

Risk Management Disclosure of Islamic Financial Institutions: An Empirical Assessment of Pakistan



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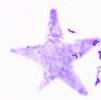
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Risk Management Disclosure of Islamic Financial Institutions: An Empirical Assessment of Pakistan

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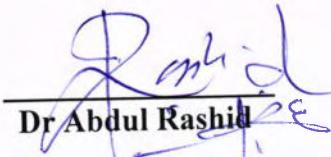


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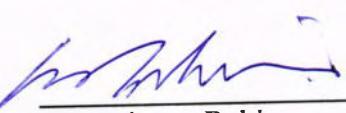


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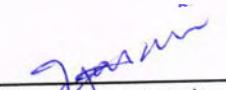


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Dedication

To my Father (Mehboob Khan) and my Mother (Zahida Perveen)

Declaration

I hereby solemnly declare that all the literature presented in following dissertation is entirely based on research work carried out in defense of my thesis topic. This publication is pioneer in its context and has neither similarity to any previously submitted thesis nor any copied material in its contexts from any source except where due reference is clearly mentioned. All of the published data is result of my own efforts, research and analysis with support of those mentioned in acknowledgement, in specific my supervisor(s). If at some later stage plagiarism is detected in the submitted research based on literature, I will be fully responsible for all the consequences as per the prevailing rules and law of approval committee.

Acknowledgement

All praises to Allah (SWA), who created man out of dust, made him His vicegerent on earth and made the angels prostate before him to make him realize the importance and centrality of human race in Divine Scheme of Universe. After Almighty Allah, may the greatest blessings of Allah (SWA) be upon His Prophet Muhammad (SWA), the most perfect and exalted, a source of guidance for humanity forever.

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List of abbreviation

- Accounting and Auditing Organization for Islamic Financial Institution (AAOIFI)
- Council of Islamic Ideology (CII)
- Diversification of Product and Services (DIPROD)
- International Islamic standard (IAS)
- Islamic Financial Services Board (IFSB)
- Middle East and North Africa (MENA)
- Ordinary Least Square (OLS)
- Profit and Loss Sharing (PLS)
- Profit Sharing and Investment Accounts (PSIA)
- Risk Disclosure Index (RDI)
- Security and Exchange Commission of Pakistan (SECP)
- Value at Risk (VAR)
- Variable Inflation Factor (VIF)

Abstract

As the time pass the complication increases in the financial tractions carried by financial institution. Due to this problem demand for risk disclosure information is raised to meet this requirement financial institutions are forced to disclose their risk related information in annual reports. This paper analyzes disclosure level of the main types of risks faced by the Islamic financial institution in Pakistan and compliance with the IFSB risk disclosure guideline. Cover the period from 2005 to 2015. Also estimate the effect of firm characteristics on the disclosure level of financial institution in Pakistan. The content analysis approach is used to analyze risk disclosure statement mention in annual report tell all Islamic financial institution declares risk related information which is required by the IFSB up to satisfactory level in financial statements. Firm characteristics variables credit rating, liquidity, institution size and diversification of products and services are positively related to the effect over the disclosure of risks items whereas subsidiary variable is not significant to disclosure level. We can develop policy from our study to disclosure risk information as it played an essential role for new investors and shareholder which newly enter this field, such information help them to slightly judge the position of the institution in the market.

Chapter 1

Introduction

1.1 Background

It is commonly understood that the Asian economic crisis is not only due to the lack of investors' confidence in investment but also due to the lack of effective management governance, risk disclosure and transparency in most of the financial individual companies and markets of Asia. In the previous many years, most of the east Asian companies have focused on analyzing and taking steps for the betterment of their regulatory frameworks, in specifically corporate and management governance, risk disclosures and transparency. However, the effortless acquisition of many international accounting standards (IAS) is not enough to address such problems of disclosure and transparency in these countries. Furthermore, the quality of actual and accurate financial disclosure pleased investors' information needs (Ho and Wong, 2001).

Risk is defined as the chance of injury, loss, destruction, danger or any other negative effect that occurs due to any internal or external changes, which can be avoided through precautionary measures (Cabedo and Tirado, 2004). Risk disclosure is a document that describes all the possible risks involved in future trading and investment. Disclosure has always been a way of fulfilling the gap of risk information dissymmetric that exists between the director and stockholder. Disclosure of accurate, timely, and authentic information is very necessary for the proper working of financial market and corporate system as many investors' decision of new investment is heavily depends on such kind of information. Most of previous studies on firm's risk disclosure show that managers are

unable to fulfill their responsibility to disclose information about risk (Cabedo and Tirado, 2004). Some researchers argue that poor level of management of risk can cause problems for many firms also become the reasons of Corporate failure which inform investors that they are unaware of actual risk condition of the firm in which they invest (Rahman, Kighir, Oyefeso and Salam, 2013).

The empirical work on Islamic finance has increased in recent years with essential contribution from Islamic scholars i.e (Baydoun and Willett, 1995 and Gambling and Karim, 1986). It is important to note that the emphasis of these studies is expressive and scientific in nature. These studies focus on the application of Islamic financial principles and execution of theoretical framework derived by the Islamic institution which is also derived accounting and financial standards for Islamic financial institutions (Baydoun and Willett, 1995). The practical response to fulfill the need of modified and clear accounting standards for Islamic institution has appeared in the form of the Accounting and Auditing Organization for Islamic Financial Institution (AAOIFI). This institution was established in Bahrain in 1991 to spread and promulgate auditing and accounting standards for application in the financial Islamic institution worldwide. Over a period of two decades, AAOIFI is known for the Islamic financial standards' institution which is responsible to check and report the situation of compliance of Islamic financial institutions. Afterword the growth in Islamic financial sector is remarkable (Vinnicombe, 2010).

The demand for Islamic financial institutions has grown because Islamic financial institutions have many benefits in our Islamic society such as Islamic financial institution strictly discourages the interest based schemes and they also prohibit paying and

receiving any interest in their lending and investing transactions. Islamic banking is completely based on equity system promoting zero-interest, mutual funds, income funds, joint business, leasing, sharing equity, varying and favorable rate of return. They have also replaced interest based business with interest free and profit and sharing (PLS) based business. On the contrary, conventional institutions faced many risk in their day to day financial activities. In the empirical study they also need to disclose risk related information for their future loss. IFSB (Islamic financial services board) is an organization setting standards for financial institutions internationally that protects the strength and soundness of the Islamic institutions of finance. All Islamic finance institutions are follow those guidelines and principles manufacture by IFSB. In the case of risk management disclosure, IFSB manufacture a list which is essential for Islamic financial institutions to pursue and disclose all realizable risks in their annual reports.

Risk disclosure is the transmission of information related to firms' characteristics, scheme and operations that have the ability to influence the anticipated return (Bozzolan, Trombetta and Beretta, 2009). It is the duty of risk management to identify that risk which affects future functioning of firms and take steps and made strategies to mitigate such risk in order to reduce loss caused by them. Risk management schemes have been measured within the borderline of firm because risk is exists in almost each part of business operation. In past few decades, risk management obtains attention, more importantly from shareholder's point of view. As the difficulties in the business world increase, there is need to upgrade the disclosure quantity and quality by decreasing the activities which tends to create risk, these analysis are very useful and also beneficial for the stakeholder. These risk disclosures help in judging the management's effectiveness in

communicating with higher market volatility and reservations of business and their effect on firm's growth rate and economic value (Lajili and Zeghal, 2005).

The study performs by Marston, Marston and Shrives (1991) analyses the disclosure index. They observed that firm size, listing companies, leverage, profitability and credit rating by audit firms were the most frequently examined firm characteristics keeping in view the disclosure level. Firm size and listing companies' characteristics have highest rate of disclosure levels but the rate of disclosure level of other characteristics i.e. leverage, profitability and credit rating is lower. On the other hand, the study of Marston and Shrives (1995) find different results about these firm characteristics. In this study they viewed 32 disclosure studies and elevate opposite result especially with respect to association between leverage, credit rating and profitability and disclosure levels. According to them the difference in result is due to the different political and economic setup and environment between the countries, theoretical framework of organizational structure, sampling error and the creation of the list of information items need to be disclosed. Wallace and Naser (1996) have a different point of view about these mixed results. In their opinion, this is due to the different statistical methods, different type of firm characteristics to be examined, different setting of disclosure index and difference in research methodology. When we examined all other researches, everyone have different limitation which is different from each other and it affects their results.

Annual report is a public paper that is authorized to be creating each year and suppose to give all financial and non-financial information that is useful for the investor to take future accurate or good investment decisions (Amran, Bin and Hassan, 2008). Due to

frequent modification in business model only financial information is not enough that fulfills informational requirement of the shareholders, some individuals and business are now favoring the utilization of non-financial information to be disclosed. Several new areas of notice need to be mention in annual report includes communal and environmental activities but still such disclosures depends on the will of many companies in many different countries according to the instructions issued by different legal and accounting bodies for financial institutions. Risk management has to be disclosure in annual reports by the accounting and financial standards board. Though, risk management disclosure is still non voluntary in many different countries (Amran, Bin and Hassan, 2008).

In order to enhance the quality and quantity of financial reporting it is essential to work not only the present condition and quality of disclosure to develop best disclosure practice but also to focus on the factors that have impact on financial accountability and reporting. There are many factors which have effects on the level of financial reporting, as well as the focus is only on specific part of corporate financial reporting. However, some previous studies highlight many of those factors which may be helpful to explain the decision that affects disclosure level, there unsolved issues, and those matters whose empirical finding are either indecisive or conflicting. The understanding of the factors that affect the corporate financial reporting disclosure decision is essential for those who want the betterment in the accountability, completeness, accuracy and objectivity of financial information. A substantial reorganization of these dominant factors will start a debate on how these problems will address in better way for improvement of financial system (Adams, Hill, and Roberts, 1998).

Financial sector are facing many different type of risks in their day to day transactions. The importance of these types of risk based on the way they running their business, regulatory system to which institutions are subjected to follow and asset portfolio. To know, the significance of these types of risks which is facing by financial institutions or banks, customer play an important role by showing their confidence over institution by investing, depositing, withdrawing and by availing different services offer by such institutions.

The most important types of risk faced by every financial institution are credit risk. This type of risk is recognize by long time as a dominating risk for banking sector and is a built in part of their main lending business. Credit and deposit normally given to customers and depositors commonly show the most important asset and liability levels in financial instructions' balance sheet. The second most important type of risk is liquidity risk, faced by the financial institution in case of unable to fulfill short term financial need. It occurs mostly when an institutions' inability to convert security into cash without the loss of capital. Operational risk is taking third position in important types of risks. This type of risk is explained as the risk of poor and failed internal management processes or from external events affects either directly or indirectly. Market risk is also very important to manage. It is a risk to change the value of investment either increase or decrease due to change in market factors. Such type of risk customer keeps under observation when they want to start new investment with financial institution or another organization. The next risk which is frequently measured by the financial institution is credit rate mitigation. The application of various different methods to reduce the intensity of loss in lending process by banks which deals with credit. Rate of return risk means risk

free investment by the investors; it is a kind of incentive institutions or financial business given to their customer in case of any loss to their investment. Customer gives very importance to this type of risk because it secures them from any loss (Hussain and Ajmi, 2012). We have mentioned few types of risk in our study, but beyond that there are further types of risks prevailing Islamic financial institution which hold fewer importance. In our study, we develop our disclosure index by considering these types of risks.

It is important to describe the definition of risk management afterward we discuss the importance of risk management disclosure in annual report. The growing difficulties of performing business, management of risk become essential and fundamental part of business internal risk reporting to attain its objectives. Risk management involves different procedure and actions taken by business to manage risk in order to achieve their target (Amran, Bin, & Hassan, 2008). Briefly, explain the few processes involves in management of risk. First of all careful recognition, assessment, and know depth of risk's type probably face by the organization. This step is very important and performing with a great care as little mistake leads to big loss to the organization. Secondly, it incorporates formulation of risk management strategies that have ability to deal with the risk or also formulate a model to tackle with risk faced by organization. This involves verifying ability for bearing risk, decrease in effect of risk or mitigation technique and other process that reduce the impact of possible risk. Lastly, it needs the application of all mitigation process or risk management strategies that develop to deal with effect of potential risk. Correct and careful identification of risk gives opportunities to the organization to protect and establish the benefit for their shareholders, employee, owners,

customers and for overall society in many developing countries it is mandatory for the organization to disclose risk management by the accountability standards. However, it is voluntary to disclose risk management in most other countries of world (Lajili and Zeghal, 2005).

