University of Essex

Enterprise Risk Management (ERM) in the Banking Sector: Evidence from Bangladesh

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Dedication

This thesis is dedicated to:

My son (Adeeb) and my sweet daughter (Aayat) for always making me happy and cheerful during this journey;

My lovely wife (Asma) for her continuous support and encouragement since our bondage;

My beloved parents (Kabir Hossain and Morgina Begam) and father-in-law and mother-in-law (Abdul Matin and Jarina Begum) for their endless love, sacrifice, and prayers;

My siblings (Moinuddin and Monira) for their love and affection;

and

My Motherland, Bangladesh.
Hope for prosperity and progress in the future.

Declaration

I do hereby firmly declare that the work presented in this thesis is entirely my own research except where acknowledged and indicated by full references. I further pronounce that the materials contained in this thesis have not been previously submitted for a higher degree at any other university or institution. It is also affirmed that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct.

Signature:
Mohammad Moniruzzaman
April 2020

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Abstract

The aim of this study is threefold. First, to investigate how Enterprise Risk Management (ERM) diffuses in the banking sector under a regulatory environment. Second, to explore how this regulatory diffusion triggers incremental change and how banks adapt to this incremental change. Finally, to investigate how this diffusion influences the "MCS (Management Control Systems) package". This study, therefore, develops an integrated theoretical framework, drawing on Abrahamson's (1991) diffusion typology, "neo-institutionalism" (Greenwood and Hinings, 1996) and "MCS package" (Malmi and Brown, 2008) to address the ERM phenomena. The data was collected using semi-structured interviews and triangulated through secondary materials.

The evidence shows that ERM is diffused as a result of forced selection and efficient choice in the banking sector. The usefulness of ERM is meaningfully established in banks. Consequently, it is mandated internally at the organisational level as an efficient innovation. Thus, it may be argued that forced-selection and efficient-choice perspectives are useful in framing an account of primary stage diffusion of ERM in a regulatory environment, which helps address the apparent paradox between these two perspectives. Following the ERM diffusion, banks shift towards an institutionalised template of risk management that influences both the structure and operations of banks simultaneously. These changes occur within a quick pace of time soon after the regulation. ERM, therefore, is regarded as a driver of incremental change, particularly under a regulatory environment. A new departmental agent, the RMD (Risk Management Division), evolves within banks following the diffusion. The highest interest of RMDs and the reformative commitment of boards and CEOs towards the ERM act as precipitating factors within banks in adaption to incremental change. Likewise, the favourable power/resource to the RMDs and the growing implementation capacities act as enabling factors in this adaption process. Furthermore, the elements of the "MCS package" are reshaped following the diffusion of ERM based on the notion of "risk", whereby the "MCS package" turns into a "risk-based MCS package". Therefore, this study asserts that the regulation signifies ERM, and that has important implications for organisational change and the reinvention of MCS.

List of Conference Presentations

The following works were presented in doctoral masterclasses:

"Enterprise Risk Management (ERM) in the Banking Sector: Evidence from an Emerging Economy", presented at the BAFA 2018 Annual Conference with Doctoral Masterclasses, Central Hall Westminster, London, 9–11 April 2018.

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"Enterprise Risk Management (ERM) and Radical Change in an Organisational Field: An Institutional Perspective of Adaptation to Change", presented at the BAFA 2019 Annual Conference with Doctoral Masterclasses, University of Birmingham, England, 8–10 April 2019.

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List of Abbreviations

ABC	Activity-Based Costing
ABM	Activity-Based Management
AD	Authorised Dealer
ADB	Asian Development Bank
ALM	Asset Liability Management
AMD	Additional Managing Director
AML	Anti-Money Laundering
APG	Asia Pacific Group
BB	Bangladesh Bank
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BIBM	Bangladesh Institute of Bank Management
BRC	Banking Reform Committee
BSC	Balance Score Card
CAR	Capital Adequacy Ratio
CAMLS	Certified Anti-Money Laundering Specialist
CB	Central Bank
CBSP	Central Bank Strengthening Project
CBRP	Commercial Bank Restructuring Project
CEO	Chief Executive Officer
CERM	Certified Enterprise Risk Manager
CIB	Credit Information Bureau
CISA	Certified Information Systems Auditor
COSO	Committee of Sponsoring Organisations of the Treadway Commission
CPD	Centre for Policy Dialogue
CRM	Credit Risk Management
CRO	Chief Risk Officer
CRGM	Credit Risk Grading Manual
CRMR	Comprehensive Risk Management Report
DCA	Development Credit Agreement
DFI	Development Financial Institute
DGM	Deputy General Manager
DMD	Deputy Managing Director
DOS	Department of Offsite Supervision
ERM	Enterprise Risk Management
EVP	Executive Vice President
FATF	Financial Action Taskforce
FB	Foreign Bank
FCB	Foreign Commercial Bank
FIPD	Financial Institutions Development Project

FSAC	Financial Sector Adjustment Credit
FSAP	Financial Sector Assessment Program
FSRP	Financial Sector Reforms Programme
FX	Foreign Exchange
GDP	Gross Domestic Product
GoB	Government of Bangladesh
ICAAP	Internal Capital Adequacy Assessment Process
ICC	Internal Control and Compliance
ICT	Information & Communication Technology
IMF	International Monetary Fund
JICA	Japan International Co-operation Agency
LRA	Lending Risk Analysis
MAT	Management Action Trigger
MD	Managing Director
MNC	Multinational Corporation
MRMR	Monthly Risk Management Report
MCS	Management Control Systems
NCMBC	National Commission on Money, Banking and Credit
PCB	Private Commercial Bank
RAS	Risk Appetite Statement
RBCA	Risk-Based Capital Adequacy
RG	Regulator
RMC	Risk Management Committee
RMD	Risk Management Division
RMP	Risk Management Paper
RMU	Risk Management Unit
SB	Scheduled Bank
SCB	State-Owned Commercial Bank
SDG	Sustainable Development Goal
SREP	Supervisory Review Evaluation Process
SRP	Supervisory Review Process
SVP	Senior Vice President
TQM	Total Quality Management
TRM	Traditional Risk Management
UK	United Kingdom
USA	United States of America
UN	United Nations
VP	Vice President
WB	World Bank

Chapter 1

Introduction

1.1 ERM: A New Archetype of Risk Management

Management of risk is now the central attention in organisations. Companies have been impacted in terms of pursuing strategic value for key stakeholders following the major risk events in the business environment over the past decades (Beasley *et al*., 2015). Therefore, concerns have been raised in the management of risks. The high-profile corporate collapses and governance failures over the last couple of decades, such as Barings Bank, Polly Peck, Enron, WorldCom, and Lehman Brothers, along with human-made and natural disasters, like the terrorist attacks of 9/11, the political crisis in the Middle East, the currency turmoil, the rise of cyber risk, the trade war between the USA and China, Hurricane Katrina, the Fukushima nuclear disaster and the Brexit, among numerous others, have given a warning call to rethink risk management practice in organisations (Dickinson, 2001; Khan *et al.*, 2016; Cohen *et al.*, 2017). Likewise, globalisation and business deregulation have also influenced this rethinking process (Lam, 2000; Pagach and Warr, 2011). Even the recent financial crisis of 2007–2009 is partially attributed to the failure of risk management (Kirkpatrick, 2009). As a result, expectations are growing among the wide range of stakeholders for improved and comprehensive risk management practice in organisations. The emergence of ERM is a response to these growing expectations as a new paradigm for the management of risks (Beasley *et al*., 2005).

ERM is a breakthrough in risk management practice. In the literature, it is perceived as a "new management innovation" and regarded as one of the major "organisational shifts" of the past decade (Hayne and Free, 2014). It is also considered as a "driver" of organisational change and "management control innovation" (Jabbour and Abdel-Kader, 2015). ERM is now one of the essential elements of the improved corporate governance practice (Beasley *et al.*, 2005; Baxter *et al.*, 2013) and part of governance reform (Mikes and Kaplan, 2015). It becomes a tool for strategic decision-making (Viscelli *et al.*, 2017) and an organisational approach for improving firm performance (Florio and Leoni, 2017), as well as value creation (Hoyt and Liebenberg, 2011). It is also a technical tool for external credit rating (Standard & Poor's, 2005, 2008), external auditing (Cohen *et al.*, 2017), and internal auditing (Arena *et al.*, 2011). It is further perceived as a mechanism for quality financial reporting (Cohen *et al.*, 2017). Consequently, ERM no longer belongs to the "finance" discipline; rather, it has entered the "management" domain in corporations as organising and controlling concepts (Soin and Collier, 2013; Choi *et al.*, 2016). It also promotes accountability and assists in ensuring transparency in organisations (Tekathen and Dechow, 2013). Now, ERM is a formalised organisational and management practice (Scheytt *et al.*, 2006). Therefore, the research interest is growing to explore ERM phenomena.

In this breakthrough, this study aims to understand the ERM phenomena in the areas of diffusion, organisational change and adaption, and the management control systems (MCS). In particular, the focus of the research in the area of diffusion is to understand how ERM diffuses in the banking sector of Bangladesh under the regulatory environment. ERM is now mandatory for banks in Bangladesh. Thus, this area of study will provide an account of the reality of ERM diffusion in the banking sector under a regulatory environment. On the other hand, the regulatory diffusion of ERM influences organisational change and MCS. Therefore, in the area of change and adaption, this research aims to explore the incremental change following the diffusion of ERM and the organisational adaption process. Furthermore, in the area of MCS, this study plans to explore how the design choices of MCS reshape in banks following this regulatory diffusion.

The notion of ERM is relatively new in the area of risk management. Since the emergence of ERM in the mid-1990s, researchers and practitioners have been trying to spread the ERM notion and contribute to its progress (Baxter *et al.*, 2013). Despite this, there is no universally agreed definition of ERM (CIMA, 2008; Bromiley *et al.*, 2015). The concept of ERM varies among different organisations, even within the same organisation (Arena *et al.*, 2010), and many researchers have attempted to define the concept. Liebenberg and Hoyt (2003) define ERM as an approach for managing a wide range of risks in an integrated and holistic manner. However, from a broader point of view, Whitman (2015, p. 161) considers ERM as "*a holistic framework for identifying, defining, quantifying, prioritising and treating all material risks of potential loss and gain while simultaneously considering potential correlation and interrelationships between individual risks throughout the organization or enterprise*".

Banking risk exposure, for example, can be considered to understand the ERM notion. Diverse types of risk exist in banks, and these are interrelated. For instance, the existence of credit risk influences liquidity risk, operational risk, capital risk, and many more. Then, these risks influence reputational risk. Consequently, this risk influences profitability risk, bankruptcy risk, and sustainability risk. Thus, risks are interrelated and interdependent in the banking business. As a result, there is no scope to look into any risk on a stand-alone basis, putting the focus only on the downside. Thus, under the ERM approach, all the interrelated risks are taken into consideration for informed decision-making. Hence, ERM is viewed as an integrated, holistic, enterprise-wide, and strategic risk management practice. In fact, ERM is considered as a risk intelligence philosophy (Deloitte, 2012) under which risk perspectives of risk managers have changed. Under the

ERM approach, risk managers now consider risk as an opportunity for making a profit rather than something to eliminate (Jabbour and Abdel-Kader, 2015).

However, as the notion of ERM is relatively new in academia. Empirical research is limited in this discipline, although it is emerging (Beasley *et al.*, 2015). As such, it is a new avenue of academic research to embark on and explore the evolving dynamics of ERM.

1.2 Motivation of the Study

This study is motivated by two aspects: firstly, the growing potential of ERM research along with the emerging debate, and secondly, the distinctive contextual background. These two features have inspired the researcher to explore the ERM phenomena under investigation. However, the rationale for conducting this study is narrated below in detail.

1.2.1 The Adolescence of ERM Research

It is noted that a diverse area of research has been connected with the ERM discipline since its advent, despite ERM studies remain at an early stage. The literature shows that a number of empirical studies are growing in the area of adoption and implementation since the emergence of ERM in the mid-1990s. In this area, researchers have mainly attempted to identify organisational determinants as a factor of adoption and implementation of ERM (Colquitt *et al.*, 1999; Liebenberg and Hoyt, 2003; Beasley *et al.*, 2005; Khan *et al.*, 2016; Lechner and Gatzert, 2018).

Afterwards, the area of value relevance has gained momentum in the ERM research. As a result, research interest has grown in the areas of firm performance and value creation (Baxter *et al.*, 2013; Gatzert and Martin, 2015; Lechner and Gatzert, 2018), operational risk management (Callahan and Soileau, 2017) and strategic decision-making

(Meidell and Kaarbøe, 2017; Beasley *et al.*, 2015; Viscelli *et al.*, 2017) to support the value relevance of ERM.

Subsequently, the research interest has been expanded beyond the areas of adoption and value relevance in recent times. Researchers are now trying to address ERM in action (Mikes, 2009, 2011; Arena *et al.*, 2010, 2017), and explore the evolving dynamics in organisation (Vinnari and Skærbæk, 2014; Hall *et al.*, 2015; Meidell and Kaarbøe, 2017). In addition, ERM has drawn research attention in the areas of organisational change (Jabbour and Abdel-Kader, 2015; Giovannoni *et al.*, 2016), internal auditing (Arena *et al.*, 2011; Vinnari and Skærbæk, 2014), external auditing (Bailey *et al.*, 2018), corporate financial reporting (Cohen *et al.*, 2017), management control systems (Liff and Wahlstrom, 2018; Rad, 2016), performance management systems (Arena and Arnaboldi, 2014), and achieving dual purpose both economic and social goals (Caldarelli *et al.*, 2016), among numerous others.

Despite this growing interest in a diverse area of research, the empirical study on ERM is still in its infancy, and there is a lack of broad empirical evidence (Khan *et al.*, 2016). ERM research is yet to reach maturity in the respective area of study. It is also admitted that the ERM is a relatively new phenomenon in academia (Meidell and Kaarbøe, 2017), and therefore, the empirical research on this topic is somewhat limited, although it is growing (Beasley *et al.*, 2015). Consequently, little is known in recently emerged areas of ERM research. Even organisations are yet to implement the ERM philosophy fully, with it being a recent experience (Fraser and Simkins, 2016). Thus, the ERM approach is still unproved and emerging (Mikes and Kaplan, 2015). Hence, there is much potential for empirical research to provide additional insight into several issues related to ERM (Viscelli *et al.*, 2016).

On the other hand, a debate is growing in the literature regarding the diffusion of ERM under regulation and its usefulness. It is agreed that ERM becomes a widespread practice due to regulatory pressure, particularly in financial institutions. Diffusion is fuelled as a result of regulation. Nevertheless, concerns have been shown regarding the reform of risk management under regulation (Power, 2009). Even in light of the recent financial crisis, it is argued that the relevance of ERM has been lost, and it is dysfunctional (Power, 2009). Consequently, the relevance of ERM becomes uncertain.

Despite the rising debate, the diffusion of ERM is growing among organisations, particularly in financial institutions. The influence of risk management is increasing worldwide, despite there being evidence of various corporate collapses and governance failures over the last decades (Mikes, 2011; Gendron *et al.*, 2016). The relevance of risk management is still surviving. Companies, regulators, and stakeholders are seemingly searching for an improved risk management practice (Huber and Scheytt, 2013). Consequently, the question is raised as to whether the diffusion of ERM is the result of regulation or has any other reason consistent with the goal of ERM (Jabbour and Abdel-Kader, 2016).

Thus, this apparent paradox creates the world of risk management as a mystery for academic research (Kaplan, 2011). On this debate and paradox, Mikes (2009, p. 38) suggests that "*academic researchers can usefully contribute to the debate on the regulatory, corporate governance, management control and accountability issues that are emerging in the wake of enterprise risk management*".

1.2.2 The Distinctive Contextual Background

The context of the study is distinctive for two reasons: the prevailing state of the industry and the reform of risk management under regulation following ERM philosophy.

The banking sector is seen as a crucial part of the economy in Bangladesh. Development partners (like WB, IMF), retired bankers, economists, professors, researchers, think tanks, business chambers, business owners' associations, accountancy bodies, civil society, politicians and parliamentarians are continuously showing concerns about the banking industry and how it is evolving (Prothom Alo, 2018a, 2018b). The number of banks has been increased compared to the economy, which did not bring fair completion rather encourage malpractices.

The banking sector of the country is now regarded as a politically directed industry. Many issues now abound in the industry, namely corruption, weak corporate governance, weak regulatory supervision, state-business nexus, growing burden of non-performing loan (NPL) and many more (Siddiqui and Uddin, 2016; IMF, 2019; World Bank, 2019a). The corporate culture of many banks is characterised by personal loyalty and obedience towards the family. Family concentration is growing in the board and managerial loyalty lies towards the family rather than the broader set of stakeholders. There is a master-servant relationship between the board and CEO and have no agency cost between them (Uddin and Choudhury, 2008; Uddin *et al.*, 2018).

Furthermore, non-compliance culture prevails in the sector. A tendency is growing among the borrowers to be wilful defaulter due to political power and patronisation. In addition, the industry turns as a target fixing industry. Besides, a number of major scandals in the banking industry aggravated the image crisis. Hallmark, Bismillah Group, BASIC Bank, and Crescent Group scandals, for example, among others, are noteworthy (Prothom Alo, 2018c). Recently there is an instance of a billion-dollar reserve heist of the central bank, which has raised a serious concern about the cybersecurity of the banking system from the cyber intruders.

Political influence is getting very acute in the industry. Political identity helps to get a business licence in the banking industry (Uddin *et al.*, 2018). Licence of fourth-generation bank is given under political consideration despite reservations by the central bank. The banking industry is now under the control of some family, group of businessmen, politicians, and politically blessed person.

On the other hand, Bangladesh Association of Banks (BAB), a forum of the bank's owners, is a very powerful forum in the sector. They convinced the government to amend the Bank Company Act in their favour. As a result, a maximum of four family members can be directors on the board of a private bank instead of the existing two, and the tenure of directorship has been extended to nine consecutive years instead of six years. They also influenced the government in reducing the corporate tax rate of banks by 2.5%.

BAB also influences the central bank in policy-making for the sector. This forum seems like an alternative to the central bank. After a meeting with the Finance Minister in a five-star hotel, BAB declared the policy decision for a reduction of 1% CRR (Cash Reserve Ratio) rate from the existing 6% and .75% REPO (Repurchase Agreement) rate from 6.75%, without considering the monetary policy. Likewise, BAB regulates the interest rate of the sector by superseding the central bank. Recently they have proposed loan-deposit interest rates 9% and 6% respectively with a spread of 3% (Prothom Alo, 2018d). The private banks are trying to follow this proposal disregarding the demand and supply in the market. Thus, state-business nexus (Siddiqui and Uddin, 2016) prevails in the banking sector.

Further, the central bank is not able to perform its regulatory and supervisory role independently due to political intervention. The central bank sometimes provides regulatory forbearance. Recently it allows, for example, Sonali Bank not to keep required provisions against the loan, which is against the international reporting standards. Besides, it relaxes the loan write-off policy and provides loan rescheduling facilities to targeted groups under pressure. The central bank, thus, appears as a toothless tiger in the banking sector.

Moreover, weak corporate governance, directed lending, and the weak regulatory supervision lead to the rise of NPL in the industry despite having facilities of loan rescheduling and write-offs. Also, there is a tendency to bring down the NPL ratio at the year-end i.e. at December, although it starts to rise thereafter, which may be a result of window-dressing of balance sheet. The gross NPL accounted for 10.3 percent of the outstanding loans at the end of December 2018 from 9.3 percent in December 2017. The 26.4 percent growth in NPL in 2018 has been the highest increase over the last five years (World Bank, 2019a). Nonetheless, the central bank has allowed to write-off default loans from the balance sheet in banks, which is around Tk 45,000 crore. There is no accountability for this written-off loan. Although, the IMF shows concern regarding the published NPL ratio, which likely to be underestimated (IMF, 2019).

Additionally, few banks fail to maintain the regulatory capital to comply with NPL provisions. The shortfall in NPL provisions has been increasing, reaching Tk 66 billion (close to 12 percent of required provisions) at end-2018, from close to zero in 2013–2014. To meet the capital shortage, the government is continuously injecting capital in government-owned banks rather than taking any regulatory actions. The reward for failure syndrome prevails in the sector. Also, Moody's has put Bangladesh's banking system on 'negative watch' in their recent report primarily due to worsening asset quality arising from weak corporate governance within the banking sector (World Bank, 2019a).

The banking sector is now in a "vicious circle of default". Capital flight is occurring in the economy. The concern is growing for doubtful transactions in the sector. Besides, crony capitalism is rising with the state-business nexus. The central bank is now under regulatory capture and could not perform its supervisory role independently. In these perspectives, demand is growing in the society for independent banking commission, strong taskforce, and comprehensive risk management practice to control the banking sector and handle the default loan. Thus, the current state of the banking sector provides a very distinctive context to study the ERM phenomena and contribute to ERM literature by drawing the reality.

In this background, ERM has gained considerable attention to the central bank (the Bangladesh Bank). The central bank has initiated the risk management reform for the sector based on ERM philosophy. Under this reform, the central bank has promulgated a circular by prescribing the ERM sophistication to strengthen the risk management practice of the banks. Consequently, banks have adopted the ERM architecture following the regulatory prescription. In simultaneous, the central bank has shifted from the "compliance-based" supervisory approach to the forward-looking, "risk-based" approach (Bangladesh Bank, 2016). As a result, the ERM becomes a regulatory toolkit to the central bank. Thus, ERM has gained momentum in the banking sector of Bangladesh (refer to section 4.4 of this thesis for details of ERM sophistication and risk-based supervisory initiatives of the central bank).

Therefore, the contextual background of this study provides a distinctive research setting to explore the evolving dimensions of ERM phenomena under the regulatory environment. Moreover, the research call is growing to conduct empirical research under the regulatory environment (e.g., Wagenhofer, 2016; Chiwamit *et al.*, 2017; Bohnert *et al.*, 2019).

The growing potential of ERM research, the emerging debate, the apparent paradox, and the distinctive contextual background have all motivated the researcher to embark on this study to investigate the evolving dynamics in the ERM field.

1.3 Research Areas and Objectives

Drawing on the motivational factors, the researcher investigates ERM phenomena in three diverse but interrelated areas in the context of the banking sector of Bangladesh. At the outset, the study aims to demonstrate a holistic account regarding the diffusion of ERM in the banking sector under a regulatory environment. Thus, the objective of this area of research is to investigate the diffusion factors that influence the diffusion of ERM and address the growing question of whether this diffusion has resulted from pure regulation.

On the other hand, ERM research has also drawn attention in the area of organisational change and MCS. In this given context, the regulatory diffusion of ERM also influences in organisational change and MCS. Thus, this study also aims to understand the incremental change following the regulatory diffusion of ERM and the organisational adaption process with this change. Hence, the objective of this area of research is to explore the dimensions of the change and the contextual factors, including the evolving organisation dynamics. The dimensions of the change will assist in understanding how ERM diffusion triggers incremental change. Besides, the interaction of contextual factors and organisational dynamics will assist in demonstrating the adaption process to the incremental change following the diffusion of ERM.

Furthermore, in the area of MCS, the study aims to investigate how the design choices of the MCS reshape following the diffusion of ERM. Hence, the objective of this area is to explore the control elements that have been (re)shaped following the diffusion of ERM. In order to achieve the research aims, the research gap and research questions are demonstrated in the next section.

1.4 Research Gap and Questions

The research gap and questions are delineated in the respective area of the ERM research under investigation as follows.

1.4.1 ERM Diffusion

Until recently, researchers put much attention on identifying organisational determinants as factors of ERM adoption, mainly employing the quantitative approach (Colquitt *et al.*, 1999; Liebenberg and Hoyt, 2003; Beasley *et al.*, 2005; Gordon *et al.*, 2009; Paape and Spekle, 2012; Khan *et al.*, 2016; Lechner and Gatzert, 2018). But organisational determinants alone are not sufficient to understand the diffusion of ERM across the organisations. Besides, it is acknowledged that institutional factors have a strong role in the diffusion of ERM and its practice (Mikes, 2005; Meidell and Kaarbøe, 2017). Also, risk management is not an isolated practice in organisations (Miller, 1994). In this background, empirical research is limited in exploring diffusion factors and understand their influence in the diffusion process of ERM, particularly employing the qualitative approach, except the study conducted by Jabbour and Abdel-Kader (2016).

The literature also shows that ERM is perceived as a regulatory-driven phenomenon (Khan *et al.*, 2016). In recent age, the concept of ERM has been entered into the regulatory domain (Mikes, 2009; Bromiley *et al.*, 2015). It is now an agenda of the regulatory bodies for its adoption (Arena *et al.*, 2010). Therefore, the diffusion of ERM is fueled across organisations following the regulation, particularly in the financial sector. Consequently, regulation is perceived as the main factor for ERM diffusion. However, little is known about the diffusion factors in the context of the banking sector, particularly when ERM progresses under the regulatory environment and addresses the question of whether it has resulted from pure regulation. Moreover, there is a concern regarding the diffusion of ERM under regulation and its relevance (Power, 2009; Lundqvist, 2014; Florio and Leoni, 2017).

Furthermore, it is also acknowledged that ERM is always implemented and interpreted in a local way, despite having world-wide acceptability (Mikes, 2009, 2011; Arena *et al.*, 2010; Tekathen and Dechow, 2013). There is a dearth of knowledge to see how ERM diffuses in a local way in the banking sector from the context of an emerging economy under regulation.

Thus, the area of ERM diffusion research aims to address these research gaps by answering the following question:

How does ERM diffuse in the banking sector under a regulatory environment?

To address this research question, the study explores diffusion factors drawing on the insights of Abrahamson's (1991) typology that influenced the diffusion of ERM in the banking sector of Bangladesh. The diffusion factors assist in shedding light on the reality of ERM diffusion, particularly under the regulatory environment.

1.4.2 Incremental Change and Adaption

In literature, ERM is documented as a driver of organisational change (Jabbour and Abdel-Kader, 2015). It is also regarded as a change management initiative (Fraser and Simkins, 2016). Despite this, it is noticed that the ERM field has taken a naïve view to understand the organisational change (Bromiley *et al.*, 2015). ERM research, though, is growing in the area of organisational change, little is known about how the diffusion of ERM influences organisational change, particularly incremental change. However, in understanding organisational change after implementation of ERM, Jabbour and Abdel-Kader (2015) put their focus on a particular area of change in an organisation, for instance, change in capital allocation routines. Likewise, Giovannoni *et al.* (2016) also put their focus on the change of risk management practice itself. However, these researchers have applied the "processual view" to understand the "evolutionary" change at an organisational level. Consequently, ERM literature remains silent in understanding the incremental change following the diffusion of ERM in a regulatory environment by employing the "product view" (Greenwood and Hinings, 1996) (refer to section 2.3.1 of this thesis for detail).

On the other hand, researchers have explored the organisational practice of ERM (Mikes, 2009, 2011; Arena *et al.*, 2010) and have attempted to identify the organisational dynamics that have evolved following the implementation. In literature, it is documented that a new group of actors has emerged with distinct power, status and culture within organisations following the ERM implementation (Hall *et al.*, 2015; Arena *et al.*, 2010; Mikes, 2008; Mikes, 2011; Meidell and Kaarbøe, 2017). Despite, empirical research is limited, except Giovannoni *et al.* (2016), to find out how evolving organisational dynamics interact with and are influenced by external factors and lead to adaption with the change, particularly when ERM is an externally driven phenomenon. However, Giovannoni *et al.* (2016) have explored the role of actors and their interaction in the process of "evolutionary" change in risk management within an organisation.

Therefore, this area of the study aims to contribute to the above research gaps by answering the following two questions:

a) **How does incremental change occur in banks following the regulatory diffusion of ERM?**

b) **How do banks adapt to incremental change following the diffusion of ERM?**

1.4.3 The Design Choice of MCS

ERM is also considered as a management control innovation (Jabbour and Abdel-Kader, 2015). It is regarded as another facet of organisational control and accountability (Mikes, 2009). COSO (2004) also advocates ERM as a strategic management control system. It is perceived as the cornerstone of modern management control (Scheytt *et al.*, 2006; Bhimani, 2009; Soin and Collier, 2013). As a result, ERM and the MCS are now intertwined in the organisation. Recently, the area of management control has drawn the attention of ERM research, particularly in the context of banks (Rad, 2016; Liff and Wahlstrom, 2018). Despite this, empirical research is limited to explore the influence of ERM in the design choice of the "MCS package", particularly in the service industry (Chenhall and Moers, 2015). Moreover, there is a research call to explore the interplay of risk management with the MCS in banks, particularly in an emerging economy (Gooneratne and Hoque, 2013). Furthermore, the area of risk management and management control (MC) has received little attention in control literature (Soin and Collier, 2013). It is also acknowledged that control literature can help to make sense of the use of ERM in an organisation (Mikes, 2009). Therefore, Berry *et al.* (2009) ask for more empirical studies regarding ERM and MC in organisations.

Additionally, the notion of "package" of MCS is yet to be considered seriously in empirical research to understand the management control design (Bedford and Malmi, 2015; Otley, 2016), particularly in the field of ERM. Little is known empirically as to whether ERM influences the "MCS package" in an organisation, and if so, how. Therefore, this area of study aims to address this research gap by answering the following question:

How does the "MCS package" reshape following the diffusion of ERM?

1.5 The Theoretical Framework and the Research Design

This study aims to investigate the ERM phenomena in the areas of ERM diffusion, organisational change and adaption, and design choice of MCS. To achieve the aims, this study develops an integrated framework drawing on Abrahamson's (1991) diffusion typology, and the frameworks of "neo-institutionalism" (Greenwood and Hinings, 1996) and "MCS package" (Malmi and Brown, 2008). This integrated framework is compatible to address the research problems of this study.

The notions of Abrahamson's (1991) diffusion typology are useful to investigate the driving factors that influence the diffusion of ERM in the banking sector, particularly under a regulatory environment. The dominant perspective (i.e., efficient choice) of this typology and other three alternative perspectives (i.e., forced selection, fad and fashion) assist to explore the diffusion factors among a group of organisations with a holistic view, which is useful to draw the reality of ERM diffusion under a regulatory environment. Besides, this framework is useful to explore both supply-side and demand-side diffusion factors. On the other hand, "neo-institutionalism" framework is useful to explore the internal dynamics and their interplay with contextual factors in understanding organisational response in adaption with the incremental change. It helps to provide an account of organisational adaption with incremental change following the diffusion of ERM under the regulatory environment. Furthermore, the objective in the area of MCS is to investigate the influence of ERM on the elements of MCS. Thus, this study relies upon the overarching conceptual framework of the "MCS package" proposed by Malmi and Brown (2008). This framework is suitable to investigate the configuration of the package of MCS following the regulatory diffusion of ERM. It provides a holistic framework to explore the elements of MCS that are shaped or reshaped following the diffusion of ERM empirically at the field level.

Therefore, the developed integrated theoretical framework is suitable to provide an account of ERM diffusion under regulatory environment, organisational process of adaption with incremental change following regulatory diffusion of ERM, and reinvention of the design choice of MCS.

