Assessing the Role of Board Risk Management Committee in the Risk Management Framework for the Banking Industry of Pakistan: A Thematic Analysis

Muhammad Bilal*

Abstract

The purpose of this study is to conduct an in-depth analysis of the existing risk management framework to explore the role of Board Risk Management Committee (BRMC) and address the risk governance issues existed in the banking sector o Pakistan. A qualitative research design was adopted for this study to carry out the in-depth evaluation of the existing risk management framework. A case study based research strategy was adopted in which in-depth interviews were conducted from the CROs/Heads of Risk of commercial banks of Pakistan. Data analysis was done using a technique called thematic analysis using QSR-Nvivo 11. In thematic analysis, the data collected through interviews were coded under relevant nodes. Then themes are extracted from the nodes using word clouds and word trees. The thematic analysis reveals that there are certain deficiencies in the existing risk management framework which are absence of risk expert on the board; weak risk culture; dysfunctional behavior; risk related mindset at the top. Furthermore, it is suggested that the Board of Directors (BoDs) design policies to create a risk culture in the bank so that every person in the bank will understand the importance of risk management. Moreover, there should be risk expert on the panel of BRMC to assist them in the evaluation of the proposals.

Keywords: Chief Risk Officer (CRO); Risk Management Framework; Board Risk Management Committee (BRMC)

Introduction

The financial sector is considered as the backbone of the economy of any country and banking industry in particular, is assumed to support this sector. Additionally, it is essential for the banking industry to become efficient as well as to secure in terms various types of risks. For this reason, banks should ascertain different exposures and establish adequate control systems to mitigate such exposures (Al-Tamimi & Al-Manzrooei, 2007). The study of Drzik (2005) substantiated that the expenditures

* Muhammad Bilal, PhD (Finance) Scholar, Department of Business Administration, Iqra University Islamabad Campus. Email: rao.muhammad.bilal@gmail.com

done by the banks after the 1991 recession for the enhancements in risk management capabilities for the market risk, interest rate risk and credit risk and it resulted in minimizing the fluctuations of losses and earnings during the 2001 recession.

It is evident from the available researches that the performance of commercial banks is largely dependent on the implementation of risk management. One such study was Fernando and Nimal (2014) which gave empirical evidence that the efficiency of Sri Lankan commercial banks has improved through the adoption of risk management. In the same way, a strong positive relationship was highlighted between risk management practice and performance of the commercial banks in Malaysia (Ariffin &Kassim, 2011). Correspondingly, the study of Oluwafemiet al. (2013) proved a significant relationship between risk management and performance in Nigerian commercial banks.

Most of the research work on the subject of risk management in the banking sector is being carried out in the developed countries and there is a dearth of literature for low and middle-income economies. Consequently, few studies have been conducted on the risk management issues for the banking industry of Pakistan (Khalid & Amjad, 2012; Nazir, Daniel, & Nawaz, 2012, Bilal, Talib, & Khan, 2013; Ishtiaq, 2015 etc.). Prior studies were quantitative in nature and focused only on the impact of various aspects of risk management process in relation to risk management practices within banking sector of Pakistan.Moreover, there is no study available in local context which addressed the issues related to risk management framework of commercial banking industry in context of role of board risk management committee. Due to this reason, prior studies were unable to extract in-depth issues prevailing in the risk management framework for Pakistani commercial banks.

So, the present study focuses on the research question that How effectively board of directors (BoDs) monitor the risk management process in commercial banks of Pakistan? This research question leads to the research objective of the study which is: to ascertain the effectiveness of BRMC in approving and endorsing the risk appetite, limits, market risk policies, internal controls in commercial bank of Pakistan.

Literature Review

The Sarban-Oxley Actdraws the attention of the BoDs towards financial reporting issues and the quality of the underlying processes. The risk oversight gained more importance due to the financial crisis. The Dodd-Frank Act and Basel Committee changes emphasized on the risk oversight responsibilities of the Board. Hence, the directors and executive management work in collaboration to design the risk oversight role of BoDs and necessary infrastructure required to perform those responsibilities. Consequently, the BoDs are demanding CRO for their assistance in the risk oversight role (Protiviti, 2011).