1.2 Gap in the Literature

Many studies have been conducted in Pakistan on risk management practices by Islamic banks and financial institutions. For example, Khalid and Amjad (2012) conduct a study on risk management practices and Nazir, Daniel, and Nawaz (2012) performed a comparative study on risk management practices of conventional and Islamic banking. They found that Pakistani banks are efficient in risk analysis, risk monitoring and understanding of risk is the most important variables of risk management. The study of Abid and Shaiq (2015) on risk disclosure of firms in their financial statements in Pakistan but no study conducted by any researcher on Islamic financial institutions' risk disclosure. Several studies have been carried out at the international level for example Amran, Bin and Hassan (2008) and Cabedo and Tirado (2004) on risk disclosure in annual report of institution but in the context of Pakistan no empirical evidence available. It is an effort to address the lack of studies on risk disclosure reporting in case of Pakistan. This study is different from rest and it completely focuses on risk management disclosure of Islamic financial institutions. The firm specific characteristics of these institutions in Pakistan that has not been empirical evaluated at least not to our knowledge. As it is an important issue to highlight that risk disclosure should have impact on the performance of the financial institutions or not. So the purpose of this study is to fulfill the gap in the literature in regard to risk management disclosure. It will help in

the future to the institution of financial standards and principles to focus on Pakistan's financial sector risk disclosure issue. IFSB should include some strict rules for those institutions which are still not follow their instruction and get punishment for their ignorance because it is the right of general public to know the risk related true and accurate information.

1.3 Research Objectives

There are three objectives of our study:

- To discover the level of risk faced by Islamic financial institutions based on disclosure made.
- To construct index in order to determine the extent of risk disclosure by Islamic financial institutions in Pakistan compliance with the IFSB risk disclosure checklist.
- To analyze the impact of firm characteristics on the extent of risk disclosure by Islamic financial institutions in Pakistan.

1.4 Research Questions

The study aims to answer the following questions:

- What is relation between Islamic financial institution size and the extent of risk management disclosure?
- Is there a positive relation between leverage Islamic financial institutions and the extent of risk management disclosure?
- What is the relation between Islamic financial institutions having a number of subsidiaries and the extent of risk management disclosure?

- What is the relationship between Islamic financial institutions having external credit rating and the extent of risk management disclosure?
- What is relation between level of risk and risk management disclosure of Islamic financial institutions?

1.5 Research Hypotheses

The hypothesis developed in our study is according to our objectives in estimating the impact of firm characteristics i-e. Size, leverage, level of risk, number of subsidiaries and credit rating on the extent of risk management disclosure.

H_1 : There is a positive relationship between Islamic financial institutions having a number of subsidiaries and the extent of risk management disclosure practice.

H_2 : There is a positive relationship between Islamic financial institutions having external credit rating and the extent of risk management disclosure.

H_3 : There is a positive relationship between Islamic financial institutions size and the extent of risk management disclosure.

H_4 : There is a significant positive relationship between leverage of Islamic financial institutions and risk management disclosure.

H_5 : There is a positive relationship between product diversification and risk management disclosure.

1.6 Significance of the Study

Banking sector and financial intermediaries comprise a major part of financial sector that are having impact on economic development. The growth and strength of economy is heavily dependent on the stability of monetary sector. Its duty is to link surplus units with deficit ones, organize funds for productive purpose and participate in development of economy. Islamic banks and financial institutions operate in comparison to conventional

financial institution because conventional system is interest based but as an Islamic state it is our responsibility to run our financial sector according to Islamic Shariah. As a result of increased demand Islamic institution started to begin which are completely Shariah based with the help of private sector. They get great response from the society and with the passage of time this sector experiences a remarkable growth. As there are many similarities between two types of banking institutions many people think that Islamic institutions are only name as Islamic otherwise all the functioning of both conventional and Islamic are same. But when we deeply study Islamic banking we come to know that they are following Shariah and using only interest free modes which are allowed in Islam. Internationally, Islamic banking is also growing slowly with the passage of time by participating in international market and successfully introducing interest free instruments.

This study is significant in providing information to the government that how many Islamic institutions in Pakistan are following the IFSB risk management checklist which is necessary for Islamic institution and for future, government can strict rules for those institutions which are not following instructions related to the disclosure of risk related information. It gives information about the risk management disclosure to the investors of the institutions because their decisions depend on such information. In this way they come to know that either risk information disclosed by the firms in the markets is complete and accurate or firms are just fooling the investors. It also helps to those new investors who are unable to understand that Islamic institutions are more risky than conventional institutions as this study shows level of risk faced by Islamic institutions which help them in taking decision about new investment of their own choice's

institution. It is complimentary step to divert the attention of new researchers in the field of risk disclosure. So, that they design their research to highlight the other issues in risk management disclosure can be made their studies more accurate.

1.7 Scheme of Study

The arrangement of this study is as follow. The second chapter analyzes and critically evaluates the previous literature about the risk management disclosure followed by the conceptual structure and the development of hypothesis. Third chapter illustrates the content analysis principle which is generally in practice; data description of dependent and independent variable taken from annual report of Islamic financial institutions also present the development of model. The forth chapter focuses empirical results. The final section summarizes and conclusion of the study.

Chapter 2

Overview of Islamic Financial Institutions

2.1 Introduction

An Islamic financial institution is the blanket term for all financial institution that operate in line with the Shairah. Generally, in order to be considered an Islamic financial institution, there must be a Shariah board composed of more than one scholar qualified to issue a fatwa on the Shariah-compliance of a financial products. Islamic banking has extended in size and magnitude in many countries all over the world. In Iran and Sudan financial system is completely working on Islamic Shariah rules and regulations while designing their financial products and services that confirmed religious principles which highlighted in the Quran and Shariah. In Pakistan the process of converting all financial system in accordance to Shariah principles is in progress. Many other countries are operating Islamic financial system along with conventional financial system like Malaysia, Egypt, Bangladesh, Jordan and Indonesia (Sundararajan and Errico, 2002). They are doing this either through opening new separate Islamic institutions or banks launching Islamic windows in conventional banks and institutions, which offer Islamic financial products. In various countries financial global institutions i.e Citibank presents Islamic products and services which is completely based on Shariah principles. Islamic banking is also another face of complicating across the border financial actions happen in definite off-shore financial institutions i.e Malaysia, Labuan and Bahrain etc. The

financial services of Islamic system are consists of highly multiple institutions such as, mudarabah companies, mutual insurance or takaful, investment and commercial banks.

Effective risk management deserves attention in Islamic banking. However it faced many difficult issues that need to understand properly and to be addressed successfully. In specific, the nature of particular risks facing Islamic institutions, jointly with the virtually vast number of ways accessible to them to give funds through utilize the combination of the legitimate Islamic financing modes both sharing of profit and loss (PLS) and non-profit and loss sharing account (non PLS), generate a lot of issues in income recognition, risk measurement, disclosure standards and adequacy of collateral. So, unfamiliar solutions and suitable modification of accessible risk management frameworks are required to show the particular characteristics of Islamic financial products and services.

2.2 Particular Risks Faced by Islamic Banking

The characteristics of Islamic financial institutions and the intermediate models which they follow demand special risks which required to be recognized to assist in making effective management of risk in Islamic banking. The PLS mode of financing generate several important considerations. Particularly, the Islamic banks' PLS modes may transfer direct credit risk to their depositors of investment; they may raise the overall level of risk of balance sheets' asset side of banks. In application, PLS modes prepare Islamic banks endanger to risks normally generated by equity investors in place of debt holders (Sundararajan and Errico, 2002).

Islamic institutions have no lawful means to restrain the agent entrepreneur that one head business financed via a mudaraba contracts. The individual has full freedom to operate

the business according to his supreme discernment. Banks are entitled to share the profit and loss according to the agreed upon PLS ratio. In direct investment and musharaka contract banks have better options to regulate the enterprise in which they invest because partner may affect the management of business and use voting right. PLS modes cannot methodically rely on any guarantee or collateral to reduce credit risk (Sundararajan and Errico, 2002).

Operating risk is key risk in Islamic financial system. It is generated through various ways including (i) the distinctive activities internally performed by the Islamic banks. These highlight internal command as key to safeguard that all stages of the investment procedure are controlled, based on Islamic banks' investment strategy, (ii) the Islamic financial products' non standardized nature, (iii) the lack of reliable and efficient shariah litigation structure to impose financial contracts.

Another specific risk immanent in the running of Islamic institutions stems from the specific nature of investment security, whose rate of return and capital value are not guaranteed. This quality combined with the asymmetry spring from the contract of unrestricted mudaraba where banks control depositors' funds on their own choice, significantly increase the probable moral hazard and generate motive for running financial and risk taking institution without enough capital. Islamic banks' investment depositors don't adore the same rights as investors enjoyed in conventional investment system but do share equivalent risks. Under these conditions, corporate governance is very difficult to exert and the possible undue risk-taking and increased moral hazard (Sundararajan and Errico, 2002).

Due to general and specific risk factor faced by Islamic banks, they typically forced to keep their large amount of assets in reserve accounts as compare to conventional banks in correspondent accounts or with central banks. This has importantly have impact on their profitability because reserves in central banks and correspondent account normally yield very low or no return. So, in return, this has increased their chance of vulnerability to exterior shocks and affects their competitiveness with probable systemic consequence.

2.3 Elements Required for Suitable Information Disclosure

Information disclosure is very important in Islamic financial system as compared to conventional financial system because sharing of profit-and-loss (PLS) principle and the implicit lack of security for investment depositors' is main aim of Islamic banking. For making depositors saved and protected the more disclosure of public information about banks' operational strategies and policy objectives become essential to enable depositors to observe banks' performance. Future, in the framework of Islamic banking depositors experience more benefit to monitor performance of bank than conventional depositors as neither returns on investment nor capital value are guaranteed and fixed by banks, but rely on performance of bank into investing depositors' fund. Such controlling should not only pursue to secure the depositors funds' capital value but also help to show that the rate of return given to them presents the true implementation of PLS principle. Therefore, the decrease information asymmetry immanent in contracts of unrestricted mudarda a concise and clear disclosure of key information and data is likely to permit depositors more pliable in choosing a particular bank in which they provide their funds with respect to their risk preference (Sundararajan and Errico, 2002).

Furthermore, proper information disclosure can allow the public and supervisory authorities to understand the strategies of bank in better way and their relevant risk. It enables the supervisors and the public in a finer position to exercise knowledgeable effective prudential and market discipline this decrease the Islamic financial environment systemic risk. Consider the operational similarity between investment companies and Islamic banks, it may demonstrate useful to adopt disclosure information requirement created by conventional banks for investment company at the time of particular need in an Islamic environment. Islamic banks could competent cover disclosure information requirement's interrelated areas such as investment policies and objectives, risk factors, performance data, types of securities, internal controls and professional qualifications, senior staff and experience of management (Zaher & Kabir Hassan, 2001).

It is value nothing that the raising appearance of institution investors, i.e. mutual Islamic funds, will greater than likely construct mechanism of market enforced discipline inherent in the procedure of disclosure information more binding and productive for banks' strategies and decision related to risk-taking. As it has already existed in conventional environment, it can be sensible expected that Islamic system's investors institutions will play a critical role in collecting, evaluating and interpreting the follow of disclosed information by financial Islamic institutions. These Islamic investors will behave as the major private controller of these institutions while such expertise is being developed by other investors and small private depositors. Such a growth will help Islamic bank to facilitate risk management.