However, it is believed that ERM is a socially constructed phenomenon (Berger and Luckmann, 1966) in the banking sector of Bangladesh. Therefore, this study adopts the interpretivism paradigm. Under this paradigm, it is assumed that there is no objective reality out there, and it is instead subjective and multiple. This social construction of reality depends on the perception of the actors. Hence, the interpretive approach is useful to understand and interpret the meaning of these actors (Baker and Bettner, 1997). Thus, this research employs the qualitative research methodology to investigate the ERM phenomena.

This research embarked on a field-level study in the banking sector of Bangladesh. Data was collected through semi-structured interviews from the Head of Risk Management Division (RMD) of banks. Thirty interviews were collected from thirty banks. Besides, five interviews were collected from the employees of the central bank – those who were involved in risk management reform. Additionally, two interviews were conducted with risk researchers of a bank management institute of the country. Therefore, 37 interviews were gathered in total. The interviews were one to one and in-depth.

All the interviews were recorded and transcribed as verbatim. Interviews were conducted both in the local language (Bangla) and in English. Data was analysed in a systematic way based on the thematic coding approach using NVivo11. In identifying the probable codes under thematic analysis, a "top-down" approach (Auerbach and Silverstein, 2003) was followed. This is considered as a theoretical or deductive approach of data analysis (Braun and Clarke, 2006). The ethical code of conduct was maintained in collecting and analysing the data.

In addition to qualitative data, secondary data was also used. It included annual reports of all sampled banks and the central bank, regulatory circulars, internal risk management reports (i.e., RAS, MRMR and CRMR), country-related publications, banking laws and regulations, international laws and regulations, published articles on banking sector of Bangladesh, website data. Secondary data helped to triangulate the interview data.

1.6 Importance of the Study

Theoretically, this study is important to see how an organisational innovation (i.e., ERM) diffuses throughout the organisations in an industry, particularly under a regulatory regime. It provides an account of how multiple diffusion factors, including regulation, influence the diffusion of ERM in the banking sector of Bangladesh. The research, therefore, is important in discovering the diffusion factors and their significance in the diffusion of ERM. Besides, this study is useful in understanding the incremental change following the regulatory diffusion of ERM, and how organisations adapt to the incremental change. The adaption process of organisations is essential to see how a management innovation is taken for granted across the organisations as an organisational practice. Furthermore, this study is vital to see how the notion of “MCS package” becomes a notion of a “risk-based MCS package” following the diffusion of ERM. Additionally, the research is imperative to enrich the ERM literature in the context of the banking sector of an emerging economy, by demonstrating how ERM diffuses in a local way.

On the other hand, with the empirical data, this study intends to validate the applicability of Abrahamson’s (1991) diffusion typology through understanding ERM diffusion, and the “neo-institutionalism” framework by understanding organisational adaption with the incremental change that occurs following regulatory diffusion of ERM. Likewise, this research wishes to enhance the applicability of the “MCS package” framework by understanding the configuration of the MCS following the diffusion of ERM.

Practically, this study should have a policy implication to the local regulators, such as the central bank (Bangladesh Bank); Bangladesh Securities and Exchange Commission; Dhaka and Chittagong Stock Exchanges; the government; development partners such as WB, IMF, ADB, JICA; and the international standard-setting bodies of financial institutions such as the BCBS and the BIS, among others. The WB and the IMF are the key stakeholders of the banking sector of Bangladesh. Risk management reform is one of the policy recommendations of the development partners.

Besides, ERM is a very recent phenomenon in the banking sector of Bangladesh and is mainly driven by the central bank. Consequently, risk management reform under regulation may arise a conflict of interest between the regulator and the regulatees. The objective of the regulator behind the risk management reform may not necessarily coincide with the objective of the bank owners in maximising their value (Arun and

Turner, 2004). In this conflict of interest, this study is equally important practically to see why and how this new approach of risk management is accepted by the regulatees in the industry. Moreover, the empirical evidence could be useful to the regulators in other industries, for instance, the insurance industry, the aviation industry, the exploration industry, to initiate ERM.

Furthermore, the findings of this study may be beneficial to individual bank in understanding the contextual environment of ERM and may comprehend its significance. Besides, the evidence may also be valuable to banks to be aware of the organisational dynamics following the diffusion of ERM, including the evolving power and politics. Likewise, the evidence may be useful to realise the significance of ERM and its embeddedness in day-to-day operations in banks. Finally, the evidence may be used by individual bank in determining the design choice of the MCS, based on risk-based management control.

1.7 Road Map of the Thesis

This thesis is organised into nine chapters. Chapter 1 sets out the introductory information of ERM, the research motivation, research areas and objectives, including the research gap and questions. The theoretical framework and research design of the study are briefly outlined in this section following the importance of this research. The conceptual framework of the study is also drawn at the end of this chapter. Chapter 2 deals with the literature review of this thesis. It reflects how the knowledge gap emerges in the respective area of ERM research, based on the relevant literature.

In Chapter 3, an integrated theoretical framework is developed for this study drawing on Abrahamson's (1991) diffusion typology, "neo-institutionalism" and "MCS package", which provides a comprehensive framework for collecting and analysing the qualitative data. A rationale is also provided in this chapter in support of this integrated framework. Chapter 4 is about the contextual background of the study. The evolution of ERM in the industry is delineated in this chapter after considering the development trajectory of the sector. Chapter 5 outlines the detail of the research paradigm of this study, including the data collection method and systematic data analysis. The ethical consideration is also discussed in this chapter.

Chapter 6 is the first empirical chapter. Empirical evidence is presented in the first section of this chapter, followed by a discussion on the reality of ERM diffusion under the regulatory environment. Chapter 7 is the second empirical chapter. Accounts of the incremental change following the diffusion of ERM, and the organisational adaption process towards the change are demonstrated in this chapter. Chapter 8 is the final empirical chapter in the area of MCS. An account is provided of how the "MCS package" reshapes as a "risk-based MCS package" following the diffusion of ERM. Finally, Chapter 9 concludes the thesis after revisiting the research questions and highlighting the study's contributions. The limitations of this study are also admitted in this chapter, followed by a suggestion for future potentials in ERM research.

However, the conceptual framework of this study is drawn in Figure 1.1 and provided below:

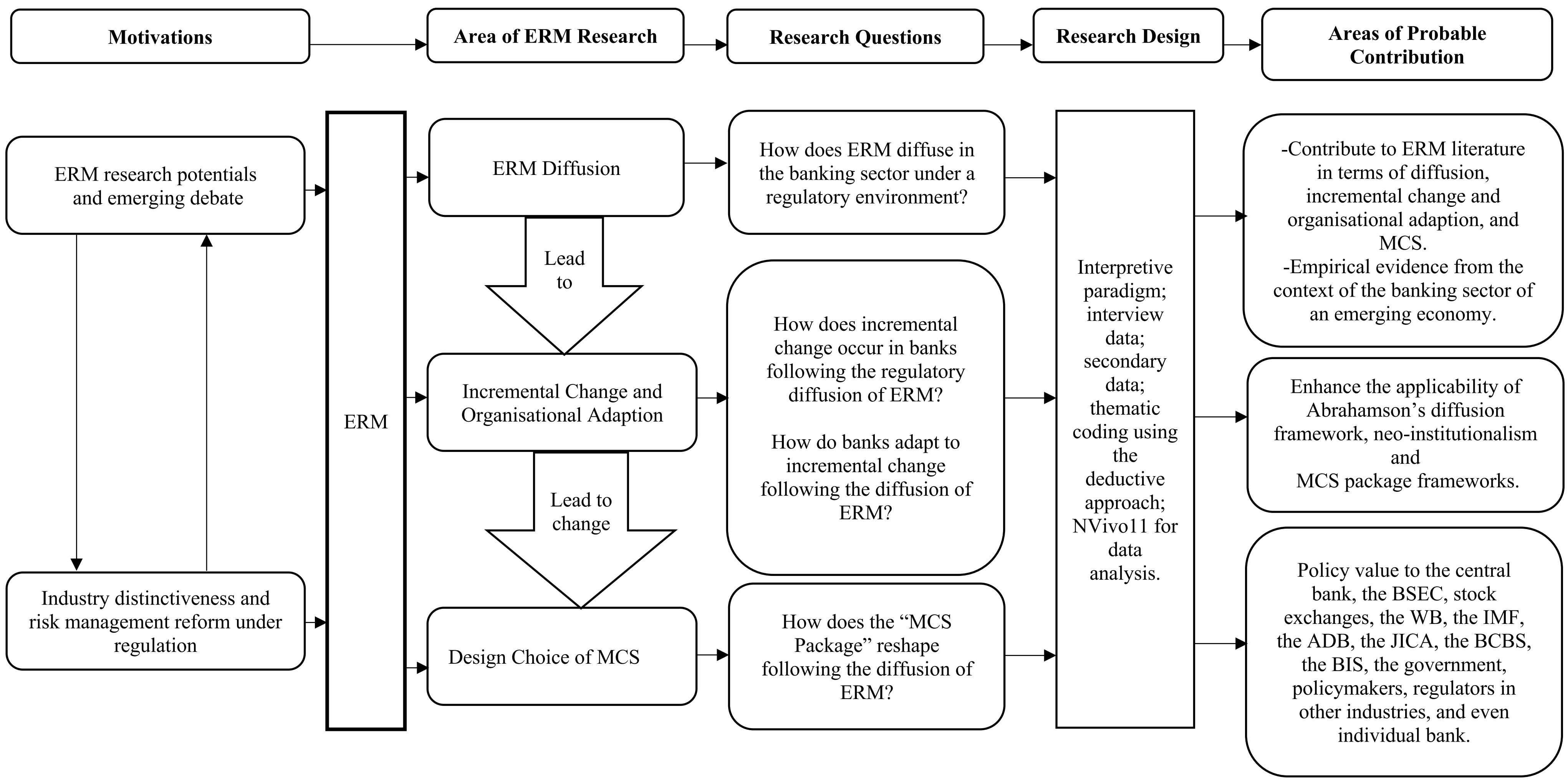

Figure 1. 1: Conceptual Framework of the Thesis

Chapter 2

Literature Review

This chapter aims to review the relevant literature and demonstrate the knowledge gap in the respective area of ERM research under investigation. The chapter is broadly structured into five sections. Section 2.1 provides the fundamentals of ERM as an organisational practice in order to understand the notion of ERM, along with a brief overview of the evolution of ERM research. Section 2.2 demonstrates the knowledge gap in the area of ERM diffusion after a review of the relevant literature. Likewise, Sections 2.3 and 2.4 describe the knowledge gap in the areas of organisational change and adaption, as well as the management control systems (MCS), respectively. The chapter ends with a conclusion in Section 2.5 after a summary of the knowledge gaps in the respective area of ERM research.

2.1 The Notion of ERM and the Emergence of ERM Research

ERM is a philosophy in risk management practice and an organisational breakthrough. The philosophy of ERM is based on the concept of managing all relevant risks in an integrated and holistic manner. It is a process that integrates all interrelated risk throughout an organisation and helps to address the risks comprehensively and coherently after prioritisation, instead of managing them separately (Bromiley *et al.*, 2015). Thus, the notion of ERM resembles as an "umbrella" (Power, 2007). Realising the growing potentials of ERM, all stakeholders, like regulators, professional bodies, rating agencies, practitioners and academics, are advocating it (Baxter *et al.*, 2013; Bromiley *et* *al.*, 2015). Despite this, there is no agreed-upon definition of ERM. A consensus is yet to be reached on exactly what constitutes ERM (Bromiley *et al.,* 2015).

However, the notion of ERM is evolving since its emergence in the mid-1990s. In the early stages of ERM research, researchers tried to develop a conceptual foundation of the notion. Lam (2000) conceptualised ERM as an integrated framework for managing all kinds of risks in order to maximise shareholders' value. Likewise, DeLoach (2000) conceptualised the ERM as an integrated, truly holistic, forward-looking and process-oriented approach. Both of them emphasised on the integration of all business risks and opportunities with a view to maximising shareholders' value. Similarly, Dickinson (2001) indicated that ERM is a systematic and integrated approach for managing the total risk of a company. Subsequently, Altuntas *et al.* (2011) attempt to extend the narrow focus of ERM by providing a broader framework from a conceptual perspective. They mention that ERM consists of processes to identify all relevant risks in a firm, where quantitative tools are used to measure and evaluate the risks and manage them efficiently. They also specify that ERM is an organisational culture of risk awareness and an integrated management approach that influences operational and strategic decision-making.

However, over the years ERM has been documented in literature as a systematic and coherent approach of risk management (Nocco and Stulz, 2006; Bromiley *et al.*, 2015), which enables firms to manage a wide range of risks in an integrated and holistic fashion (Liebenberg and Hoyt, 2003). It is also considered as a mindset, commitment, and culture that permeates through an entire organisation from top to bottom (Simkins, 2008; Choi *et al.*, 2016), and it is inherently aligned with corporate governance and strategy (Bromiley *et al.*, 2015).

Consequently, the ERM philosophy is sharply in contrast to the traditional risk management (TRM) approach (Rochette, 2009). TRM is described as a silo-based and downside risk management approach. Pure risk is the main focus under TRM, and here, risks are managed separately by respective departments (Kleffner *et al.*, 2003). Risk management function under TRM is fragmented and compartmentalised. Risks are identified, classified, and managed separately in different sub-parts within an organisation, and measured in an isolated way. As a result, the developed tools and techniques of each department are largely independent of each other (Bromiley *et al.*, 2015). Above all, there is a lack of integration of risks under TRM across the functions in an enterprise.

However, in parallel with academic research, professional firms and consulting bodies also attempted to define the notion of ERM. The concept of ERM is institutionalised with the formal definition from the COSO in 2004, and this definition is widely used in ERM research in academia (Hayne and Free, 2014). The COSO defines ERM as:

> "*…a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives*" (COSO, 2004, p. 2).

Although, in an early report, the KPMG (2001) marked ERM as a new business trend. This professional firm attempted to define ERM in the following way:

> "*ERM is a structured and disciplined approach aligning strategy, processes, people, technology and knowledge with the purpose of evaluating and managing the uncertainties the enterprise faces as it creates value*" (KPMG 2001, p.2).

Moreover, recent clarifications from the COSO (2017) against a background of arising misconceptions provide a clear conception of the ERM notion. In their clarification, the COSO (2017) indicates that ERM is not a function of a department. It is the culture, capabilities and practices that organisations integrate with strategy and apply to carry out that strategy with a view to creating, preserving and realising value. The

COSO also clarifies that ERM is not just a checklist, and it is more than a risk listing. ERM is a set of principles that apply at all levels of an organisation and across all functions. Further, they highlight that ERM is a system of monitoring, learning and improving performance. However, in the end, the COSO mentions that ERM philosophy is universal, and any size of organisation can use it.

Nevertheless, ERM studies are not as old as risk management research. The avenue of ERM research has been growing since the mid-1990s. It has now entered into the management domain in corporations as an organising concept (Bromiley *et al.*, 2015). At the early stage of ERM research, the main focus was given to defining its notion, setting out its objectives and scope, identifying its components, developing its framework, highlighting its benefits, describing the role of the CRO and implementation challenges, and much more (e.g., see Haimes, 1992; Miller, 1992; Doherty, 2000; Lam, 2000; Dickinson, 2001; Meulbroek, 2002). In fact, conceptual papers were mainly developed at the early stage of ERM research to promote the notion in academia. Consequently, empirical research was limited at the very early path of ERM. In that vacuum, Colquitt *et al.* (1999) came up with the first empirical paper on ERM by employing a quantitative approach and paved the way for future research (Bromiley *et al.*, 2015). Following them, Liebenberg and Hoyt (2003) and Kleffner *et al.* (2003) carried out their empirical studies on ERM. Since then, empirical research on ERM is growing successively in different areas.

Now the research gap(s) are addressed in the following sections in the respective area of research.

2.2 Diffusion Factors of ERM and the Emerging Debate

Researchers have acknowledged that both external and internal factors drive the adoption of ERM in organisations (Khan *et al.*, 2016). Despite this, empirical research is limited in identifying external factors of ERM diffusion, particularly at the field level. However, empirical studies are growing in the area of adoption and diffusion by putting the focus on studying organisational determinants (e.g., Colquitt *et al.*, 1999; Liebenberg and Hoyt, 2003; Beasley *et al.*, 2005; Khan *et al.*, 2016; Lechner and Gatzert, 2018). As a result, a range of organisational factors and determinants have been identified that influence the adoption of ERM. However, organisational determinants of ERM adoption are summarised by Gatzert and Martin (2015), after a review of the existing empirical literature. As the objective of this area of study is to explore the diffusion factors of ERM innovation, the external factors that have been marked in the literature are highlighted in the following sub-sections, including the emerging debate, methodological approach in diffusion research, and the state of ERM research in emerging economies.

2.2.1 External Factors of ERM Diffusion

Researchers have highlighted a range of external factors that drive the adoption of ERM in organisations, albeit most of them being conceptual. As such, most of the external factors require empirical validation, which warrants empirical research to explore the external diffusion factors.

Regulation is identified as one of the most important factors that drives the diffusion of ERM. ERM has drawn the attention of the regulators following the debacle of large corporate giants and governance failure over the last decade, along with the priced experience of the recent financial crisis (Florio and Leoni, 2017). As such, regulators are now pushing for ERM for better corporate governance and improved risk management practice (Bhimani, 2009; Soin and Collier, 2013; Lundqvist, 2015). Companies are now adopting ERM on a wholesome basis due to regulation. Consequently, ERM is perceived as a regulatory-driven phenomenon (Khan *et al.*, 2016; Lechner and Gatzert, 2018).

Particularly in the financial sector, the requirement of the new regulatory capital puts enormous pressure on the adoption of ERM (Lam, 2006). In the meantime, the Basel Committee has already endorsed the ERM philosophy as an “umbrella” notion and allied it with the capital adequacy calculation (Mikes, 2009). The emergence of risk-based capital adequacy framework under the Basel II and III frameworks has broadened the scope of risk management in banks and enhanced the need for ERM. In response to the regulatory requirements, banks are embracing ERM to manage risks across entities (Beasley *et al.* 2008). In fact, banks are the leader in the financial industry in ERM adoption due to regulation and staying at the forefront (Pagach and Warr, 2011). Thus, regulation lies at the heart of risk management (Huber and Scheytt, 2013).

It is noted that regulators in many developed countries, like Canada, the United States, the United Kingdom, Australia, and New Zealand, have forced regulatees to adopt and implement ERM (Kleffner *et al.*, 2003). In the USA, the ERM framework is legally required for financial institutions like banks, security brokerage firms, insurance, hedge funds, and mutual funds (Whitman, 2015).

Likewise, the requirements of the corporate governance code, for instance, the New York Stock Exchange Corporate Governance Rules, 2009; the Combined Code on Corporate Governance, Cadbury and the Turnbull Report on Corporate Governance in the UK; the Dutch Corporate Governance Code; the King Report on Corporate Governance in South Africa; the Corporate Governance Code in Malaysia, and many more, also influence the diffusion and implementation of ERM as an enterprise-wide risk management practice (Kleffner *et al.*, 2003; Beasley *et al.*, 2005; Manab *et al.*, 2010; Paape and Spekle, 2012; Khan *et al.*, 2016). In addition, risk-based internal control becomes compulsory in the corporate governance code, which also influences the diffusion of ERM in an organisational setting by appointing a CRO (Liebenberg and Hoyt, 2003). Moreover, the requirements of stock exchanges, for example, the Toronto Stock Exchange (Kleffner *et al.*, 2003) and Bursa Malaysia (Manab *et al.*, 2010) also drive the adoption of ERM.

Besides the regulatory pressure, the influence of credit rating companies is also documented. Rating agencies have introduced ERM analysis into their credit rating process, which induces firms to adopt ERM (Mikes and Kaplan, 2015; Jabbour and Abdel-Kader, 2016). Also, the presence of the "big four" audit firms is considered an important reason behind ERM adoption (Beasley *et al.*, 2005; Paape and Spekle, 2012).

Additionally, uncertain business environment, the costly experience of the recent financial crisis and high-profile corporate collapses in the last couple of decades are also highlighted in the literature as major driving forces for the emergence of ERM as an organisational practice (Lam, 2006; Cohen *et al.*, 2017). Likewise, globalisation and business deregulation have also influenced the emergence of ERM (Liebenberg and Hoyt, 2003; Pagach and Warr, 2011). Similarly, business complexity, international diversification, institutional investors and technological advancement are also documented as external factors of ERM emergence (Gordon *et al.*, 2009; Manab *et al.*, 2010; Hoyt and Liebenberg, 2011; Paape and Spekle, 2012; Lechner and Gatzert, 2018). The lack of investors' and creditors' confidence in financial reporting has also influenced ERM adoption (Kleffner *et al.*, 2003; Lam, 2014). Furthermore, industry distinctiveness (such as of banks, insurance, energy and airlines) has also empirically been found as a diffusion factor of ERM (Liebenberg and Hoyt, 2003; Beasley *et al.*, 2005). Moreover, the COSO's risk management framework, as a best practice guideline, has impacted the implementation of ERM (Bowling and Rieger, 2005).

On the contrary, the relevance of ERM has already been established in the literature. This usefulness of ERM also enforces the adoption. Researchers, practitioners and professional bodies have provided evidence in support of the value rationale of ERM, although academic evidence is mixed. However, a variety of areas have been documented in the literature to justify the value relevance of ERM as an organisational practice.

Firstly, the area of firm performance and value creation. Several studies find a positive correlation between ERM implementation and firm performance or firm value (Hoyt and Liebenberg, 2015; Lechner and Gatzert, 2018; Baxter *et al.*, 2013; Farrell and Gallagher, 2015), although the evidence is mixed. In a recent study, Florio and Leoni (2017) also find that firms with advanced levels of ERM present a higher performance.

Secondly, the area of operational efficiency. Researchers have argued that ERM helps to improve operational performance through better resource allocation (Baxter *et al.*, 2013), reducing the cost of debt (Aabo *et al.*, 2005), cost efficiency and revenue enhancement (Grace *et al.*, 2015). ERM also helps to reduce the frequency and severity of operational risk (Al-Amri and Davydov, 2016). However, in a recent survey study, Callahan and Soileau (2017) find that firms with higher levels of ERM maturity are characterised by higher operating performance than their industry peers who have less mature risk management.

Thirdly, the area of decision-making. The relevance of ERM is growing due to having significant importance in decision-making. Evidence shows that ERM aids informed and risk-based decision-making (Wu *et al.*, 2015). It also helps to increase risk awareness within the entire organisation and facilitate better operational and strategic decision-making (Hoyt and Liebenberg, 2015). From a historical case study, Meidell and

Kaarbøe (2017) recently claim that ERM functions influence decision-making, both vertically and horizontally over time.

Finally, the relevance of ERM has also increased due to the extension of its scope in the recent age. It is evidenced that ERM influences internal audit functioning (Arena *et al.*, 2011; Vinnari and Skærbæk, 2014), external audit efficiency (Bailey *et al.*, 2018), financial reporting processes (Cohen *et al.*, 2017), internal controlling (Rasid *et al.*, 2014; Rad, 2016; Liff and Wahlstrom, 2018); and performance management (Arena and Arnaboldi, 2014). It also helps organisations to remain compliant with the regulatory requirement and the code of corporate governance (Arena *et al.*, 2011).

2..2.2 The Debate - Regulatory Diffusion and ERM Relevance

Literature shows that regulation is the main factor for wholesome diffusion of ERM. However, the diffusion of ERM under regulation is criticised by a group of researchers. They have shown their concerns over the relevance of ERM when it diffuses under regulation. Therefore, the question is often asked as to whether the diffusion of ERM is the result of purely regulatory pressure or has any other reason consistent with its goal (Pagach and Warr, 2011; Jabbour and Abdel-Kader, 2016). Despite, another group of researchers has provided evidence of ERM diffusion beyond the regulation that is consistent with its goal. Hence, ERM regulation and its relevance is an issue for academic debate in diffusion literature.

In this debate, one group of researchers are concerned regarding regulation being the main factor of ERM diffusion. Martin and Power (2007), in their conceptual paper, highly criticise the rise of the regulatory conception of risk management. They call it the "sell-side" risk management framework. They argue that ERM is now a fashion and suitable for regulators for proof of governance. Besides, it is favourable to regulators due to command and control-based frameworks (Samad-Khan, 2005). Consequently, Power (2009) advises to remain more cautious on the agenda of risk management reform under regulation.

It is also claimed that ERM becomes a compliance exercise due to regulation (Collier *et al.*, 2006; Hall *et al.*, 2015), and a legitimacy-driven style (Power, 2009). Firms adopt ERM on a superficial basis just to window-dress to meet the regulatory requirements (Lundqvist, 2015). Consequently, the adoption of ERM becomes symbolic to demonstrate to outsiders rather than the real and meaningful practice of the approach (Beasley *et al.*, 2015). As a result, the value proposition of ERM becomes uncertain (Lundqvist, 2014), and the sophistication of ERM and firm performance cannot be taken for granted (Florio and Leoni, 2017).

Despite this, the other group of researchers has advocated the relevance of ERM under the regulatory environment. After acknowledging the influence of regulation, they argue that ERM adoption is beyond regulatory compliance, which is consistent with the goals of ERM. Pagach and Warr (2011) argue that firms adopt ERM for direct economic benefits rather than to comply with regulatory pressure merely. In another study, Manab *et al.* (2010) argue that ERM in financial companies in Malaysia is not only driven by corporate governance compliance, but also by good business practice, improved decision-making, company survival, and value creation. Similarly, drawing on insurance companies in Germany, Altuntas *et al.* (2011) also agree about the value proposition of ERM adoption instead of regulatory compliance.

Likewise, in another study, Whitman (2015) concludes that ERM is recognised as a value-contributing best practice in corporate governance, even when legal standards do not require it, although ERM is legally required for US financial institutions. Similarly, Jabbour and Abdel-Kader (2016) provide evidence that ERM is seen as a necessity that adds value, rather than as a burden on insurance companies in the UK. They found that early adopters of ERM were mostly driven by internal strategy, although late adopters were driven by regulation. In addition, Viscelli *et al.* (2017), based on interviews of 15 ERM champions, indicate that ERM is mainly implemented to meet the strategic need that was the motivation for its launch, rather than regulatory and compliance reasons, although they find limited integration between ERM and strategy.

Regardless of these, in light of the recent financial crisis, Power (2009) argues that the continuing expansion of risk management is dysfunctional. He also contends that this continuous expansion is perceived as a discipline of everything, and after that, risk management of everything turns into risk management of nothing (Power 2004, 2009). Also, Power *et al.* (2009) claim that risk management is merely regarded as a tool to manage reputational risk. In spite of having an argument against the ERM, the diffusion of it has become widespread, and the relevance of risk management has survived (Mikes, 2011). Even all stakeholders are searching for an integrated and improved risk management practice (Huber and Scheytt, 2013). This paradox of risk management is also a mystery for academic research (Kaplan, 2011).

2.2.3 Methodological Approach of ERM Diffusion Research

From the methodological point of view, it is found that the mainstream research approach largely dominates ERM research in the area of diffusion and adoption. Researchers have mainly employed quantitative approach, using secondary data, in exploring organisational determinants as adoption factors (e.g., see Colquitt *et al.*, 1999; Liebenberg and Hoyt, 2003; Beasley *et al.*, 2005; Pagach and Warr, 2011; Paape and Spekle, 2012; Khan *et al.*, 2011; Lechner and Gatzert, 2018). Consequently, the application of the qualitative methodology is limited, particularly in exploring the external diffusion factors of ERM, except the study conducted by Jabbour and Abdel-Kader (2016). In their study, they conducted semi-structured interviews to investigate institutional factors driving the adoption and implementation of ERM in insurance companies in the UK. However, there is a dearth of empirical research exploring the diffusion factors employing the qualitative approach and relying on the interview data.

2.2.4 ERM Research in Emerging Economies

It is noted that most ERM research is based on developed economies like the USA, the UK, Canada, Germany, France, and Italy (Altuntas *et al.*, 2011; Hoyt and Liebenberg, 2011; Baxter *et al.*, 2013; Lechner and Gatzert, 2018). However, research is growing in the context of emerging economies in recent times.

Researchers have acknowledged that ERM is always implemented and interpreted in a local way, despite its philosophy being accepted worldwide (Arena *et al.*, 2010; Mikes, 2011; Tekathen and Dechow, 2013). Moreover, the distinctive characteristics of the socio-political and cultural environment of developing countries are different from the developed economies (Siddiqui and Ferdous, 2014). Consequently, ERM research has gained importance in the context of emerging economies.

However, it is noted that Dabari and Saidin (2015) empirically examine the extent of ERM implementation in Nigerian banks based on survey data. In another study, Rao (2007) evaluates the current status of ERM in organisations in Dubai. Likewise, Gupta (2011) examines the present position of ERM in Indian companies based on questionnaire and interview data and explores the reasons for adoption or lack of adoption of ERM. In a similar study, Ghosh (2013) examines determinants of ERM adoption in the top 100 national stock exchange Indian companies. Through a case study, Muralidhar (2010) apprises the current status of ERM in oil and gas entities in the Gulf Co-operation Council (GCC).

In a separate study, Chen *et al.* (2019) examine the value benefit following ERM adoption in Taiwan's financial industry, while Kim (2014) explores the entrance of ERM in the Korean public sector. Also, Nahar *et al.* (2016) investigate the association between risk governance and bank performance in the context of Bangladesh, employing the quantitative technique, and find a significant relationship. In addition, research is growing in the context of Malaysia, putting the focus on adoption and implementation of ERM and its influence over firms' values (Manab *et al.*, 2010; Yazid *et al.*, 2011; Abdullah *et al.*, 2017), including some conceptual papers (see Daud and Yazid, 2009; Hudin and Hamid, 2014).

Despite this, there is a dearth of empirical research exploring diffusion factors by employing the qualitative approach in the context of the banking sector of an emerging economy with a holistic focus. Moreover, the contextual environment of an emerging economy does vary from a developed economy. The contextual setting of an emerging economy is an interesting perspective to get to know the reality of the ERM phenomenon, particularly under a regulatory environment.

2.2.5 The Knowledge Gap

In sum, previous research puts emphasis on identifying organisational determinants as adoption factors, mostly employing the quantitative approach. Thus, empirical research is limited in identifying external diffusion factors by employing the qualitative approach, except the study by Jabbour and Abdel-Kader (2016), to understand how these factors influence the diffusion of ERM, particularly under the regulatory environment. Because organisational determinants are not sufficient to understand the reality of ERM diffusion across the industry, particularly when ERM is an externally driven phenomenon. Moreover, it is argued that risk management is not an isolated practice from the social and organisational context of an organisation (Miller, 1994). Therefore, the organisational context is important to study in ERM diffusion. Furthermore, Mikes (2005) and Meidell and Kaarbøe (2017) acknowledge that institutional forces have a strong influence on selecting and using ERM in practice. Despite this, there is a dearth of empirical studies to explore the external diffusion factors with a holistic focus.

Besides, a debate is growing on the relevance of ERM when it is diffused through regulation. There is also a dearth of research investigating the reality of ERM diffusion under a regulatory environment, particularly in the banking sector, and addressing whether ERM is being diffused purely as a response to regulatory pressure.