According to Protiviti Survey (2011), it is evident from the responses that the financial service industry is taken positive initiatives for the improvement of board risk oversight in response to regulatory changes after sub-prime crisis. For instance, the 60 percent respondents have the opinion that there is an effective board risk oversight and 10 percent respondent said that the board risk oversight is highly effective. Whereas, there are 27 percent respondents who have the opinion that the board risk oversight needs improvement while 3 percent have the opinion that board risk oversight is ineffective in their organizations.

According to the Financial Times, "it is obvious that there has been a massive failure of risk management across most of Wall Street" (Stulz, 2009). The sub-prime crisis provides the opportunity to the researchers to examine the role of the board in the building of risk in the pre-crisis period and investigate the performance of the banks during the crisis period. The two streams that the researchers are attracted the most are the financial expertise of independent directors and board independence. Some of the research studies argued that the deficiencies in the financial expertise of independent directors and board independence were among the prime contributors to governance failure (Walker, 2009; Kirkpatrick, 2009; European Commission, 2010). There are regulations on the issue of board independence but there is almost nothing on the financial expertise of independent directors which open the door for future researchers to dig out its implications.

The board independence majorly dependent on the regulations of the country rather than on those of bank as evident from the research work on the banks of 41 countries (Ferreira, Kirchmaier, & Metzger, 2011). Moreover, there is no explanation about the director's expertise neither country level nor bank level. A study of Stulz (2008) mentioned a report of UBS shareholder that indicates that there was a poor communication of risk exposures to the executive management in the banks before sub-prime crisis. This argument of poor communication of risk exposures was also supported by a report prepared by Senior Supervisors Group (2008, p.9) as: "*In some cases, hierarchical structures tended to serve as filters when information was sent up the management chain, leading to delays or distortions in sharing important data with senior management.*"

The independent director with financial expertise is very valuable in risk management. Harris and Raviv (2008) argued that if the financial expertise of independent directors cut down the expenditure of risk intelligence about risk environment then the board should be capable of designing a suitable risk profile, facilitate the executive management in risk taking and oversight the risks efficiently. Informed decision making by the board is possible only if there is an in-depth understanding of risk on the back end (Minton, Taillard, & Williamson, 2014). Moreover, the study showed that there is no independent director with financial expertise is present on the board in one-quarter of bank holding companies having more than $1 million in assets. Furthermore, in the pre-crisis period, the proportion of independent directors having financial expertise is between 20% to 26%. During the pre-crisis period, those banks outperformed in the industry which are having more financial expertise on the board than others.

A study of Landier, Sraer, and Thesmar (2009) concluded that a little bit dissent between the board and CEO is beneficial for an organization to avoid a bad decision, but the acceptance of the dissent largely depend on the dynamics between the directors and CEO. The studies conducted in the European countries to investigate the board risk taking, competence and performance revealed that the losses incurred in the financial crisis are due to the incompetence of the board in the risk management area (Hau&Thum, 2009; Cunat&Garicano, 2010).

The overall discussion revealed that the board with financial expertise can play an instrumental contribution to informed decision making in relation to risk management. Furthermore, assisting the executive management in a better way as they have the professional expertise to evaluate the pros and cons of the project. The lack of regulations in the expertise of directors led the Armour and Gordon (2014) to propose rules for officer and director liability that are focussed at stimulating the BoDs to behave in more risk-averse manner.

The review of the literature revealed that there is dearth of literature on the role of BRMC in the risk management framework. Therefore, present study fills this gap by exploring the roles, responsibilities and governance issues of BRMC in the risk management framework of Pakistan.