2.4 Key Challenges Ahead

For the suitable development and establishment of Islamic financial system in the near future, a conference carried in Washington DC, the governor of central bank of Pakistan, Indonesia, Bahrain, Sudan, Saudi Arabia, Kuwait, Lebanon, Iran, Malaysia and United Arab Emirates, senior officials from the AAOIFI and the development Islamic bank agreed to develop a new organization IFSB to encourage good supervisory and regulatory application and uniform authentic standards for financial Islamic institutions. These decisions obeyed by large consultation harmonize by the IMF and with the cooperation of AAOIFI and Islamic development bank (Sundararajan & Errico, 2002).

The development of the IFBS is of great importance in the acknowledgement of the growing magnitude of financial Islamic institutions and globally products. The acquirement of its alternate objectives critically depends on further advancement in addressing technical issues, the coordination of the regulatory and legal frameworks dominating financial Islamic institutions and the growth of sufficient instruments, market infrastructure and markets to support their actions.

The harmonization, while encouraging of financial global security, should also be useful to productive prudential supervision of financial Islamic institution in which country they originate, and facilitate Islamic banking an encouraged international expansion. The expansion of adequate instrument, market infrastructure and markets are also factors important to ease risk management and authorize Islamic banks to victorious participate with conventional financial system in the global financial system (Sundararajan & Errico, 2002).

Therefore, it is critical for the IFSB to act deliberate role as the catalyst for conducting conversation at international level on a broad array of financial and legal, Islamic banking, consisting not only regulatory and technical issues but also wider market and policy development issues. The IFSB should overtake the center of proficiency for designing suitable solutions of growing challenges that the capital global markets occur to the operating institutions in the Islamic system, as well as promoting extensive acceptance of the good practices and standards important to apply these solutions. In bring these tasks, the coordination establish by IFSB with concerned supervisory national authorities, AAOIFI, central banks, the financial international institutions and market relevant participants (Sundararajan & Errico, 2002).

2.5 Islamic Financial System Experiences in Pakistan

As an institution Islamic banking, has around for 25 years but we cannot say that interest free banking was not tried before. Although, every country has different history of Islamic system, they all have played major role in the Islamic financial institutions' revolutionizing. The founder of complete Islamization was the Islamic republic of Iran, Pakistan and Sudan. As we all know the concept of Islamic banking in Pakistan was started when economists were eager to focus on ideology or theory of Islamic banking as early as in the 1950s. Pakistan was the very first country which starts full financial Islamic system. It has been persistent in modeling this concept workable by changing and reaffirming measure to attain its objective. However, after 20 years the picture had turned when leaders of the country realized that the inherent British system unable to change in country. Pakistan was trying to alter things too much too early, as it was still under the

effect of British legacy, haze of its freedom and independence (Zaher and Kabir Hassan, 2001).

The first stage of economic reform began in February, 1979 in Pakistan when zakat was imposed on all accounts of saving in many banks. But this technique didn't prove effective because public is opposing that this is not an Islamic way of zakat through banks as those are not the guardian of money. The second stage of its Islamization, the government of Pakistan authorized council of Islamic ideology (CII) which prohibits interest and launch 'godly and brotherly' ways of creating profits. They give time to the institution to remove the interest from institutions in the period of 3 years. The main 3 specialized credit institutions national investment trust, the investment corporation of mutual funds and the corporation of house building of Pakistan removed interest immediately. The mission of removing interest rate from commercial banks become complicated and difficult because CII which gives the detailed blueprint of removing interest for the purpose of Islamization didn't provide any detail or suggestion on changing institutions internal structure of banking and financial system (Khan & Mirakhor, 1990). As a result despite of all these local steps foreign investment banking transaction still follow western financial framework. In 1992, the problem got worse when federal court of Shariah declared that banking based on interest is not Islamic and strictly banned by the court.

Contending the prevailing country's legal framework could not properly safeguard the banks against defaults and undue delays, the government of Pakistan passes an ordinance in 1984, the banking tribunal ordinance. Due to this ordinance, particular territorial jurisdictions with 12 banking tribunals, each monitor by a higher-ranked judge to be

approved by the government and order to dissolve all cases in 90 days of reporting the complaints and objection, were to be system. The ordinance is also given an appeal procedure under which the decision of the tribunal is challenged in high court within 30 days of decision announced by the tribunal. Through this way government of Pakistan try to address the problem and give security to the banks against defaulters (Khan & Mirakh, 1990).

Pakistan's model explicate us that banking based on interest free engaging PLS as a mean of income earnings is non-financial while 90% of the dealing is secure in mark up. The question rises of moral Islamic hazard with numerous businessmen who were taking benefits of new model of banking. This experiment did not attain its desire results.

In particular countries numerous Islamic financial institutions arrive between their top 5 banks. Meezan bank is the largest Islamic bank in Pakistan, which is fast presuming mainstream prominence. Pakistan's Meezan bank got the award of the best Islamic financial institution by global finance magazine at its award function organized annually for the world's best financial Islamic institution 2010. Meezan bank also introduce other financial institution which are based on Shariah principles in Pakistan like meezan mutual funds, Islamic meezan fund, meezan pension fund, meezan tahafuz pension fund and many others.

The halal sources of funds of Islamic banking in Pakistan other than its own equity and capital, main source of funds for an Islamic institution are two different types of deposits i.e investment and transaction deposit. Transaction deposit is straightly lined with payment and can consider as equal to demand deposit of conventional system. While

banks would give guarantee the formal value of deposit but they would give no return on this form of deposit. Investment deposit comprises the primary source of banks' funds and they favor shares in firms other than saving and time deposits of the traditional sort. In this type of deposit banks would not give any guarantee on its nominal value and would not give any fixed rate of return on this type of deposit.

Assets acquisition of Islamic banks in Pakistan through two main modes of financing: Musharakah and Mudarabah. In the provisions of mudarabah mode the surplus or excessive amount is provided to the business to be invested in creative and productive enterprise or business in return for specified share of profit deserve. Financial loses are carried entirely by the lender. This arrangement therefore, successfully place financial capital with human capital on par. On the other hand, in musharakah there is more than one contributor of funds in business. All the investors invest in different proportions and they share profit or losses in different proportions as according to their share in capital. This financing mode is correlated with equity market where shares can be obtained by the general public, central banks, banks and the government. Traditionally, mubarabah mode of financing is applied on short term investments projects and commerce and trade, whereas musharakah is employed in long term investment plan and projects (Khan & Mirakhor, 1990).

2.6 Risk Disclosure in Pakistan

Risk disclosure demand in financial system is increased day by day due to the increase in complexities and changing business type which creates uncertainty for future continuation of institution. Some regulatory authorities have developed standards that

control reporting of risk and needed managers to disclose information. These regulation or standards require information or data on financial and non-financial risks. In Pakistan, a regulatory body which regulates risk disclosure information is security and exchange commission of Pakistan (SECP). The regulation no 14 of latest document publish by SECP on November 19, 2015 require the disclosure of risk information. The requirement is give risk information on financial statements' notes, risk resulting from utilizing derivative financial instruments. Pakistan has follows IFSB regulation, IFSB 7 deal with the risk disclosure information. In Pakistan, financial institutions must provide information on financial risk acquire from the employ of financial instruments consist of liquidity, credit, market, interest rate, price risk and exchange rate in financial statements' notes. Furthermore, there is no necessary regulation related to the disclosure of non-financial risk in annual report or give any separate document or report for mitigating risk for non-financial institutions.

Chapter 3

Literature Review

3.1 Introduction

Many empirical studies have been carried out in order to find the risk disclosures and their compliance with IFSB e.g., Rahman, Kighir and Oyefeso and Salam (2013), Hassan, Bin and Amran (2008) and Shrives and Linsley (2006). Several studies highlighted the risk disclosure practices across different regions globally e.g., Sundararajan (2007) and Hussain and Ajmi (2010).

3.2 Risk Disclosure Practices

Chandra (1974) investigated adequacy of disclosures mainly in published corporate annual reports. For such purpose, the study examined whether who attest corporate annual reports and also those who use reports – public accountants and security analysts had any kind of connection about the information which was provided in annual reports of published firms. He found out that accountants did not value information about equity investment decisions just like security analysts.

Buzby (1975) examined that sample of annual reports of firms indicated that level of disclosure differs from company to company. Many factors could be attributed to this variation. One of the problems that usually occurred in corporate reporting that very little was known about the extent of these factors affect disclosure's adequacy in annual reports. The results showed that disclosure's extent in annual reports was positively associated with company's size and they were not affected by the listing status. Few

points were also highlighted that the extent of disclosure was not synonym with disclosure's adequacy, but it was adequate disclosure's subcomponent.

Firer and Meth (1986) examined the information requirements in the annual reports of investment analysts of South Africa and compared them to United Kingdom counterparts. A disclosure index for the measurement of the extent of information disclosed voluntary in the annual reports was developed. The results of their study were compared with the UK's study. The results showed that a correlation of low level was found, indicated that two countries had different analyst need for information disclosure. It was shown that analysts of investment mainly considered the information on the whole relevant with investment decisions. A comparison using Firth index revealed that there was very limited positive correlation between the requirement of information of South Africa and the United Kingdom.

Chow and Boren (1987) reported on practices of voluntary financial disclosure of Mexican corporations and they related the extent of firm size disclosure, proportion of assets, and financial leverage. Voluntary disclosures varied with 52 listed firms in Mexican stock exchange. The results of that study showed that the extent of disclosure was positively and significantly related to the size of the firm. On the other hand, it was significantly related to asset in place and financial leverage. Their study also contributed to the disclosure practices in American country non-Anglo that had not been examined extensively.

Amran, Hassan and Bin (2008) analyzed risk disclosures in the annual reports of the companies of Malaysia by paying attention to the non-financial part of the reports. Their

research examined the level of risk too. Descriptive analysis showed that most of the companies of Malaysia risk disclosure practices but this practice there is still in infancy stage. Solomon and Norton (2000) focused on the areas of risk disclosure and risk management in their study related to the segment of corporate governance in their study. Through conceptual framework, the results showed that institutional investors agreed that risk disclosure would help the decision making process in the companies.

Lajili and Zeghal (2005) examined risk disclosure information in the annual reports of Canadian companies in 1999 and the usefulness of information to a firm's stakeholder. For the purpose of analysis of disclosure information, content analysis was used. Information about risk disclosure in annual reports of the companies of Canada is mainly qualitative in nature, so content analysis was performed regarding risk management techniques and risk sources. Their analysis was limited but it indicated that risk disclosures were always playing a significant role.

Shrives and Linsley (2006) explored risk disclosures with a sample of 79 annual reports of United Kingdom companies by using content analysis. Their study found a significant effect and association between company size and number of risk disclosures. They used Eco Value 21 Rating Model for the disclosure of risk information. It provides help to the companies about the environmental risk. In terms of empirical findings, that there was dispersion about risk disclosure throughout the report. Risk disclosures in the annual reports were only partially satisfied; the evidence suggested that risk disclosure information was not sufficient.

Abraham and Cox (2007) investigated the risk information in annual reports of companies, governance, ownership, and also US listing characteristics. Through descriptive analysis, it was observed that firms published control risk, financial risk but all firms did not publish business risk, it differed from firm to firm. The sample of the firms revealed that 40% firms revealed business risk in their annual reports. Their study found out those firms of UK with a listing of US stock exchange disclosed more information within the annual reports of UK as compared to non-listed US firms. Hence, their study proved that the pattern of disclosure of risk information in annual reports might be dependent on the regulations.

Akhtaruddin (2005) reported the information about risk disclosure in Bangladesh by 94 listed companies. These companies were reviewed according to their age, size, and status. This study stated that mandatory disclosure were not present in the annual reports of the non-financial institutions. In Bangladesh, many non-financial companies did not meet the requirements of regulatory bodies in terms of risk disclosure. The sample companies on average disclosed information on 43.5% of items which indicated poor with mandatory rules. The poor disclosure performance of firms in Bangladesh was attributed to policies enforced by regulatory authorities.