Moreover, it is acknowledged that ERM is always implemented and interpreted in a local way. Hence, the contextual forces in emerging economies are distinct from the developed economies in exploring the reality of ERM diffusion under regulation. Despite this, the evidence is limited from the context of emerging economies, particularly from the banking sector, to draw on diffusion factors. Knowledge is limited to know how ERM is diffused in a local way under regulatory environments from the context of emerging economies. This area of study aims to address these knowledge gaps and take part in the debate.

2.3 Incremental Change and Organisational Adaption

This section firstly describes the notion of "change" along with its dichotomy. Based on the change dichotomy, a framework is developed to understand the incremental change to address the knowledge gap in the literature. After that, this part describes the evolving organisational dynamics and the knowledge gap in terms of organisational adaption to the incremental change.

2.3.1 Organisational Change and Framework for Incremental Change

The introduction of ERM triggers change (Meidell and Kaarbøe, 2017), which is now the central focus of organisation studies (Greenwood and Hinings, 2006). Change is in the heart of an organisation where innovation is considered an important partner of change (Poole and Van de Ven, 2004). ERM as an "organisational innovation" also initiates organisational change. Hence, ERM is also believed a change management initiative (Fraser and Simkins, 2016) and considered as a change driver in organisations (Jabbour and Abdel-Kader, 2015).

However, the area of change has drawn the attention of ERM researchers in recent times. Despite, ERM research has taken a naïve view in respect of organisational change (Bromiley *et al.*, 2015). Although studies of organisational change are a central issue within the "organisational studies" and "management" discipline, attention is also increasing in the "accounting discipline" to understand the change (e.g. see Ezzamel, 1994; Burns and Scapens, 2000; Quattrone and Hopper, 2001; Soin *et al.*, 2002; Jabbour and Abdel-Kader, 2015; Giovannoni *et al.*, 2016).

Organisational change can take place in many forms. Change can be planned or unplanned, revolutionary or evolutionary, radical or incremental. It can involve a comprehensive coverage initiated from a change in an individual's behaviour, and their role, responsibility and accountability to the change in organisational structure and hierarchy. However, researchers have attempted to explain the organisational change in accounting literature. According to Quattrone and Hopper (2001), change is the passage of an entity from one identifiable and unique status to another. It can be an organisation or structure or operation or accounting practice. According to them, implementation of a new information system, for example, enterprise resource planning (ERP), leads to management control change. Likewise, redefining allocation bases from "direct labour hour" to "activities" leads to a change in the cost accounting system.

On the other hand, Poole and Van de Ven (2004) define organisational change as a difference in form, quality, or state over time in an entity. They consider three basic concepts for organisational change: difference, at different temporal moments, and between states of an organisational unit or system.

Similar to Quattrone and Hopper (2001), Andon *et al.* (2007, p. 274) define the change in the following way:

> "*Change is generally assumed to be engineered, involving a transition from one well-defined point of being (State A) to another (State B). So, for example, through effective execution and management, an organisation moves from being an 'organisation without an ABC system' (State A) to an 'organisation with an ABC system' (State B)*".

In addition, Andon *et al.* (2007) highlight the preconditions of change, drawing on existing accounting literature, particularly to understand accounting change. They describe organisational design, organisational structure, and corporate strategy as prerequisites of change. Besides, some organisational features, for instance, the presence of change facilitators, actors, catalysts and motivators of change, quality of technology, capacity and resource, top management support, linkage to performance evaluation and compensation, and training, are also noted as preconditions of change.

However, in exploring organisational change, researchers suggest various dichotomies of change. Among these, Burns and Scapens' (2000) change dichotomy is very prominent. They propose three dichotomies to understand organisational change. These include: "formal versus informal" change, "revolutionary versus evolutionary" change and "regressive versus progressive" change.

The introduction of new rules and/or action by a powerful individual or group induces “formal” change. In an organisation, “formal” change is more visible, and it occurs by conscious design, whereas “informal” change occurs at a more tacit level and is less visible. In another dichotomy, “revolutionary” change involves a fundamental disruption to existing routines and institutions where the pace is very fast. Conversely, “evolutionary” change is incremental, with only minor disruption to existing routines where the pace of change is gradual. In the third dichotomy, “regressive” change preserves existing power structures, and ceremonial behaviour is used to describe this; conversely, “progressive” change seeks to enhance relationships, and instrumental behaviour is used to describe this.

Besides, Greenwood and Hinings (1996) also attempt to define the dichotomy of “revolutionary versus evolutionary” change, considering the scale and pace of upheaval and adjustment. In defining “revolutionary” change, they mention that this happens swiftly and affects virtually all parts of an organisation concurrently. Conversely, “evolutionary” change occurs slowly and gradually.

Nevertheless, Greenwood and Hinings (1996) propose another dichotomy of organisational change, namely “radical versus convergent” change. In describing “radical” change, they argue for the transformation of an organisation from an existing orientation. They suggest that “radical” change occurs when an organisation moves from one template in use to another. On the other hand, in defining “convergent” change, they mention that this is a fine-tuning of the existing orientation or template in use.

Therefore, radical organisational change can be explained in terms of the shift between the institutional templates (or archetypes). However, in defining a template or archetype, Greenwood and Hinings (1993, p. 1055) describe an archetype as “*a set of structures and systems and related ideas and values*”. Radical change occurs when structures and systems shift from one template to another, along with a shift in ideas and values. Moreover, radical change is considered as the "product of the process" under the template concept, which is the result of sequential interaction between external and internal variables (Greenwood and Hinings, 1996). However, in this study, the change is perceived as incremental change focusing on the features of radical change following the regulatory diffusion of ERM.

Additionally, shifting from one template to another is an institutional change. However, in describing the institutional change, Hinings *et al.* (2004) argue that it is the movement from one institutionally prescribed and legitimated pattern of practices to another, which involves the processes of de- and re-institutionalisation. Likewise, Greenwood and Hinings (2006) argue that institutionalisation of any template occurs when diffusion of a template becomes universal throughout the field, and it is taken for granted. Hinings *et al.* (2004) indicate three things that are needed for institutional change: the emergence of an alternative template, the de-legitimising of the existing template and the legitimising of the new one. Although institutional change is part of a political process both at the field and organisational level (Greenwood and Hinings, 1996; Greenwood *et al.*, 2002; Lawrence *et al.*, 2002), and hence, it is urged for a careful study. Thus, an incremental change can also lead to institutional change.

However, based on the notion of "template/archetype" and premises on change dichotomies, this study develops the following framework to undersigned the incremental change following the regulatory diffusion of ERM in the banking sector:

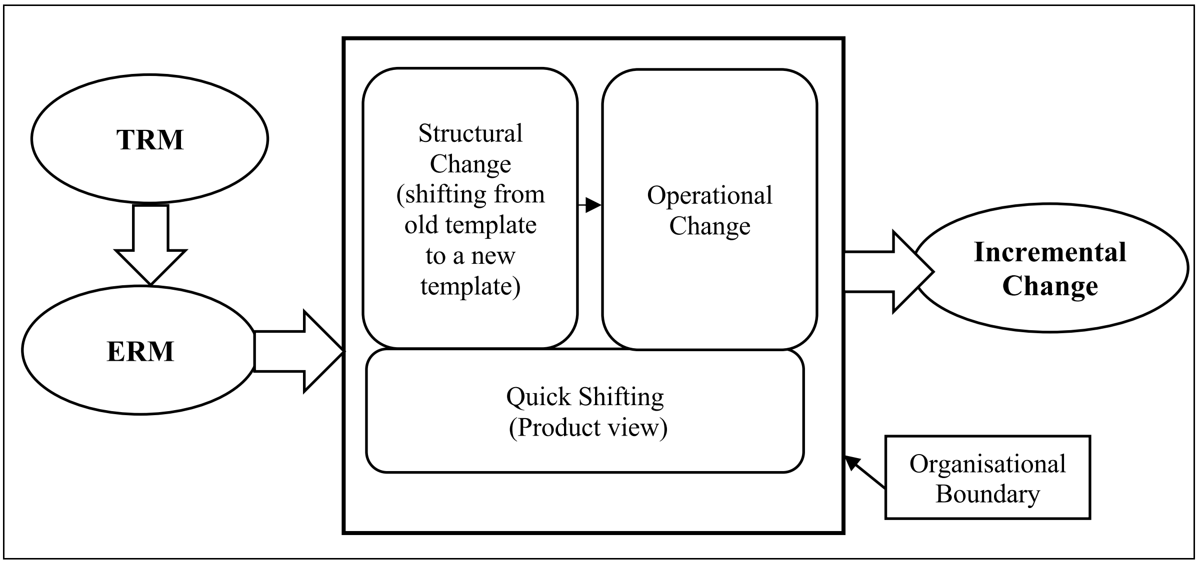

Figure 2. 1: Framework of Incremental Change
(Developed by the author based on Greenwood and Hinings, 1993, 1996; Burns and Scapens, 2000)

In accounting literature, it is found that management accounting innovation, such as budgeting and ABC, has been used to understand organisational change (e.g. see Ezzamel, 1994; Soin *et al.*, 2002). However, ERM, a contemporary management control innovation, is yet to get in touch to understand organizational change, in particular incremental change.

Nonetheless, the area of organisational change has recently drawn the attention of ERM researchers. Jabbour and Abdel-Kader (2015) and Giovannoni *et al.* (2016) have attempted to understand organisational change following implementation of ERM. Jabbour and Abdel-Kader (2015) investigate changes in capital allocation routines in an organisational setting and assess the nature and extent of organisational change. Based on interviews at different levels within a non-life insurance company in the UK, along with documentary analysis, they found a complete change in existing capital allocation practices following the implementation of ERM. They noted that risk-based capital allocation routines have evolved and been institutionalised in that organisation.

Afterwards, they argued that ERM is a powerful managerial tool and an external driver to change that influenced in existing capital allocation routines in an organisation.

In another change study, Giovannoni *et al.* (2016) investigate risk management change within an Italian bank over 12 years and explore the role of organisational actors (i.e., risk experts and management accountants) and their interactions during the process of risk management change. Based on interviews and documentary analysis, they found that the risk management system has evolved over that period, and the organisation has adopted a "holistic risk management" template shifting from a "risk-based management" template.

However, Jabbour and Abdel-Kader (2015) mainly studied the intra-organisational processes of change through a processual view, where the roles of the CROs and risk teams were documented that influenced the institutionalisation of the new routines. Giovannoni *et al.* (2016), however, investigated risk management change over a period of time and also identified the significant role of organisational actors. They acknowledged the influence of external pressures but engaged in a limited scale to explain interactions between internal and external factors. In fact, in both of the studies, the focus was placed on a particular area of change within the organisation to explore evolutionary change. Therefore, ERM literature remains silent in exploring incremental change following the diffusion of ERM at the field level, particularly under the regulatory environment.

2.3.2 Evolving Organisational Dynamics

In studying organisational change and ERM in action, researchers have explored evolving dynamics within organisations following the implementation of ERM. It is noticed that organisational dynamics have evolved following the implementation of

ERM. Distinct dynamics have been identified in the literature. Despite this, empirical research is limited to find out how evolving organisational dynamics interact with contextual factors in adaption to change, particularly to incremental change. Besides, there is a dearth of knowledge to understand how ERM, as a contextually originated template, is filtered throughout the banks and becomes institutionalised.

Giovannoni *et al.* (2016) document the emergence of new actors (i.e. risk experts and cost accountants) as evolving organisational dynamics, and their roles, influence, and interaction within the process of risk management change in a bank. Relying upon a longitudinal case study, they interpret that evolving change in risk management is the result of an ongoing interplay between external pressures and intra-organisational dynamics. In addition, they indicate that the actual roles of actors depend on certain dynamics, like their specific interests, their favour in different risk management templates and control over information systems.

However, Giovannoni *et al.* (2016) explained the interaction of external and internal factors in understanding evolutionary change by applying a longitudinal study. Besides, they mainly put their focus on a group of actors and their role in risk management change. Moreover, a limited focus is given on the external factors and their nature of influence in exploring change in risk management practice. Consequently, empirical research is limited to explore the adaption process with the change drawing on the interaction between external and organisational factors. The interplay between external factors and organisational dynamics assists in understanding the institutionalisation process of ERM both at the field and organisational level. However, the evolving organisational dynamics that have been documented in the literature following the implementation of ERM are narrated below.

Firstly, the emergence of a new group of actors. Literature shows that a new group of actors has emerged in organisational boundaries following the implementation of ERM. CROs, risk experts, risk managers, management accountants and internal auditors are recognised in this new group (Arena *et al.*, 2010; Vinnari and Skærbæk, 2014; Jabbour and Abdel-Kader, 2015; Giovannoni *et al.*, 2016). They act as change agents in an organisation. They are the translators of ERM into action. Risk management expertise, various risk rationalities such as compliance imperatives, corporate governance justifications and pervasive performance measurements, along with the use of risk technologies, provide the privilege to this group of actors to translate the ERM template into action (Arena *et al.*, 2010).

Secondly, the new dimension of power and control. With the emergence of the new actors, distinct power and politics have also evolved in organisations. It is found that ERM helps risk experts to gain organisational power, and they influence in decision-making (Hall *et al*., 2015; Mikes 2009, 2011). Hall *et al*. (2015) find that risk managers become influential within an organisation for the embodiment of expertise. Besides, they also compete to draw the attention of decision-makers in the intra-organisational field with their tool-driven and tool-making activities.

In another study, Meidell and Kaarbøe (2017) find that ERM functions give power and control to risk managers, through which they influence organisational decision-making. Hence, Mikes (2011) argues that risk experts engage themselves in boundary work, which helps them to ensure their legitimacy, authority and responsibility within the organisation. Although, a concern is shown about this evolving power and influence of the risk experts. Kaplan and Mikes (2016) argue that this power and influence may have an adverse effect on innovation and entrepreneurial activities in an organisation and may discourage people from undertaking bold initiatives.

Thirdly, the evolving role of risk experts. It is found that the role of risk experts has evolved after the diffusion of ERM. In a study, Mikes (2008) finds twin roles of CROs, namely, compliance championing and business partnering. Compliance roles of CROs are imperative due to compulsory regulation, whereas as a business partnering, risk experts are now playing a role in decision-making. Similarly, Meidell and Kaarbøe (2017) find that risk managers influence organisational decision-making, both vertically and horizontally. Vertically, they influence top management's decisions in the acceptance of new risk management technology, and horizontally, they influence decision-makers to use their risk knowledge in the decision-making process.

Fourthly**,** the evolving risk culture. It is noted that a cultural shift has occurred in organisations due to the implementation of ERM. The risk voice has become influential in organisations. However, in a critical study, Mikes (2009) notices that risk experts foster various calculative practices, which she called "calculative culture". The obsession with calculative culture is growing, particularly in financial institutions. This includes the culture of "quantitative enthusiasm", i.e., dedication to risk measurement, and "quantitative scepticism", i.e. focusing on risk environments with alternative future scenarios. This calculative risk culture helps risk experts to legitimise their boundary work towards the decision-maker in an organisation (Mikes, 2011).

Fifth, a toolkit in an organisation. ERM has emerged as a toolkit within an organisation. Risk experts deploy their expertise and communicate with other actors through using various risk management tools, such as value-at-risk software, risk-adjusted capital models, risk maps and risk reporting frameworks, stress testing, and many more. As a result, risk management becomes tool-driven and toolmaking activity in contemporary organisations (Hall *et al.*, 2015). It also acts as a tool for internal audit functions (Vinnari and Skærbæk, 2014).

However, Arena *et al.* (2011) highlight the role of risk experts and their use of ERM tools. Based on 11 interviews from nine non-financial firms, they find three different types of use of ERM, namely, responsive (limited to external reporting); discoursive (developing risk culture); and prospective (planning for future action), although they found that the use of ERM remains limited and the prospective use depends on risk specialists.

Finally, the dynamic of ERM relevance. The relevance of ERM has grown among key actors within organisations in the recent age. Gendron *et al.* (2016) find that corporate boardroom members maintain their confidence in the credibility of risk management as a reliable apparatus despite having evidence of corporate failure and limited efficacy of ERM. On the other hand, Mikes (2009) finds that ERM achieves organisational significance in terms of the management control system and becomes an integral part of strategic planning, performance measurement and discretionary strategic decision-making, albeit selectively.

Similarly, Viscelli *et al.* (2017) find that organisational actors believe that ERM provides strategic value, and based on that belief, they implemented ERM, although they find limited integration of ERM with the strategic decision-making process. In another study, Cohen *et al.* (2017) find that actors of the governance triad, i.e. CFOs, audit committee members, and external auditors, believe that ERM practice strongly influences the financial reporting process.

Thus, organisational dynamics are vital for understanding the adaption process towards the incremental change along with the institutional mechanism.

2.3.3 The Knowledge Gap

In sum, the area of organisational change has drawn the attention of ERM research following the implementation of ERM, although on a limited scale. Thereby, there is a research call for an empirical study to explore organisational change following ERM diffusion (Bromiley *et al.*, 2015). However, in understanding the change, researchers put their focus on specific areas of change at organisational level, for instance, change in capital allocation routines (Jabbour and Abdel-Kader, 2015) or change in risk management itself (Giovannoni *et al.*, 2016). Moreover, they applied the processual view and captured evolutionary change at the organisational level. Consequently, ERM literature remains silent in understanding incremental change following the regulatory diffusion of ERM, particularly at the field level, drawing on a product view. This study aims to contribute to this knowledge gap.

On the other hand, until recently, ERM researchers put their primary focus on investigating ERM practice in an organisational setting and the evolving organisational dynamics following the diffusion of ERM. Thus, empirical research is limited in exploring contextual factors as well as the evolving organisational dynamics following ERM diffusion, and their interaction. Above all, ERM is perceived as an externally driven phenomenon. Hence, the organisational dynamics alone are not sufficient to demonstrate the adaption process towards incremental change at the field level. Moreover, little is known about the interaction between external and internal factors in response to change, except the study by Giovannoni *et al.*, (2016), particularly adaption with incremental change following ERM diffusion. Thus, this area of research aims to contribute to this knowledge gap.

2.4 The Design Choice of MCS

MCS and innovation are intertwined in an organisation. It is argued that an MCS evolves in response to innovation (Chenhall and Moers, 2015). However, ERM is considered as a management control innovation (Jabbour and Abdel-Kader, 2015). Consequently, it challenges the traditional form of management control (Huber and Scheytt, 2013). As a control innovation, the influence of ERM over organisational change and management control practice is quite striking (Huber, 2009). However, MCS acts as an anchor with other organisational practices (Ahrens, 2018). The domain of MCS has been one of the core topics in accounting research for decades, where accounting and control innovations influence the broadening of the scope of the MCS (Malmi, 2013). Hence, the rise of ERM is an emerging issue in the domain of MCS, particularly in financial institutions. Despite this, accounting researchers have given little attention to this area of research (Mikes, 2009).

Besides, diverse accounting and control innovations, such as organisational strategy, strategic planning, strategic management, accountability structures, responsibility accounting, budgeting, performance measurement, balanced scorecards, theories of constraints, activity-based costing, economic value addition, JIT, TQM, target costing, lean manufacturing, quality costing, benchmarking, supply chain management, management accounting, management accounting systems, motivation and incentives, and many more, come under the umbrella of MCS in the current literature (Zawawi and Hoque, 2010; Gooneratne and Hoque, 2013). Despite, it has yet to be seen how ERM, as a new control innovation, comes under the boundary of the MCS in the organisational periphery. Thus, after discussing the notion of the MCS and its various typologies, the research gap is addressed in this area of research in the following sub-sections.

2.4.1 The Notion of MCS and its Typology

The field of MCS is rooted in the management control literature based on the seminal work of R. Anthony. MCS comprises of a wide array of mechanisms for directing and controlling employees' behaviour for achieving organisational goals (Merchant and Van der Stede, 2013). Management control typically operates through systems; hence, it is called MCS (Otley, 1980). In the highly uncertain, ever-changing and dynamic business environment, MCS helps organisations in adaption (Otley, 2016). Thus, it has a complementary role as an organisational device to cope with that uncertain environment (Chapman, 1998).

The MCS is also useful for strategy formulation and its implementation (Simons, 1990). It has two basic uses, namely, controlling use and enabling use. The combined use of controlling and enabling aspects of the MCS creates dynamic tensions that produce competitive advantages and unique organisational capabilities (Mundy, 2010). Conversely, inability to balance the use of these two aspects can lead to instability, waste of resources, slow decision-making, and decrease performance (Bisbe *et al.*, 2007).

However, the concept of MCS has evolved since its development in 1965 (Merchant and Otley, 2007). The scope of the MCS has advanced from narrow, formal and closed technical aspects to a broader coverage, including environmental, informal and qualitative aspects, to cater for the organisational need in uncertain atmospheres (Chenhall, 2003; Chenhall and Moers, 2015).

In the classical view, the MCS is defined as a simple mechanical or regulating system involving a single feedback loop. In this loop, managers measure performance, compare that measurement with a pre-set performance standard, and, if required, take corrective action (Merchant and Van der Stede, 2013). However, this view was narrow, primarily based on accounting control (Otley *et al.*, 1995), and the behavioural aspect was not taken into consideration. Consequently, this view is considered as a potential obstacle in the development of the MC field (Otley, 1994).

After this, considering the behavioural aspect, Merchant and Van der Stede (2007) argue that MCS influences employees' behaviour in a desirable way that helps to achieve organisational goals. Here, the focus is on goal congruence between the organisation and its employees (Anthony and Govindarajan, 2003; Cugueró-Escofet and Rosanas, 2013). Subsequently, the MCS has been considered as a product of social setting and subject to wider social, economic and political forces (Burchell *et al.*, 1980; Berry *et al.*, 1985; Hoque and Hopper, 1994). Consequently, the MCS becomes a social practice shaped by factors under societal systems (Wickramasinghe and Hopper, 2005; Uddin, 2009).

However, in the recent literature, the MCS is conceptualised as a "practice" (Ahrens and Chapman, 2007), a "package" (Otley, 1980; Herath, 2007; Malmi and Brown, 2008) and a "system" (Grabner and Moers, 2013). These notions are similar in principle to each other, but the debate is growing.

Based on the evolving notion of the MCS, multiple control frameworks have been proposed by control researchers, along with control typologies. As a result, many control typologies have emerged, for instance, formal and informal controls (Anthony *et al.*, 1989); behaviour control, outcome control and clan control (Ouchi, 1979); administrative and social controls (Hopwood, 1976); action, result and personnel/cultural controls (Merchant and Otley, 2007); diagnostic controls, interactive controls, and boundary and belief systems (Simons, 1995); feedback and feedforward controls (Preble, 1992); administrative and interpersonal controls (Bruns and Waterhouse, 1975); and organic and mechanistic controls (Chenhall, 2003). Likewise, Otley (1999) proposed a control framework to understand MCS in performance management after recognising five key areas of the MCS in organisational activities. After this, that framework has been extended by Ferreira and Otley (2009) by including seven additional key issues to make it more comprehensive.

2.4.2 The Framework of the "MCS Package" and the Rationale to Choose

There has been an effort to conceptualise control elements under the concept of a "package". Although, the idea of a "package" dates back to 1980 when Otley (1980) used the term to refer to the separate parts of an overall management control system, without any definition. After a long time, Abernethy and Brownell (1997) supported the "package" notion and argued that in a given setting, organisations rely on combinations of control mechanisms. Subsequently, Herath (2007) came up with the framework of "control package" for the first time for a better understanding of the MCS in an organisation. After identifying comprehensive elements of MCS, including their organisational structure, strategy, organisational culture and management information systems, she conceptualised those elements as "control package" in her framework.

Notwithstanding, in the following year, Malmi and Brown (2008) proposed a conceptual framework with the title of "MCS as a package". In developing this framework, they analysed and synthesised the empirical results of the control studies of the last four decades through an exhaustive literature review. Their framework is considered the most inclusive MCS framework (Otley, 2016), which provides a broader approach to explore the elements of MCS empirically.

In their framework, Malmi and Brown classify all the control elements into five typologies, namely, planning, cybernetic, reward and compensation, and administrative and cultural controls. They argue that elements of MCS do not operate in isolation and influence each other, which needs to be assessed. Therefore, multiple controls exist and perform collectively under the concept of "package". In another argument, they highlight that management accounting research has mainly studied accounting-based control, which is more formal. As a result, little is known to understand the impacts of other types of control. Thus, this broader package approach helps to develop a better theory, considering both formal and informal controls.

In this area of study, Malmi and Brown's (2008) framework is suitable to explore the design choice of the MCS following the diffusion of ERM because this framework is useful in developing a better theory regarding the real impact of a control innovation like ERM. It also helps to understand the control element individually when there is no systematic relationship with other control elements, and even when several controls exist simultaneously (Chenhall and Moers, 2015). Moreover, Tessier and Otley (2012) suggest that the phenomenon of MCS design is separated from the quality of the MCS and therefore, they suggest separate research for this.

With this background, this study adopts the framework of "MCS package" to explore the influence of ERM in the design choice of the MCS following its diffusion. Thus, it is not the objective of this study to identify the optimal package design of the MCS or the interrelationship among the control elements, but rather to explore the control elements in the design choice that have been influenced following the regulatory diffusion of ERM.

2.4.3 ERM and the MCS Package – A New Research Avenue

ERM is now considered as another facet of organisational control and accountability (Mikes, 2009). The COSO (2004) advocates ERM as a strategic management control system. Similarly, Altuntas *et al.* (2011) argue that ERM can be understood as a management control discipline that is promoted as a strategic management control system. Therefore, ERM has gained organisational significance as a control innovation. Consequently, risk management is now considered the cornerstone of modern management control (Scheytt *et al.*, 2006; Bhimani, 2009; Soin and Collier, 2013). Research call is growing to understand the influence of ERM on the MCS as a new control innovation.

Chenhall and Moers (2015) argue that management innovation has a direct effect on the MCS. However, little is known about ERM and the MCS, and how ERM, as a new control innovation, mediates with the MCS in organisations, particularly in the service industry. Moreover, several accounting and control innovations, such as ABC, ABM, TQM, BSC, economic value-added performance measurement and many more, have already been brought under the umbrella of MCS in the current literature (Zawawi and Hoque, 2010; Gooneratne and Hoque, 2013). However, it is yet to be explored how ERM, as a new control innovation, comes under the boundary of MCS in the organisational periphery. Besides, Gooneratne and Hoque (2013) provide a direction to explore the interplay between risk management practices and MCS in banks, particularly in emerging economies.

On the other hand, Soin and Collier (2013) highlight that the area of risk management and its interrelation with control practice has received relatively little attention in control literature. Likewise, Berry *et al.* (2009) anticipate more studies putting the focus on the control process and ERM in companies. Furthermore, Mikes (2009) argues that management control literature can help to make sense of the implementation of ERM in organisational boundaries and can enrich the body of management control literature. Also, in a recent article, Rana *et al.* (2019) argue that ERM-enabled MCS has the potential to improve performance measurement systems and strategic decision making.

The domain of management control has drawn little attention in ERM research in recent times, particularly from the context of the banks. However, Liff and Wahlstrom (2018) investigate how the MCS – the control package (Otley, 1980, 2016) of a bank – has influenced the opinion of the usefulness of ERM in different control contexts before and after the financial crisis. Whereas, Rad (2016) investigates the managerial intention underlying the design of MCS, putting the focus on the interplay between risk management and control systems in banks.

Despite this, the "package" concept is yet to be considered substantively in empirical research to understand the management control system design (Otley, 2016). Bedford and Malmi (2015) also mark the dearth of empirical research to analyse how control mechanisms combine. To the best of the knowledge of the researcher, no empirical study has been conducted yet to explore how the design choice of the MCS reshapes following the diffusion of ERM in the banking sector, drawing on the framework of the "MCS package".

2.4.5 The Knowledge Gap

In sum, the research call is growing for empirical studies regarding ERM and its influence on MCS. There is a research direction to explore the interplay of risk management and the MCS in banks, particularly in emerging economies (Gooneratne and Hoque, 2013). More empirical research has also been asked to study ERM and MC in organisations (Berry *et al.*, 2009; Soin and Collier, 2013). Besides, there is a dearth of research to discover how the control elements reshape following the diffusion of ERM, particularly in the service industry (Chenhall and Moers, 2015). Moreover, knowledge is limited to see how ERM, as a new control innovation, comes under the boundary of MCS.

On the other hand, the framework of "MCS package" (Malmi and Brown, 2008) is yet to consider seriously in empirical research to understand the design choice of the MCS (Bedford and Malmi, 2015; Otley, 2016). However, little is known about how the design choices of an "MCS package" reshape following the diffusion of ERM. Thus, this area of study intends to contribute to this knowledge gap.

2.5 Conclusion

In this chapter, the knowledge gap is demonstrated in the respective area of ERM research based on relevant literature. Research questions have emerged from the knowledge gaps. However, in the recent age, the diffusion of ERM is growing in organisations, particularly in the financial sector. The influence of ERM in organisational change and MCS is also quite striking. Thus, this study embarks on the areas of ERM diffusion, organisational change and adaption, and MCS, and integrates these three interrelated areas of research under the umbrella of ERM. However, the research gaps are summarised in the respective areas in the following table, along with the research question(s):

Summary of Research Gap(s)	**Research Questions**
ERM Diffusion	
• The main focus is given on exploring organisational determinants, mainly employing the quantitative approach as a factor of adoption and implementation of ERM. • Empirical research is limited in exploring diffusion factors at the field level to understand ERM diffusion, particularly under a regulatory environment. • A debate is growing on ERM diffusion under regulation and its relevance. • Limited application of the qualitative approach in exploring the diffusion factors. • Little is known about the reality of ERM diffusion in the context of an emerging economy.	How does ERM diffuse in the banking sector under a regulatory environment?
Incremental Change and Organisational Adaption	
• ERM literature remains silent regarding incremental change following ERM diffusion. • Until recently, the focus is given on a particular area of change in the organisation following the implementation of ERM. • Processual view applied to understand evolutionary change at the organisational level.	How does incremental change occur in banks following the regulatory diffusion of ERM?
• More focus is given on understanding ERM in action. • Evolving organisational dynamics are identified in the literature with a distinctive nature, despite little is known about how organisational dynamics interplay with contextual factors in adaption to incremental change, when ERM is an externally driven factor for change. • There is dearth of knowledge to see the ERM institutionalisation process at field level following the regulatory diffusion.	How do banks adapt to incremental change following the diffusion of ERM?
MCS	
• Research call is growing to see the interaction between ERM and MCS, particularly in the service industry, as ERM is regarded as a control innovation. • Little is known how ERM as a control innovation comes under the boundary of MCS. • There is a dearth of knowledge of how the design choices of MCS reshape following the diffusion of ERM, drawing on the framework of an "MCS package".	How does the "MCS package" reshape following the diffusion of ERM?

Table 2. 1: Summary of Research Gaps with Research Questions

Chapter 3

Theoretical Framework

An integrated theoretical framework is developed to understand the research problems, which are under investigation. This chapter outlines the theoretical perspective that provides the basis to inform this research. It is organised into four sections. Section 3.1 provides an overview of the theories used in ERM literature. Section 3.2 describes the detail of the integrated theoretical framework of this study, along with the rationale for adoption. After drawing on the limitation of the integrated theoretical framework in Section 3.3, the chapter ends with a conclusion in Section 3.4, along with a summary.