Methodology

Population and Sample

The research question of current study required the responses of the Chief Risk Officers (CROs)/Heads of Risk, Head of Credit Risk and Head of Market Risk of Pakistani commercial banks in order to explore the risk management and risk governance issues. As these risk personnel were responsible for the overall management of risks, therefore these were the right people to give an in-depth response to the research questions in order to explore the risk management and risk governance in Pakistani commercial banks. As in Pakistan, there were only 23 local and foreign commercial Banks and each commercial bank had only one CRO/Head of Risk position, one Head of Risk and one Head of Credit Risk. Therefore, the researcher of present study took the whole population (i.e. 23 CROs/Heads of Risk, 23 Head of Credit Risk and 23 Head of Market Risk) for the in-depth interviews. Thus, there was no need to take the sample out of population as the population size was smaller and manageable for qualitative data collection. Therefore, total 69 interviews were conducted from the risk personnel working in commercial banks.

Interview Script Sheet

The interview script sheet was finalized with the help of five CROs/Heads of Risk from the banking industry of Pakistan. The interview script sheet initially contains twelve questions but after discussion with the CROs/Heads of Risk were reduced to ten questions. The finalized interview sheet was used for the final interviews.

Thematic Analysis

In the qualitative analysis, the first method bubbles up is thematic analysis (Braun & Clarke, 2006). The prime objective of using thematic analysis approach was to dig out the hidden themes and patterns in the primary data. The researcher coded its primary data in the form of interviews, website material, observations to figure out the relevant themes, patterns and interrelationships among themes to interpret the data to draw conclusions.

Braun and Clarke (2006) described the thematic analysis as a flexible and handy method for primary data analysis. Thematic analysis processes the data in a logical and organized way. Thematic analysis has the capability to handle small as well as large primary data and produces authentic and reliable descriptions. Some of the advantages of using thematic analysis are listed below.

- Ability to handle and interpret large data set of primary data.
- Integrate data sets from various sources by creating codes.
- Figure out the relevant themes and patterns according to research questions.
- Develop thematic explanation of large primary data.
- Test the theories on the basis of already produced themes and thematic relationships.
- Produce and testify conclusions.

Thematic analysis is a standalone method and does not affectby the adopted research philosophy and approach. However, research philosophy (positivism, critical realism, interpretivism, postmodernism or pragmatism) and approach (inductive, deductive or abductive) will dictate how the researcher interpreting the primary data. Therefore, the researcher can use thematic analysis in a realist study as well as interpretivist study with equal ease.

Qualitative Data Analysis Software

The software used in this study was Nvivo version 11. The software has the capability to handle the huge amount of qualitative data collected through interviews from the risk personnel of commercial banking industry of Pakistan. The data collected through interviews was fed into Nvivo and then arranged and organized by making code extracts which were grouped under relevant nodes. Furthermore, the coded data was analyzed using 'word clouds' and 'word trees' to generate themes.

Result and Findings

Thematic Analysis

The first step of thematic analysis is the coding process to organize the data collected through interviews. The coded extracts related to BRMC are placed under relevant nodes. The nodes organize and arrange the relevant material regarding an idea or concept. Once the coding process was completed then the themes are generated with the help of word cloud analysis and word tree analysis which is given in detail in the following section.

Word Cloud Analysis

***Figure 1:** Word Cloud of themes related to role of board*

The word cloud mentioned in figure 1 shows the themes related to the role of the board in risk management in the banks. This word cloud is helpful in extracting the potential themes in the data collected through interviews. The potential themes from the word cloud are 'BRMC', 'oversight', 'Appetite', 'committees', 'governance', 'review', 'strategic', 'tolerance' etc. The refinement of these potential themes is done through context analysis using tree analysis.

Word Tree Analysis

The first theme created from the codes is the *effectiveness of board risk oversight.* The next section and figure 2 will explain the exploration and identification of this theme from the initial codes.