Hossain (2008) conducted a research in India regarding voluntary and mandatory disclosure relevant to listed banking companies by using correlation analysis. 184 items were selected, 101 were mandatory and 81 were voluntary. It was reported in the study that in disclosing mandatory items, average score was 88, on the other hand 25 was the average score for voluntary disclosure. The results indicated that banks in India were in compliance with rules in terms of mandatory disclosure.

Wallace and Naser (1995) selected Hong Kong for their research for analyzing multivariate impact of the characteristics of selected firms by using corporate annual reports. Their study used two regressive models which were ranked OLS method and unranked OLS method. Total assets, types of independent auditor, profit margin, and also scope of business indicated the contribution to their understanding of disclosure index's variation awarded to Hong Kong firms. On the other hand, liquidity ratios, market capitalization, returns on equity and outside interest of shareholder were not much useful in the explanation of variations in the disclosure indexes.

Kaouthar and Daniel (2005) examined risk information about disclosures in the annual reports of Canada to provide information about disclosure of current risk environment, also its characteristics, and analytical information which is disclosed to the stakeholders of the firm. In their study, they used content analysis in order to analyze the subject matter of risk disclosures of the companies of Canada by using information of risk in the firm. The results indicated that they found risk disclosure of higher level which reflected both voluntary risk and mandatory risk.

The study of Ameer and Othman (2009) focused on market risk disclosures and for that purpose, evidences were collected from the firms of Malaysia. They used content analysis and also the procedure of coding. They attempted to find the compliance of market risk disclosures with financial instruments. As a result, they concluded that a large number of firms show compliance with financial instruments related to the disclosure of risk of management policy but firms' differed in their disclosure level. Interest rate disclosure was not disclosed, on the other hand disclosure of credit risk was least mentioned in the annual reports of the firms.

Philip (2005) explored risk disclosures using annual reports of 79 UK companies using content analysis. Statistically, a significant association was found between company size and number of risk disclosures. Furthermore, they also discussed the nature of the disclosures of the risks mentioned by sample companies specifically analyzing their time orientation. They examined the risks on the basis of monetarily qualification by examining whether the risk disclosed were bad or good risk news.

Paul and Santhosh (2007) investigated in their study the relationship between ownership, governance, characteristics of US listing and quantity of information of narrative risk. They revealed in their study that reporting of corporate risk was negatively related to ownership by long term institutions. They put forth that the important section of institutional investors had some investment preferences with lower level of risk disclosure firms. Addressing the relationship with the governance, board of directors fulfill different kind of functions with independent directors and executive were positively related to the level of reporting of corporate risk which excluded number of dependent non-executives from the list.

Marco, Saverio, and Sergio (2009) analyzed the effects of forward looking of disclosures on forecast properties of analysts, in particular dispersion and accuracy. For the purpose of measurement, they used content analysis. They discriminated between forward looking information in terms of disclosure of expected impacts on future performance financially and disclosure of a measurement of this effect. They defined that looking forward information disclosed with the qualified information facilitates comparison with its realization in relationship to future performance financially.

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Bin, Abdul and Azlan (2008) investigated the availability of information about risk disclosures of the companies of Mayasia by mainly focusing on non-financial section of the annual reports. Moreover, they aimed to empirically test the characteristics of sample companies and also to compare the level of risks which was faced by these companies in terms of the disclosure of the risks. For the empirical analysis, these companies used the procedure of content analysis. They selected annual reports of the 100 listed companies in order to analyze the extent of disclosure of risk and also relationship against the characteristics of firms. They also tested diversification strategy in their study.

Abdallah, Hassan and McClelland (2015) explored the effect of firm specific and characteristics of country regarding corporate risk development procedures and practices of firms in the region of GCC. Firstly, Islamic financial institutions as compared to non-financial institutions disclosed less risk, this factor mainly attributed to the principles of Islamic finance. Secondly, firms operating in better corporate governance appeared to disclose more risk than their competitive financial institutions. Lastly, it was found out those practices of corporate risk disclosures vary across different countries in the region of GCC.

Cordella and Yeyati (1998) studied the effects of public disclosures of risk exposures of banks affects risk taking incentives of banks and it also accessed the effects of informed depositors about the banking system's soundness. It was revealed that if risks were largely exogenous, there were cases where disclosure could indeed have probability to impact the performance of banks in failures by allowing adjustment of deposit rates. In that way, banks are taxed during tough times and they rewarded during good times. In

such cases, non-disclosure by the elimination of the state dependent tax, can improve the surviving chance of banks.

Perignon and Smith (2009) studied the level of Value at Risk (VaR) disclosed by commercial banks and also the accuracy of these disclosed figures for the sample of international commercial banks and the United States. They developed VaR disclosure index which covered different facets of disclosure of market risk by using data spanning over years 1996-2005. They found upward trend in information's quantity which was released to public. They empirically accessed the VaR disclosure's quality. The results indicated that VaRs are conservative in nature and their quality did not get better over time.

Ansah (1998) conducted a study in Zimbabwe by investigating influence's level of eight corporate firms that attributed on mandatory disclosure's extent and also forty nine listed companies of Zimbabwe. They used disclosure index which involved 214 informative mandated items. Each sample country was quantified by the extent of mandatory disclosure and was also used to test the hypotheses. They tested many multivariate models and estimated them but only robust regression analysis could produce the more fruitful results and also indicated size of company, ownership structure, age of company, multinational corporate affiliation, and also profitability had statistically significant effect on the mandatory disclosure. The results also indicated that regulators in Zimbabwe should focus on new listed, non-affiliated, and small firms to ensure availability of information of mandatory disclosure in annual report of corporations.

Cabedo and Tirado (2003) analyzed in their study that the method of VaR was very suitable in order to measure the risks in companies. They stated that VaR was helpful in quantifying risks of credit, business, and market. They also highlighted that the measure of risks would enhance the utility of information of accounting for extern user in order to make decisions. Shrives and Marston (1991) measured disclosure in published firms. They also examined the use of disclosure index in their study. They stated that disclosure index can be used in order to measure the extent of different disclosure of risks.

Harahap (2003) compared the disclosure of risks in the capitalist system against the Islamic system of finance. They named the shortcomings of capitalistic environment in form of employee reporting, socio-economic accounting; value added accounting, and environmental accounting of the capitalistic accounting system for building a fair system of justice. The study carried out in Indonesia by using the data of Bank Muamalat Indonesia used the traditional structure of capitalistic accounting structure to prove its financial position. They argued that the current system of disclosure gave no such indication of fairness and justice and it was incompatible with the values of Islamic finance.

Oliveira, Rodrigues, and Craig (2013) highlighted issues of current risk disclosures. They also investigated the major factors affecting the reporting risk practices. They reviewed four different published papers in order to analyze the aspects of corporate risk disclosure in Portugal. Their findings indicated that disclosures related to risk were inadequate, lacked transparency, and also compounded the difficulty of availing the risk profile of any company. In the context of Portugal, they found out that in order to reduce agency Cost, company normally disclosed risk related activities.

Adamu (2013) performed a study in Nigeria by assessing the effect of leverage of company on the corporate risk disclosure. They selected four sectors for their study quoted in Nigerian Stock Exchange. They used stratified sampling technique containing 12 companies. The data was retrieved from the annual reports of 2010. The study used regression technique for estimating their data. The findings depicted that corporate risk disclosure was not related to company leverage statistically. Hence, it was concluded that the size of the company was not influencing disclosure of corporate risk in Nigeria. They suggested that regulators should come with some policies on the disclosure of corporate risk.

Hassan (2009) explored the relationship between United Arab Emirates and corporation specific characteristics mainly level of risk, size, reserves, industry type, and level of corporate risk disclosure. That research consisted of a sample of about 41 corporations. They developed risk disclosure index based on prior literature, UAE regulatory framework, and accounting standards. They used the technique multiple regression analysis for finding the relationship between corporate risk disclosure and characteristics of corporation. The results indicated that size of corporation was not significantly associated with the level of corporate risk disclosure. On the other hand, corporate industry and level of corporate risk were significant in the explanation of variation of corporate risk disclosure. Furthermore, corporate reserves were negatively and insignificantly related to the level of corporate risk disclosure.

Sami and Zhou (2008) examined the effect on cross listing information of asymmetry risk in China. They used univariate and multivariate techniques for the purpose of estimation. They found out that Chinese cross listed firms were consistent with the hypothesis which

stated that increased accounting disclosures helped to minimize the information asymmetry risk. Palepu and Healy (2001) discussed in their study the importance of financial risk disclosures for management and also their significance to outside investors. The empirical results in their study showed that financial choices of managers regarding reporting and disclosure were associated with contradicting, considerations of capital markets, and political risk. They also stated that disclosure of different risks was associated with the performance of stock price, and institutional performance.

Thuelin, Henneron, and Touron (2006) focused on the issues of risk disclosure orientations in communication of corporations. In United States of America and also Europe, many provisions had been implemented in order to promote transparency in the companies. The increasing rate of mandatory risk disclosure's impact was analyzed with the regulatory authorities. Their study found out that the risk faced by the companies of France had no consensus between different parts of legislation. These findings were contributed to the fact that companies and regulatory authorities different risk cycle. The results also indicated that three different French companies mainly disclosed risk information.

Siddiqui (2003) conducted a study over different modes of Islamic finance and also examined different risks and their characteristics. The findings indicated that Islamic banks had shown good performance in terms of return to assets and also they had better risk management and sustained adequate liquidity. Hassan (2009) studied risks in Islamic banks of Brunei Darussalam. They developed questionnaire covering different areas of risk. Their study found out that the most important risks were operating risks, credit risk

and foreign exchange risk. They performed their study in Islamic and also conventional banks. It was noted that Islamic banks were more efficient in managing risks.

Sundararajan (2007) discussed the factors in the measurement and management of control of risks in Islamic financial services institutions, mainly the accounts of profit sharing and investment accounts (PSIA) for supervision, capital adequacy, risk management, and risk measurement. They analyzed that the sharing of risks with PSIA was very limited in practice but in principle, well designed return and risk sharing arrangements with PSIA could serve as a powerful risk mitigation tool in Islamic finance. That study proposed value at risk (VAR) procedure for the measurement of such risks.

Anjum, Bhatti and Khan (2008) focused on different modes of Islamic banking and finance and examined various risks and their characteristics. Interest rate is prohibited in Islamic finance and due to this factor Islamic banks had different profile related to risk as compared to conventional banks. Prohibition of interest rate gave rise to many regulatory issues pertaining to liquidity requirements and also capital adequacy. Issues related to operational risks in Islamic banks were limited in their choice of liquidity and risk such as options, bonds and derivatives. These issues were only theoretically examined for the comparison with traditional banking system that used the methods of markup pricing.

Ibrahim, Ismail, and Zabaria (2011) focused on interrelationship between disclosure, performance and risk using panel data analysis. For the purpose of finding interrelation among different variables 11 full-fledged Islamic banks and also Islamic windows are selected between years 2002-2006. The results showed that profit and leverage are significant statistically in the determination of risk. Botoson (1997) highlighted the importance of risk disclosure in the cost of equity. The results by using correlation

analysis indicated that higher the risk disclosures in the annual report, lower the cost of equity would be.

Nazir, Daniel, Nawaz (2012) compared the risk management practices across Islamic and conventional banks in Pakistan. They used the questionnaire technique in order to present their results. They covered differed six aspects such as credit risk analysis, risk management practices, risk assessment, risk identification, risk management, and risk monitoring. They distributed 300 questionnaires for the collection of data from Islamic and conventional banks. They used two techniques, one-way ANOVA and regression for the estimation of results. The results depicted that banks are efficient in risk monitoring, understanding the risks, and credit risk analysis. Furthermore, it was comprehended that there was a significant difference in the practices of risk management in the Islamic and conventional banks of Pakistan. Khalid and Amjad (2012) analyzed the level of risk management practices in Pakistan and different techniques for dealing different forms of risks. Islamic banks were found more efficient in terms of dealing risk.