3.1 Theory in ERM Research

In ERM literature, it is found that a good number of theories, theoretical notions and conceptual frameworks have been used in explaining the ERM phenomenon. For instance, institutional theory, contingency theory, actor-network theory, paradox theory, agency theory, resource dependency theory, political theory and signalling theory are the major ones. Besides, various theoretical notions, such as "boundary objects", "sense-giving", and "sensemaking", are also used to draw the reality of ERM. Also, Simons' LoC (Level of Control) framework is used, along with the "dynamic capability framework", in ERM research.

Institutional theory is common among existing theories in ERM research. Drawing on the notion of "institutional isomorphism" of neo-institutional sociology (NIS), Jabbour and Abdel-Kader (2016) investigate various institutional pressures that influence adoption and implementation of ERM in the insurance sector of the UK.

Likewise, drawing on the institutional perspective, Arena *et al.* (2010) investigate the organisational dynamics of three companies and their intertwined dimensions involved in the implementation of ERM. Besides, Giovannoni *et al.* (2016) follow the institutional approach to understand risk management change. In another paper, Jabbour and Abdel-Kader (2015) draw on old institutional economies and evaluate the extent and nature of change in capital allocation routines. Additionally, Sarens and Christopher (2010) investigate the association between corporate governance guidelines, risk management and internal control practices using institutional theory. In recent times, based on the notion of “institutional work”, Hayne and Free (2014) examine the emergence and institutionalisation of the COSO’s ERM-IF (Integrated Framework). Besides, drawing upon institutional and legitimacy-based notions of symbolic and substantive management strategies, Soobaroyen *et al.* (2019) explore the role of governance structures (i.e. audit committee) in the oversight of organisational risk management.

Drawing on contingency theory, Gordon *et al.* (2009) investigate the relation between ERM and firm performance. In another study, Woods (2009) supports contingency theory in explaining the implementation of risk management phenomenon. Later on, Mikes and Kaplan (2013) also argue in favour of contingency theory by proposing a more comprehensive specification of ERM and identify the parameters that could serve as a solid foundation for contingency theory for ERM design and implementation study.

On the other hand, based on theoretical pluralism, Collier and Woods (2011) tested their empirical findings against institutional, contingency, resource dependence and political theory perspectives. Similarly, Hudin and Hamid (2014) propose a conceptual framework following institutional, contingency and diffusion of innovation theories to explore the driving factors of ERM implementation. Similarly, Beasley *et al.* (2015) draw on insights from the institutional, agency and resource dependency theories to explain ERM maturity and its usefulness as a strategic tool for competitive advantages. Furthermore, Cohen *et al.* (2017) demonstrate the relationship between ERM and the financial reporting process based on agency and resource dependence perspectives. In recent times, Bogodistov and Wohlgemuth (2017) propose a theoretical framework drawing on the "resource-based" view and the "dynamic capability" perspective to enhance the theory of ERM.

Besides, based on the literature of "boundary objects", Arena *et al.* (2017) explore the dynamics of (dis)integrated risk management and offer a theoretically informed analysis of the context-specific development of ERM in two large organisations. In another study, Lim *et al.* (2017) draw on the framework of the paradox theory. Based on this framework, they examine the operational dynamics and paradoxical nature of risk management in banks. Also, Vinnari and Skærbæk (2014) use the actor-network theory (ANT) to analyse the implementation of risk management as a tool for internal audit activities.

Furthermore, the notions "sense-giving" and "sensemaking" are used in the literature. Drawing on the notion of "organisational sense-giving", Meidell and Kaarbøe (2017) explain how ERM function influences decision-making in an organisation over time. Similarly, based on the notion of "sensemaking", Gendron *et al.* (2016) examine the processes by which credibility of risk management is sustained as a reliable apparatus in corporate boardrooms. In addition, Rad (2016) uses Simons' Levers of Control (LoC) framework to investigate the interplay between risk management and control systems in banks, particularly in understanding the managerial intentions underlying the design of the MCS.

However, after analysing the existing theories in ERM research, this study develops an integrated theoretical framework putting the focus on the research philosophy, research problems and the research questions, which is described in the next section.

3.2 The Integrated Theoretical Framework of this Study and the Rationale

The research objectives of this study and the philosophical underpinning have influenced the development of this integrated theoretical framework. Besides, existing theories in the ERM literature have also provided a guideline in this development. This section describes the theoretical framework that has developed to address the research problems of this study and provides its rationale. It is described in the introduction chapter that this study addresses three avenues of ERM research with different research aims. Therefore, this research has developed an integrated theoretical framework to capture the ERM phenomena under investigation.

Drawing on the insight of Abrahamson's framework, "neo-institutionalism" framework and the notion of "MCS package", this study has developed the following integrated theoretical framework to address the research problems:

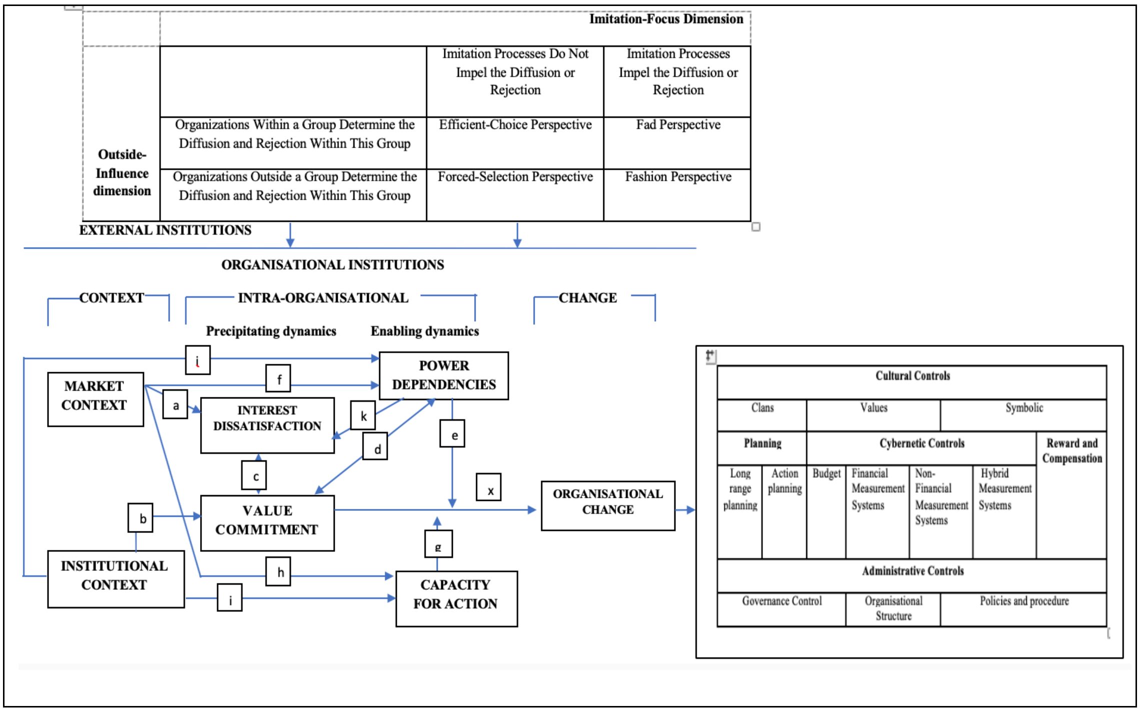

Figure 3. 1: Integrated Theoretical Framework of the Study

(*Source:* Abrahamson*, 1991; Greenwood and Hinings, 1996; Malmi and Brown, 2008.)*

In order to address the research question in the area of ERM diffusion, this study has relied upon Abrahamson's framework. The notions of this framework are useful in exploring the factors that influence the diffusion of ERM in the banking sector under a regulatory environment. The dominant perspective (i.e. efficient-choice) and other three alternative perspectives (i.e. forced-selection, fad and fashion) of this framework assist in exploring the diffusion factors among a group of organisations with a holistic view which is useful to draw the reality of ERM diffusion, particularly under the regulatory environment. Besides, this framework is useful to explore both supply-side and demand-side diffusion factors. Therefore, Abrahamson's framework (1991) is a suitable theoretical lens to provide an account of ERM diffusion in the banking sector under a regulatory environment.

The second area of research is organisational change and organisational adaption. Internal dynamics and their interplay with contextual factors are useful in understanding organisational adaption with the incremental change. Nevertheless, the neo-institutional theory alone is not sufficient enough to understand the organisational change and organisational response. The theory is weak in analysing the internal dynamics of organisational change. Therefore, to address the research questions in this area of investigation, this study has relied upon the "neo-institutionalism" framework developed by Greenwood and Hinings (1996). This framework is developed based on the insight of "old" and "new" institutionalism. It assists in providing an account of organisational dynamics and their interaction with contextual factors to understand organisational response in adaption with change. Recently, this framework has been used in accounting literature to understand accounting change (Liguori and Steccolini, 2012) and risk management change (Giovannoni *et al.*, 2016). As such, the study is influenced by this model to theorise the organisational adaption to incremental change.

The third area of research is MCS. As the objective in this area is to investigate the influence of ERM on the elements of MCS, this study has relied upon the overarching conceptual framework of the "MCS package" proposed by Malmi and Brown (2008). This framework is suitable to investigate the configuration of the package of MCS following the regulatory diffusion of ERM. This framework provides a holistic approach for exploring the elements of MCS that are shaped or reshaped following the diffusion of ERM empirically at the field level.

Besides, the philosophical assumptions of this research are also compatible with the ontology and epistemological grounds of the frameworks as adopted in this study. Ontologically, the institutional theory is grounded in a social constructivist view, although the realist dimension is also pronounced (Modell *et al.*, 2017). However, in the seminal work of institutional theory, Meyer and Rowan (1977) put more focus on Berger and Luckmann (1966) and describe institutions as socially constructed, which gradually achieve a taken for the granted state. In the epistemological position, the institutional theory is generally empirical and inductive but includes an important deductive element (Modell *et al.*, 2017). Thus, philosophically the "neo-institutionalism" framework is consistent with this research. Besides, the diffusion framework and the MCS package framework are also suitable to understand the phenomena based on the actors' experiences and practices.

Thus, the developed integrated theoretical framework is suitable to address the ERM phenomena under investigation in the areas of diffusion, organisational adaption and MCS. Details of the framework are narrated in the following sub-sections.

3.2.1 Abrahamson's Innovation Diffusion Framework

Abrahamson (1991) advances a typology of four perspectives to understand the diffusion or rejection of innovation. Drawing attention on efficient-choice perspective, the dominant perspective of diffusion, the author proposes other three alternative perspectives to capture the reality of diffusion or rejection of administrative technologies and to evaluate whether the diffused innovation is technically efficient or inefficient. It is agreed that the efficient-choice perspective is occupied with proinnovation biases, i.e. innovation is efficient/beneficial to adopters. Hence, this perspective limits to ask the question of why organisations adopt or reject innovation (Malmi, 1999). Despite, this dominant perspective gives more focus on demand-side factors of innovation diffusion. However, acknowledging the proinnovation biases of the dominant perspective, the author also advances other three alternative perspectives along with the dominant one to overcome the proinnovation biases, which are forced-selection, fashion and fad.

Considering the influence of outsiders and organisational imitation, Abrahamson (1991) proposes two dimensions in his typology: outside influence dimension and imitation-focus dimension. The author argues that the adoption of any innovation is not only the result of organisational choice. Organisations outside the group such as regulatory body, consulting firms and other factors may influence on organisational choice. On the other hand, organisations may be unclear about the goal of the innovation and may have uncertainty about technical efficiency of innovation which can lead to imitating other organisations. The efficient-choice and forced-selection perspectives belong to outside-influence dimension, and the fashion and the fad perspectives lie under imitation-focus dimension. This typology is suitable to identify the contextual and organisational factors that affect the diffusion of an innovation. Thus, it helps to explore both demand-side and supply-side factors to understand the process of innovation diffusion across the industry. Moreover, this typology is useful to understand whether the innovation is technically efficient or inefficient.

Thus, the four perspectives under two dimensions are efficient-choice, forced-selection, fashion and fad. Details of the typology are narrated below:

		Imitation-Focus Dimension	
		Imitation Processes Do Not Impel the Diffusion or Rejection	Imitation Processes Impel the Diffusion or Rejection
Outside-Influence dimension	Organizations Within a Group Determine the Diffusion and Rejection Within This Group	Efficient-Choice Perspective	Fad Perspective
	Organizations Outside a Group Determine the Diffusion and Rejection Within This Group	Forced-Selection Perspective	Fashion Perspective

Figure 3. 2: Abrahamson’s Innovation Diffusion Framework
(*Source: Adopted from Abrahamson* 1991, p. 591)

A. Outside-Influence Dimension

In this dimension, Abrahamson (1991) argues that organisations outside the group are compelled to accept inefficient innovation, although organisations are free to adopt efficient innovation. Consequently, the organisational choice is less dominant in this dimension. Organisation outside the group, such as regulatory bodies, consulting firms and other factors influence on the organisational choice. Thus, the outside-influence dimension distinguishes two types of perspectives of innovation diffusion: efficient-choice and forced-selection.

A.1 The Efficient-Choice Perspective

It is a dominant perspective in the diffusion innovation literature. In this perspective, organisations inside a group enforce the diffusion of innovation. It posits that organisations are free and independent for the rational choice of innovation. Also, organisations are relatively certain about the goals of innovation and the ways to achieve the goals. Hence, their behaviour is not imitative. Thus, organisations determine the diffusion or rejection of an innovation. Consequently, organisational choices can be rational and can lead to the selection and retention of technically efficient innovation. Although it always leads to proinnovation biases and adopts technically efficient innovation.

A.2 The Forced-Selection Perspective

To address the proinnovation biases, the author proposes other three alternative perspectives along with the dominant perspective for a holistic framework to identify the diffusion factors from the organisational context, where the forced-selection is one of them. Under the forced-selection perspective, it is presumed that diffusion factors lie outside of the organisations rather inside. External organisations, such as regulatory bodies or government organisations, dictate the adoption of an innovation irrespective of efficiency or inefficiency. Powerful interest groups control sufficient power and may coerce organisations to adopt technically inefficient innovation or to reject the efficient one. Here, organisations within a group have no choice, and even their motives do not play any role in determining diffusion or rejection of an innovation.

B. Imitation-Focus Dimension

The main focus of this dimension is uncertainty about the technical efficiency of the innovation. Imitation also arises under the condition of uncertainty. The unclear goal of the organisations and uncertainty about the technical efficiency of an innovation may lead to reject efficient innovation or accept inefficient innovation. This imitation-focus dimension includes the rest of the two perspectives: fashion and fad.

B.1 The Fashion Perspective

Under this perspective, organisations in a group imitate administrative innovations promoted by fashion setting organisations. Thus, organisations in a group imitate other organisations that reside outside that group. These fashion setting organisations are called opinion leader whose mission involves the creating and disseminating of an innovation. Although fashion setters do not have coercive power to enforce organisations to imitate rather have charismatic power to influence by their capacity to inspire the organisations to imitate their choice in the adoption of innovation.

B.2 The Fad Perspective

Under this perspective, diffusion of innovation occurs when organisations within a group imitate other organisations within that group. Under the condition of uncertainty, organisations imitate other organisations that reside within that group. Here, organisations are uncertain about the goals and efficiency of innovation. As a result, organisations in a group imitate each other's adoption irrespective of efficiency or inefficiency of the innovation to appeal legitimacy (Meyer and Rowan, 1977; DiMaggio and Powell, 1983).

C. The Rationale to Choose the Framework

Abrahamson's (1991) typology is considered more comprehensive and analytic one. The four perspectives of this framework are useful to understand the organisational processes that impel the diffusion or rejection of an innovation among a group of organisations. This typology helps to address the population characteristics to provide an account for the diffusion of innovation instead of an individual firm (Malmi, 1999). It is suitable also to explore both demand-side and supply-side diffusion factors to understand the process of innovation diffusion across the industry, particularly under a regulatory environment. Besides, it assists in evaluating whether the innovation is technically efficient or inefficient for a group of organisations under regulation as the other three perspectives are advanced to overcome the proinnovation biases.

However, multiple perspectives of Abrahamson's (1991) typology can be used to understand the diffusion or rejection of innovation. Despite, there is multiple perspectives problem. Abrahamson admits that there are paradoxes opposing these perspectives. At the same time, he suggests to develop more encompassing theories of innovation diffusion or rejection using this theoretical tension that exist between the dominant perspective and other three alternatives.

Researchers also admit that theory based on a single perspective may well explain the whole diffusion in some innovations. Despite, a combined perspective may require to explain the phenomena in other cases. In this paradox, Malmi (1999) argues that driving forces behind innovation change over the stage of diffusion by referring to the management accounting change. He finds that efficient-choice may explain the early stage of adoption, whereas fashion setting organisations influence at the take-off stage. Again efficient-choice and mimetic behaviour influential at a later stage. Based on empirical evidence, he shows the variation of driving forces based on the stage of diffusion.

Thus, the stage of adoption is vital to apply the certain perspective of the typology to understand the diffusion or rejection of innovation, because all the perspectives are not equally applicable to explain the diffusion in every stage. Rogers (1995) and Gallivan (2001) argue that the adoption process basically occurs in two stages in organisations: primary stage and secondary stages. Primary stage adoption occurs through firm-level decision to adopt the innovation, whereas secondary stage adoption occurs through actual implementation in the individual firm following the primary stage of adoption. Here, certain perspectives are useful to explain the early stage or primary stage of diffusion of innovation over the secondary level (Perera *et al.*, 2003).

Under this paradox, however, the paradox resolution allows the researchers to develop theories by exploring paradoxes combining two or more of the perspectives to generate a variety of theories that fit for idiosyncrasies of each innovation and diffusion context. Because paradox resolution assumes that different perspectives do not simply apply to certain innovations or contexts. It assumes instead that each perspective captures some aspects of every innovation and diffusion context.

Paradox resolution is necessary in terms of a context. Abrahamson's (1991) also implies that resolution paradox approach helps to study the diffusion of various innovations in different types of innovation context and also may introduce the flexibility necessary to generate theories that match the innovation or context study and, thereby, offer for strong empirical findings. Forced-selection, for example, might have the greatest explanatory power during the war. On the other hand, efficient-choice perspective is no longer applicable in explaining adoption from the context of imitation focus.

In this background, ERM provides an interesting opportunity to study the reality of ERM diffusion across the industry from the context of a regulatory environment. The existing study mainly puts attention to understand organisational factors of ERM adoption. Understanding the diffusion factors from both demand-side and supply-side might enrich our knowledge regarding the motivation of ERM diffusion as a management control innovation and evaluate whether the innovation is technically efficient. As a result, the Abrahamson's (1991) typology is useful to understand the reality of diffusion under the regulatory environment and to evaluate the technical efficiency of ERM as a choice of innovation.

3.2.2 The Neo-Institutionalism Framework and Organisational Adaption

In the second area of research, the aim is to understand the incremental change following regulatory diffusion of ERM in the banking sector of Bangladesh and provide an account of organisational response in adaption to that change. Therefore, this part of the study adopts the "neo-institutionalism" framework developed by Greenwood and Hinings (1996) drawing on the notion of "old" and "new" institutionalism to understand the incremental organisational change and organisational response. In their framework, the authors put forward the notion of “template or archetype” to conceptualise the l change. However, based on the notion of “template”, this study has also developed a framework to understand incremental change following regulatory diffusion of ERM in the banking sector. The developed framework is illustrated in Figure 2.1 in Chapter 2.

However, the institutional theory is not considered a theory of organisational change because it mainly provides an account of similarity. Besides, it is weak in analysing organisational dynamics and change (Greenwood and Hinings, 1996). Therefore, to overcome these limitations, Greenwood and Hinings (1996) have developed a framework which they labelled as “neo-institutionalism” drawing on the notions of “old” and “new” institutionalism. Because, the central tenets of “old institutionalism” are competing values, influence, coalition, power, and informal structures. Whereas, “new institutionalism” puts focus on the notion of legitimacy, organisational fields, isomorphism, decoupling (Meyer and Rowan, 1977; DiMaggio and Powell, 1983). Combining the notions from these two institutionalisms, Greenwood and Hinings suggest “neo-institutionalism”, which is suitable to understand organisational adaption to change. The framework of Greenwood and Hinings (1996) is interesting because it provides an outline to explore the contextual factors and the organisational dynamics to understand the institutional change.

To understand the organisational response, however, Greenwood and Hinings (1996) denote that institutional theory does have some insight beyond the ideas of inertia and persistence. However, at the same time, they argue that this can only happen when the “old” and “new” institutionalism are combined in a neo-institutionalist framework. Greenwood and Hinings deal with two points made by DiMaggio and Powell (1991). The first point relates to the relationship between the “old” and “new” institutionalism. New institutionalism is primarily related to organisations-in-sector and the old institutionalism centres on the individual organisation. In their framework, Greenwood and Hinings try to show how the external processes have to be understood together with the internal dynamics by the organisation in interpretation, adoption, and rejection. However, the framework of the "neo-institutionalism" is depicted below:

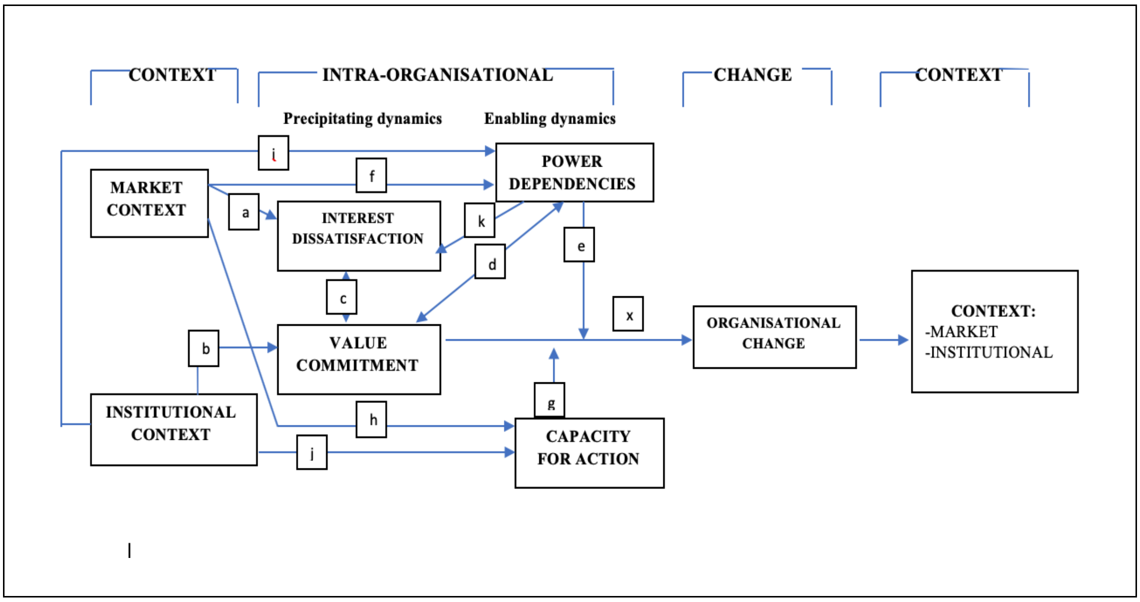

Figure 3. 3: Neo-Institutionalism Framework

(Source: Adopted from Greenwood and Hinings, 1996, p.1034.)

However, the insight of "neo-institutionalism" framework is described underneath:

Institutional Context and its Impact

Institutional factors are crucial for organisations. Organisations must accommodate institutional expectations for their survival and growth despite having a contrary expectation with organisational performance. Therefore, the institutional theory argues that organisation behaviour is shaped by both market and institutional pressure such as regulatory agencies, state, profession, and actions of the leading company and many more. According to this assumption, Greenwood and Hinings (1996) assume that organisations are structured in terms of archetypes (templates of organizing) which are institutionally derived.

Templates of Organizing

It is argued that institutional context provides "templates for organizing" (DiMaggio and Powell, 1991, p. 27). Therefore, drawing on the notion of "template/archetype" (Greenwood and Hinings, 1993, 1996), this study conceptualises the incremental change. However, it is assumed that incremental change occurs when an organisation moves from one template-in-use to another. Breaking the mould is a precondition for incremental change. Greenwood and Hinings (1996) assume that organisations are structured in terms of archetypes (template of organizing) which are institutionally derived. Based on the concept, a framework is developed for understanding the incremental change, which is depicted in Figure 2.1 in Chapter 2.

However, the contextual factors and organisational dynamics of the neo-institutionalist framework are enumerated below:

A. Contextual Factors/Exogenous Dynamics

In their framework, Greenwood and Hinings (1996) draw on two types of dynamics: exogenous and endogenous. Exogenous dynamics are external to the organisations arise from the market and institutional context. The authors indicate that organisational change would become input from the market and institutional contexts as the "template of organizing" is institutionally derived. They also direct that institutional forces are aroused from "regulative", "normative" and "cognitive" pressures from the institutional environment.

B. Organisational Dynamics/Endogenous Dynamics

As the aim of the framework is to bridge the "old" and "new" institutionalism, Greenwood and Hinings (1996) draw upon four aspects of organisation's internal dynamics - interests, values, power dependencies, and capacity for action. These are the endogenous dynamics operating within an organisation. In this framework, interest and value commitment act as precipitating dynamic for adaption to change within an organisation, whereas power dependencies and capacity of action act as enabling dynamic.

B.1 Precipitating Dynamics

Interest Dissatisfaction and Value Commitment

It is mentioned in the framework that internal pressure for change derives from interest dissatisfaction and the pattern of value commitments of the functional group(s). In every organisation, different functional groups are doing different activities. This functional groups could be recognised based on the specialisation of the tasks. They are not neutral and indifferent to each other. Each group seeks interest, power, capacity, dominance, and favourable resource allocation over others within the organisation.

Therefore, potential pressure for change or inertia is the result of group dissatisfaction. As a result, a high measure of dissatisfaction of a group put pressure for change (Covaleski and Dirsmith, 1988), and the intensity of the pressure links with the market and institutional context of the organisation. Despite in the same market context, the extent of interest dissatisfaction can vary from firm to firm, which represented through line "a" in Figure 3.3. However, in interest dissatisfaction, the agency role of the group(s) is in the main focus. In fact, the functional group(s) acts as a change agent in this framework.

It is argued that interest dissatisfaction itself will not lead to adapt to change unless the dissatisfied group recognised the connection between the prevailing template and their position of disadvantage. Therefore, the authors have directed for the pattern of value commitment, which is significantly vital in explaining the possibility of adaption to the change. In connection to change, the authors have argued that competitive or reformative value commitment is associated with the adaption to incremental change.

However, in competitive commitment, some groups support the template-in-use, whereas other groups prefer an articulated alternative. Whereas in reformative commitment, all groups are opposed to the template-in use and prefer the alternative. A reformative commitment will be associated with revolutionary change because of the absence of resistance. A competitive commitment, in contrast, is more likely to be evolutionary in pacing as resistance occurs. However, this pattern of commitment is critical within an organisation because there is no direct link from interest to change. However, the authors claim that the organisation does vary in terms of the pattern of commitment because of different locations within the institutional sector. Institutional context also influences the value commitment. It is represented through line "b" in Figure 3.3.

In this framework, interests and commitment are described as discrete precipitators to create pressure for change, and they are connected, which draws through line "c" in the Figure. Therefore, the authors claim that interest in association with the competitive or reformative pattern of commitment leads to adapt to change, which is shown through line "x" in Figure 3.3. Therefore, internal pressure for change arises from interest (dis)satisfaction and the pattern of value commitment.

However, there is an interaction between the precipitating dynamics and contextual factors. Interest and value commitment are influenced by the market and institutional factors. The intensity of the pressure of the contextual factors leads to the pattern of value commitment. Through interaction with the contextual factors, pressure for incremental change arises within the organisation. Therefore, market and institutional pressure precipitate the desire for change, but the intensity of the pressure may likely vary from organisation to organisation.

B.2 Enabling Dynamics

Greenwood and Hinings consider two factors as enabling factor in their framework. These are power dependencies and capacity for action. They argue that the appropriate capacity for action and supportive power dependencies are the preconditions for adaption to change.

Power Dependencies and Capacity for Action

In an organisation, the interest of a group(s) acts as a precipitator for incremental change in association with the pattern of value commitment and intensity of the contextual pressure. However, to promote their respective interest, groups use favourable power dependencies which represented through line "k" in Figure 3.3. When a new group of actors gains supportive power within an organisation, they try to alter the organisation's goals. However, power dependencies and value commitment are interrelated. Both of them have a reciprocal relation, which is represented through line "d" in Figure 3.3. In any organisation, the prevailing template/archetype gives power to a particular group over others and therefore, they promote the norms of that template/archetype.

The authors argue that the power dependencies either enable or suppress the incremental change, which is represented through line "e" in the Figure. Based on the notion of resource dependence model (Pfeffer and Salancik, 1978), the authors indicate a direct link between market change, power dependencies, and incremental change. They suggest that changes in market context led to changes in the relative power of functional groups within the organisation representing through line "f" in Figure 3.3. and influence in the change. The authors also suggest that resource dependence thesis complements the institutional perspective. The institutional context also acts to configure the power and status of a group within an organisation (line "i" in the Figure) along with market pressure but not necessarily in a manner consistent with market exigencies.

However, the awareness of the group of actors regarding existing and alternative template/archetype is essential for leading to incremental change. Greenwood and Hinings (1996) argue that if the advantageous group(s) recognise the weakness of the existing template and if they are aware of potentials of the alternative, the favourable power dependencies will produce the change whether this power dependency brought by market and/or institutional pressure. Therefore, enabling power dependencies will lead to incremental change only if alternatives to the prevailing archetypal template are known to the group(s).

On the other hand, "capacity for action" indicates the ability to manage the transition process from one template to another. Capacity for action is essential in organisation for substantive application of a new template rather than instrumental appearance. However, the authors indicate three aspects in "capacity for action" for substantive application.

Firstly, the group(s) should have sufficient understanding and knowledge regarding the new template along with its conceptual destination, and the ability to manage to reach the destination. *Secondly,* the group(s) should have leadership skill - charismatic, instrumental, and institutional and, *finally,* the involvement of multiple actors in the change process. Therefore, capacity for action is an enabling dynamic because, without sufficient capacity for action, incremental change will not occur (line "g" in Figure 3.3).

In addition, the speed of incremental change may be influenced by the capacity for action. The authors argue that a clear understanding of the new destination and the way to the destination may give an organisation the confidence to push ahead rapidly with the change. On the other hand, lack of understanding and expertise may promote experimental steps. Thus, high capacity for action is associated with revolutionary change. However, the capacity for action linked to the market and institutional context (line "h" and "j" in Figure 3.3). Market context and its maturity can have an impact on the level of capacity for action in an organisation and increase the possibility for adaption to change. Sometimes, institutional context can limit the development of capacities for action in some organisations.

However, according to this framework, power dependencies and capacity for action are necessary but not sufficient conditions for adaption to organisational change. They will not lead to adaption to change by themselves, but they can act as enabling factor or may act as a constraint for the change.