The Board of Directors (BoDs) of the bank constitute the board risk management committee (BRMC) for the risk oversight purposes. The committee is comprised of three to four members from the BODs. The committee is responsible for approving the risk appetite of the bank. It is responsible for reviewing the risk inherent in the proposal presented by the executive risk management committee (ERMC). This committee protects the right of the shareholders against various types of risks inherent in the bank's operations and transactions. Furthermore, it not only oversees the risk internally but also externally due to unforeseen events as per the contingency plans. The BRMC sets and approves the limits for various risks like foreign exchange, interest rate, credit, liquidity risk etc. The BRMC also reviews the existing risk management practices in the bank and updates them according to the changing risk management guidelines issued by the state bank of Pakistan (SBP) and Basel Accord (Basel I, Basel II, Basel III) issued by Bank of International Settlement (BIS). The risk management tone is set by the board of directors through BRMC in the bank that provides a clear direction for the future risk management practices.

One of the interviewees made a point on the effective role of BRMC in the commercial banks of Pakistan by stating that

> [*In the banks, the role of BRMC is very important in respect of risk oversight. The SBP guidelines clearly state the formation of BRMC for risk oversight. The BRMC reviews the existing risk management policies according to the market situation. BRMC ensures that the current risk management practices are in line with the SBP guidelines and bank's internal limits. BRMC sets the tone of the risk management in the Bank. The BoDs formulates BRMC for the review of risk appetite and setting risk limits*]

Some of the interviewees have a stance that the members of the BRMC should have a vast experience regarding risk management in every area e.g. market, credit, operation and strategic etc. in order to take an effective decision regarding setting the risk appetite and setting limits for various exposures. The interviewee made a point by arguing that [*The risk management at the strategic level is done by BRMC by analyzing the top risks faced by banks. Prioritizing the risks is one of the main jobs of the BRMC according to the set risk appetite of the Bank's committee*]

In Pakistani banks, BRMC members lack experience in the area of risk management, there should be risk expert on the panel of BRMC to assist the BRMC members in evaluating the proposals. Most of the interviewees state that the BRMC in Pakistani bank lack expertise in the area of risk management. Therefore, the expert reviewing is weak because their decision depends only upon the basis of ERMC recommendations and the CEO. It is emphasized that board members with risk management expertise are essential for the changing nature of exposures in the market. Members having sheer knowledge of risk management guidelines and practices as per SBP and BIS shall be inducted in the boards. Some arguments made by interviewees in this regard are as follows:

> [*The purpose of BRMC is to provide support to the Bank's BODs and its executive management in developing and refining the risk management environment. It also helps to inculcate a holistic Risk Management culture, spotting the miscellany and density of its operations and gauging exposure to various kinds of risks primarily operational, market, liquidity, and credit risk. The guiding principles for bearing derivative exposures are approved by the BODs and the BRMC.*]

The BODs and the BRMC play a pivotal role in the development of risk culture in the bank so that everybody from top to bottom keeps a risk-oriented eye on their daily operations and transactions. This enterprise-wide risk management is a collaborative effort of the BoDs and its delegated risk committees (BRMC, ERMC, ALCO, CRC etc.). During the interviews majority of the interviewees agreed with this argument and opinion of one such interviewee is given as follows:

[*The BODs provide the strategic direction for robust risk management for the various risk exposures and take the ultimate accountability for guaranteeing that an effective and efficient risk management framework is established including the required policies, human resources, systems, and procedures. Moreover, this task is backed up by board committees i.e. BRMC and Board Audit Committee (BAC) and also supported by the management committees i.e. Operational Risk Management Committee (ORMC), Management Risk Committee (MRC), Credit Risk Management Committee (CRMC), and Asset & Liability Committee (ALCO)*]

The BoDs of the bank has the responsibility to keep the risk management practices up to date and aligned with the local and international risk management standards. During the interviews, most of the interviewees highlight the above-cited responsibility of the BoDs for the effective risk management in the banks. The arguments of the interviewees in this regard are as follows:

[*The Board of Directors, through its BRMC guarantees that decision making is aligned with the Bank's risk appetite and strategies. The Board receives periodic updates on the critical risks including a quarterly comprehensive summary of the portfolio performance and Bank's risk profile against set targets and thresholds.*]