Hussain and Ajmi (2012) analyzed the practices of risk management in the banks of Bahrain. The sample of different bankers was surveyed by using the questionnaires and then the results were used to analyze if the practices of risk management were associated significantly with the different types of banks i.e., Islamic and conventional banks. The findings indicated that banks in Bahrain were found to have understanding of risks as well as risk management. They also had efficient risk identification, analysis of risk assessment, risk monitoring, and also credit risk analysis. They also indicated that Islamic banks were found to be different significantly from their competitive conventional banks in understanding risk management and also risks. The level of risks in Islamic banks was

found to be higher than conventional banks. Furthermore, residual, liquidity, country, operational, and settlement risks were found to be higher in banks following principle of Shariah as compared to banks following operating conventionally.

Rahman, kighir, Oyefeso and Salam (2013) examined practices based on risk management of Islamic banks in the region of MENA. Their study cross checked the level of compliance with IFSB checklist of risk disclosure using OLS technique and also content analysis. Their research study proved that reliable information on the basis of compliance with IFSB disclosure checklist, these researchers found slightly above average compliance in the region of MENA, On the other hand, they found low reporting in terms of risk disclosure category mainly displaced commercial risk which is important risk in Islamic banks.

3.3 Summary

Islamic financial institutions found edge cover conventional institutions in terms of risk management practices. The studies found mixed results in terms of reporting of risks. Some institutions reported risks while some did not disclose risks in the annual reports of different corporations. In terms of compliance with regulatory authorities and IFSB, the results mostly showed that financial institutions have above average compliance with IFSB disclosure checklist.

Chapter 4

Methodology and Data Specification

4.1 Introduction

Content analysis method is used to investigate risk disclosure. It is selected since this study based on quantity rather than quality of risk disclosure. Content analysis is very frequent used method to estimate risk disclosure in previous researches such as Amran, Bin, and Hassan (2008); Botosan (1997); Cabedo and Tirado (2004). Weber (1990) explains in his book relating to content analysis as empirical research method that follows a sequence of instructions to construct logical reasoning from text. Furthermore, he added the set of instruction of this researcher. This method provides a logical and replicable reasoning from the context of the data. In order to get useful duplicate logical reasoning, a set of investigating mechanism, checklist and determination rules are develop. The risk disclosure checklist develop in this is based on previous studies. This study is focuses on the non-financial section of the annual report which is about risk disclosure. The IFSB publishes a document that highlights a checklist of disclosure items for risk management's disclosure which includes general disclosure of most important risk types in financial sector that is credit risk, operational risk, credit risk mitigation, liquidity risk, rate of return risk, market risk, contract specific risk and displaced commercial risk. It further classifies the list of each risk in terms of qualitative and quantitative disclosures.

We select a quantitative approach to estimate the level of compliance with the IFSB's risk disclosure checklist rather than believe on the claim of institution of compliance to follow certain accounting and financial standards. The index consists of six types of risks

i.e credit risk, operational risk, credit risk mitigation, liquidity risk, rate of return risk and market risk publishes in IFSB's document and the reason behind to drop two type of risk is those risk are not frequently mention in annual reports of Islamic institution for 2005 to 2010. So, we include these six types of risks that are easily available in annual report of Islamic institution of Pakistan. The dependent variable risk disclosure index is to check the compliance level through risk management disclosure by 20 sample Islamic financial institutions.

Outstanding developments of count data models enter in social, statistical and science fields. In currents years such models are used frequently in the arena of economics, finance, social and environmental sciences. The prominent quantities of data in their related fields of execution have boosted developments that have expanded the demand of these models. An important achievement in the case of count model development for regression was the exposure of the "ordinary least square model" which is widely used in recent studies. Ordinary least square is a technique for measuring unknown variable in linear regression, gives visual conformation of the relation between the data set. In assuming the relationship between dependent and independent variables, we have to know how convincing results provides by our regression model. The dense the regression line to the actual points of data, the superior the equation fits. So, multivariate method of ordinary least square (OLS) is used to estimate the association of firm characteristics with risk disclosure index and their level of significance correlation matrix is assessed and variable inflation factor (VIF) is developing to check the multicollinearity problem in the regression.

4.2 Scoring of the Disclosure Index

To attain our objective to check the risk disclosure level of Islamic financial institutions compliance with the IFSB risk disclosure checklist. For this purpose, we have to develop risk disclosure index. There are two methods for developing disclosure index, which are extensively used for creating disclosure index, the weighted index and the unweighted index method. In literature many studies used weighted and unweighted method for the establishment of disclosure index. Studies such as Wallace, Naser and Mora (1994); Hossain (2008); and Ali, Ahmed and Henry (2004) selected to use dichotomous disclosure method which involve scoring of an item as one if disclosed and zero if it is not. Other studies which are used weighted disclosure scoring method are (Barrett, 1976 and Marston and Robson, 1997), include the implication of weight more than zero but less than one to the disclosure made information and zero for not disclosing information. Previous researches also tell that use of weighted or unweighted disclosure index method for disclosure of information in annual reports having no or little difference in the findings.

This study applies the unweighted scoring method. The based factor in this case is either an institution discloses the information we need in annual report or not. If the financial institution discloses an item of information in their annual reports then it is scored as one (1) and zero (0) if it is not disclose. However, a notable problem with this scoring method is some institutions may be penalized by awarded as zero when institutions expected not to disclose specific items information because they consider it as unrelated due to the nature of action or any other reason. To reduce or remove such problem, firstly we thoroughly study the annual report to know the nature and complications of every action

of the institution and to decide either the specific item need to be disclose or not (Cooke, 1989). Hence, the unweighted disclosure method estimated the risk management disclosure index (RDI) as follow:

$$RDI_j = \frac{\sum X_{ij}}{\sum M_{ij}} \quad (1)$$

where,

RDI_j = Risk disclosure index for bank j

M_{ij} = Number of items i expected to be disclosed by bank j

X_{ij} = Number of disclosure items i disclosed by bank j

This formula is carried out for each year and mean score for the ten years is eventually taken to obtain the final disclosure score for each bank.

To achieve our next objective we need to investigate the relationship between financial institutions characteristics and risk disclosure index. In this case firstly we develop risk disclosure index, then we run the variables which are associated to firm characteristics; leverage, level of risk, subsidiaries, credit rating and size of the institution in the second model. So, the second model takes the form as following and applying ordinary least square (OLS) regression on this model because it is suitable to check the independent effect of every variable on disclosure level.

$$RDI_{jt} = \beta_0 + \beta_1 SUBS_{jt} + \beta_2 CR_{jt} + \beta_3 SIZE_{jt} + \beta_4 LEV_{jt} + \beta_5 DIPROD_{jt} + \varepsilon_{jt} \quad (2)$$

where,

RDI	=	Risk disclosure index
SUBS	=	Subsidiaries of financial institutions
CR	=	Credit rating
SIZE	=	Financial institution's size
LEV	=	Financial institution's leverage
DIPROD	=	Diversification of products or services

4.3 Variable Definition

Risk disclosure is a file or document involve all possible risk related to future trading, here risk disclosure is our dependent variable which is calculated by an index of disclosure. Before establishing the index for each institution in the sample, a scoring sheet was produced on the basis of disclosure item of information that what is the necessity of the financial standards. Items were selected based on the previous researches related to risk disclosure. As mentioned before the purpose to create this index is to check the compliance of Islamic financial institutions to the IFSB checklist of risk disclosure items. The basic reason behind using the IFSB guidelines is the distinctive identity of risk faced by Islamic finance that are well definite and standardized nature of risk management guidelines that are internationally suggested to Islamic finance. The IFSB publishes a complete document of risk management's standards in December 2005. The guidelines revolves general demand of risk management disclosure and 6 major risk types namely credit risk, operational risk, credit risk mitigation, liquidity risk, rate of return risk and market risk/shariah noncompliance risks (Rosman and Rahman, 2015).

Independent variables are subsidiary, credit rating, institutions size, leverage and diversification of product which play a significant role in our research. These are explanatory variables they give more information to our study and helping in explain our study. Following table shows individual proxies for estimating these explanatory variables. For subsidiary the most frequent used proxy in literature and we also follow them is the total number of subsidiaries of financial institution in all over the Pakistan. Proxy for credit rating which is easily to measure is by giving weights to the institution if they are rated by any credit rating agency of Pakistan awarded as one (1) otherwise if they are not rated by credit rating agency then awarded as zero (0). Institution size is proxied by famous method which is consistently using for this variable is log of total assets of Islamic institution. Leverage is measured by the method which is used in many studies such as (Amran, Bin, and Hassan, 2008 and Abraham and Cox, 2007) that is total liabilities over total assets of institution. Level of risk in the institution is measured through diversification of product and it is estimated by total number of products and services offered by the Islamic institution. All these variables dependent and independent are calculated for all 20 financial Islamic institutions independently.

Table 4.1 Description of Variables

Variables	Definitions
Subsidiary	Total number of subsidiaries of institution.
Credit Rating	If a financial institution has been rated by any of the credit ratings agencies (1 if a financial institution had credit ratings otherwise 0)
Institution size	Log of average total assets of Islamic financial institution.
Leverage	Total liabilities divided by the total assets.
Diversification of products	Total number of products or services produce by the institutions.

4.4 Sample Selection

Data for this study is based on secondary data because it is cheap and easily available which is taken from annual report of all Islamic financial institution of Pakistan. The collection of data also enables to avail the opportunity to exam whether the use of professional instructions as disclosure index was achievable. Furthermore, by focusing on the small sample available on the annual reports and statements it decrease the amount subjective supposition used as basis for the calculation of risk disclosure index establish later on. Financial firms are risk based firms and those risk which they are facing are of

different types so for better result it is better to analysis independently. The sample is drawn from the annual report of financial institutions obtain from the official website of all Islamic banks and financial institutions for the year 2005 to 2015 panel based data. To estimate the type and nature of the firm disclosure on annual report all the related documents or files were downloaded from the institution's website. Records from files downloaded were eventually printed to allow better analysis of disclosure. Sample consists of 5 Islamic banks, 10 mubarabah companies and 5 mutual funds institution. We exclude the Islamic windows of conventional banks, only pure Islamic working institutions are included in our data set. Furthermore, independent analysis and for better results we divide data into 3 parts. First, part contains the data of all pure Islamic banking operating in all over Pakistan. The second part includes data of mubarabah companies of Islamic financial institutions. Last and final part involves data of Islamic mutual funds. We check the effect of above mentioned three parts on firm characteristics which is our dependent variable independently.

4.5 List of Islamic Financial Institutions

Islamic Banks

- Meezan bank
- Dubai Islamic bank Pakistan Limited
- Burj Bank
- Bank Islami Pakistan Limited
- Al Baraka Bank

Mudaraba Companies

- Crescent Standard Mudaraba (CSM)
- First Elite Capital Mudaraba (FECM)
- First Fidelity Leasing Mudaraba (FFLM)
- First Habib Bank Mudaraba (FHB)
- First Punjab Mudaraba (FPM)
- First UDL Mudaraba (FUDLM)
- Mudaraba Al-Mali (MODAM)
- First Prudential Mudaraba (PMI)
- Standard Chartered Mudaraba (SCM)
- First National Bank Mudaraba (FNB)

Islamic Mutual Funds

- Al-Meezan Islamic Fund
- Meezan Tahaffuz Pension Fund
- First Capital Mutual Fund
- Al-Meezan Mutual Fund
- Meezan Islamic Income Fund

Chapter 5

Empirical Findings

5.1 Introduction

In this study, we present the empirical results of risk disclosure for 20 Islamic financial institutions. The results of disclosure index can be viewed in Table 5.1 and they are presented for each Islamic institution by disclosure category. This chapter provides the results of ordinary least square method and also random and fixed method.

5.2 Descriptive Analysis

Table 5.1 shows the results of descriptive test of risk management disclosure index based on the IFSB disclosure guidelines. For the purpose of making index of risk management disclosure, we selected six variables which are credit risk, market risk, credit risk mitigation, liquidity risk, operational risk, rate of return risk with 216 numbers of observations. The highest score obtained by the Islamic banks (i.e Meezan Bank, Al Baraka Bank, Bank Islami, Burj Bank and Dubai Islamic Bank) to disclose all types of risks in their annual reports. Although the least score acquire by the Islamic financial institutions (Mubaraba companies and Mutual Fund), most of them disclose few types of risk items no one shows all types of risk items in their annual reports (Hossain, 2008).