Thus, according to the neo-institutionalist framework, the institutionalisation of an organisational practice is the result of the interplay between internal and external dynamics. Therefore, this framework is useful to explore the evolving dynamics in the organisation classifying into precipitating and enabling dynamics. Consequently, the interplay between organisational dynamics and organisational context helps in understanding the organisational adaption towards the incremental change following the regulatory diffusion of ERM.

3.2.3 The MCS Package

The final aim of this study is to demonstrate how the design choices of "MCS package" reshape following the diffusion of ERM at field level. Therefore, to achieve the aim, this area of study adopts the conceptual framework of "MCS package" proposed by Malmi and Brown (2008). This framework is useful to explore the elements of the "MCS package" that have been configured following the regulatory diffusion of ERM in the banks and draw the reality. Detail of the framework is reported below:

<table>
<tr><td colspan="7">Cultural Controls</td></tr>
<tr><td colspan="2">Clans</td><td colspan="3">Values</td><td colspan="2">Symbolic</td></tr>
<tr><td colspan="2">Planning</td><td colspan="4">Cybernetic Controls</td><td rowspan="2">Reward and Compensation</td></tr>
<tr><td>Long-range planning</td><td>Action planning</td><td>Budget</td><td>Financial Measure-ment Systems</td><td>Non-Financial Measurement Systems</td><td>Hybrid Measurement Systems</td></tr>
<tr><td colspan="7">Administrative Controls</td></tr>
<tr><td colspan="3">Governance Control</td><td colspan="2">Organisational Structure</td><td colspan="2">Policies and Procedure</td></tr>
</table>

Figure 3. 4: Management Control Systems (MCS) Package
(Source: Adapted from Malmi and Brown, 2008, p 291.)

a. Cultural Controls

Culture can be defined as broader values and normative pattern, which tends to be shared by its members, and, in turn, influence their thoughts and actions (Flamholtz *et al.*, 1985). When culture is used to regulate the behaviour of the employees, it is considered a system of cultural control. In their framework, Malmi and Brown (2008) consider three aspects under cultural control: value-based controls, symbol-based controls and clan controls.

The authors mention that managers formally communicate the explicit set of definitions and reinforce them to provide values, purposes and directions with a view to adhering by the employees under value-based control. They also highlight the relationship between value and belief system because the value is institutionalised through the belief system. Value also influences the behaviour of employees. For instance, mission statements, vision statements, credos and statements of purpose, are examples of belief systems which convey values.

Likewise, the authors argued that symbol-based control arises through the creation of visible expression within the organisation. For instance, a dress code in any organisation or specific uniform creates symbol-based cultural control. On the other hand, distinct sub-culture or micro-culture within an organisation is categorised under a clan control. In addition, the authors consider training under cultural control because training can be seen as a way of managing organisational culture.

b. Planning Controls

Planning is considered an ex-ante form of control. The authors put forward three sets of objectives which are achieved through planning controls. *Firstly*, planning helps to set out the goal of the functional areas and directing the behaviour of the employees. *Secondly*, planning provides standard to achieve through linking with the organisational goals and *finally*, planning enables in coordination through goal congruence across the functional areas and thereby, ensure control to achieve the organisational objectives. In their framework, Malmi and Brown (2008) consider two types of planning controls namely: *long-range planning* - where goal and action are more than twelve months and long run and, *action planning* - where goals and actions are usually for twelve months period.

c. Cybernetic Controls

The authors highlight the principles of “cybernetic” and draw a relationship between cybernetic principles and the concept of control in categorising cybernetic controls. Under cybernetic control, the behaviour is linked with target and ensure accountability by putting the focus on variation of performance. It is a loop of the feedback process. However, the authors highlight five features of the cybernetic controls. *First*, quantification of underlying phenomena, activity or system. *Second*, set the standard or target to be met. *Third*, a comparison between actual and standard and provide feedback through the process. *Fourth,* analysis of variance arising from comparison and *fifth*, corrective action through modification. As a component of cybernetic control, the authors considerer budgets, financial measures, non-financial measures, hybrids that contain both financial and non-financial measures such as the balanced scorecard (BSC).

d. Reward and Compensation Controls

Under these controls, Malmi and Brown put the focus on motivation, individual performance and goal congruence. Under this segment, control is designed in such a way which motivates the employees in increasing performance, and ultimately influence to achieve the organisational goal. This control segment emphasis the concept of “goal congruence”. However, in an organisation, reward and compensation can range from extrinsic to intrinsic and influence in retaining employees and encouraging cultural control.

e. Administrative Controls

Administrative control systems are those that direct employees' behaviour through organising of individual and group. It has a direct influence on employees' behaviour. However, Malmi and Brown (2008) classify the administrative controls into three groups: organisations design and structure; governance structures within the firm; and procedures and policies.

Organisational design is considered a vital control device under administrative control. It influences a certain type of contact and relationship within the organisation. Similarly, the *organisational structure* is a form of control which also influences to reduce the variability of the employees' behaviour and increase productivity. On the other hand, board structure and compositions are part of the *governance structure*. Governance includes formal line and accountability. For instance, meeting schedules, meeting agenda, meeting deadlines and many more, direct the behaviour of the members, which are part of the governance structure. Furthermore, *policies and procedures* are the part of the bureaucratic approach of control within an organisation, which include standard operating procedures, practices, rules and policies. In addition, the authors consider job design as administrative control.

3.3 Constraints of the Integrated Theoretical Framework of this Study

Abrahamson's (1991) typology may not be applicable if the uncertainty is moderate about goals and efficiency. Because level of uncertainty and efficiency vary across the organisation or may change different stage of diffusion. Besides, organisations outside the group may exert moderate influence overall diffusion of innovation in that group, but high influence over certain organisations within it. In that case, this typology will not be applicable to explain the diffusion of innovation.

On the other hand, “neo-institutionalism” framework is developed based on insights of both “old” and “neo-institutionalism. But, institutional theory puts more focus on homogeneity and persistence and less attention on the role of interest and agency (DiMaggio, 1988), or tendency to ignore the agency (Volkoff *et al.*, 2007). Thus, the agency becomes subordinate to institutions (Abdelnour *et al.*, 2017). In fact, the institutional theory is criticised largely ignoring “power”, the role of “power”, especially the “power” of large corporations (Munir, 2015). In addition, the institutional theory does not consider organisational heterogeneity (Greenwood *et al.*, 2014), and lack of responsiveness to change (Gilmore and Sillince, 2014). It demonstrates the resistance of change, not the formation of change (Börner and Verstegen, 2013). Even, the institutional theory is not able to explain the process of institutionalisation (Siti-Nabiha and Scapens, 2005).

Besides, there are some challenges to study the MCS as a package as it involves difficulty in defining the concept of MCS. The conceptual difficulty in identifying the elements of the MCS make the framework large and complex. Besides, the coverage of this framework is comprehensive and sophisticated. It creates difficulties to gather and make sense of the vast array of controls from a field study. Moreover, a debate is growing whether MC practice is a “package”, or “system”. Grabner and Moers (2013) have made a distinction between “system” and “package”. They argue that the view of MC as a “package” is ill-suited if the purpose of the study is to examine the relationships among the MC practices. They opine that “system” perspective is necessary to examine the interdependency of the controls. They also mention that the view of “MC package” reflects the mirror view of the control environment of an organisation. Despite these limitations, this integrated framework has the potential to address the research problems, which are under investigation.

3.4 Conclusion

This study investigates the ERM phenomena in the areas of ERM diffusion, incremental change and organisational adaption, and design choice of MCS. To achieve the aims, this study has developed an integrated theoretical framework drawing on the notion of Abrahamson's (1991) diffusion typology, "neo-institutionalism" framework and the framework of "MCS package". This integrated framework is compatible with addressing the research problems of this study. Besides, the ontological and epistemological ground of this framework is also consistent with the philosophical underpinning of this research. Thus, this integrated framework provides a useful lens to demonstrate the reality of the phenomena empirically which are under investigation. The elements of the integrated framework, theoretical constructs and respective area of ERM research are summarised in the following table:

<table>
<tr><th>Elements of Integrated Framework</th><th colspan="3">Main Constructs</th><th>ERM Research Area</th></tr>
<tr><td rowspan="4">Diffusion of Innovation</td><td colspan="3">Efficient-Choice Perspective</td><td rowspan="4">ERM Diffusion</td></tr>
<tr><td colspan="3">Forced-Selection Perspective</td></tr>
<tr><td colspan="3">Fad Perspective</td></tr>
<tr><td colspan="3">Fashion Perspective</td></tr>
<tr><td rowspan="6">Neo-institutionalism Framework</td><td rowspan="2">Contextual Factors</td><td colspan="2">Market Factors</td><td rowspan="6">Organisational adaption to incremental change</td></tr>
<tr><td colspan="2">Institutional Factors</td></tr>
<tr><td rowspan="4">Organisational Dynamics</td><td rowspan="2">Precipitating Dynamics</td><td>Interest</td></tr>
<tr><td>Commitment</td></tr>
<tr><td rowspan="2">Enabling Dynamics</td><td>Resource dependencies</td></tr>
<tr><td>Capacity for action</td></tr>
<tr><td rowspan="5">MCS Package</td><td colspan="3">Cultural Controls</td><td rowspan="5">Configuration of the MCS Package</td></tr>
<tr><td colspan="3">Planning Controls</td></tr>
<tr><td colspan="3">Cybernetic Controls</td></tr>
<tr><td colspan="3">Reward and Compensation Controls</td></tr>
<tr><td colspan="3">Administrative Controls</td></tr>
</table>

Table 3. 1: Summary of the Integrated Theoretical Framework and Respective Area of Research

Chapter 4

The Evolution of ERM in the Banking Sector of Bangladesh

The purpose of this chapter is to provide a contextual background to the study. It mainly describes the evolution of ERM in the banking sector of Bangladesh. However, ERM in the banking sector is a culmination of various risk management initiatives taken by the central bank over the years since the emergence of the industry following numerous sectoral reforms. Thus, the evolution of ERM is drawn after a brief outline about the development trajectory of the sector, considering the main reform measures. In so doing, this chapter is structured into five sections. Section 4.1 provides a brief feature on Bangladesh as an emerging economy, followed by the financial architecture of the country in Section 4.2. Section 4.3 briefly outlines the development trajectory of the banking sector, followed by details of the evolution of ERM and its current state in Section 4.4. The chapter ends with a conclusion in Section 4.5.

4.1 Bangladesh: An Emerging Economy

Bangladesh is now considered one of the emerging economies in the South Asia region. The economy of the country is ranked in 43rd position among 205 economies all over the world, and the GDP was marked at $274.02 billion in 2018 (World Bank, 2019b). Bangladesh has achieved considerable success in its sustainable economic development and ensured real GDP growth of more than 6% on average every year during the period of 2006 to 2015 (Sinha, 2017). Per capita income is also growing steadily and reached $1716 in 2018 (World Bank, 2019b). Recently the country has graduated from the level of “low income” to the level of a “lower-middle-income” country. In the meantime, Bangladesh has set its vision on accelerating into the “middle-income” level by 2021 (Planning Commission, 2012). Besides, in March 2018, Bangladesh graduated from the status of “least-developed country (LDC)” to “developing country” after fulfilling the UN’s criteria, and will enjoy the full status by 2024 after attaining some other criteria. In addition, the country has also set its vision on accelerating into “developed country” by 2041.

Bangladesh is now a role model for sustained growth and development with its amazing achievements over the years, and the financial sector of the country has played a vital role in this progress. The economy of the country is highly dependent on the banking sector. It is the lifeblood of the Bangladesh economy. It helps to channel savings into investment in the economy, thereby supporting the sustainable growth of the country. However, the banking sector is under the financial sector of the country. The financial structure of the country and the place of the banking sector is described in the next section.

4.2 The Financial Structure of Bangladesh

The financial structure of Bangladesh can be classified into three broad sectors – formal, semi-formal and informal – based on the degree of regulation. The formal sector comprises of financial markets and all regulatory institutions. The banking industry belongs to this sector. The semi-formal sector includes specialised financial institutions that do not fall under the jurisdiction of the central bank, the Insurance Authority, the Securities and Exchange Commission or any other enacted financial regulator. The informal sector includes private intermediaries that are completely unregulated and sometimes engaged in financial transactions that are not legally permitted. A figure is provided below describing the financial system of the country.

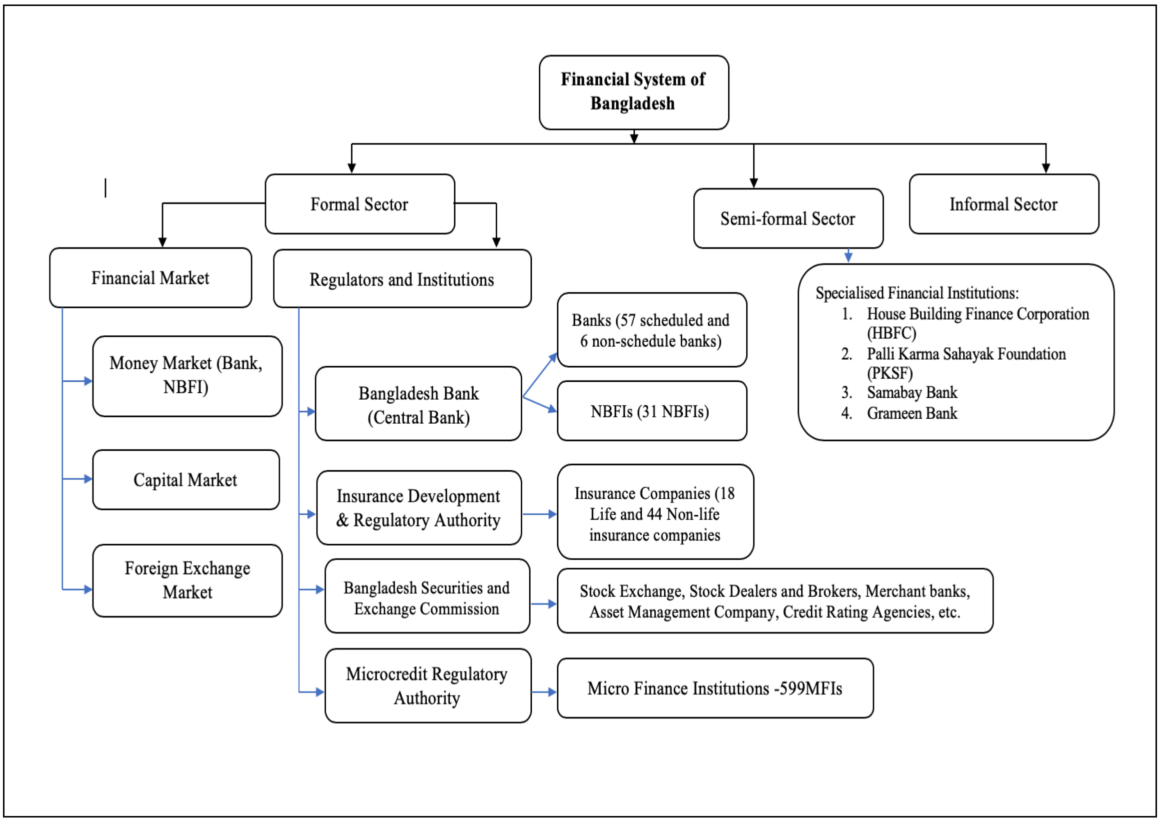

Figure 4. 1: Financial System of Bangladesh

(*Source: Bangladesh Bank Website, available at:* [*https://www.bb.org.bd/fnansys/*](https://www.bb.org.bd/fnansys/) *accessed on 20 December 2017.*)

The banking sector is regulated by the Bangladesh Bank (BB), which is the central bank of the country. The BB was established on 16 December 1971 through the enactment of the Bangladesh Bank Order, 1972, and the President's Order No. 127 of 1972 (amended in 2003). However, banks that are under direct control and supervision of the BB are called scheduled banks. Currently, 57 scheduled banks are operating in the economy. Details of these scheduled banks with essential classification are provided in Appendix A. The scheduled bank is the population of this study.

However, the development trajectory of the banking sector is essential to understand the evolution of risk management and its reform, because ERM has been evolved following the sectoral reforms and development over the years. Thus, the development trajectory of the banking sector is briefly outlined in the next section, highlighting the major reforms:

4.3 Development Trajectory of the Banking Sector in Bangladesh

Nationalisation

Soon after the independence of the country in 1971, the banking sector began its nationalisation policy. Banks operating in this region were restructured and nationalised (except branches of foreign banks) by the then government led by Sheikh Mujibur Rahman, who is crowned as the "Father of the Nation" in post-colonial Bangladesh (Mannan, 2011). Twelve banks operating in this country were nationalised and grouped into six commercial banks. Besides, two government-owned specialised banks were renamed. Hence, the banking industry in Bangladesh started its journey with six nationalised commercial banks, namely: Sonali, Pubali, Rupali, Agrani, Janata and Uttara banks, two state-owned specialised banks, namely: Bangladesh Shilpa Bank and Bangladesh Krishi Bank, and three foreign banks. The East Pakistan branch of the "State Bank of Pakistan" was converted into the country's central bank with the name "Bangladesh Bank" (BB) under the Bangladesh Bank Order, 1972 (P.O. 127 of 1972), with effect from 16 December 1971.

Ownership Reform and Privatisation

However, policy reform in the banking industry started in the early 1980s in line with the structural adjustment policies influenced by the WB and the IMF. A state of disarray in the banking sector and macro-economic instability created compelling domestic demand for initiating the "sectoral adjustment programme" by the government (Ali, 1994). Consequently, the development philosophy of the country changed from a controlled economy to a market-based economy (Huda, 1997; Mahmud *et al.*, 2008). This policy reform was pursued through diluting the shares of nationalised banks and encouraging private investment. Following this, the ownership reform was initiated in 1982 when two of the six nationalised commercial banks were denationalised and a few licences were awarded in the private sector (Ahmed, 2006).

However, the denationalisation and privatisation failed to create the desired impact due to a lack of the central bank's capacity in supervision and rigid economic regulation (Bhattacharya and Chowdhury, 2003). The economic regulations failed to achieve the objective of the government and monopolised the whole regulatory structure of the sector (Choudhury and Moral, 1999; Choudhury, 2012). In this condition, the government appointed a Commission titled as "National Commission on Money, Banking and Credit (NCMBC)" in 1986 to identify problems of the banking sector and policy recommendations for efficient management. Subsequently, the WB also conducted an in-depth study on the sector. Following the recommendations of the Commission and the WB, several reform measures were undertaken in the 1990s to bring back financial discipline and improve operational efficiency.

Market Economy and Reforms

At the beginning of the 1990s, financial sector reforms began intensively under the WB-assisted programme titled "Financial Sector Adjustment Credit (FSAC)". Mainly, the WB and the USAID provided the finance in this program, and the IMF provided the technical assistance subject to comply with various conditions (Siddiqui, 2010). Then, the government embarked on a "Financial Sector Reforms Programme (FSRP)" to assist in implementing reform measures, and this ended its activities in 1996.

Throughout the whole FSRP regime, the WB and the IMF came forward with many suggestions to bring a qualitative change in the financial sector, which includes interest rate liberalisation, implementation of capital adequacy requirements, introduction of new policies for loan classification and provisioning, discontinuation of directed credit and subsidies refinancing facilities, stringent regulations for bad debt and interest accrual, updating the accounting information system, revising the legal structure of the financial sector, strengthening the central bank's supervision and its automation, and adopting a market-oriented monetary policy, among the major ones (Huda, 1997; Raquib, 1999).

However, more emphasis was placed on economic deregulations under the FSRP rather than broadening prudential regulation and supervision (Choudhury, 2012). As such, the performance of the financial sector continued to deteriorate and inefficiency in management arose (Choudhury and Moral, 1999).

When the FSRP regime was approaching its end, the government formed a "Banking Reform Committee (BRC)" in 1996. After that, another project was installed under the title "Commercial Bank Restructuring Project (CBRP)" in 1997 with the finance by the WB. The committee put forward several policy recommendations and those of the BRC/CBRP were much better than those of the earlier FSRP (Choudhury and Moral, 1999).

Afterwards, the WB reinforced the reform programme by launching the "Financial Institutions Development Project (FIDP)" in February 2000, as per the "Development Credit Agreement (DCA)", which ended in February 2006. Likewise, the WB undertook a reform initiative called the "Central Bank Strengthening Project (CBSP)" in 2003 to put in place a strong and effective regulatory and supervisory system for the banking sector of the country. Subsequently, the WB installed another project for the banking sector in 2005 in the name of the "Enterprise Growth and Bank

Modernisation Project", to minimise losses and improve the soundness and efficiency of the SCBs. These reform measures helped the banking sector in bringing back under discipline.

Thus, the banking sector has progressed with the change of development philosophy, along with policy recommendations and assistance of donor agencies like the WB and the IMF. However, the evolution of risk management and the current state of ERM are the result of this sectoral progress. Thus, the development of ERM is enumerated in the next section.

4.4 The Evolution of ERM in the Banking Sector

ERM is a breakthrough in the banking sector of Bangladesh in risk management practice. Banks have already adopted ERM and are now practising it. Nevertheless, the sophistication of ERM did not evolve in the sector overnight. It has emerged following the progress and reform in the sector over the years since the emergence of the country. However, ERM is a regulatory initiative under risk management reform. The central bank (CB) mainly leads to the diffusion of ERM across banks. In light of that, the development route of ERM can be analysed from three types of regulatory initiatives over the years. The sophistication of ERM as of the present date is the result of the following three types of regulatory initiatives:

1. The policy guidelines and circulars for risk management;
2. The architectural development; and
3. The risk-based supervisory initiative and regulation.

4.4.1 The Policy Guidelines and Circulars for Risk Management

ERM has arrived in its current shape following policy guidelines and circulars in the area of risk management issued by the central bank from time to time. The central bank mainly directed the risk management practice in the industry, although it was influenced by the donor agencies under the sectoral development project. However, the major policy guidelines of risk management under the sectoral development are enumerated below.

Lending Risk Analysis (LRA) Manual in 1993

Until 1993, no formal directive regarding risk management practice was in place in the banking sector. The risk was mainly managed by putting the main focus on credit risk. As such, the risk management initiative began considering the management of credit risk in the industry. The BB, for the first time, introduced a uniform best practice to assess the creditworthiness of borrowers in the banking sector through the "Lending Risk Analysis" framework in 1993. Besides, banks were asked to follow the CIB (Credit Information Bureau) report for lending. However, this policy guideline was a result of the FSRP, which was initiated by the WB in 1992.

Risk-Based Capital Management and Basel Accord Since 1996

Risk management practice in the banking sector was geared up along with the implementation of risk-based capital maintenance following the Basel I framework. The BB decided to adopt "Risk-Based Capital Adequacy" for banks, in line with the capital adequacy framework devised by the Basel Committee on Banking Supervision (BCBS) under the "Basel I framework". After 1996, the banks of the country started to maintain risk-based capital at least 8% of the risk-weighted assets according to Basel I. Despite this, major emphasis was placed on credit risk in Basel I, and the market risk was accompanied in 1996, although the operational risk was ignored under this framework.

Afterwards, Basel II came into force in 1998, with a three-pillar concept consisting of minimum capital requirements, supervisory reviews and market discipline. The risk management practice speeded up with the development of the Basel II accord. Pillar 1 of the accord stipulated the minimum capital ratio considering the credit, market and operational risks. Pillar 2 dealt with the "Supervisory Review Process (SRP)", which made the framework very comprehensive by addressing the entire risk aspects of the bank, and Pillar 3 addressed market discipline, putting a focus on effective public disclosure. However, with the emergence of the Basel II accord, the CB revised the capital management requirements and provided a road map for fully implementing the Basel II framework from January 2009, in parallel with Basel I, and from January 2010 was in full swing. The compliance of Basel I and II highly emphasised on risk management practice in the banks.

However, the risk management practice has gained momentum with the adoption of the Basel III framework. After the global financial crisis, BCBS felt that the Basel II framework was inadequate. As a result, they developed the Basel III framework, where more emphasis was placed on integrated risk management practice. In line with the BCBS, the Bangladesh Bank has promulgated a circular on 18 December 2014 providing a road map of implementation of the Basel III framework starting from 1 January 2015, with full implementation from 1 January 2019. Thus, this regulatory initiative to comply with the Basel framework over the years highly influenced the emergence of ERM in the industry.

Core Risk Management Guidelines Since 2003

Until 2003, the risk management area of banks was underdeveloped. The WB also highlighted the weakness of risk management in their FSAP report in 2003. However, risk management practice was mainly confined to capital and credit management. Following the policy recommendations of the WB, the BB put significant effort into upgrading risk management practices of the sector by issuing several guidelines for risk management in core risk areas. In line with that, the BB identified five core areas of risk and issued core risk management guidelines in 2003 with a view to standardising the practice. The issuance of core risk management guidelines was considered as a breakthrough in risk management framework in the banking sector, although it was actually the result of the reform project commissioned under the WB entitled "Bangladesh Central Bank Strengthening Project" pursued in 2003. In the pursuance of this project, the BB formulated various prudential rules, regulations and guidelines, including the corporate governance guideline and the risk management guidelines for commercial banks.

The five "core risk" management areas include (i) credit risk management; (ii) asset liability/balance sheet risks management; (iii) foreign exchange risk management; (iv) internal control and compliance risk management; and (v) money laundering risk management. These guidelines laid out the policies, procedures, processes and structures of the core risks, although the BB revised all the core risk guidelines in 2016 and 2017 to strengthen the core risk management in banks.

In addition, the BB issued another core risk management guideline in 2005 on "information and communication technology (ICT)", although it was revised in 2010 and after that in 2015. Furthermore, a detailed guideline on "environmental risk management" was issued in 2011 to assess environmental risks, along with the environmental due diligence of borrowers before disbursement of loans. However, the areas of core risk are also integral parts of the ERM.

Credit Risk Grading Manual in 2005

Due to the limitations of lending risk analysis (LRA), the BB went on to further strengthen the credit risk assessment capacity of banks by imposing the credit risk grading manual in 2005 to determine the creditworthiness of borrowers. Credit risk grading is an important tool for credit risk management as it helps banks to understand the various dimensions of risk involved in different credit transactions. Actually, in January 2004, the BIBM was instructed by the governor of the BB to produce the "Credit Risk Grading Manual (CRGM)" based on the core risk management guideline, which was submitted by the BIBM in September 2004.

Stress Testing Guideline in 2010

According to Pillar 2 of the Basel framework, all banks require stress testing and should produce a report to the BB at regular intervals. Stress testing mainly includes sensitivity tests and scenario analysis. In order to strengthen the country's financial system, the BB has designed a stress testing framework for banks to manage risks proactively. For this purpose, and to ensure consistency, the BB has prepared a guideline for the banks. Afterwards, all banks have been advised to carry out the stress test as per the guideline on a half-yearly basis since June 2010.

Report of Minimum Capital Requirement (MCR)

Banks were also asked to prepare a report of the MCR under Pillar 1 of the Basel II accord. Under this report, credit, market and operational risks were considered when assessing minimum capital requirement. Banks were advised to maintain capital adequacy ratio (CAR) at least 10% of risk-weighted assets, with at least 5% in core capital. Preparation of this report emphasised on the area of risk management in banks. It is still mandatory under Basel III.

SREP Dialogue and ICAAP Report

Under Pillar 2 of Basel II, the BB framed a guideline for implementing the internal capital adequacy assessment process (ICAAP) and set a target to implement this within 2011. According to the ICAAP guidelines, a bank should have an internal team called an SRP (Supervisory Review Process), headed by the CEO. The main aim of the SRP is to reveal whether a bank has a prudential risk management system in place and sufficient capital to cover its own risk profile. After that, the BB evaluates the ICAAP report, which embodies the macro-economic scenario and the risk management strategy and recommends the bank's SRP team as part of the dialogue between the BB and the bank's SRP team. In May 2014, the BB issued the "revised process document for SRP-SREP dialogue on ICAAP" to facilitate the dialogue for the determination of the capital requirement under Pillar 2 of Basel II. Based on the revised process document and the prescribed reporting format, banks were advised to submit their quantitative information regarding the ICAAP from 31 December 2014 onwards, along with supplementary documents. Information of the banks' ICAAP is counter-checked with the information available from both onsite inspection and offsite supervisory departments of the central bank.

Enterprise-Wide Risk Management Guideline in 2012

The BB, a decade after the formulation of the six core risk management guidelines, introduced an integrated bank-wide risk management guideline in 2012 to further strengthen the risk management architecture of banks. This document promotes an integrated and bank-wide approach to risk management. The guideline encompasses common risks in the banking sector, including credit risk, market risk, liquidity risk, operational risk, and other residue risks, namely, compliance risk, strategic risk, money laundering risk, reputation risk, and many more, which were supplemented by the existing core risk management guidelines. The guideline also outlines the key issues regarding a sound risk management system, an independent risk management function headed by the CRO, an oversight role of senior management and the board, and the risk reporting systems for establishing enterprise-wide risk management culture in banks.

This guideline is a landmark in promoting the integrated risk management practice in banks. These guidelines are prepared in line with the internationally accepted risk management principles and the best practice guidelines. Besides, it is aligned with the Basel Framework of the BCBS. This guideline has emerged due to the influence of the BIS (Bank for International Settlement) on the BB.

The ERM Circular in 2015

The BB issued a circular on 9 September 2015 regarding ERM sophistication. As a result, ERM has come into existence formally and gained momentum in banks. The structural change, along with the communication hierarchy, was prescribed in this circular for ERM and soon after this, banks ensured this regulatory compliance. It is considered as the turning point of ERM in the banking sector of Bangladesh. The sophistication of ERM is formalised with this circular.

The Revised Risk Management Guidelines in 2018

To further strengthen the ERM practice across the banks in the industry, the CB has subsequently issued revised ERM guidelines in October 2018 by superseding the enterprise-wide risk management guideline of 2012 and the ERM circular of 2015. Although, most of the provisions of that circulars remain same in this updated version. However, among the mentionable changes, the BB has made some structural changes in RMD and explicitly define the role, responsibility and authority of the board, board risk management committee, RMD, CRO and management risk committee in terms of ERM in banks. The position of Head of RMD is abolished in this revised circular. Besides, banks are advised to submit a "risk management review report" by February following the end of each year with the approval of the board in addition to existing risk reports.

4.4.2 The Architectural Development

In line with the policy guidelines and circulars, the BB has also strengthened the architecture of risk management in banks. The architectural development of risk management assists in formalising ERM, and thereby ERM becomes visible. The major architectural developments in ERM are as follows.

Risk Management Unit and Risk Report in 2009

The structural development began in risk management when the BB instructed to establish a separate "Risk Management Unit (RMU)" in 2009. The BB prepared an organogram and prescribed the responsibilities of the RMU. The RMU was entrusted with developing the risk assessment policies, and with preparing the guidelines on risk identification, risk assessment, risk measurement and risk control for all major risks, such as credit risk, operational risks, market risk and liquidity risk. It was also responsible for ensuring compliance with the regulations. Besides, banks were instructed to arrange a meeting at least once a month covering strategies relating to management of risks, and also instructed to submit the minutes of the meetings to the BB on quarterly basis. In addition, banks were instructed to prepare risk management papers (RMPs) and place the same in their regular monthly meetings of the RMU, and submit the RMPs, along with the minutes of the meetings, to the BB within ten days from the end of the quarter. Although these instructions were at compliance level in that time.