From the word tree analysis, the problems highlighted in relation to board and BRMC for the strengthening of risk management framework as mentioned by several interviewees in their comments are given as follows:

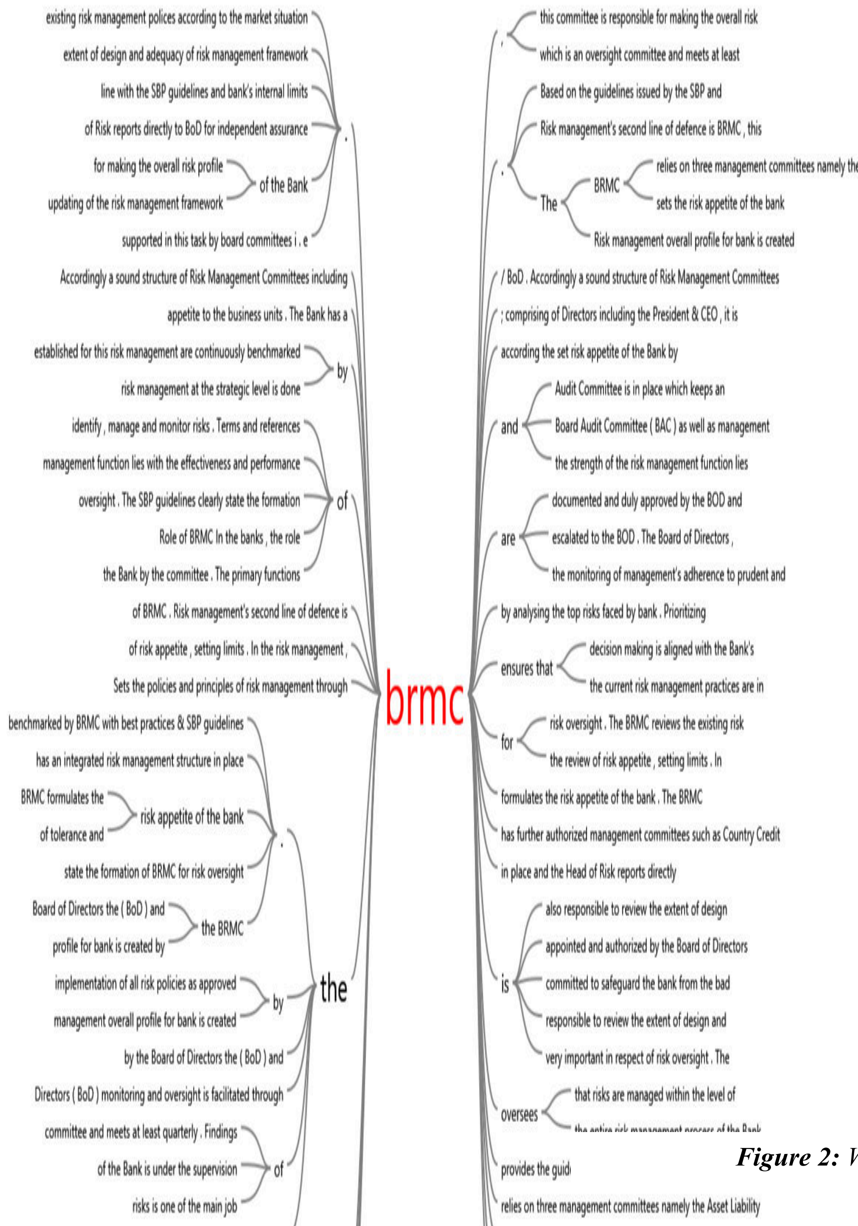

Figure 2: *Word Tree Analysis on Role of BRMC*

[…*The risk oversight is weak as there is a deficiency in terms of risk management capabilities of the bank. hence, BoDs and BRMC work in close coordination to sort out this issue*…]

