was undertaken among a random sample of staff in organizations. The primary data was collected from questionnaires distributed aiming employee and head of department of Cihan bank. Only 50 randomly sets of questionnaires from 70 sets that have been distributed are obtained, an examination of the factors that affect on risk management. Convenience sampling had been applied with various analytical tools such as regression analysis is applied to test the proposed hypotheses using SPSS and Excel.

ii.) Data Analysis

Demographical Data

Finding of respondents profiles are illustrated in figure 1-3, and below table shows the summary of demographical section.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Factors</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>30%</td>
</tr>
<tr>
<td>Age</td>
<td>Below 25</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>26-35</td>
<td>64%</td>
</tr>
<tr>
<td></td>
<td>36-46</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>Above 46</td>
<td>0%</td>
</tr>
<tr>
<td>Education</td>
<td>Diploma</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Bachelor Degree</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>Master Degree</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Doctorate Degree</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 1: Demographical Data

Multiple Regressions:

These researches summarize the regression analysis results in table 4 as below:

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Measuring Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Management</td>
<td>0.521*</td>
</tr>
</tbody>
</table>

*p < (0.05) N=50

Table 3: Correlation Analysis Result

In order to check dependency of risk management on perception, multiple regression analysis was done. \( R^2 \) is 0.521 this suggests that of the variance of factors can be explained.

<table>
<thead>
<tr>
<th>Standardized coefficient</th>
<th>Beta</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Committee</td>
<td>0.273</td>
<td>.041*</td>
</tr>
<tr>
<td>Chief Risk Officer</td>
<td>0.134</td>
<td>.032*</td>
</tr>
<tr>
<td>Board Independence</td>
<td>0.118</td>
<td>.034*</td>
</tr>
<tr>
<td>Board Size</td>
<td>0.015</td>
<td>.051N.S</td>
</tr>
<tr>
<td>The Experience of Director</td>
<td>0.122</td>
<td>.028*</td>
</tr>
</tbody>
</table>

*P< 0.05, N.S= Not Significant

Table 4: Coefficients (a)

Dependent Variable

Coefficient values which indicate if independent variable is increased by one unit dependent variable shall change by reported value.

Beta indicates that (Beat = 0.273) of Risk Committee is significant and positive, which supports hypothesis 1. (Beta = 0.134) of Chief Risk Officer is significant and positive, which supports hypothesis 2. (Beta = 0.118) of Board Independence is significant and positive, which supports hypothesis 3. (Beta = 0.015) of Board Size is not significant and negative, which not supports hypothesis 4. (Beta = 0.122) of The Experience of Director is significant and positive, which supports hypothesis 5.

<table>
<thead>
<tr>
<th>Factors</th>
<th>No of Items</th>
<th>Cornbrash's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Committee</td>
<td>4</td>
<td>0.89</td>
</tr>
<tr>
<td>Chief Risk Officer</td>
<td>4</td>
<td>0.83</td>
</tr>
<tr>
<td>Board Independence</td>
<td>4</td>
<td>0.71</td>
</tr>
<tr>
<td>Board Size</td>
<td>4</td>
<td>0.76</td>
</tr>
<tr>
<td>The Experience of Director</td>
<td>4</td>
<td>0.61</td>
</tr>
</tbody>
</table>

*P< 0.05, N.S= Not Significant

Table 5: Reliability Analyses
At initial stage coefficient alpha (Cornbrash, 1951) was applied. Data were analyzed to measure reliability. The study computed separate and combined reliability estimates, which are similar to the normally used coefficient alpha statistics. Cornbrash's alpha calculated, indicates as the coefficients get closer to (\( \alpha = 1.0 \)) the better is reliabilities and coefficients, and less than (\( \alpha = .60 \)) are considered poor. In our study Cronbach alpha for variables are above 0.6 which indicates that the questionnaire has been filled consistently and are reliable.

IV. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

i.) There are a weak in board size that mean the people who responsible for make decision are not in agreement with the decisions they make it.

ii.) There must be few member of board bank and the board should have people who have long experience in risk management situation.

iii.) Attention should also be given in the information which the banks or risk management committee depend.

iv.) The Director of the Bank shall give limited powers to the committee, especially in relation to the implementation of decisions and the adoption of information that will determine the strategy adopted for dealing with future threats.

v.) The factors or variables are chosen here all cannot affect the overall risk level.

Recommendations

i.) Viewing the other risk or similar risk that happened in the past for make useful from it to deal with threats.

ii.) Defining a set of rules and conditions for the number of board size and the nature of the individuals chosen.

iii.) Create database for information about risks that happen in Cihan bank for use it when necessary.

V. DECLARATION

All authors disclosed no conflicts of interest.

REFERENCE