Board Level Risk Management Committee

ERM is a top-down approach. The board is vital in the ERM process. They set the tone of the risk culture that prevails throughout the organisation and help to achieve the desired objectives, consistent with the goals of ERM. In this need, the Bank Companies Act was amended in 2013 with the regulation of having a risk management committee at board level. Guidelines are given regarding the formation, composition, eligibility, qualification and responsibilities of the committee. A board risk committee is one of the major components in the ERM architecture.

The ERM Structure in 2015

The architecture of ERM is formalised when the BB issued a circular for strengthening and updating existing risk management systems of banks in September 2015 (Bangladesh Bank, 2015a). It is the milestone to institutionalise ERM in the banking sector. With this circular, banks are instructed to establish a separate division for risk management under the title “Risk Management Division (RMD)”. The organisational hierarchy of the RMD, with eight separate desks, is also prescribed. It is also instructed to appoint a “Chief Risk Officer (CRO)” as the chief of the RMD from a senior management position (at least from the DMD/AMD level) who shall not be in charge of the internal control and compliance department.

In addition, the “Head of the RMD” is also instructed to appoint at least from the position of EVP/SVP/DGM/VP, with the individual having risk management experience following the CRO. Besides, a risk committee is instructed to be formed at the management level, chaired by the CRO. The Head of the RMD will act as member secretary of this committee. The Heads of the all functional divisions will be the members of this management committee. The RMD shall report to the Board’s risk management committee, with a copy to the CEO of the bank.

Revision of ERM Structure in 2018

Subsequently, the BB has revised the ERM guideline in October 2018 (Bangladesh Bank, 2018b). In the revised circular, the organogram of the RMD is restructured to some extent. Now, the CRO is instructed to act as the “Head of RMD”. Consequently, the position of the departmental head is now abolished in RMD. Besides, flexibility is given to banks to enhance the organogram of RMD in terms of establishing risk management desk considering the size and complexity of banks.

However, the present organisational structure of ERM is depicted below based on circulars in 2015 and 2018:

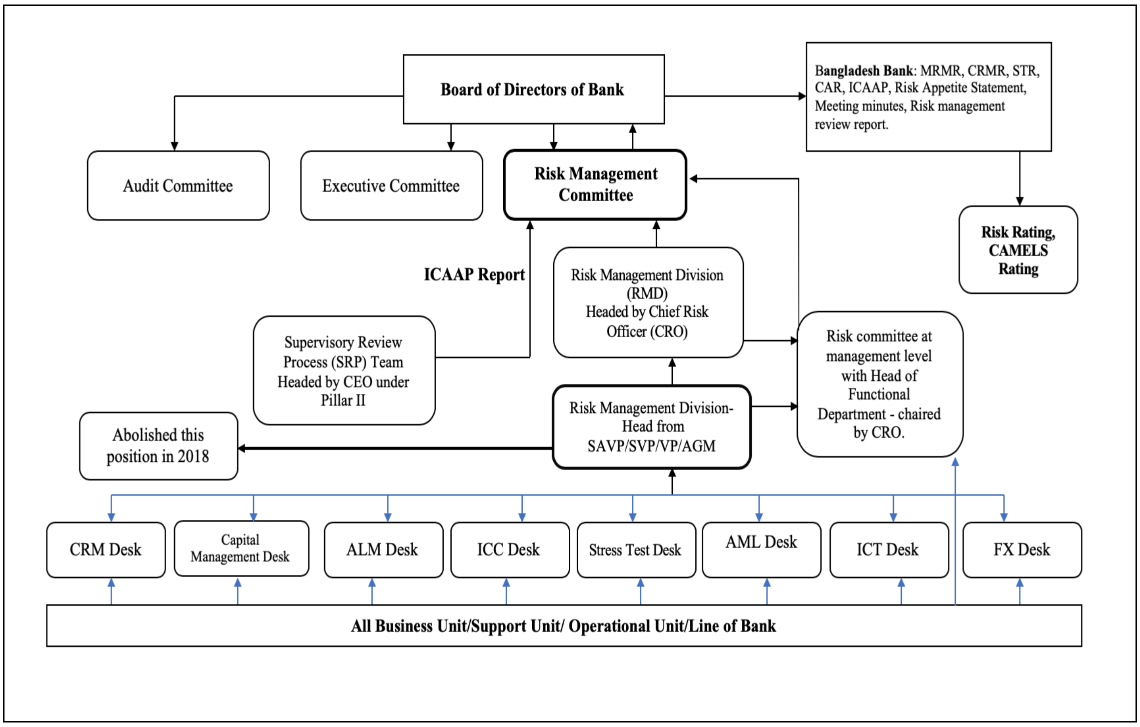

Figure 4. 2: Organisational Architecture of ERM in Banks

4.4.3 The Risk-Based Supervisory and Regulatory Initiatives

ERM in banks is also a result of the risk-based supervisory initiatives of BB. The BB has shifted from a compliance-based approach in supervision and regulation to a forward-looking risk-based approach. Part of that, the BB conducts two types of supervision activities, namely, offsite and onsite supervision. Details of the supervisory initiatives under these supervisions are narrated below.

Offsite Supervision

The department of offsite supervision (DOS) of the BB performs offsite supervision. The BB has recently formed six sections in the offsite division for supervision. The offsite supervision team plays an important role in evaluating the financial capabilities of a bank. Under offsite supervision, the BB introduces two risk-reporting formats in 2015, under the titles of "Comprehensive Risk Management Report (CRMR)", on a half-yearly basis, and the "Monthly Risk Management Report (MRMR)", to strengthen their risk-based supervisory approach. Every aspect of a bank needs to be included in the CRMR, and these reports are advised to be submitted to the BB within a stipulated time. Besides, banks are instructed to hold meetings of risk committees at management level once a month, and at board level at least once every quarter. It is also advised to submit the meeting minutes of those risk committees within a stipulated time.

Moreover, banks are instructed to prepare a "Risk Appetite Statement (RAS)" on an annual basis and submit this to the BB by the end of March every year. Besides, the BB issued a guideline for "Risk-Based Capital Adequacy", following the Basel III framework, to comply in a phased manner, beginning from January 2015, and instructed banks to submit risk-based capital adequacy reports in every month.

Furthermore, the BB developed a "risk rating" of individual bank on a half-yearly basis. The submitted risk reports, meeting minutes and other compliance documents are considered by the BB for determining the "risk rating". It carries 15% weight in the management component of "CAMELS rating". The BB takes necessary inspection measures for an individual bank based on this "CAMELS rating". Besides, certain regulatory approval, such as a branch licence, an AD licence or dividend payment, depends on the "risk rating" of an individual bank (Bangladesh Bank, 2015b). In addition, the BB has also started to assess the financial position of banks through the "Quick Review Report". Based on the findings of the DOS, the BB also appoints an observer in the board of the scheduled bank to monitor the practice, if needed.

Onsite Supervision

This department conducts a field-level inspection to scrutinise a bank's activities and compliance with regulations. Currently, seven departments of the BB are conducting field-level inspection activities. Inspection activities are conducted in three major areas:

(i) comprehensive/regular/traditional inspection; (ii) risk-based system check inspection; and (iii) special/surprise inspection. Individual banks having a CAMELS rating of between "3" and "5" are inspected every year. Banks rated "1" or "2" are inspected once in every two years. Onsite inspection of branches is also conducted based on probable weaknesses identified by the offsite department.

However, the evolution of ERM in the banking sector are summarised in Figure 4.3 and provided below:

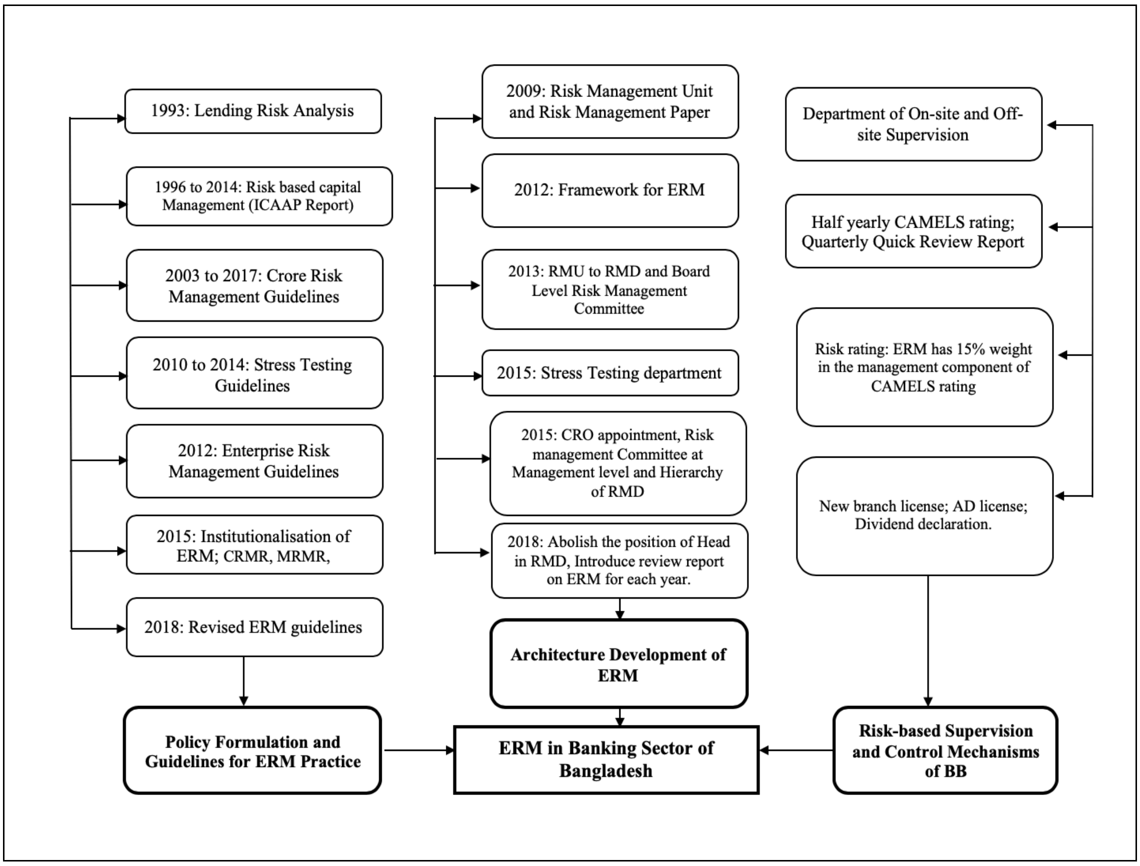

Figure 4. 3: The Evolution of ERM in the Banking Sector of Bangladesh

(Source: Developed by the author based on BB publications and circulars as of 31 December 2018.)

4.5 Conclusion

The evolution of ERM in the banking sector is the result of various reform initiatives that have taken place in the banking sector since the emergence of the country. The present sophistication of ERM is the culmination of diverse risk management initiatives that have been carried out over the years under various reform initiatives following the development philosophy of the country. Consequently, ERM in the banking sector has evolved as a regulatory-driven phenomenon. Various regulatory circulars over risk management, structural setup and change in the supervisory approach of the central bank have influenced the evolution of ERM and have brought the risk management practice at the present shape. Therefore, the development philosophy, sectoral reforms and evolution of ERM are interrelated. However, the evolution of ERM following the development philosophy and sectoral reforms are summarised in Figure 4.4:

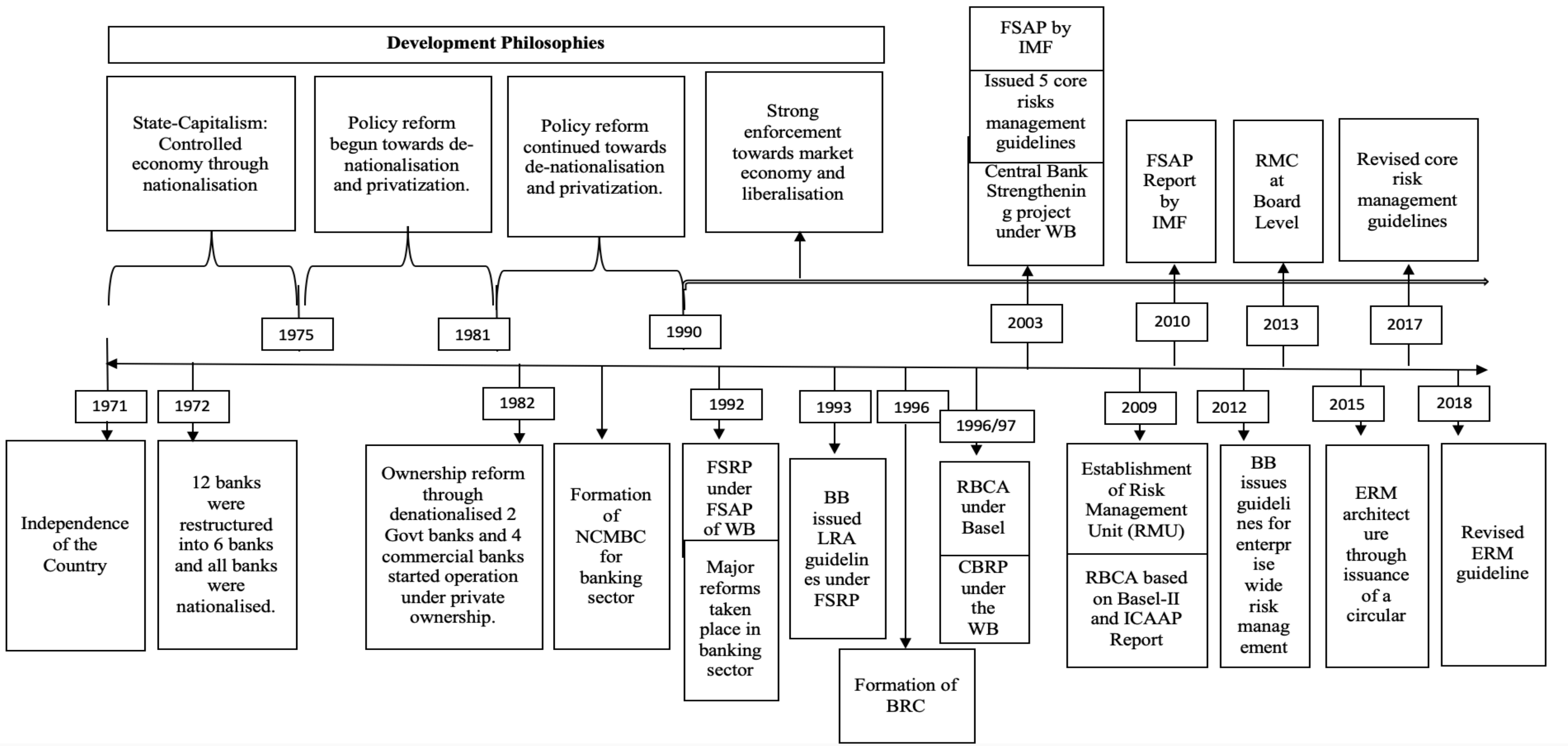

Figure 4. 4: The Development Trajectory of the Banking Sector and the Progress Towards the ERM

Chapter 5

Research Methodology

This chapter outlines the overall research approach of this study from the research paradigm to the data collection method, consideration, analysis and its interpretation to make sense of this research. It is organised into six sections. Section 5.1 is about the research paradigm of this study and its rationale. Data collection methods and considerations are discussed in detail in Section 5.2. Systematic data analysis is vital in qualitative research; hence, Section 5.3 is about the detail of this analysis to make sense of the data. Then, justifiability and reliability of the qualitative study and the ethical considerations are discussed in Sections 5.4 and 5.5 respectively. The chapter ends with a concluding remark in Section 5.6.

5.1 The Research Paradigm of this Study and its Rationale

This study adopts the "interpretivism" paradigm, considering the research aims and questions under investigation. This approach has been chosen because of the embedded assumptions of this paradigm about reality, the underlying approaches of knowledge construction and the methodological choice, which are consistent with addressing the research issues of this study. Although, the philosophical underpinnings of the "interpretivism" paradigm sharply contrast with the "mainstream" paradigm. Hence, it belongs to the "alternative stream" (Chua, 1986; Baker and Bettner, 1997; Baxter and Chua, 2003), although the critical approach also belongs to this stream (Alawattage *et al.*, 2017).

The main argument of "interpretivism" is that reality is constructed socially (Berger and Luckmann, 1966). It is constructed through people's experiences and interpretation. Therefore, ontologically, this research believes that there is no objective reality out there and the world is just the creation of human minds. It is also believed that reality is subjective and multiple; it does not exist. Consequently, there is no separation between the researcher and the phenomenon under investigation to draw the abstract reality (Corbetta, 2003). As a result, this research study has drawn on "constructionist ontology" and "interpretive epistemology" under the "interpretivism" paradigm.

As the aim of the study is to explore ERM phenomena in the banking sector based on the perception of actors, the use of the interpretive approach is highly suitable, because it attempts to describe, understand and interpret the meanings of actors (Baker and Bettner, 1997). Besides, qualitative methodology dominates in this paradigm. The main focus of the qualitative approach is to comprehend rather than generalise reality by using small and selected samples (Corbetta, 2003). Moreover, it is argued that the qualitative method is an umbrella term for several interpretive techniques that can be applied for describing, translating and analysing phenomena occurring in the social world (Covaleski and Dirsmith, 1990). Also, the qualitative approach provides closeness to the subject under investigation and assists in obtaining an in-depth understanding of participants' personal beliefs (Collis and Hussey, 2003). Drawing on the interpretive paradigm, this study has employed qualitative study at field level.

Furthermore, the use of the interpretive paradigm, the qualitative methodology and the field-level study of this research are consistent with the notion of institutional theory and the developed integrated theoretical framework (refer to Chapter 3 for detail). However, in designing this research study, the focus has been placed on the research objectives, the research philosophy in terms of ontology and epistemology, the qualitative methodology and the insight of the theoretical framework. This has helped to ensure the appropriateness of the chosen methods to address the research problems, because inappropriate matching of the methodology and the research problem may result a dubious outcome (Holden and Lynch, 2004). Sometimes, generated knowledge could be flawed if there is no consistency among ontology, epistemology and research methodology. Even practical application of such knowledge is unlikely to be effective.

5.2 Data Collection Methods and Considerations

Drawing on the insights of the "interpretivism" paradigm, this study employed semi-structured interviews as the main method for collecting qualitative data. Application of semi-structured interviews is suitable to get rich and in-depth qualitative data to explain the reality, because the research questions of this study begin with "how". The interviews were semi-structured, one-to-one and in-depth, which are widely used techniques to collect qualitative data (Mcintosh and Morse, 2015). This method provided ample opportunity to the researcher to talk with the interviewees in-depth and in detail to understand their views based on their experiences, expertise, norms and values regarding the ERM phenomena (Cridland *et al.*, 2016). Although there are some concerns regarding qualitative interviews as a method (Kvale, 1994), however, these were taken into consideration in designing, conducting, reporting and defending the qualitative interview as a research tool for this study. The interview is seen as a professional conversation in which knowledge is constructed through the interaction between the interviewer and the interviewee (Kvale and Brinkmann, 2009).

Besides, this study followed the "constructionist" conception of the interview, as suggested by Roulston (2010), in collecting data. This conception is different from the "neo-positivist" and "romantic" concept of the interview. Under the "constructionist" concept, the interviewer and interviewee co-construct data either in an unstructured or semi-structured way. Here, knowledge and reality are constructed socially during the interview process.

However, in addition to the primary data collected through the semi-structured interviews, secondary data was collected from the annual reports of sampled banks and the central bank (BB). Besides, internal risk policies, internal risk management reports, country reports of the development partners, circulars, guidelines and various research publications were also used to triangulate the interview evidence. Now, the details of the data collection considerations are narrated below.

5.2.1 Sample Selection and Interview Considerations

Prior to collecting qualitative data through in-depth interviews, several factors were considered in selecting sample banks, as well as targeted interviewees. The purposive sampling technique was followed in selecting the samples. Having said that, at first, a profile of the banks was developed by classifying them into various categories so that the samples could be representative to reflect the reality. All scheduled banks were classified based on essential features, namely: state-owned commercial bank (SCB), development financial institutions/government specialised bank (DFI), private commercial bank (PCB) and foreign commercial bank (FCB). Besides, generation wise banks were classified. In addition, listing feature and sharia-based banking feature were also taken into consideration in classification. Details of selection criteria, along with the names of the sampled banks, are enclosed in Appendix B.1. A total of 30 interviews were collected from 30 banks following the classification criteria.

In selecting the interviewees, the "Head of the RMD" of banks were purposively targeted, because RMD is now mandatory for every bank as per the regulation. This division is chaired by the CRO following a Head. It was noticed that all the banks had appointed CROs from the top-management positions, or at least from DMD/AMD levels, to remain compliant with the regulation. However, the position of the CRO becomes a ceremonial post. The fact is that banks cannot afford a dedicated CROs from the position of DMD/AMD level without having any business portfolio and generating any profit. In every bank, the DMD/AMD has a separate business portfolio. He/she has to look after his/her business target. As a result, conflict of interest arises between the CRO position and DMD/AMD position. The interviewees also acknowledged this reality. Therefore, the “Heads of the RMD” were purposively selected as the targeted interviewees. They are dedicated and experienced employees and have no conflict of interest with the business as they have no business portfolios. Thus, the Head of the RMD has no role conflict. They are experienced and much aware of ERM as a new phenomenon in the sector of Bangladesh. Details of the interviewees as “Head of the RMD” are attached in Appendix B.2.

However, after conducting 30 interviews from the banks, data saturation was found, and it was realised that there was less possibility to get new information (Fusch and Ness, 2015), although judgement and experience were used to conclude the interviews.

ERM is diffused in the sector through regulation. Therefore, it was vital to understand the perceptions and experiences of the regulators. As such, five interviews were conducted with employees of the central bank, those who were directly involved in ERM policymaking. In addition, two interviews were conducted with risk researchers of the BIBM, an institute related to bank management in the country. Therefore, a total of 37 interviews were gathered to understand the ERM phenomena under investigation.

5.2.2 Organisational Access for Interviews

Organisational access is a critical matter in qualitative research. Alexander and Smith (2018) find substantial limitations in describing organisational access in collecting qualitative data in research papers. Hence, organisational access management in collecting the interview data is described below.

To get access to the banks, the researcher took assistance from insiders and outsiders of those banks (Alexander and Smith, 2018). A good number of university friends of the researcher are now working in the banking sector. Most of them started their banking careers soon after their graduations in 2006 from the University of Dhaka. A few of them are now even working in the RMDs of banks. At first, the researcher communicated with his friends over the telephone – those who are working in banks – and asked for help in managing the organisational access for interviews.

Besides, the ERM phenomenon was discussed with some other friends informally – those who were working in RMDs – to understand the real scenario in the industry, because this was also relatively new to the researcher. This free and frank informal discussion helped the researcher to be more acquainted about the phenomena and become more prepared to conduct the interviews. However, friends of the researcher helped to manage access to 11 banks to conduct interviews.

On the other hand, the researcher had a privilege to manage access to the banks being a professional chartered accountant (CA). A lot of chartered accountants are working in the banking sector as CFOs. Even a few CAs are working as Head of RMD in banks. The researcher collected the member's list booklet from the Institute of Chartered Accountants of Bangladesh (ICAB). In that booklet, the names of the bankers were listed, along with their phone numbers. Then they were contacted over the phone. Knowing the researcher as a professional colleague and a PhD researcher, they spontaneously did their level best to manage the interviews of the targeted interviewees. These colleagues helped to manage a total of 15 interviews. In addition, the snowball sampling technique was used to manage access for interviews. The Heads of the RMDs were sometimes aware of their counterparts in other banks. On request, they helped the researcher to collect four interviews.

However, it was not easy to manage access for interviews in the central bank as the entrance is very restricted. An “access pass” is required to gain admission into the BB. With the “access pass” and after the “security clearance”, one can gain entrance into the BB. However, a friend of the researcher, working in the post of joint director in the BB, helped to manage access for all five interviews. He was very aware of those who involved in risk management policy reform, and he helped the researcher to find the targeted interviewees. Furthermore, some senior professors and the dean of the researcher’s faculty also helped to manage access to the targeted interviewees at the BIBM.

A diary was maintained to follow up the interviewees and to keep track of their appointments. There was no mentionable difficulty faced in managing access to the banks. Despite this, sometimes it took a long time to book the appointments of the targeted interviewees after their assurance. Follow-up was required several times to get the appointment.

The RMD of a bank is usually located at the Head Office. The Head Offices of all the banks are located either in Motijheel or in Gulshan area, which is within a five-mile radius. Besides, the central bank is also located in the Motijheel area. Therefore, a dedicated office room was managed in business office of a professional colleague of the researcher in the Motijheel area without any cost. This was very useful to follow up the appointments, to arrive in the banks for the interviews on time and to transcribe the data, because the researcher stayed outside of Dhaka during the data collection period.

5.2.3 Conducting Interviews and Collecting Data

In a qualitative study, interviewing is an art of hearing to gather qualitative data from interviewees (Rubin and Rubin, 2005). Necessary training and knowledge are essential for crafting and conducting interviews. The success of interviews depends on careful planning for conducting them, designing and asking interview questions, and establishing a rapport with interviewees. Having said that, the necessary knowledge and skill were developed by the researcher regarding qualitative interviewing before the collection of interview data. Coursework, particularly the module "BE 959: Advanced Research Methods", helped the researcher to be aware of the interview as a method of data collection and its process.

Besides, the researcher attended day-long training programmes on qualitative interviewing both at the University of Surrey and the University of Essex. Moreover, reading the literature on qualitative interviews (e.g. Doody and Noonan, 2013; Rowley, 2012; Rabionet, 2011; Ryan *et al.*, 2009; Myers and Newman, 2007; Qu and Dumay, 2011) also helped the researcher to make necessary preparations for conducting interviews, designing interview questions, addressing practical challenges and many more, albite theoretically.

Furthermore, the philosophical underpinning of the research, i.e. the interpretive epistemological approach, also influenced designing, developing and asking the interview questions (Rubin and Rubin, 2005; Roulston, 2012). The qualitative interview does not lead to objective and scientific knowledge on epistemological grounds (Kvale, 1994). Therefore, the constructionist paradigm and insight of the integrated theoretical framework influenced in shaping of the interview questions and gained in-depth understanding regarding ERM phenomena. Following this paradigm, the researcher tried to elicit the view of risk managers towards ERM phenomena based on their experience and knowledge. Although it may be argued that there is no correct way to conduct an interview. The interviewer must have a sound and well-considered philosophical underpinning for the style he or she adopts. However, the researcher was aware of the danger of excessive rapport (Spencer *et al.*, 2004; Parker, 2012).

The interview questions and consent form were sent to all the interviewees well in advance via email so that they became aware of the research project, the questions and the expected timeframe of the interview. In conducting the interviews, semi-structured interview questions were used, which included pre-determined questions focusing on the research problems (Ryan *et al.*, 2009; Doody and Noonan, 2013), with opportunities to ask supplementary questions for clarification. The interviews began using the main questions followed by the follow-up questions, although the limitations of the semi-structured interview were taken into consideration.

However, the researcher modified the interview questions after conducting five interviews. Soon after completing the five interviews, the researcher analysed them manually and modified the interview questions, intending to collect rich and in-depth information to address the research questions following the theoretical lens, because the accuracy and rigour of data collected from interviews depend on well-designed interview questions and a consistent approach in conducting the interview. Samples of the interview questions, both for the Head of the RMD and the regulators/researchers, are annexed as Appendices C.1 and C.2 respectively.

All the interviews were one-to-one and in-depth, which provided insight into the interviewees' attitudes, experiences and perspectives. It is considered a useful data gathering tool in qualitative research (Ryan *et al.,* 2009). However, interviews were conducted at the offices of the respective interviewees, although all the interviewees were allowed to choose the venues when their appointments were taken. Nonetheless, all of them preferred to be in their respective offices. Although Cridland *et al.* (2016) recommend not to conduct an interview at home or an office as circumstances may interrupt the process. Despite, there was not enough choice to select the venue and invite the interviewees. Hitherto, the interviews were conducted at private desks of the interviewees in their offices in a quiet area, although a few interruptions were experienced while conducting interviews due to attending to personal or intercom calls.

On the other hand, all the interviews were duly recorded by an audiotape recorder. Detail of the interview recording is provided in Appendix B.2. It was recorded for the convenience of data documentation, transcription and analysis. Recording of the interviews ensured data validity and reliability. Moreover, it helped in conducting the interviews effectively, putting a due focus on the desired area, although there are some concerns regarding the use of a tape recorder in the interview process (Rubin and Rubin, 2005). However, Ryan *et al.* (2009) highlight the importance of getting a verbatim account of an interview for analysing data. As there were no confidential or sensitive issues in the interview questions, the researcher was able to convince all the participants to record the full interview discussions.

Due permission was taken from all of the participants before recording. Besides, the interviewee and interviewer signed two sets of consent forms. One set was provided to the participant for formal assurance as to use the recorded data anonymously and confidentially. The other set was preserved by the researcher as formal evidence. The participant information sheet and a scanned copy of the signed consent form are annexed herewith as Appendix D and Appendix G respectively.

As soon as finished an interview, it was transferred from the tape recorder to a personal laptop and deleted from the recorder. Every time, the researcher went to the interviewee's office with a blank tape recorder. However, the laptop and the interview folder remained password protected.

In addition to qualitative interview data, secondary data was gathered from annual reports of the sampled banks, annual reports of the central bank, published circulars, monthly and half-yearly risk management reports, internal risk management reports, publications and reports of the developing partners of the country, banking laws and regulations, international regulations in the financial sector, published articles on the banking sector, website data of various organisations and many more. It also helped to understand the ERM phenomena and triangulate the interview evidence.

5.3 Making Sense of the Interview Data

In the qualitative research process, one of the most critical steps is data analysis, i.e. making sense of data (Leech and Onwuegbuzie, 2007). Qualitative data analysis is not as conventional as in the case of quantitative research because there is no universal recipe for data analysis in the qualitative interview (Cresswell, 2007). Qualitative data analysis is argued to be pragmatic rather than perceptive because it deals with meaning. It depends on the research perspectives and purposes. Various preoccupations of the researcher may lead to emphasis on different aspects of analysis. Despite this, academic researchers have attempted to suggest a diverse array of qualitative data analysis techniques (Leech and Onwuegbuzie, 2007). Therefore, Burnard (1991) urges researchers to be systematic in data analysis in qualitative research and advises to be open to difficulties of the task of understanding the perception of interviewees.

Similarly, Lathlean (2006) also argues that the qualitative data analysing process is not linear, and it is influenced by the research aims and the theoretical and methodological underpinnings of the study. Therefore, she suggests following a systematic and rigorous process in data analysis to ensure data quality and reliability. A systematic approach helps to arrive at the shore from adrift in a sea of interview data and assists to bridge the gap between the research question and raw data. Besides, systematic analysis of data helps to reduce the volume of data and entails the development of a theme and sub-theme, which ultimately helps to construct a new theory or extend an existing theory (Auerbach and Silverstein, 2003). However, academic researchers provide various criteria and checklists for systematic qualitative data analysis to make sense of qualitative data (e.g. see Silverman, 2001; Braun and Clarke, 2006).