[*The board's risk oversight needs to be more effective as there is a lack of understanding core assumptions and risks of the business strategy.*]

[*…The critical issue for the board and BRMC is the designing of the risk appetite statement (RAS). The risk appetite statement entails the details about who will take a risk and who will monitor risk. The tone of the risk management is set through this statement. The RAS clearly defines the amount of risks that the bank is willing to bear in order to achieve its set objectives and business plan...*]

[*The board and BRMC needs timely, specific risk information that helps in effective risk oversight. This is the main obstacle in taking a timely decision as the board and BRMC receives bulk of information that is hard to review and hard to extract required information about a particular issue.*]

[*The board and BRMC would be more effective in risk oversight if they overlook any dysfunctional behavior that results in excessive risk taking. These behaviors disrupt the risk management process in banks.*]

[*One of the problems stands against the effective risk oversight is that the board and BRMC are unable to give timely input to the senior management which is necessary to cater the core risks faced by the banks. The problem exists because the board and BRMC do not have a risk expert on the BRMC that can advise in the risk related matters. Therefore, the BRMC composition is very vital for the banks as it needs a risk expert on the Panel.*]

Proposed Extensions in the Existing Risk Management Framework

The effectiveness of risk oversight depends upon the bank's risk management capabilities. Stronger the capabilities more effective will be the risk oversight by the board will be. During the interviews, several interviewees pointed out that BoDs have inadequate risk oversight due to weak risk management capabilities. Therefore, the author has the view that BoDs should take certain measures to boost the bank's risk management capabilities. One such measure is that the BoDs ensures that risk is integrated into bank's core processes such as business planning, strategy setting etc. Moreover, BoDs must ensure that there is an effective reporting process in place to inform the BoDs in a timely manner to assist in decision making. Furthermore, independence of risk management function is very vital for the effectiveness of the BoDs risk oversight. Hence adequate authority, compensation, stature, and resources should be given to the risk management function. BoDs must ensure that bank's risk management function is capable of keeping its pace with the changing risk profile due to changing business environment.

The interviewees pointed out the second problem in board risk oversight is the Board's weak understanding regarding the risks and core assumption of the bank's strategy as well as extracting the unbiased information from internal and external sources regarding core assumptions. For that reason, the author has the view that BoDs should take certain measures to enhance the risk oversight. One such measure is to evaluate annually whether the management's assessment regarding the changes in the regulatory and business environment would alter the core assumptions embedded in bank's strategy and impact of these changes on bank's business model. The main evaluation here is to judge whether these changes will lead the bank forward or backward. Moreover, BoDs should encourage the out of box thinking concentrating on core assumptions.

The effectiveness of the BoDs risk oversight highly depended on how engaged is the bank's BoDs and executive management in designing and implementing the risk appetite framework. Several interviewees have the view that there is a need for more engagement from the BoDs and executive management for the designing and development of risk appetite statement for the Pakistani commercial banks. The author has the view that the effectiveness of the risk appetite framework is possible only if it is designed by BoDs with close coordination with CEO, CRO, and CFO. Moreover, the CRO's ability to escalate risk issues to the BoDs and CEO's commitment to risk appetite framework are key factors in the success in the strengthening of risk oversight by the BoDs. The CRO communication with the business line and other departments is very vital for the effective implementation of the risk appetite framework. Therefore, BoDs should take steps to foster a risk culture in the bank so that the communication between the CRO and business lines will improve.

Another key obstacle in the effective risk oversight is quality, quantity, and timing of the risk information to the BoDs mentioned by the interviewees. Most of the time, there is a substantial amount of risk data and it is hard for the BoDs to extract the key information from it. Moreover, there is a possibility that the required risk information is not present in the risk report and timing of the risk information is wrong. Therefore, the author has the view that BoDs should demand a risk reporting package to improve the quality, lesser the volume and improve the timing of the risk information. This risk reporting package must include unit wise and as a whole bank wise summary of top level risks; risk updates such as risk trends; highlights of scenario analysis; brief description of the assumptions underlying business strategy; report on effectiveness of risk mitigation; report on the limits breached or near misses; and disclosure of deficiencies in risk capabilities and measures taken in their response.