Table 5.1 Descriptive Statistics of RDI

Variable	Obs	Mean(%)	Std.Dev(%)
Credit risk	214	73.83	44.05
Market risk	214	71.02	45.46
CR Mitigation	214	11.68	32.19
Liquidity Risk	213	73.70	44.12
Operational Risk	213	23.94	42.77
Rate of Return Risk	214	0.46	0.83

Table 5.1 presents the information about credit risk disclosed by Islamic financial institutions of Pakistan with the mean score of 73.83%. This figure reflects that 73.83% Islamic financial institutions are willing to display the information of disclosure of credit risk in their annual reports. This figure is comparatively higher than other risk disclosure items. However information about market risk and liquidity risk made available by many Islamic institutions in their financial reports to fulfill the requirement made by IFSB disclosure category and their mean score is 71.02% and 73.70%, respectively, which is slightly lower than credit risk. Credit risk mitigation, operational risk and especially rate of return risk have very low mean score i.e. 11.68%, 23.94% and 0.46% respectively which means very few institutions are capable to show such type of risk information as they think it is not as much important with respect to investor point of view. These three risk items were not frequently disclosed by most of the Islamic financial institutions.

5.3 Risk Management Disclosure Index and Institution Characteristics

For the purpose of checking institutions' characteristics effect on index of risk management disclosure, we have used five variables subsidiary, credit rating, institution size, leverage, diversification of products or services. Table 5.2 provides descriptive analysis of risk management disclosure index and institution characteristics. It is noticed that risk management disclosure index have positive relationship with institution characteristics which gives us a thought that large institutions have large number of stakeholder so it is necessary for them to disclose more risk related information. It is consistent with the study of Linsley and Shrives (2005).

Table 5.2 Descriptive Statistics of RDI and Institution Characteristics

Variable	Obs	Mean	Std.Dev	Min	Max
RDI	212	0.5775	0.1387	0.166	0.833
Subsidiary	212	0.1132	0.3178	0	1
Credit rating	213	0.8176	0.3878	0	1
Institution Size	213	0.4303	0.3692	0.004	0.984
Leverage	213	17.168	3.9659	6.278	22.49
DIPROD	214	7.2405	6.4850	3	47

Note: RDI stands for risk management disclosure index and DIPROD stands for diversification of product or services.

Islamic banks are more focused on their firm characteristics as compare to other Islamic financial institution e.g., mutual funds, mudarabah companies etc. Table 5.2 presents that Islamic financial institution in Pakistan reports compliance with mean score of 57.7% with risk disclosure items required by IFSB disclosure guideline with the minimum value 0.166 and maximum value 0.833. Moreover, we observe in descriptive analysis that only

11.32% Islamic institutions have subsidiary operating all over the Pakistan which doesn't have much impact over risk disclosure. It is reported that 81.76% of these Islamic institutions are evaluated by famous credit rating agencies of Pakistan like Pakistan Credit Rating Agency Limited (PACRA) and JCR-VIS Credit Rating Company Limited. Institution size is investigated in terms of total assets which have mean score of 41.03%, having low impact on risk management disclosure. The proxy used for leverage is total liabilities over total asset and it possess high mean of 17.16 which shows higher impact on risk disclosure. In the end, descriptive analysis provides the information about diversification of products and services which have 724.05% mean score it also have higher impact on risk disclosure but lower than institution size.

5.3.1 Correlation matrix and Multicollinearity Analysis

Table 5.3 Correlation Matrix

	Index	Subsidiary	Credit	Institution	Leverage	Diversification of product
			Rating	Size		
Index		1				
Subsidiary		0.368*** (0.000)	1			
Credit Rating		0.713*** (0.000)	0.246*** (0.000)	1		
Institution size		0.660*** (0.000)	0.482*** (0.000)	0.540*** (0.000)	1	
Leverage		0.830*** (0.000)	0.206*** (0.000)	0.572*** (0.000)	0.535*** (0.000)	1
DIPROD		0.690*** (0.000)	0.635*** (0.000)	0.489*** (0.000)	0.650*** (0.000)	0.486*** (0.000)

Note: p-values are reported in parentheses.

***Significant at 1% level of coefficient.

**Significant at 5% level of coefficient.

*Significant at 10% level of coefficient.

Multicollinearity in variables has been determined through analysis of variance inflation factor (VIF) and correlation factors based on (Weisberg, 1985) Table 5.3 reports the results of correlation matrix between dependent and independent variables. It is expected that risk disclosure index is highly correlated with each coefficient and the correlated coefficients are in the expected direction which are consistent with the study of Beattie, McInnes, & Fearnley (2004). We observed that the highest correlation exists between leverage and risk disclosure index 0.83. Judge (1985) and Bryman and Cramer (2001)

recommended that simple correlation between dependent and independent variable is not harmful if it doesn't exceed the limit 0.80 or 0.90. The correlation of 0.80 or 0.90 is mostly linked with variable inflation factor (VIF) of between 6 and 10. The result of VIF present in Table 5.4. When VIF exceeds its upper limit 10 it should consider a symptom of harmful multicollinearity (Neter, 1989). In our model the highest VIF is reported in subsidiary at 2.55. The condition still comparatively lower than 10 and the highest tolerance value linked with the highest condition index is 0.588 diversification of products and services of Islamic financial institutions. The tolerance value of other variables is less than 0.588. Now, on the basis of the results we can say that the correlations are not harmful as our results don't violate the limits of VIF and correlation. It is also proved by our findings that multicollinearity between independent variable is not creating any problem in the results of regression analysis (Hossain, 2008)

5.3.2 Risk Management Disclosure Index Regression for Firm Characteristics

Table 5.4 RDI Regression Results for Firm Characteristics

Index	Coefficient	Std.err	t-statistics	p-value	Collinearity	
					Tolerance	VIF
Subsidiary	-0.009	0.027	-.033	0.738	0.392	2.55
Credit Rating	0.105***	0.015	6.94	0.000	0.471	2.12
Institution Size	0.048**	0.022	2.13	0.034	0.560	1.78
Leverage	0.012***	0.000	14.52	0.000	0.581	1.72
DIPROD	0.008***	0.001	6.32	0.000	0.588	1.70
Cons	0.034***	0.010	3.27	0.001		

***Significant at 1% level of coefficient.

** Significant at 5% level of coefficient.

*Significant at 10% level of coefficient.

Regression analysis method is very helpful when we are discussing the relationship of dependent and independent variables. Several studies e.g. Ansah (1998) and Hossain (2008) have used OLS regression in order to find the relationship between dependent and independent variable. Based on previous literature, we use ordinary least square regression. Our dependent variable is risk disclosure index (RDI) and independent variables are subsidiary, credit rating, institution size, leverage and diversification of products and services (DIPROD) used to estimate our model. The least square method shows that firm characteristics have significant effect on risk disclosure index, further highlighted by independent variables used in our study. The negative coefficient of subsidiary variable (-0.009) implies that in Islamic financial institutions the level of disclosure is not affected by the number of subsidiaries but this result is statistically insignificant. It rejects our first hypothesis. This result is consistent with the study of

Hossain (2008). The coefficient of credit rating is positive for Islamic financial institution and it is statistically significant at 1% level of coefficient that means Islamic institutions which were rated by credit rating agencies have greater impact over the risk disclosure information by the instructions included in our sample. It accepts our second hypothesis. This result is consistent with the study of Rahman et al. (2013). The positive coefficient of institution size shows its instrument effect on the risk disclosure index and result is significant at the 5% level of coefficient. It indicates that large sized institution reveal more risk disclosure information as compared to small sized institutions. These results support our third hypothesis. This result is consistent with the study of Linsley and Shrives (2006). The results show that leverage has a positive coefficient (0.012) which is significant at the level of 1%. This suggests that, Islamic financial institutions with high leverage will disclosure information about risk more timely to decrease the uncertainty of long-term creditors about the capability of the institution to pay its obligation. On the basis of this result, we accept our fourth hypothesis which states that there is a positive relationship between leverage of Islamic financial institution and risk management disclosure. This result is consistent with the study of Ibrahim, Ismail, and Zabaria (2011). The diversification of products and services has a positive coefficient 0.008 and it is at the level of 1%. It reveals that diversification of product influences the level of risk disclosure by Islamic financial institution. We accept our fifth hypothesis which states that there is a positive relationship between product diversification and risk management disclosure. This result is consistent with the study of Amran, Bin, and Hassan (2008)

5.3.3 Hausman Test

For estimating our model, we employ random and fixed effects. The Hausman test here supports random effect model. In Hausman test, p-values are greater than 0.05. Table 5.5 presents the results of random effect model. The independent variables are subsidiary, credit rating, leverage, institution size, diversification of products and dependent variable risk disclosure index for estimating our model. The coefficient of subsidiary is positive but it is statistically insignificant. The coefficient of credit rating is positive with the value of (0.016) which is statistically significant at the level of 1%. The coefficient of credit rating (0.136) is positive and it shows that credit rating disclosure is having positive impact over Islamic financial institutions. The coefficients of institutional size, leverage and diversification of products are positive and they are statistically significant at the level of 1%. These findings indicate a positive impact between institutional size, leverage, diversification of products of Islamic financial institutions and risk management disclosure.

Table 5.5 Random Effect on Firm Characteristics and RDI

Index	Coefficient	Std.er	t-statistics	p-value
Subsidiary	0.016	0.048	0.33	0.739
Credit rating	0.136***	0.023	5.84	0.000
Institution Size	0.138***	0.035	3.89	0.000
Leverage	0.018***	0.001	16.80	0.000
DIPROD	0.009***	0.001	5.54	0.000
Cons	0.015	0.020	0.78	0.434

***Significant at 1% level of coefficient.

**Significant at 5% level of coefficient.

Table 5.6 Hausman on Fixed and Random

Chi-Sq. Statistics	P-value
2.28	0.727

Table 5.6 provides the value of chi square statistics and also p-value, and on the basis of p-value, the selection of random or fixed effect model occurs usually. In order to test the relationship of firm characteristics and risk disclosure index, we apply Hausman test. Hausman test is generally used to differentiate between the fixed and random effect model in panel data. In this test hypothesizes are:

H_0 : Random effect model is appropriate.

H_1 : Fixed effect model is appropriate.

Now, on the basis of Hausman test p-value we have to decide whether we accept null hypothesis or alternate hypothesis. The results of Hausman show that we accept null hypothesis which is more appropriate to explain the relationship of firm characteristics and disclosure index than fixed effect. So, we have to reject alternate hypothesis as $P>0.05$.

5.3.4 Panel Regression

Table 5.7 RDI Regression Results for Islamic Banks

Index	Coefficient	Std.er	t-statistics
Subsidiary	-0.010	0.044	-0.24
Credit rating	-1.382**	0.683	-2.02
Institution Size	-1.238**	0.484	-2.55
Leverage	0.198***	0.062	3.18
DIPROD	-0.008**	0.004	-1.95
Cons	5.55e-16	0.037	0.00

***Significant at 1% level of coefficient.

**Significant at 5% level of coefficient.

*Significant at 10% level of coefficient.