Hence, analysis of qualitative data remains a thorny one. Therefore, academic researchers have attempted to propose different stages, steps and phases for systematic analysis of qualitative data. For instance, Burnard (1991) outlines 14 integrated stages for analysing qualitative data, whereas, Miles and Huberman (1994) identify three activities involved in data analysis, such as data reduction, data display and verification. On the other hand, Auerbach and Silverstein (2003) suggest a six-step mechanism for coding to transform raw data into a theoretical narrative. Furthermore, Braun and Clarke (2006) provide six phases of guidelines as part of a systematic analysis for thematic analysis. Considering all these steps and phases, four phases were followed for analysing the qualitative data systematically: data familiarisation and management, data reduction and initial code development, initial code organisation and primary theme development and theme refinement and data set preparation. These step-by-step phases were used to transfer the raw interview data into a theoretical narrative. Details of the data analysis are narrated below.

Phase 1: Data Familiarisation and Management

Data familiarisation is argued the key phase of data analysis in qualitative interpretive methodology. In view of that, the researcher personally collected all the interview data during the period from April 2017 to August 2017. As a result, it helped to get familiar with the nature and depth of the data. Data familiarity helped to identify repeating ideas from the interviews, which make more sense of repeating code under a suitable theme. It also helped to visualise the data, key themes of the interviews, main perspectives and much more, which influenced the development of initial codes and primary themes. It ultimately influenced the development of the narrative of reality, following the theoretical lens.

All the interviews were conducted using both local language (Bangla) and English. An opportunity was given to the participants to choose the mode of discussion. It was found that interviewees felt comfortable in describing ERM phenomena in their local language. They were free and frank in the discussion. However, all the interviews were recorded by a tape recorder and all of them, thereafter, transcribed as verbatim, because a verbatim account of interview discussion suits the purpose of data analysis. Besides, the process of transcription of the interviews as verbatim helped to familiarise with the data in an informed way.

The researcher started to type the conversations as verbatim after conducting three interviews. Soon after the initiative to type, the researcher realised that it would not be possible by himself to complete the transcription within the period of data collection as he planned. After discussing this fact with one of his colleagues in Bangladesh, the researcher came to know about an expert who was professional in typing in Bangla and English. After negotiation, the professional typist agreed on Tk. 25 (around 25 cents) per minute for interview transcription. As per the agreement, the professional typist came to the office of the researcher and did his job. He was not allowed to bring any flash drive. Besides, an undertaking was taken from him not to disclose any interview information to others.

However, the professional typist provided the transcripts of unorganised data. The typist was not aware of the flow of data, formatting of the interview dialogue and the use of punctuation. Therefore, as soon as he finished his typing, the researcher reviewed the transcript thoroughly and formatted them accordingly as verbatim. The transcription process profoundly helped the researcher to be very close with the collected data and visualising the reality focusing on the research questions. This familiarising process also assisted in conducting the interviews efficiently and effectively.

After completing the transcription as verbatim, a printout was taken in hard copy as evidence. To ensure the anonymity of the interviewees, a pseudo-code was used in data analysis. For example, the interviews from banks were tagged as “SB”. The interviews from the regulators were marked as “RG”, and the interviews from the research institute were coded as “BIBM”. After using anonymous code, all the verbatim transcripts were kept in a folder of PDF files, which was used for data analysis through NVivo software version 11. An excerpt of a verbatim interview in NVivo is annexed as Appendix E.1.

Phase 2: Data Reduction and Developing Initial Code

In analysing the raw data, the researcher followed the coding procedures using NVivo 11. Coding helped to process and organise the raw data into a meaningful theme. However, the coding process is not a linear movement from raw data into the theoretical interpretation. It could be said that the coding process was the most labour-intensive and challenging part of this research process. The researcher spent around five months in data analysing and coding. A two-day training was also taken on using NVivo in qualitative data analysis at the University of Essex before embarking on data analysis.

However, in developing the preliminary code, the "Thematic Approach (TA)" was followed, which is considered as a foundation method of qualitative data analysis. The TA is useful for analysing a diverse form of qualitative data. This approach can provide a rich and detailed account of the data (Braun and Clarke, 2006). However, the TA is not independent of theory and epistemology. The outcome of the TA depends on the epistemological position of the study. The thematic analysis of this study was compatible with the constructionist philosophy of this study and influenced by the theoretical proposition of this research. The TA helped to make sense of the data, its analysis and interpretation. Besides, the TA is suitable for "top-down" data analysis and useful in applying a "semantic approach" in identifying the themes, following the explicit and surface meaning of the data (Braun and Clarke, 2006).

Upon returning to the UK after data collection from Bangladesh, the researcher dedicatedly involved himself in the data analysis process. Each transcript was analysed separately and tried to identify the probable codes as much as possible using NVivo. In identifying the probable codes under the thematic analysis, a "top-down" approach (Auerbach and Silverstein, 2003), which is considered as a theoretical or deductive approach of data analysis, was used.

However, a data analysing framework was developed in NVivo using nodes and sub-nodes following the theoretical constructs of the integrated theoretical framework and the research questions. For instance, a framework was developed in NVivo considering theoretical constructs, like coercive, mimetic and normative pressure, contextual factors, precipitating factors and enabling factors, to identify the institutional factors influencing ERM diffusion and external and internal dynamics. An excerpt of the data coding framework in NVivo is annexed herewith as Appendix E.2.

Although coding of relevant text is a subjective matter (Auerbach and Silverstein, 2003), familiarity with the data, research questions and the theoretical framework helped to apply subjective judgement to identify the relevant text for coding. The whole interview transcription was read and listened to simultaneously to generate the codes as much as possible after identifying the relevant text. The focus was placed on explicit and surface meanings of the data in coding, following the semantic approach (Braun and Clarke, 2006).

Phase 3: Initial Code Organisation and Primary Theme Development

Braun and Clarke (2006) mention that a theme is something that captures important things from the data to address the research question. After finishing the coding of all the transcripts, the repetitive code was combined in NVivo. Then, the initial theme was developed following the codes that fit into the theoretical construct. For example, all the relevant codes and texts under "regulatory enforcement" were put together for developing this theme as a diffusion factor. However, primary themes were developed through a repetitive review of the coded data in NVivo. Themes were tried to be discovered as much as possible in this stage.

Phase 4: Refining the Themes and Preparation of Data Set

In this phase, initial themes were refined after reviewing again and again and put into a manageable size. Theoretical frameworks influenced the refining of initial themes through including and excluding and helped to identify the reality. The refined themes were used to demonstrate the reality of the phenomena and address the research questions.

After refining the initial themes, a data set was developed for the respective area of research in Word files, with the quotations of the interviewees as verbatim. An excerpt of the refined data set for the first research question as verbatim is annexed as Appendix E.3.

However, a difficulty was faced in exporting the data set from NVivo into a Word file due to having an inherent limitation in the software. Data was coded as verbatim into the software using a PDF file, and thereafter, suitable themes were developed. But the data became ineligible when exporting the relevant text into a Word file because NVivo could not export Bangla language into a Word file. Therefore, the data set was prepared manually in the Word file following the quotation link in NVivo, which was also a time-consuming task.

After developing the data set manually as verbatim in the Word files, the relevant quotations were translated into English. However, the researcher was aware of the interview dialogues, which helped him to translate the required text into English without changing the quotation meaning or deviating from the perspectives as narrated. This data set helped to develop the theoretical narrative to explain the reality of the ERM phenomena under investigation. Besides, documentary evidence was analysed manually, which helped to triangulate the interview findings.

5.4 Convincing the Other People: Justifiability and Transferability

Qualitative research is not an area in which anything can happen (Auerbach and Silverstein, 2003). Thus, this research takes into account the subjectivity, interpretations and the context of the study, despite standards exist to evaluate the quality of the qualitative investigation. Auerbach and Silverstein (2003) suggest justifiability and transferability as alternative thoughts to the reliability, validity and generalisability of the quantitative research to convince the other people. Reliability, validity and generalisability are usually related to quantitative research. Besides, Lukka and Modell (2010) also advise to consider the validation matter seriously in qualitative research.

In quantitative research, reliability and validity are established through statistical measures due to them having objectivity features. Subjectivity is absent in the quantitative approach. Hence, the statistical scale of measurement helps to establish the reliability and validity of quantitative research. In addition, a representative sample in quantitative research helps to ensure the generalisability of the findings.

Despite this, "justifiability" can be used in qualitative research as an alternative to "reliability and validity" to convince people. Rubin and Rubin (1995) argued that justifiability in qualitative research could be ensured through transparency, communicability and coherence. These criteria help to check the biases of the researcher and make sense of the interpretation for the other people (Auerbach and Silverstein, 2003).

Data analysis should be transparent to justify the qualitative research so that other researchers can know the sequential steps that need to be followed to arrive at the interpretation. Therefore, the researcher attempted to make the data collection and analysis transparent so that the reader could be able to understand the data collection considerations, access management and the systematic data analysis procedures to make them sense for the interpretation. Besides, understandability of the research to other people ensures communicability and applicability of the findings. It means that research themes and constructs are understood by other people, and it makes sense. To ensure coherence, theoretical constructs are fitted together and used to tell a coherent story following the data.

On the other hand, “transferability”, as an alternative to “generalisability”, is also assessed in qualitative research. Transferability is ensured through investigating the sample by using the existing construct of the theory (Auerbach and Silverstein, 2003). The transferability is ensured in the qualitative study with the focus on theoretical generalisation.

5.5 Ethical Considerations of this Research

Ethical consideration is vital in academic research. It helps to ensure that research is conducted ethically and does not have any adverse consequence to the participants (Berry and Otley, 2004). Keeping this fact in mind, this research followed the ethical guidelines of the Essex Business School. Ethical approval was taken from the ethics committee before conducting the interviews. A copy of ethical approval is annexed in Appendix F.

While collecting the interview data, the necessary precautions were taken to ensure research ethics. A consent form was sent to every participant, along with interview questions, at the time of making the interview appointments. Besides, at the beginning of the interview, the purpose of the research, objectives and potential benefits were explained. In addition, due permission was taken before recording the interviews and anonymity was ensured when using the interview data. Above all, a signed consent form was taken from all participants, which secured effective co-operation between the researcher and the participants. A scanned copy of a signed consent form is annexed in Appendix G. The anonymity of the interviewees was ensured while analysing the interview data.

In addition, necessary measures have been taken to ensure data security and confidentiality. Interview data was stored in an encrypted file with password protection in a laptop. An encrypted external hard drive was maintained for external backup of data. Besides, an undertaking was taken from the professional typist on the grounds of confidentially of data, in addition to necessary precautionary measures. The hard copy of all the interview transcript was kept under a locked drawer.

5.6 Conclusion

This study adopts the "interpretivism" paradigm to investigate the ERM phenomenon in the banking sector. Following this paradigm, the research believes in the constructionist ontology and interpretivism epistemology, which is also consistent with the ontology and epistemology of the developed integrated theoretical framework. Following this, the interview was used as the main method of collecting qualitative data. Triangulation of data was established through secondary information. In systematic data analysis, the top-down approach was followed based on the constructs of the theoretical framework. A coding procedure was used in data analysis based on the thematic approach. In coding, the semantic approach was followed. A data set was prepared based on the thematic approach for a theoretical narrative.

Chapter 6

Diffusion of ERM Under Regulatory Environment

This chapter aims to provide an account of how ERM diffuses in the banking sector under the regulatory environment. In order to achieve this aim, this chapter is organised into three sections. Section 6.1 documents the ERM diffusion factors that have explored drawing on Abrahamson's (1991) typology. Likewise, the nature of the influence of those factors in ERM diffusion is also described in this part. Based on empirical evidence, Section 6.2 demonstrates the reality of ERM diffusion under the regulatory environment in the banking sector of Bangladesh. After summarising, this chapter ends with a conclusion in Section 6.3.

6.1 ERM Diffusion Factors and their Nature

Drawing on Abrahamson's (1991) typology, this study investigated the factors that drive to diffuse the ERM in the banking sector under a regulatory environment. The antecedents and their intensity of pressure are captured through forced-selection, efficient-choice, fashion and fad perspectives of the typology. The theoretical lens of this framework aided to explore a range of factors, including the regulation, that led to diffuse a management control innovation i.e., ERM in an organisations field.

6.1.1 Diffusion Factors Under Forced-Selection Perspective

Under the forced-selection perspective, it is assumed that the diffusion factor of innovation lies outside of the organisations. Powerful interest groups exert coercive power to diffuse an innovation in the organisational group directly and indirectly. Here, organisations have no choice, and their motives do not play any role in accepting or rejecting such innovation. Drawing on this perspective, a range of diffusion factors are identified that exerted direct and indirect pressure on the banking sector in ERM diffusion.

It is evidenced that the central bank and its ERM regulation, BASEL Framework, foreign counterparty, international and local credit rating agencies, development partners of the country and the disclosure requirements directly enforced the banks in ERM diffusion. Besides, the contextual factors from industry and country context indirectly enforced the ERM diffusion.

A. Direct Diffusion Factors

At first, the central bank, i.e. the Bangladesh Bank (BB) and its regulatory requirements. All the interviewees unanimously agreed that ERM is an externally driven phenomenon in the industry, and it is a result of the compulsory regulation of the CB. One of the interviewees asserted that the feeling of the integrated approach of risk management first came in the mind of the regulator because they know the industry very well. Stressing on this point, another interviewee said:

> *Only one stakeholder is responsible for the implementation of ERM. It is the Regulator. No one pays attention to it. Only the regulator wanted a strong risk management base in the industry. (SB-15)*

Likewise, another interviewee quoted:

> *It [ERM] is a top-down approach for us in the industry, as the regulator has disseminated it. It is externally driven. (SB-11)*

In describing the influence of the regulator, the interviewees cited the sophistication of ERM, which is prescribed by the BB and also mentioned their "risk-based" supervisory initiative. The interviewees stated that every bank requires to submit the risk reports to the BB in a prescribed form, including the meeting minutes of the risk committees within a stipulated time. Besides, they said that the submission of these risk reports and the meeting minutes are the part of "risk-based" supervision of the BB.

The interviewees also indicated the "risk rating" methodology of the BB under the "risk-based" regulatory approach as a factor to adopt ERM. They said that the BB determines the "risk rating" for every individual bank on a half-yearly basis as a part of their "risk-based" supervisory approach, which is very significant. They stated that regulatory approval on certain issues like a new branch opening, new AD license and dividend declaration of any bank depends on that "risk rating". Besides, the interviewees highlighted the relationship between the "risk rating" and the "CAMELS rating". They also mentioned that the BB takes necessary supervisory measures for an individual bank based on the outcome of the "risk rating" as well as the "CAMELS rating". To signify the ERM regulations, two interviewees quoted:

> *There is a "risk rating" in our banking sector, which is called comprehensive risk rating by considering many components of a bank. If the risk rating is low, then the fundamentals of a bank are considered good. It is very confidential. BB does not disclose it to the public. (SB-18)*

> *We can avail some benefits provided by the Bangladesh Bank if our "risk rating" and "CAMELS rating" are excellent. We can apply for branch expansion, AD license and can declare dividend. (SB-10)*

However, all the interviewees surprisingly strongly argued in favour of the central bank's ERM regulation. By supporting the regulatory initiatives of the BB, one interviewee claimed that ERM could not be diffused in the industry without compulsory regulation. Likewise, several interviewees highlighted the culture of the industry and the intention of the industry people to support the mandatory regulation. One of the interviewees opined:

Actually, in Bangladesh, nothing happens without regulatory pressure. It is our culture. We become serious about implementing something when there is a pressure. Now, our Board and Management are much concerned due to regulatory pressure. (SB-9)

Conversely, several interviewees believed that the BB is influenced by the global financial regulators and the development partners to initiate the ERM regulation. For instance, one interviewee pronounced:

Bangladesh Bank is influenced by the BIS [Bank for International Settlement]. The office of the Basel Committee is in Switzerland. The standards are spreading all over the world, including Bangladesh. In that sense, Bangladesh is not out of that global part. As such, Bangladesh had to adopt and implement those regulations. (SB-8)

Overall, the evidence showed that ERM is perceived as a regulatory-driven phenomenon in the industry. Regulation is the leading diffusion factor of ERM. Therefore, the diffusion of ERM has been fuelled in the industry. This regulatory-driven perception of ERM is consistent with the claim forwarded by Khan *et al.* (2016) and Lechner and Gatzert (2018). They also acknowledge that ERM is a regulatory-driven phenomenon. Besides, the influence of regulation in ERM adoption is also documented by Colquitt *et al.* (1999), Liebenberg and Hoyt (2003), Lam (2006), Acharyya (2008) and Hoyt and Liebenberg (2011). Thus, regulation is a well-established diffusion factor of ERM.

However, it is revealed that the BB's prescription for ERM sophistication and their "risk-based" supervisory approach mainly enforced in ERM diffusion in the sector. The BB has promulgated a circular by prescribing the ERM sophistication to strengthen the risk management practice for the banks. Simultaneously, the BB has taken a "risk-based" supervisory approach. In addition, under the "risk-based" supervisory approach, the BB prepares the "risk rating" and the "CAMELS rating" for every individual bank and takes necessary regulatory and inspection measures.

Thus, the central bank following the ERM sophistication and the "risk-based" regulatory approach has enforced the banks to adopt ERM. Consequently, banks have adopted a homogeneous risk management practice across the industry. Lundqvist (2015) also indicates that the regulator is pushing for the ERM in the industry. The evidence of this study is also consistent with her indication.

However, surprisingly most of the interviewees are in favour of this compulsory regulation. They expressed their deep concerns regarding the diffusion of ERM without compulsory regulation. Highlighting the culture, norms and practice of the industry, the interviewees argued that diffusion of the ERM could not be possible without the regulatory initiative. They said that industry people are reluctant to initiate and accept any change without regulation. Moreover, they believed in ERM for the sustainability of the banking sector and to achieve the economic visions of the country. To support the ERM regulation, one of the interviewees argued in the following way:

> *[…] of course! Regulation is mandatorily required for ERM. Because we are still a third world country. We are moving from a developing to a developed economy. When you become developed, you have to comply with international rules and regulations. There is no scope to give it up […] I have to ensure compliance for the sustainability of the industry. (SB-5)*

The interviewee also quoted:

> *Risk- based regulation of the central bank is a blessing for us. It is not possible to implement this kind of practice [ERM] without the intervention of the Bangladesh Bank. It is not possible on my part solely to let the stakeholders understand. Due to regulation, it becomes easy to convince the Board and Top Management. If we don't get this cushion, it would be tough to implement ERM. (SB-5)*

Secondly, the BASEL-III framework. All the interviewees highlighted the Basel-III framework as an important diffusion factor of ERM. They claimed that the requirements of the Basel framework compelled the industry to adopt ERM. One of the interviewees believed that the Basel framework is a complete risk management structure for a bank. Another interviewee mentioned that there is no scope to look into the credit risk on a stand-alone basis under the Basel-III framework. Thereby, operational risk, market risks and most importantly, the liquidity risk come under a holistic focus in the Basel framework. However, one interviewee asserted:

> *Actually, risk management itself part of BASEL. Basel-III talks about integrated risk management. Before that risk was managed individually. So, Basel Committee promulgated this idea. It [ERM] is a by-product of Basel. Without Basel-III, you cannot imagine the risk management practice. (SB-1)*

In explaining the need for ERM under the Basel framework, the interviewees pointed out several requirements of the framework. They highlighted the requirement of risk-based capital maintenance, which is one of the most important provisions. Besides, they stressed on the requirement of quality of the capital, non-risk-based leverage ratio, the SRP and ICAAP documentation under this framework. These requirements have mandated to adopt ERM in the banks. In further clarification, the interviewees described that the capital of the bank is now commensurate with risk under the Basel framework. Capital is not now fixed over time. It depends on the "risk weight" of the assets. After determining the risk weight of the respective asset, a certain percentage of the risk-weighted assets is required to maintain as capital. On this necessity, the interviewees emphasised on an integrated and holistic risk management practice to maintain the optimum capital in the banks. One interviewee explained:

> *Capital shall be determined now based on the risks. You know, the minimum capital is required to enter into the market, but once you get in the industry and start operation, you have to follow risk-based capital. It is mandatory to calculate and report the level of minimum capital to the Bangladesh Bank in every quarter. If you have enough capital, no problem, you can do the business. But if there is NPL [Non-Performing Loan], then the provision will increase, capital requirement will increase. So, there is no option to run the banking business with fixed capital under Basel-III framework. (SB-4)*

The documentary analysis also showed that compliance with the Basel-III is now mandatory for banks in the industry. The Bangladesh Bank (BB) has promulgated a circular on 18 December 2014 providing a road map for implementation of the Basel-III framework starting from 1 January 2015 with full implementation from 1 January 2020. The Basel-III framework puts more emphasis on improved risk management and governance in the banks as well as strengthen the banks' transparency and disclosures. Actually, the regulator realised the need for Basel-III compliance and thereby, made it mandatory. One of the interviewees from the regulator also quoted:

> *Activities of our banks are now not limited within the country. They are doing business globally. In doing this business, they have to comply with globally accepted standards. Our banks have to follow international standards. If they do not follow, their [banks] rating will be down. Then they will not be able to do business with their foreign counterparts. If you do not follow the international standards like Basel-III, you will not be able to do business with reputation with them [foreign banks]. Banking activities of our banks are not now limited within the boundary of the country. We [the CB] need to certify that our banks are Basel-III compliant. (RG-1)*

In sum, the Basel-III framework is a global regulatory standard for the financial institutions issued by the Basel Committee on Banking Supervision (BCBS). It provides a common platform to take part in the global financial community. Without Basel compliant, banks cannot deal with foreign banks, and even cannot take part with the global community. Therefore, the CB has made the Basel-III framework mandatory for the banks in the industry from January 2015. Simultaneously, the CB has realised that it is not possible to remain compliant with the Basel-III framework without a comprehensive risk management practice in the industry. As a result, the CB has taken regulatory initiatives for ERM since September 2015.

The Basel-III Framework of BCBS puts more emphasis on an improved and integrated risk management practice in the banks. Under this framework, there is no scope to look into any risk on a stand-alone basis. In literature, the influence of the Basel

Framework on ERM diffusion is also documented by Beasley *et al.* (2005, 2008) and Pagach and Warr (2011). Beasley *et al.* (2008) mention that banks are embracing the ERM in response to the Basel Framework. The evidence of this study is also consistent with them.

Thirdly, the influence of the development partners. Several interviewees highlighted the influence of the WB, IMF, IFC in the diffusion of ERM in the banking sector. They believed that the development partners of the country significantly influenced the CB to initiate the ERM regulation. One interviewee said:

> *The experience of the crisis [global financial crisis] and prescription of the outsiders induce to adopt this practice [ERM]. Actually, these came through the influence of the IMF. (SB-3)*

Likewise, the interviewees from the regulator also acknowledged the influence of the development partners in the diffusion of ERM. Two interviewees stated:

> *There is a joint program between the World Bank and the IMF to assess the financial sector under the title FSAP (Financial Sector Assessment Program). It is a very vital document. Here, the performance of the scheduled banks is considered as the performance of the Bangladesh Bank. Regulatory and supervisory initiatives of the Bangladesh Bank are also assessed under this FSAP. They look not only at the policy implementation but also its implementation status and progress. (RG- 3)*

> *Donor agencies are mainly looking for whether our banking industry is Basel compliant. Foreign donors assess the corporate governance status, risk management practice, Basel compliance and many more. When they provide any fund, they assess whether we [BB] implement those international standards. (RG-5)*

Besides, the documentary analysis showed that the risk management reform was one of the policy recommendations of the WB. In the FSAP in 2010, the WB showed concern regarding the risk management practice of the banking industry and recommended to strengthen it (World Bank, 2010). Following that recommendation, the BB embarked on risk management reform based on ERM philosophy.

In sum, the WB and the IMF are working with the country as a development partner since the emergence of the country. Various economic policy reforms and the sectoral reforms initiated in the country following the prescription of the development partners. Financial and technical support are also provided by them. In line with that, the risk management reform was also a policy recommendation of the WB. On the other hand, the WB and the IMF continuously monitor the progress of their policy recommendations as well as the Basel-III compliance. Besides, they also publish an assessment report on the financial sector on regular interval under the Financial Sector Assessment Program (FSAP). However, the influence of the WB and the IMF in an underdeveloped and developing economy is also documented in the literature (Siddiqui and Ferdous, 2014).

Fourthly, the government's zero-tolerance policy regarding terrorist financing and money laundering. Several interviewees stated that zero-tolerance policy of the government regarding terrorist financing and money laundering is also highly enforced the banking sector to adopt ERM. The interviewees said that zero-tolerance policy is a political agenda of the government. In support of this agenda, the government has enacted the Anti-Terrorism Act in 2009 and the Money Laundering Prevention Act in 2012.

Besides, the government has instructed the CB to look after the terrorist financing and money laundering issue in the financial sector. Following the instruction, the CB has established a separate department in the name of "Financial Intelligence Unit". In addition, the CB has issued another core risk management guideline for the management of money laundering risk. Thus, the political agenda, legal requirement and regulatory enforcement have exerted absolute pressure on the banks to adopt an integrated and comprehensive risk management practice i.e. ERM. One of the interviewees mentioned:

There is an issue of money laundering. The activity of the Financial Intelligence Unit of Bangladesh Bank highly influences our risk management practice. We are now paying due attention to the money laundering and terrorist financing issue. We never tolerate this. These factors highly influenced our risk management practice. (SB-4)

It is noted from the interview analysis that terrorist financing and money laundering is a political risk. The interviewees said that banks do not want to take this political risk as long as it is a political agenda. Moreover, it is a matter of reputation risk. Therefore, banks are much concerned about the integrated risk management practice to mitigate this political risk. One interviewee highlighted their initiatives to avoid this political risk in the following way:

We have taken a lot of initiatives from the branch level to the top level. We are providing training to our branch managers or operational managers in every month on money laundering and terrorist financing issue so that we can minimise this risk. The good thing is that there is no incidence of money laundering and terrorist financing in my bank in the last two years. My bank is highly appreciated for minimising risk on this issue. (SB-4)

It is further noted that Bangladesh is a member of the APG (Asia Pacific Group) and the FATF (Financial Action Taskforce). The APG monitors the country's progress on terrorist financing and money laundering issue on a regular interval.

In sum, the zero-tolerance policy is an agenda of the political government. Banks are also concerned about their legitimacy to the government. Hence, no bank wants to fall into this political risk. Besides, the issue of terrorist financing and money laundering is also a matter of reputational risk. It creates a negative image in the industry as well as to the government. Thereby, banks are much concerned to manage these risks and remain compliant following adopting integrated and holistic risk management practice. Besides, this policy agenda of the government also affects BB. The BB has taken regulatory initiatives to uphold this agenda. They have issued a risk management guideline for money laundering risk and established a dedicated department to monitor this risk continuously in the sector. In addition, the global regulatory bodies also review these issues on a regular interval. Consequently, this policy agenda of the government has enforced the banks to adopt ERM. However, this diffusion factor is relatively new in ERM literature, although it is country-specific.

Fifth, the foreign counterpart banks. All of the interviewees highlighted the influence of foreign banks for improved risk management practice. To explain the influence of the foreign banks, they said that foreign banks are now much concerned about the risk management practice of the local banks. They assess the local bank's risk management capacity before entering into any business parentship. The interviewees further highlighted that the foreign banks create pressure to remain compliant with the Basel-III Framework. Otherwise, they do not enter into any business relationship.

One interviewee said that banks are now globally connected. Therefore, it is now essential to remain compliant with the global standards to take part with the global financial community. Similarly, another interviewee asserted that foreign banks sometimes send their delegate to inspect the risk management practice of the local banks before any business deal. Thus, the foreign counterparts put enormous pressure on the local banks for improved and integrated risk management practice and to remain Basel-III compliant. The interviewees said:

> *We have a business relationship with our counterparts in different countries. If we are non-compliant, they [foreign banks] will not continue the business relationship with us. Risk management is essential for our survival. (SB-19)*

> *If we are not compliant with global regulations, then foreign banks will not have their business partnership with ourselves. They will not keep any relationship with us. So, this is an external factor which drives us to be compliant with BASEL. (SB-13)*

Sixth, mandatory disclosure requirements. Several interviewees indicated to the mandatory requirement of risk and risk management disclosure in the annual report as a factor of ERM diffusion. Because disclosure on risk management practice is now mandatory in the annual report of the banks. Regardless, some of the interviewees believed in value relevance of the risk management disclosure. Besides, the interviewees highlighted the need of the foreign counterparts and the prospective investors to assess the risk management disclosure of bank before entering any business relationship or making an investment decision. Also, some of the interviewees claimed that improved risk management practice and its disclosure help them to ensure accountability and good governance practice. The interviewees quoted:

> *Due to requirements of corporate governance, automatically comes the question of disclosure. This also influences the risk management practice. (SB-6)*

> *Nowadays, people are very much smart, both locally and internationally. My external partners those who are doing business with me also study my annual report. (SB-16)*

> *We have to do the practice [ERM] for the sake of good governance. (SB-10)*

In sum, risk management disclosure in the annual report is mandatory for banks. The corporate governance code, Basel-III framework, listing rule mandate the banks to disclose the risk management practice. Thus, the legal requirement and the value relevance of risk management discourse influence in ERM diffusion.

Finally, the local credit rating company. Some of the interviewees highlighted the pressure of the local credit rating company regarding ERM. It is noted that external credit rating is mandatory for the banks in the industry. One of the interviewees said that ERM is one of the preconditions for an excellent credit rating. He asserted:

> *There are some risk management requirements of the CRAB [a credit rating company of the country]. [...], but there is an impact of the risk management practice of bank on the credit rating. We need to meet a lot of requirements of the credit rating company in terms of risk management practice of my bank. (SB-6)*

Another interviewee mentioned:

> *Over the last seven years, we have AAA credit rating because of integrated risk management practice. We have an excellent reputation to the regulatory body (SB-23)*

Besides, it is also noted from the documentary analysis that there is a regulatory provision for the banks to maintain the credit rating score at a certain level as a minimum. If the credit rating falls below that specific level, the BB will charge additional capital under pillar-2 of the Basel-III framework (Bangladesh Bank, 2014, p. 56). However, the influence of the credit rating companies is also documented in the literature. This evidence is also consistent with Mikes and Kaplan (2015) and Jabbour and Abdel-Kader (2016).

B. Indirect Diffusion Factors

Besides the direct diffusion factors, a range of indirect factors has been revealed from the interview and documentary analysis. These factors are noted from industrial context and socio-economic and political environment of the country. This includes a distinctive feature of the industry, ill competition, industrial lesson learning, an unintended cultural shift of the industry people, media pressure, development vision and SDG commitment of the country, sovereign credit rating, and political patronisation. These factors directly influenced the BB to lead the ERM under regulation and at the same time, indirectly enforced the banks in the sector to adopt ERM.

Many diffusion factors have been found from industry context that also enforced in ERM diffusion in the sector.