The excessive risk taking the behavior of the business line is one of the obstacles in the effective risk oversight by the BoDs as mentioned by the interviewees. Author has the view that the effective risk oversight is possible if the BoDs keep a close eye on the management risk taking and discourage excessive risk-taking behavior so that the culture of 'eat what you kill' is suppressed. The BoDs should review the incentive compensation structure triggering excessive risk taking. Such a dysfunction behavior can exist in the bank due to management ignorance of warnings generated by risk management function, lack of risk assessment resources available to risk management function, the mindset of banks business lines of viewing the risk management as a compliance function only. Hence, BoDs should create a balance between growth and risk management, short-run objectives vs long term objective etc.

The interviewees mentioned that due to lack of risk management knowledge and experience on the board they are unable to give input to senior management. Author has the view that the effective risk oversight is possible only if the BoDs provide timely input to the executive management. For timely input, the BoDs must have right composition of board members in the BRMC who have vast experience, expertise, and knowledge in the field of risk. Moreover, BRMC should not solely rely on the risk information given by the executive management through ERMCs. BRMC should arrange an independent directors' view through third party help. The BRMC should have the services of risk expert to assist them in evaluation of projects. The BoDs must set timeframes and deadlines for the receipt of timely risk information so that important strategic decision can be made.

Conclusion

It is concluded from the results that the board oversight needs to be more effective as the members of BRMC are lacking in vast expertise, experience, and knowledge in the risk management area in most of the Pakistani commercial banks. The effectiveness of the Board's risk oversight depends upon the risk appetite statement of the bank. Therefore, this needs to be carefully designed so that there is clarity of roles in risk monitoring and risk ownerships across the bank. The effectiveness of risk oversight also depends upon the risk culture which is not adequately developed in Pakistani commercial banks. Hence, the Board, BRMC, and ERMCs should work together to initiate risk awareness workshops, trainings, and seminars to ensure that every employee of the banks fully understands that everybody should see their work both from growth as well as risk lens.

Policy Recommendation

Currently, the members of the BRMC have little experience about risk management, thus it is also recommended that the members of the BRMC should have vast experience of risk management so that the BRMC can evaluate projects with the spectacles of risk. There should be a risk expert on the panel of BRMC to assist them in project evaluations. Moreover, if the members of the BRMC have a vast experience in risk management then they are in a better position to set the risk limits, risk appetite and make other important risk-related decisions in a better way.

It is also recommended that a strong risk culture should be cultivated from top to bottom in the bank by the BoDs as they set the tone for every policy and guidelines for the bank. Accordingly, BoDs should take necessary steps to set up a risk culture in true spirit in every department of the bank so that all the department should facilitate each other and work in collaboration. To achieve this, the BoDs and top management should conduct seminars on the awareness of risk management for the banking personnel and make sure that the participation of every department in these seminars is mandatory so that the required objectives of setting up a risk culture from top to bottom can be achieved in the bank.

Future Directions

This study covers only the commercial banks (public, private, foreign) of Pakistan for the evaluation of risk management framework and risk governance. Therefore, there is ample room for future researches to extend this study by evaluating the risk management framework and risk governance in specialized banks and microfinance banks as risk management is equally important for these institutions also. Moreover, the study can be extended by incorporating other risk management aspects such as board size, board compositions in their analyses.

References

Al-Tamimi, H. A. H., & Al-Mazrooei, F. M. (2007). Banks' risk management: A comparison study of UAE national and foreign banks. *Journal of Risk Finance*, *8*(4), 394-409.

Ariffin, N.M. and Kassim, S.H. (2011). Risk management practices and financial performance of Islamic banks: Malaysian evidence, *8th International Conference on Islamic Economics and Finance*. 19-21 December 2011. Doha: Qatar.