Furthermore in our research we divide data into three panels for viewing independent effect of different data set's firm characteristics on risk disclosure index which supports our objective of this research. For the purpose of testing our hypothesis, we have used, regression technique is used for testing our hypothesis, each of the estimates of risk disclosure index is regressed for subsidiary, credit rating, institution size, leverage and diversification of product (Abdallah, Hassan and McClelland, 2015). Table 5.7 reports result of first panel data result which consists of all Islamic banks of Pakistan showing impact on risk disclosure index. The result of subsidiary is consistent with our regression results presented in Table 5.4 also subsidiary variable is not significant and its coefficient value is negative which means it doesn't have an impact on risk disclosure strategies of banks. Islamic banks are regularly rated by famous credit rating agencies of Pakistan but the negative coefficient value of credit rating variable -1.382 indicates there is no effect of being credit rated on Islamic banks level of risk disclosure but this result is statistical

significant at 5% level of coefficient. On this basis, we reject our second hypothesis in case of Islamic banks relation with firm characteristics. In case of Islamic banks we reject hypothesis related to institution size because it have negative coefficient of institution size variable with 5% significance level of coefficient which means size of banks doesn't matter for risk disclosure index. Leverage is very important variable concerning risk disclosure strategies of banks as hypothesis of leverage in case of Islamic banks are acceptable at 1% significance level of coefficient. As it have positive value of coefficient which implies highly leverage banks are willing to disclose risk related information to satisfy their long-term investors. Diversification of products or services have no impact on risk disclosure index as its coefficient value is -0.008 but significant at 5% level of coefficient. So, in this condition fifth hypothesis is rejected.

Table 5.8 RDI Regression Results for Mudarabah Companies

Index	Coefficient	Std.er	t-statistics
Credit rating	0.012	0.022	0.54
Institution Size	0.069**	0.036	1.90
Leverage	0.017***	0.001	12.25
DIPROD	0.032***	0.005	5.70
Cons	0.015	0.012	1.20

***Significant at 1% level of coefficient.

**Significant at 5% level of coefficient.

*Significant at 10% level of coefficient.

Data in second panel includes Mudarabah companies' firm characteristics effect on risk disclosure index. The results of regression with omitted independent variable are presented in Table 5.8. The t-statistics and p-value of each calculated coefficient in the regression were reaching a conclusion on hypothesis about the variable to which they relate (Wallace, Naser, and Mora, 1994). We drop subsidiary variable because there is no subsidiary existed in Mudarabah companies in Pakistan. The result show credit rating is not statistical significant but it have positive coefficient value 0.012 which means credit rating having impact over Mudarabah company risk disclosure strategy. Institution size is consistent with previous result. It is significant at 5% level of coefficient and it has positive coefficient value. It has an influence on the level of risk disclose by the companies. Leverage and diversification of products or services are significant at 1 % level of coefficient which means both have impression on risk disclosure index of mudaraba companies. The coefficient values of both variables are positive which supplement its significance value. Hence, we accept hypothesis related to these two variables which are leverage and diversification of products and services have positive relationship with risk management disclosure.

Table 5.9: RDI Regression Results for Islamic Mutual Funds

Index	Coefficient	Std.err	t-statistics
Credit rating	0.310***	0.036	8.42
Institution Size	0.086	0.070	1.24
Leverage	0.004**	0.001	2.34
DIPROD	0.011**	0.005	2.06
Cons	0.081	0.025	3.19

***Significant at 1% level of coefficient, **Significant at 5% level of coefficient.

We discuss our final panel results which consist of data of Islamic mutual funds characteristics on risk disclosure index. To estimate the variations in dependent and independent variables we are using regression model. The results of omitted independent variable from the regression model are represented in Table 5.9. Subsidiary variable is omitted in this panel because Islamic mutual funds having no subsidiary working in Pakistan. Credit rating is significant with a positive coefficient value at 1% level of coefficient which able us to accept hypothesis. The results of this panel show that institution size is not statistical significant but have positive coefficient value which means there is a impact on risk disclosure index and it supports the statement of third hypothesis and these results differ from regression results presented in Table 5.4. On the basis of the results presented in Table 5.9, we accept our fourth hypothesis related to leverage as it is significant at 5% level of coefficient. Coefficient value of diversification of products or services is positive and it is significant at 1% level of coefficient.

The coefficient of subsidiary is negative in our study but the result is insignificant which is consistent with the results of the study of Hossain (2008). The coefficient of size of institution is positive and significance level is 5% and the study of supports this result Linsley and Shives (2006) and Akhtaruddin (2005). The positive coefficient of credit rating is consistent with the research studies of Rahman et al. (2013). The positive coefficient of leverage is statistically significant at the level of 1% which is also consistent with the studies of Patton and Zelenka (1997); Ibrahim, Ismail and Zabaria (2011). Our study prove that the coefficient of diversification of services and products is positive and the result is statistically significant at the level of 1% and this result is consistent with the study of Amran et al. (2008).

Chapter 6

Conclusion and Policy Implications

6.1 Introduction

Lack in the interest of research in international Islamic sector financial reporting especially in Islamic countries could be one of the main reasons behind the slow development of Islamic financial sector accounting. Even though some well-developed and developing countries such as United Kingdom, Indonesia, Malaysia, and Brunei Darussalam are examples of well-organized research work in their own countries, researchers appear normally less worried about international issues of Islamic financial reporting.

It is important to follow rules and standards of regulatory bodies in order to keep best level of disclosure and clarity, as well as to create the confidence of the depositors and investors. Disclosure of risk on time, accurate and authentic is most necessary for the proper and efficient working of the financial markets as stakeholders or investor's investment decision is heavily depend on such information. Furthermore, the suggestion and guidelines provided by the international financial organization such as FISB, World Bank, AAOIFI, BASEL etc. should be complied in order to achieve the international disclosure standards. In the case of Pakistan, it has attained 50% followed the standards of disclosure, as half items of risk disclosure index achieved highest disclosure level. Whereas, on contrary the other half items such as operational risk, credit risk mitigation and rate of return disclosure in the annual reports of Pakistani Islamic financial institution at a very low level. This result may be occurring due to the Pakistani financial sector is

not closely or seriously observed by the regulators. The disclosure practice is found to maximum level of compliance with the guidelines of IFSB checklist. The attention of regulatory bodies is required on this sector for improvement in the results.

This research also includes some firm characteristics to check their effect on the level of disclosure items and attain the overall regression result that credit rating, leverage, institution size and diversification of products and services variable are significant whereas, other variable i.e subsidiary is not significant it has no effect over risk disclosure index. Furthermore, we divide data into three parts to check the individual effect of firm's characteristics over different set of financial institution. In the first part where we estimate the impact of firm's characteristics on pure Islamic banks of Pakistan in the result we come to know that only subsidiary is insignificant other variables are significant here consistent with the result of overall regression results. In second part of regression in which we measure influence of firm's characteristics on Mudarabah Companies, the result is slightly different from our previous regression result here we drop subsidiary variable because no data found for that variable and credit rating variable become in significant whereas, other variables such as institution size, leverage and diversification of products and services are significant. Third part of dataset consists of firm's characteristics impression over Islamic Mutual Funds and findings are credit rating, leverage and diversification of products and services are significant but institution size become insignificant here and we drop subsidiary variable because no data available on annual reports. The study gives an opinion about how the developing country especially Pakistan executing their duties of financial sector commonly and how the financial sector in particularly. Ideally, higher transparency should decrease the

consequences and frequency of problem in financial sector as such increased information should enable financial institution to reach capital markets quickly and higher disclosure allow market member to implement market regulations on time and effectively. These results highly support the public disclosure of risk information and enhance clarity in financial sector which is recommended by basal committee, IFBS organization and other international regulatory authority.

6.2 Policies and Recommendations

Our study is helpful for IFSB in making new policy related to risk disclosure. They can also make risk disclosure policy and notices against those institutions which are not fulfilling required by IFSB risk disclosure guideline document. In the warning notice they inform the new comers in financial field to first complete understand the rules and regulation outlined by the Shariah supervisory board for Islamic financial institutions and following those instructions are binding for them and tell them if they do not pursue Shariah rules and principle then they should punish, take serious action against the violation of rules. All clients and future clients should carefully read and understand the terms and condition of risk disclosure and warning document before applying in the financial Islamic institution for trading securities and before they want to trade with the Islamic financial institutions. If the clients are not satisfied by the risk information provided to them by institutions then they should take wise and considerate decision about their future investment. IFSB should require a detailed risk disclosure document about all risk possibly faced by the new investor and stakeholders for new investments in the institution. Such type of documents issued by IFSB is very helpful and give protection to shareholders and our research have potential to give an idea to law

enforcement authorities. For the further growth of economy and Islamic finance, government needs to allot more funding and more allocation of budget to Islamic financial institutions will further nourish Islamic finance.

6.3 Limitations of the study

Our research is not free from limitation. The limitation of our research is it covers only one country and specific single sector whereas, for detail analysis to recognize the nature of disparity of risk disclosure information. This study is based on secondary data it is also a limitation because most of the data is not available on web so in the result have to drop some variable in some case. Moreover for in-depth investigation to highlights the risk disclosure issues by using case study approach, it give opportunity to involve more specifics elements of our methodology to investigate more closely. For future research it is recommended to involve other firm characteristics like external auditors, market diversification and profitability as these variables have an important impact over the disclosure of information policies and strategies. We are not incorporating these characteristics because these are not the part of IFSB disclosure checklist documents. So it is further suggests that they should be add in the next improvised document because it have great impact over disclosure level. Overall we believe that our research is explanatory and capable of taking part in current debate related to risk disclosure of financial institutions in Pakistan.

References

Abdallah, A. A.-N., Hassan, M. K., & McClelland, P. L. (2015). Islamic financial institutions, corporate governance, and corporate risk disclosure in Gulf Cooperation Council countries. *Journal of Multinational Financial Management*, 31, 63-82.

Abraham, S., & Cox, P. (2007). Analysing the determinants of narrative risk information in UK FTSE 100 annual reports. *The British Accounting Review*, 39(3), 227-248.

Abu Hussain, H., & Al-Ajmi, J. (2012). Risk management practices of conventional and

Adams, C. A., Hill, W.-Y., & Roberts, C. B. (1998). Corporate social reporting practices in Western Europe: legitimating corporate behaviour? *The British Accounting Review*, 30(1), 1-21.

Ahmed, K., & Courtis, J. K. (1999). Associations between corporate characteristics and disclosure levels in annual reports: a meta-analysis. *The British Accounting Review*, 31(1), 35-61.

Al-Tuwaijri, S. A., Christensen, T. E., & Hughes, K. (2004). The relations among environmental disclosure, environmental performance, and economic performance: a simultaneous equations approach. *Accounting, organizations and Society*, 29(5), 447-471.

Ali, M. J., Ahmed, K., & Henry, D. (2004). Disclosure compliance with national accounting standards by listed companies in South Asia. *Accounting and business research*, 34(3), 183-199.

Amran, A., Manaf Rosli Bin, A., & Che Haat Mohd Hassan, B. (2008). Risk reporting: An exploratory study on risk management disclosure in Malaysian annual reports. *Managerial Auditing Journal*, 24(1), 39-57.

Barrett, M. E. (1976). Financial reporting practices: disclosure and comprehensiveness in an international setting. *Journal of Accounting Research*, 10-26.

Baumann, U., & Nier, E. (2004). Disclosure, volatility, and transparency: an empirical investigation into the value of bank disclosure. *Economic Policy Review*, 10(2), 31-45.

Baydoun, N., & Willett, R. (1995). Cultural relevance of western accounting systems to developing countries. *Abacus*, 31(1), 67-92.

Beattie, V., McInnes, B., & Fearnley, S. (2004). *A methodology for analysing and evaluating narratives in annual reports: a comprehensive descriptive profile and metrics for disclosure quality attributes*. Paper presented at the Accounting forum.

Bebbington, J., Larrinaga, C., & Moneva, J. M. (2008). Corporate social reporting and reputation risk management. *Accounting, Auditing & Accountability Journal*, 21(3), 337-361.

Bewley, K., & Li, Y. (2000). Disclosure of environmental information by Canadian manufacturing companies: a voluntary disclosure perspective. *Advances in environmental accounting and management*, 1(1), 201-226.

Bishop, P. (1995). Diversification: some lessons from the UK defence industry. *Management Decision*, 33(1), 58-62.

Botosan, C. A. (1997). Disclosure level and the cost of equity capital. *Accounting review*, 72(3), 323-349.

Bozzolan, S., Trombetta, M., & Beretta, S. (2009). Forward-looking disclosures, financial verifiability and analysts' forecasts: A study of cross-listed European firms. *European Accounting Review*, 18(3), 435-473.