Armour, J., & Gordon, J. N. (2014). Systemic harms and shareholder value. *Journal of Legal Analysis*, *6*(1), 35-85.

Bilal, A. R., Talib, N. B., & Khan, M. N. A. A. (2013). Remodeling of risk management in banking: evidence from the sub-continent and gulf. *The Journal of Risk Finance Incorporating Balance Sheet*, *14*(5), 468-489.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101.

Cuñat, V., &Garicano, L. (2010). Did good Cajas extend bad loans? The role of governance and human capital in Cajas portfolios decisions. *Working Papers 2010-08, FEDEA*. Retrieved from http://documentos.fedea.net/pubs/dt/2010/dt-2010-08.pdf.

Drzik, J. (2005). New directions in risk management. *Journal of Financial Econometrics*, *3*(1), 26-36.

European Commission (2010). *Green Paper: Corporate Governance in financial institutions and remuneration policies,* COM (2010) 284 final, Brussels. Retrieved from http://ec.europa.eu/internal_market/ company/docs/modern/com2010_284_ en.pdf.

European Commission (2010). *Green Paper: Corporate Governance in financial institutions and remuneration policies,* COM (2010) 284 final, Brussels. Retrieved from http://ec.europa.eu/internal_market/ company/docs/modern/com2010_284_ en.pdf.

Fernando, J. R., &Nimal, P. D. (2014). Does risk management affect on bank efficiency? An analysis of Sri Lankan banking sector. *International Journal of Management and Sustainability*, *3*(2), 97-110.

Ferreira, D., Kirchmaier, T., & Metzger, D. (2011). *Boards of banks*. Financial Markets Group.

Harris, M., &Raviv, A. (2008). A theory of board control and size. *Review of Financial Studies*, *21*(4), 1797-1832.

Hau, H., &Thum, M. (2009). Subprime crisis and board (in-) competence: Private versus public banks in Germany. *Economic Policy*, *24*(60), 701-752.

Ishtiaq, M. (2015). *Risk management in banks: determination of practices and relationship with performance* (Doctoral thesis, University of Bedfordshire, Bedfordshire, England). Retrieved from https://core.ac.uk/download/pdf /30317379.pdf

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

Kirkpatrick, G. (2009). The corporate governance lessons from the financial crisis. *OECD Journal: Financial Market Trends*, *2009*(1), 61-87.

Landier, A., Sraer, D., &Thesmar, D. (2009). Financial Risk Management: when does independence fail?. *The American Economic Review*, *99*(2), 454-458.

Minton, B. A., Taillard, J. P., & Williamson, R. (2014). Financial expertise of the board, risk taking, and performance: Evidence from bank holding companies. *Journal of Financial and Quantitative Analysis*, *49*(2), 351-380.

Nazir, M.A., Daniel, A., & Nawaz, M.M. (2012). Risk management practices: a comparison of conventional and Islamic banks in Pakistan. *American Journal of Scientific Research, 68*(1), 114-122.

Oluwafemi, A.S., Adebisi, A.N.I., Simeon, O., &Olawale, O. (2013). Risk management and financial performance of banks in Nigeria. *IOSR Journal of Business and Management,* 14(6), 52-56.

Protiviti (2011). *Constructive Engagement Through Effective Board Risk Oversight: Enabling the Chief Risk Officer's Success*. CRO series. Retrieved from http://www.protiviti.com/en-US/Pages/Constructive-Engagement-Through-Effective-Board-Risk-Oversight.aspx.

Senior Supervisors Group (2008). *Observations on risk management practices during the recent market turbulence*, March 6, 2008, p. 9

Stulz, R. M. (2008). Risk management failures: What are they and when do they happen?. *Journal of Applied Corporate Finance*, *20*(4), 39-48.

Stulz, R. M. (2009). Six ways companies mismanage risk. *Harvard Business Review*, *87*(3), 86-94.

Walker, D. (2009). *A review of corporate governance in UK banks and other financial industry entities*, (Financial Services Authority) July