Bryman, A., & Cramer, D. (2001). Quantitative data analysis with SPSS release 10 for Windows. *New York*.

Buzby, S. L. (1974). Selected items of information and their disclosure in annual reports. *The Accounting Review*, 49(3), 423-435.

Buzby, S. L. (1975). Company size, listed versus unlisted stocks, and the extent of financial disclosure. *Journal of Accounting Research*, 16-37.

Cabedo, J. D., & Tirado, J. M. (2004). The disclosure of risk in financial statements. *Accounting Forum*, 28, 181-200.

Chandra, G. (1974). A study of the consensus on disclosure among public accountants and security analysts. *The Accounting Review*, 49(4), 733-742.

Cooke, T. E. (1989). Disclosure in the corporate annual reports of Swedish companies. *Accounting and business research*, 19(74), 113-124.

Cooke, T. E. (1992). The impact of size, stock market listing and industry type on disclosure in the annual reports of Japanese listed corporations. *Accounting and business research*, 22(87), 229-237.

Cooke, T. E. (1998). Regression analysis in accounting disclosure studies. *Accounting and business research*, 28(3), 209-224.

Coombs, H. M., & Tayib, M. (1998). *Developing a disclosure index for local authority published accounts-a comparative study of local authority published financial reports between the UK and Malaysia*. Paper presented at the Asian Pacific Interdisciplinary Research in Accounting Conference.

Craig, R., & Diga, J. (1998). Corporate accounting disclosure in ASEAN. *Journal of International Financial Management & Accounting*, 9(3), 246-274.

Frankel, R., McNichols, M., & Wilson, G. P. (1995). Discretionary disclosure and external financing. *Accounting review*, 135-150.

Gambling, T. E., & Karim, R. A. A. (1986). Islam and 'Social accounting'. *Journal of Business Finance & Accounting*, 13(1), 39-50.

Goodman, M. B., Combes-Thuélén, E., Henneron, S., & Touron, P. (2006). Risk regulations and financial disclosure: An investigation based on corporate communication in French traded companies. *Corporate communications: an international journal*, 11(3), 303-326.

Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal*, 8(2), 47-77.

Hackston, D., & Milne, M. J. (1996). Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing & Accountability Journal*, 9(1), 77-108.

Haniffa, R. M., & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38(3), 317-349.

Hassan, A. (2009). Risk management practices of Islamic banks of Brunei Darussalam. *The Journal of Risk Finance*, 10(1), 23-37.

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of accounting and economics*, 31(1), 405-440.

Hirtle, B. (2007a). Public Disclosure and Risk-Adjusted Performance at Bank Holding Companies.

Hirtle, B. (2007b). Public disclosure, risk, and performance at bank holding companies. *FRB of New York Staff Report*(293).

Ho, S. S., & Wong, K. S. (2001). A study of the relationship between corporate governance structures and the extent of voluntary disclosure. *Journal of International Accounting, Auditing and Taxation*, 10(2), 139-156.

Hossain, M. (2008). The extent of disclosure in annual reports of banking companies: The case of India.

Iannotta, G., Nocera, G., & Resti, A. (2013). Do investors care about credit ratings? An analysis through the cycle. *Journal of Financial Stability*, 9(4), 545-555.

Ibrahim, W. H. W., Ismail, A. G., & Zabaria, W. N. W. M. (2011). Disclosure, risk and performance in Islamic banking: A panel data analysis. *International Research Journal of Finance and Economics*, 72, 110-114.

Judge, G. (1985). Gri ths, WE, Hill, RC, L utkepohl, H. and Lee, T.-C.(1985). The theory and practice of econometrics: Wiley, New York.

Kahl, A., & Belkaoui, A. (1981). Bank annual report disclosure adequacy internationally. *Accounting and business research*, 11(43), 189-196.

Kamal Hassan, M. (2009). UAE corporations-specific characteristics and level of risk disclosure. *Managerial Auditing Journal*, 24(7), 668-687.

Karim, R. A. A. (2001). International accounting harmonization, banking regulation, and Islamic banks. *The International Journal of Accounting*, 36(2), 169-193.

Keasey, K., Cai, C., Othman, R., & Ameer, R. (2009). Market risk disclosure: evidence from Malaysian listed firms. *Journal of Financial Regulation and compliance*, 17(1), 57-69.

Khalid, S., & Amjad, S. (2012). Risk management practices in Islamic banks of Pakistan. *The Journal of Risk Finance*, 13(2), 148-159.

Khan, M. S., & Mirakhor, A. (1990). Islamic banking: Experiences in the Islamic Republic of Iran and in Pakistan. *Economic Development and Cultural Change*, 38(2), 353-375.

Kraman, S. S., & Hamm, G. (1999). Risk management: extreme honesty may be the best policy. *Annals of Internal Medicine*, 131(12), 963-967.

Lajili, K., & Zéghal, D. (2005). A content analysis of risk management disclosures in Canadian annual reports. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 22(2), 125-142.

Lang, M., & Lundholm, R. (1993). Cross-sectional determinants of analyst ratings of corporate disclosures. *Journal of Accounting Research*, 246-271.

Leung, W. S., Taylor, N., & Evans, K. P. (2015). The determinants of bank risks: Evidence from the recent financial crisis. *Journal of International Financial Markets, Institutions and Money*, 34, 277-293.

Leventis, S., & Weetman, P. (2004). Voluntary disclosures in an emerging capital market: Some evidence from the Athens stock exchange. *Advances in International Accounting*, 17, 227-250.

Liebenberg, A. P., & Hoyt, R. E. (2003). The determinants of enterprise risk management: Evidence from the appointment of chief risk officers. *Risk Management and Insurance Review*, 6(1), 37-52.

Linsley, P. M., & Shrives, P. J. (2005). Examining risk reporting in UK public companies. *The Journal of Risk Finance*, 6(4), 292-305.

Linsley, P. M., & Shrives, P. J. (2006). Risk reporting: A study of risk disclosures in the annual reports of UK companies. *The British Accounting Review*, 38(4), 387-404.

Linsley, P. M., Shrives, P. J., & Crumpton, M. (2006). Risk disclosure: An exploratory study of UK and Canadian banks. *Journal of Banking Regulation*, 7(3), 268-282.

Mansoor Khan, M., & Ishaq Bhatti, M. (2008). Development in Islamic banking: a financial risk-allocation approach. *The Journal of Risk Finance*, 9(1), 40-51.

Mansoor Khan, M., Ishaq Bhatti, M., & Siddiqui, A. (2008). Financial contracts, risk and performance of Islamic banking. *Managerial Finance*, 34(10), 680-694.

Marston, C., & Robson, P. (1997). Financial reporting in India: Changes in disclosure over the period 1982 to 1990. *Asia-Pacific Journal of Accounting*, 4(1), 109-140.

Marston, C. L., & Shrives, P. J. (1991). The use of disclosure indices in accounting research: a review article. *The British Accounting Review*, 23(3), 195-210.

Masood, O., Hanim Tafri, F., Abdul Rahman, R., & Omar, N. (2011). Empirical evidence on the risk management tools practised in Islamic and conventional banks. *Qualitative Research in Financial Markets*, 3(2), 86-104.

MILNE, M. J., & CHAN, C. C. (1999). NARRATIVE CORPORATE SOCIAL DISCLOSURES: HOW MUCH OF A DIFFERENCE DO THEY MAKE TO INVESTMENT DECISION-MAKING? *The British Accounting Review*, 4(31), 439-457.

Nazir, M. S., Daniel, A., & Nawaz, M. M. (2012). Risk management practices: A comparison of conventional and Islamic banks in Pakistan. *American Journal of Scientific Research*, 68, 114-122.

Nier, E., & Baumann, U. (2006). Market discipline, disclosure and moral hazard in banking. *Journal of Financial Intermediation*, 15(3), 332-361.

O'Donovan, G. (2002). Environmental disclosures in the annual report: Extending the applicability and predictive power of legitimacy theory. *Accounting, Auditing & Accountability Journal*, 15(3), 344-371.

Oliveira, J., Rodrigues, L. L., & Craig, R. (2011). Risk-related disclosure practices in the annual reports of Portuguese credit institutions: an exploratory study. *Journal of Banking Regulation*, 12(2), 100-118.

Owusu-Ansah, S. (1998). The impact of corporate attributes on the extent of mandatory disclosure and reporting by listed companies in Zimbabwe. *The International Journal of Accounting*, 33(5), 605-631.

Patten, D. M. (2002). The relation between environmental performance and environmental disclosure: a research note. *Accounting, organizations and Society*, 27(8), 763-773.

Patton, J., & Zelenka, I. (1997). An empirical analysis of the determinants of the extent of disclosure in annual reports of joint stock companies in the Czech Republic. *European Accounting Review*, 6(4), 605-626.

Pérignon, C., & Smith, D. R. (2010). The level and quality of Value-at-Risk disclosure by commercial banks. *Journal of Banking & Finance*, 34(2), 362-377.

Raffournier, B. (1995). The determinants of voluntary financial disclosure by Swiss listed companies. *European Accounting Review*, 4(2), 261-280.

Rahman, R. A., Kighir, A., Oyefeso, L. O., & Salam, O. A. (2013). Risk Management Disclosure Practices of Islamic Banks in the Mena Region: An Empirical Analysis. *Middle-East Journal of Scientific Research*, 15(1), 152-160.

Rosman, R., & Abdul Rahman, A. R. (2015). The practice of IFSB guiding principles of risk management by Islamic banks: International evidence. *Journal of Islamic Accounting and Business Research*, 6(2), 150-172.

Sami, H., & Zhou, H. (2008). The Economic Consequences of Increased Disclosure: Evidence from Cross-Listings of Chinese Firms. *Journal of International Financial Management & Accounting*, 19(1), 1-27.

Singhvi, S. S., & Desai, H. B. (1971). An empirical analysis of the quality of corporate financial disclosure. *The Accounting Review*, 46(1), 129-138.

Solomon, J. F., Solomon, A., Norton, S. D., & Joseph, N. L. (2000). A conceptual framework for corporate risk disclosure emerging from the agenda for corporate governance reform. *The British Accounting Review*, 32(4), 447-478.

Sundararajan, V. (2007). Risk measurement and disclosure in Islamic finance and the implications of profit sharing investment accounts. *ISLAMIC ECONOMICS AND FINANCE*, 121.

Sundararajan, V., & Errico, L. (2002). *Islamic financial institutions and products in the global financial system: Key issues in risk management and challenges ahead* (Vol. 2): International Monetary Fund.

Syafri Harahap, S. (2003). The disclosure of Islamic values-annual report. The analysis of Bank Muamalat Indonesia's annual report. *Managerial Finance*, 29(7), 70-89.

Van Greuning, H., & Iqbal, Z. (2007). Banking and the risk environment. *Islamic Finance: The Regulatory Challenge*, John Wiley & Sons, Singapore, 11-39.

Vinnicombe, T. (2010). AAOIFI reporting standards: Measuring compliance. *Advances in Accounting*, 26(1), 55-65.

Wahlen, J. M. (1994). The nature of information in commercial bank loan loss disclosures. *Accounting review*, 455-478.

Wallace, R. O., & Naser, K. (1996). Firm-specific determinants of the comprehensiveness of mandatory disclosure in the corporate annual reports of firms listed on the stock exchange of Hong Kong. *Journal of Accounting and Public policy*, 14(4), 311-368.

Wallace, R. O., Naser, K., & Mora, A. (1994). The relationship between the comprehensiveness of corporate annual reports and firm characteristics in Spain. *Accounting and business research*, 25(97), 41-53.

Williams, G., Alsakka, R., & Ap Gwilym, O. (2013). The impact of sovereign rating actions on bank ratings in emerging markets. *Journal of Banking & Finance*, 37(2), 563-577.

Zaher, T. S., & Kabir Hassan, M. (2001). A comparative literature survey of Islamic finance and banking. *Financial Markets, Institutions & Instruments*, 10(4), 155-199.