At first, the distinctive industry features. Most of the interviewees highlighted the distinctive characteristics of the banking industry, which have advocated for ERM. To describe the distinctive features, the interviewees highlighted the feature of leverage, the business of certainty and uncertainty, connectedness of risks, connectedness of the banks, technology intensity and excessive compliance. They argued that these distinctive features of the banking industry have advocated for ERM. One of the interviewees described the feature of "leverage" and "business of certainty and uncertainty" in the following way:

> *You know! The bank is the biggest levered firm. We have found from our study that 95% of the total fund coming from the depositors. So, equity is not more than 5%. In that case, if you are not able to manage risk properly, it will not take time to finish your 5% equity and put into the risk of the depositors' interest [...] we [banks] invest money, but the return of this investment is not entirely certain. On the other hand, we collect the deposit from the depositors where the interest of the deposit is totally certain. So, our [bank] return is uncertain, whereas depositors' return is certain. To make a bridge between this certainty and uncertainty, comprehensive risk management is crucial. (SB-19)*

Another interviewee highlighted the unique risk profile of the banking sector and the interconnectedness of the risks. He narrated that risks are interconnected in the banking business, and thereby, one risk generates another risk in the industry. Consequently, there is no scope to look into the risk on a stand-alone basis. He stated:

> *[…] if there is an increasing trend in NPL, it arises credit risk. But, look at the 'Hallmark Scam'. Here, the risk did not arise only from the credit risk; instead, there was an operational risk. So, operational risk creates credit risk, and credit risk creates strategic risk. Due to the increase of the loan classification, the capital requirement of banks was also increased, and it also affected in profitability. So, it is also a strategic risk. (SB-2)*

Besides, several interviewees also indicated the interconnected of banks in the industry and their inter-dependency. Consequently, disaster risk is relatively high in the industry that could influence the whole economy. One interviewee quoted:

All banks in the sector are inter-connected. If any disaster happens in any bank, it will affect the whole banking system. Bank to bank commitment exists in the industry. It is a chain. There will be a cyclical problem. (SB-2)

Likewise, the interviewees from the regulator also acknowledged the feature of the interconnectedness of the banks and the vulnerability of the industry towards the disaster risk. One of the interviewees from the regulator said:

The whole banking industry is under a system. The problem of one bank could influence the other bank. So, we are concerned about the system. (RG-3)

Another interviewee further added the feature of "technology intensity" of the industry. Technological advancement and sophistication along with the increasing risk of cybercrime, demand the ERM in the sector, he added. Similarly, another interviewee believed that ERM is highly needed to remain compliant as there is excessive compliance in the banking industry.

Secondly**,** ill competition. It is noted that competition in the sector highly influenced the diffusion of ERM. The interviewees mentioned that the number of banks has increased, which is incompatible with the size of the economy. As a result, competition becomes fierce. One of the interviewees specified that the growing competition induced unhealthy and unethical business in the industry. It also influenced to destroy the level playing field. This ill competition became a risk for the sustainability of the industry. One of the interviewees clarified this effect in the following way:

I can say, though I am not an economist, that our market becomes distorted with the growing number of banks in comparison to the size of the economy. It grows an ill competition. For example, a bank offers a 5% interest rate for FDR, whereas another bank offers 8%. It indicates that people have no confidence in that bank, but that should not be. Sometimes, a bank offers Tk 5 core loan, whereas another bank offers Tk15 core to the same client for the same business. Then what he will do with the additional amount like Tk10 crore? Either he (client) will use that fund to another business or may repatriate outside of the country through the informal channel. (SB-7)

The interviewees from the regulator also acknowledged this growing unhealthy competition in the industry. Thereby, they came across with the ERM regulation to ensure the level playing field in the industry. They said:

> *Internal competition has been increased. The number of banks has also been increased in the country. (RG-1)*
>
> *Competition in the market is not fair. (RG-3)*

Thirdly, industrial lesson learning. Most of the interviewees also highlighted the recent lesson learned in the industry following fraud and forgery. They indicated to the costly experience learned from the scam of the Hallmark, Bismillah Group, Basic Bank and Sonali Bank, recent liquidity crisis, fund heist from the Bangladesh Bank, the cyber-attack, and the credit card fraud and many more. This fraud and forgery have also given a warning call to the industry for an improved and comprehensive risk management practice. The interviewees said:

> *Banking environment of the country has been changed in the last couple of years. We faced a lot of problems, and some are still continuing like fraud, default culture, ill competition, NPL, fall of interest rate, excess liquidity or liquidity crisis etc. (SB-27)*
>
> *The fraud, forgery occurred in the year 2012 like Basic Bank and Sonali Bank issues have given a wake-up call to the Bangladesh Bank in terms of risk management. (SB-17)*

Forth, media pressure. Most of the interviewees highlighted that banks are much concerned about media news. It is a matter of reputational risk. One of the interviewees said that their management is much serious for dealing with the media news. Two interviewees stated:

> *We are now concerned about the media. We need to take care of media news in 26 TV channels and some important national dailies in our country. (SB-25)*
>
> *You know there is an impact on the market. When any news publishes in the newspaper, say, there is a capital shortfall of my Bank, then public get puzzled. What happens? It becomes a matter of image of the bank. (SB-9)*

Besides, the documentary evidence showed that it is mandatory for banks to disclose media news, if any, in half-yearly risk management report. Therefore, ERM is felt vital to remain compliant with all affairs of a bank, because ERM puts holistic and integrated focus in risk management practice. One interviewee claimed:

> *We have to mention in risk management report if any news related to our bank comes in the media. (SB-25)*

Finally, unintended cultural shift. An unintended cultural shift is found among the industry people, which also put concern on the banking sector for its stability and sustainability. One of the interviewees said that this cultural shift is the result of the formal and informal change of state power since the independence of the country. Besides, the change of the development visions from time to time also affected in this cultural shift, he added. Several interviewees highlighted the tendency of the borrowers to be a wilful defaulter in the industry as a part of the culture shift. Therefore, the default loan is growing over the years. One interviewee said:

> *[….] you see! The garments industry, the largest sector in the country. All the garments owners are doing business well. They are making a profit. All of them have a bank loan. But you see, they are wilful defaulter, particularly in the government banks. (SB-9)*

The interviewees made responsible the political influence as a reason for this default culture in the industry, particularly in government-owned banks. One of the interviewees from the government-owned bank stated that his bank could not manage the default culture due to having political power and political connection of the defaulters. With regret, he also mentioned that it is one kind of offence to call the default borrowers as "defaulter". He stated:

> *It is challenging to handle the large borrower if they become a defaulter. Even, there are some large borrowers to whom it could not be said that they are a defaulter. It is one kind of offence to say them a defaulter. I have much experience of this default culture in the industry. (SB-9)*

The tendency is growing among the borrowers to be a wilful defaulter. Consequently, the default culture is a constant source of worries, and it is persisting from long since (Siddiqui and Podder, 2002).

Besides, another interviewee stated that the borrowers have a tendency to manage an excessive amount of loan than they needed through fraud and collusion. He explained this fact with an example in the following way:

> *[...] for example, we got a proposal for a working capital loan of Tk 23 crore from a Rice Burn Oil Mill. We were a bit confused. Then we assessed why they have asked for Tk 23 core just for working capital. In this industry, oil produces from rice husk. We assessed that it is no longer require more than Tk 2 Core for buying rice husk. We did not go for financing that client. (SB-25)*

On the other hand, it is found that the attitude of the bank owners has also changed. Several interviewees mentioned that the banking industry now becomes a target-oriented industry. The owners of the banks set an unrealistic target and always prefer short-term profit. They are not interested in a trade-off between risk and profit. One interviewee stated:

> *Actually, our banking industry is target-oriented. They [owners/directors] only know about deposit and investment. They only like to count short term profit. There is no scope to get rid of this chain. This target is ambitious and unrealistic. (SB-6)*

Likewise, another interviewee said:

> *[...] they [bank owners] are more concern about their business, nothing else. They do not want to think anything except the profit. They think the risk management as an opponent of them. (RG-5)*

In sum, it is found that the banking industry is a distinctive industry than others. The unique industry features indirectly enforce the banks to adopt an integrated and holistic risk management practice. On the contrary, ill competition also put enormous pressure on the sector to diffuse the ERM. It became a threat to the sustainability of the industry. Additionally, the costly experience of industrial fraud has given a lesson for improved risk management practice in the industry. Besides, the media also acts as a whistle-blower and watchdog in the industry. Furthermore, unintended culture shift among the industry people also enforced to diffuse ERM in the sector.

Thus, it is revealed that industry matters in the diffusion of ERM. This evidence is consistent with Gordon *et al.* (2009), Hoyt and Liebenberg (2011), Lin *et al*. (2012), Paape and Spekle (2012), Lechner and Gatzert (2018). They also claim that distinct features of the industry like banks, influence in ERM adoption.

The interviewees also highlighted several country-specific diffusion forces that also influenced in ERM diffusion in the banking sector. These factors have resulted from the socio-economic and political environment of the country.

At first, development visions and sustainable development goals (SDGs) of the country. It is evidenced that the development vision of the government and the SDGs commitment put enormous pressure on the banking sector, particularly in terms of stability and sustainability. Most of the interviewees agreed that ERM is essential for a stable and sustainable banking sector, which will ultimately influence economic growth and progress. One of the interviewees cited that the banking sector is the heart of the economy, and ERM is highly needed for the wellbeing of this heart. Besides, a sustainable banking sector is essential for achieving the SDGs. One interviewee said:

> *You see, the development pace of Bangladesh! It may be a problem if no focus put on the risk management issue right now. ERM is very much essential for the upcoming potential development and growth of Bangladesh. (SB-4)*

Similarly, another interview quoted:

> *If there is no proper risk management system in the banking sector, they [banks] will be affected. At the same time, the economy will be affected. My bank is also related to the economy. (SB-1)*

The documentary analysis also supported their arguments. It is found that Bangladesh has set its development visions targeting the year 2021 and 2041. The target of the "Vision 2021" is to shift the country from "lower-middle-income" to "upper-middle-income" economy. The WB has already branded Bangladesh as a "lower-middle-income" country from 1 July 2015 for its improved and sustainable economic performance over the decade. On the contrary, with the "Vision 2041", Bangladesh has targeted to be a "Developed Country". In the meantime (since March 2018), Bangladesh has advanced from the "Least Developed Country (LDC)" to the "Developing Country" and will enjoy full status of the "Developing Country" by 2024 after attaining some other criteria of the United Nations.

On the other hand, Bangladesh has already embraced the Sustainable Development Goals (SDGs) since January 2015 and a leader in approaching towards the goals proactively. The government has expressed a deep commitment to achieving the SDG targets before the time frame of 2030. Hence, a stable and sustainable financial system is a precondition to reach the destination of the development visions and to achieve the SDGs, particularly Goal-9. One of the interviewees from the regulator also argued for ERM with regard to the sustainability of the banking sector. He said:

> *If we want to ensure the sustainability of the system [banking system], there is no alternative of ERM. (RG-3)*

Secondly, the sovereign rating pressure. Several interviewees indicated the pressure arising from the country's sovereign credit rating. Indicating the financial sector, they mentioned that it is one of the segments in the sovereign credit rating process. International credit rating companies such as Moody, S&P and Fitch are doing sovereign credit rating of the country for every year. One interviewee said that rating companies in their sovereign rating process put the focus on Basel-III compliance as well as on the stability of the banking sector. As such, ERM becomes imperative for the industry to remain compliant with the Basel Framework and to ensure industrial stability and sustainability.

Although, sovereign rating is a requirement of the international agencies, however, most of the interviewees believed that it is a matter of country's image and reputation and have an impact on the country's progress and growth. Besides, it is vital to attract foreign investment and to enter into the international bond and credit market, some of them added. However, the interviewees from the regulator also explained the sovereign rating pressure in the following ways:

> *At the time of assessment of the banking sector, they [international credit rating agencies] put the focus on the 27 core principles of the Basel and its implementation status. Therefore, the banking sector is vital in the sovereign rating process. (RG-3)*

> *Sovereign credit rating is an expectation of the international agencies […] and we [Regulator] felt that it would be good for our country image if we have the country's sovereign rating. (RG-5)*

Finally, political influence and patronisation. All the interviewees highlighted the political pressure and patronisation in the industry. One of the interviewees stated that the banking sector of the country is now politically managed. It is a politically led industry. The explicit political connection of the local banks in Bangladesh is also captured by Uddin *et al.* (2018). However, all the interviewees believed that political influence is the main reason for non-compliance, loan default, and industrial scams. One interviewee added that the BB could not perform its responsibility independently due to political interference and intervention. Interviewee quoted:

> *[…] I become surprised! In any part of the World, banking and education do not consider under political reason which is happened in our country! It is also discussed in the Parliament that banking license is given under political pressure. (SB-24)*

Likewise, another interviewee quoted:

> *We have seen many scams in the banking sectors, and loan default is growing. But these are not created by the bankers. There is a strong political backup behind this issue, and many influential people stayed behind it. How can you tackle them? (SB-19)*

Besides, the "reward for failure syndrome" is evidenced in the industry. In every year, the government provides subsidy from the budget for a shortfall of capital in the government-owned banks. This patronisation is also a political issue. One interviewee highlighted:

> *[…] no bank in our economy will go for liquidation, why? There is a good reason! The government will fall if any bank falls in the developing economy. It is very significant. The government knows this very well. So, how much money required to continue the operation of the banks [government banks]? Give it to them for stability. Many people related to government banks and the banking sector. It is a question of their subsistence. The government could not be able to manage such turmoil if any bank fails in the economy. It will be a political issue. Other political parties will grab this issue for political reason. (SB-15)*

Thus, political pressure and patronisation enforced the BB and the sector for a holistic and integrated risk management practice so that banks could reduce the political influence at a minimum level for industrial stability.

In sum, it is revealed that country-specific diffusion forces have also enforced on the banking sector to select the ERM as a risk management practice. These country-specific diffusion forces are relatively new in the ERM literature. These factors are generated from the socio-economic and political environment of the country. It is found that the development visions of the country, SDGs commitment, sovereign credit rating, and political pressure and patronisation, have exerted indirect pressure on the sector to adopt a comprehensive and integrated risk management practice. In addition, these factors have also directly led the BB to initiate integrated and holistic risk management for the sector.

6.1.2 Diffusion Factors Under Efficient-Choice Perspective

This perspective reinforces proinnovation biases. Innovation is adopted because it helps organisations to attain their goals. Organisations are certain about their goals and process to attain those goals. It posits that rational adopter never decides a technically inefficient innovation. However, empirics revealed a range of ERM diffusion factors under this perspective. The interviewees argued for reputational risk management, operational efficiency, informed decision making, controlling and monitoring, and sustainability as a reason for the efficient choice of ERM as an administrative technology in the sector. Factors under efficient-choice perspective are narrated underneath:

i) Reputation Risk Management

All the interviewees agreed that banks are much concerned about reputation risk. One of them mentioned that every aspect of a bank is subject to reputation risk. Thus, holistic and integrated risk management is essential for the management of reputational risk. An interviewee added that the "risk rating" is a matter of reputation. It depends on the ERM practice of a bank. He believed that if the "risk rating" is good, a bank can do business with a good reputation in an acceptable manner. Likewise, another interviewee stated:

> *As a foreign bank, we are much concern about our reputation. Any news in Bangladesh also spread all over the world. In that case, we always try to manage our reputation. My risk management practice increases my strength to my clients. (SB-27)*

Similarly, another interviewee argued:

> *[..] effective risk management practice creates a good corporate image in the market. We get competitive advantages and able to build confidence among the investors and stakeholders. It is also useful to ensure regulation and compliance. (SB-21*

Thus, it is revealed that the area of reputation risk management is one of the vital aspects to adopt ERM. The evidence of reputation risk management through ERM is consistent with the claim made by Power *et al.* (2009), although they argued the reputational risk management from a critical angle.

ii) Operational Efficiency and Effectiveness

The interviewees highlighted the area of operational efficiency and effectiveness as another fundamental factor for the adoption of ERM. In support to this factor, they provided various examples to justify how ERM helps in improving operational efficiency and effectiveness. For instance, several interviewees mentioned that ERM helps to deal with the risks more systematically and methodically. Management is now able to manage risks without any surprise. One interviewee quoted:

> *We are managing risks from the beginning of banking business, but in past there was no framework of such risk management and no format. Now, we have a set framework and format. The main advantage of this framework is that we are now able to manage the risk systematically. (SB-14)*

Most of the interviewees mentioned that ERM assists in preparing a better risk profile considering all aspect of a bank. This risk profile aids the risk managers to identify the risk in a better way and help them in managing the risk efficiently and effectively. Better risk profile also assists in taking necessary measures to safeguard the investment. Interviewee stated:

> *Risk exists all times, but it did not identify in the past. Risk management was not focused due to non-identification. After the ERM concept brought down in the industry, risks are now identified. Risks are now discussed at the management level and then accelerated to the Board-level risk committee, and then at the Board level, which was totally absent in the past. (SB-4)*

Likewise, another interviewee said:

> *[…] if I do not consider all types of risk that impacted on my bank, then it will be a big mess. (SB-16)*

Besides, several interviewees mentioned that ERM helps to prepare a blueprint in a bank. The CRMR is considered as a blueprint. It is regarded as a scan report, which helps to assess the health of a bank at a point of time. One interviewee mentioned that the CRMR is really a very comprehensive report. It includes all aspects of a bank. Thus, it helps to see the total picture of a bank with a holistic focus. In support of this blueprint, Interviewees pronounced:

> *It [CRMR] is a very comprehensive report. We need to produce around 70 tables, including small and large together with 59 formatted tables as prescribed by the Bangladesh Bank. We require to provide quarterly comparison along with the half-yearly comparison in this report. We require to provide different loan concentration disclosure like sector-wise, division-wise, district-wise, male and female, age group and many more. It is a very good format. Risk management was not structured in the past. (SB-13)*

> *If every bank truly fills the report [CRMR], then I would say, it is a blueprint of the bank. Nothing is left as good as this report. (SB-5)*

Additionally, several interviewees highlighted the influence of ERM in determining the risk-adjusted interest rate. One interviewee stated:

> *Now we have started risk-based pricing through counter-party rating under ERM. If the credit rating of any client is good, we offer risk-adjusted rate for that customer. On the other hand, our foreign counterparty is also doing risk rating based on our risk management practice. After that, they offer a risk-based rate. As such, the cost of my fund decrease. (SB-6)*

Furthermore, some interviewees indicated the increasing bargain power of the banks in various areas following the adoption of ERM that also helps to avoid reckless banking. One interviewee mentioned:

> *If my risk management becomes strong, my bargaining power will be high at the time of collecting a deposit and providing a loan. Even when we go for recruitment, we get a competent workforce. (SB-16)*

Another interviewee said:

Under ERM, you cannot do reckless banking. But in our society, reckless banking is very popular. (SB-6)

Finally, one of the interviewees argued in favour of employee motivation following the adoption of ERM. He remarked that ERM influences to increase the employees' motivation, which ultimately influences in effective risk management. He mentioned that risk management is now a professional and expertise areas in the banks, and therefore, ERM helps to increase job satisfaction among the risk personnel. The interviewee said:

The person who is in-charge for the desk of anti-money laundering, he is always thinking about that risk. As a result, expertise is growing. As an employee, there is an area of satisfaction. (SB-4)

In sum, it is evidenced that ERM has been adopted as a choice of increasing operational efficiency and effectiveness. It is found that ERM assists in preparing a blueprint and a better risk profile in a bank. As a result, risk management becomes systematic and methodical. ERM is also useful to determine the risk-adjusted interest rate with a holistic focus. It also helps in increasing the bargaining power with the depositors and the borrowers. Besides, ERM influences to increase employee motivation. These areas of ERM eventually help to increase the operational efficiency and effectiveness in banks. However, Grace et al. (2014), Gates *et al.* (2012), Aabo *et al.* (2005) also document the usefulness of ERM in terms of operational efficiency. The evidence of this study also supports their findings.

iii) Decision Making

All the interviewees believed that ERM in banks assists in making an informed and calculative decision. One of them said that ERM helps to see every corner of a bank, instead of looking at a particular side, which helps to make a better decision after assessing and justifying the risks. Another interviewee stressed that the bank has to take risks, but that risk should be calculative and informed. Here, ERM helps to take a calculative and informed risk. Consequently, the quality of the decision increases. The interviewees provided some examples to explain how ERM assists in decision making. For instance, one interviewee explained:

> *You know! Capital management is part of risk management. We found that our CRAR [Capital to Risk-weighted Assets Ratio] is getting lower than the required level. Then we decided to issue the bond. So, it [ERM] is a decision-making tool. We are now able to make an informed decision. Quality of decision making has been radically improved. (SB-22)*

Similarly, another interviewee stated:

> *Board is always like to receive a cash dividend. When we explained the situation from ERM point of view, they become aware of it. We [RMD] compelled them to take less cash dividend. (SB-6)*

It is further found that ERM assists in maintaining risk-based capital, helps to ensure the quality of the capital, helps in deciding the appropriate mode of capital injection, aids to decide the mode of payment of dividend, and many more.

In sum, the area of decision making is also argued by the interviewees as another facet of ERM adoption. ERM is now regarded as a decision-making tool in the industry and helps in informed and risk-based decision making. Wu *et al.* (2015), Kleffner *et al*. (2003), Hoyt and Liebenberg (2015), Meulbroek (2002), Meidell and Kaarbøe (2017) also document the usefulness of ERM in terms of decision making. In addition, ERM aids in strategic decision making in banks. The evidence of ERM in terms of strategic decision making is also consistent with the findings of Beasley *et al.* (2015) and Viscelli *et al.* (2017). They also argue for the strategic benefit and strategic value of ERM.

iv) Controlling and Monitoring Tool

The interviewees also highlighted the area of controlling and monitoring as another important factor for the choice of ERM. In support of this factor, the interviewees described that the RMDs in the banks act as a third eye. This division helps in controlling and monitoring. One interviewee said:

> *Of course! It [ERM] is a control mechanism. It is not only operational control but also the business. Enterprise means total, not only operational. So, ERM is a total business control mechanism. (SB-16)*

Another interviewee extended this aspect. He stated:

> *Monitoring becomes forceful in banks following the ERM. Say, you [indicating credit department] are paying the loan, and you are also monitoring the loan. In that case, there might have a soft corner in loan monitoring. It is workable if third-party, i.e. RMD monitors the loan. It [RMD] acts as a third eye in the banks. (SB-20).*

Another interviewee also supported this usefulness of ERM and argued:

> *Due to ERM, a check and balance have been established between business and risk. Apparently, there should have no conflict between business line and risk management. However, there is a target for the business line, sometimes unrealistic target. They [businesspeople] fall into pressure. Business guys are in a rush in achieving their target. They have no time to calculate the risk. In that case, the risk management department will monitor whether the business unit is making any mistake for achieving the target, whether the business unit is in aggressive for their target. (SB-7)*

Furthermore, one of the interviewees mentioned that ERM influences in strengthening the internal control system of the banks. He said:

> *If you want to control fraud or operational loss, ultimately you have to strengthen your internal control system. In that case, there is no alternative except ERM. (SB-3)*

Therefore, ERM is regarded as a controlling and monitoring tool in the banks, which is another vital aspect to adopt ERM.

v) Sustainability

The area of sustainability is considered as another important factor to adopt ERM in the banks. The interviewees believed that ERM helps to ensure sustainability in terms of the profit of the banks, in terms of the industry as a whole, and even in terms of the economy of the country. One interviewee argued:

> *Sustainability is crucial because I may make a profit this year, but it may fall in next year if I do not follow proper risk management. If you manage capital properly through a link with risk, your risk-based capital will be adequate. It will help the bank to be more resilient to the risks. (SB-1)*

Similarly, another interviewee mentioned:

> *Sometimes we found the profit line goes up straightway in a year and down again straightway in the following year. The result of proper risk management will be a stable profit, which leads to stable banking, leads to a stable financial institution and eventually leads to a stable economy. (SB-18)*

Therefore, the area of sustainability is established as another fundamental factor of ERM adoption in the industry. The area of sustainability as a factor of efficient choice is relatively new in ERM research.

6.1.3 Diffusion Factors Under Fad Perspective

In fad perspective, an organisation in a group imitate the adoption of other organisation within the group irrespective of efficiency or inefficiency of the innovation. The study revealed a diffusion factors under the fad perspective.

ERM practice of country's foreign banks. Some interviewees stated that the multinational banks of the country are the pioneer to introduce ERM in the sector. They said that multinational banks have a wide range of risk management experience due to having their long-standing risk management experience all over the world. Consequently, some local banks followed the foreign banks' risk management practice. Interviewees stated:

The multinational banks in the country actually introduce these [ERM] concepts in the industry. In line with this thing, ERM is formalised in the industry. (SB-11)

The business operation of the Citi Bank N. A. is around 110-120 years. But the operation of my bank [a local bank] around 16-17 years. In that sense, Citi Bank N. A. is a benchmark for my bank. When I left Citi Bank, it had operation around 100 countries. You know, we only learn from our own country around 16/17 years, whereas Citi Bank is experienced from 100 countries. So, their risk management [Citi bank] is quite vast. I would say, Citi Bank N. A could be a good benchmark for the other banks. (SB-30)

However, in adopting foreign banks' risk management practice, several interviewees highlighted the transfer of risk expert from foreign banks to local banks. The experience of the risk experts in a foreign bank influenced in adopting ERM practice in the local banks. One interviewee said:

My background, I mean, I was in a multinational bank. ERM framework or practice of ERM was in there. So, I was used to with that practice. So, it not new to me rather new to the industry. (SB-11)

Similarly, another interview mentioned:

The main objective to take Mr X [by pointing a finger towards Mr X] in my bank was to develop my internal credit rating system. Because he had 7-years' experience to work in one of the biggest credit rating firms of the country. (SB-30)

However, the interviewees of the foreign banks also acknowledged the influence of their parent company or Head Office in adopting ERM practice. Hence, the risk management practice of the country's foreign banks is robust. One of the interviewees from a country's foreign bank stated:

We have a global risk management policy. We get it from our Head Office. In addition, we set up a process to comply with the Bangladesh Bank requirements. Risk management division in our Head Office is extensive. Every loan proposal of my bank goes through the risk management division in Head Office. After their approval, a loan is sanctioned. We are yet to develop this culture in our local banks. (SB-27)

Likewise, another interviewee mentioned:

We have redesigned our risk management system considering regulatory guidelines and our Head Office practice. (SB-23)

In sum, it is revealed that some of the local banks follow the ERM practice of country's foreign banks in risk management. They believed that the risk management practice of the multinational banks is robust. Consequently, local banks follow them. However, the evidence is not sufficient whether this mimicry is a result of the uncertainty of the ERM innovation.

The diffusion factors that have been explored from the field study and documentary evidences are summarised in Table 6.1:

Forced-Selection Perspective	Features
Direct Diffusion Factors	
Central Bank and its ERM regulation	ERM promulgation – a prescription of the CB featured with a separate division for risk management, the CRO and Head of the RMD, divisional hierarchy, communication line, a prescription for risk management committees and risk committee meeting, six core risk management guidelines, integrated risk management guidelines, among numerous. Risk-based supervisory approach – featured with risk appetite statement, monthly risk report, half-yearly risk report, meeting minutes of the risk committees; comprehensive risk rating on half-yearly basis; CAMELS rating; approval decision for a new branch, dividend, and AD license; deploy observer in the board; off-site and on-site inspection; punitive actions. Argument in favor of ERM regulation due to industry features and socio-cultural and political characteristics.
Basel-III Framework of BCBS	Mandatory compliance with Basel-III framework (important provisions include risk-based capital maintenance, quality of the capital, non-risk-based leverage ratio, SRP and ICAAP among numerous).
Development partners (the WB, IMF)	Sectoral prescription under Financial Sector Assessment Program (FSAP); Country report; Sectoral finance.
Government's zero-tolerance policy against terrorist financing and money laundering	Zero-tolerance policy regarding terrorist financing and money laundering; Member of the APG (Asia Pacific Group); Enactment of the Anti-Terrorism Act in 2009 and the Money Laundering Prevention Act in 2012; Monitoring by the FATF (Financial Action Taskforce) and the APG; Formation of "Financial Intelligence Unit" in Bangladesh Bank.
Foreign counterparts	Evaluation of Basel-III compliance; Evaluation of the ERM practice; Review the risk management disclosure in the annual report; Send a team for physical inspection.
Risk management disclosure	Mandated by corporate governance code; BB guidelines; Pillar 3 under Basel-III framework; Range of stakeholders; Foreign counterparts.
Local credit rating company	Mandatory for the banks; Regulatory threshold of credit rating; Capital charge if the rating below the threshold.
Indirect Diffusion Factors	
Industry-specific factors	
Uniqueness of the industry	Highly levered; Business of certainty and uncertainty; Safeguard of depositors' interest; Connectedness of the risk and banks in the industry; High disaster risk; Technology-intensive; Excessive compliance.

Ill competition	Increased number of banks; Increased ill and unhealthy competition; Destroyed level playing field; Risk for sustainability.
Industrial lesson learning	Scam of Hallmark, Bismillah Group, Basic Bank, Sonali Bank; Recent liquidity crisis; Fund heist from the BB; Credit card fraud.
Media pressure	Reputational risk; Regulatory requirement to disclose media news if any in the risk report.
Unintended culture shift	Wilful defaulter; Tendency to avail excessive loan; Target-oriented industry; Focus on short term profit.
Country-specific factors	
Development visions and MDGs commitment	Vision 2021 and Vision 2041; Mainly goal 9 under MDGs.
Sovereign credit rating	International credit rating agencies (Moody, S&P and Fitch rating); Basel-III compliance; Stability of the financial sector; Demand by the donor agencies; Question of country's image and reputation; Use in a foreign investment decision; Require to get access in the international credit and bond market.
Political influence and patronisation	Politically led industry; Central bank's decision influenced by political interfere; Increasing political risk; Inability to perform regulatory duty by the BB; Reward for failure syndrome exist; Provide subsidy for the capital shortfall for government-owned banks.
Efficient-Choice Perspective	
Reputation risk management	Non-compliance in any aspect is a matter of reputation risk; High area of concern.
Operational efficiency and effectiveness	Systematic and methodical risk management; Preparation of better risk profile; Blueprint to assess real health; Determine risk-adjusted interest; Increase bargain power; Avoid reckless banking; Influence to increase employees' motivation.
Decision making	Calculative, informed and risk-based decision making; Strategic decision making.
Controlling and monitoring tool	The second line of defence; Third eye; Check and balance between business and risk; Strengthen internal control.
Sustainability	In terms of profit, industry, economy.
Fad Perspective	
ERM practice of country's foreign banks	Multinational risk management exposure; Transfer of risk experts; Influence by parent company or Head Office.

Table 6. 1: Summary of ERM Diffusion Factors with Features

6.2 An Account of ERM Diffusion Under Regulatory Environment

This part of the study provides detailed insight about ERM diffusion in the banking sector under the regulatory environment through in-depth interviews with risk manager of banks, regulators and risk researchers along with publicly available documents. The empirical evidence in this area assists to advocate how ERM diffuses in banking sector under regulatory environment and evaluate the apparent question whether ERM diffusion is the result of pure regulation or have any other factors that consistent with the goals of ERM. Existing ERM literature is used to understand the existing diffusion forces influenced the diffusion of ERM. Despite, the empirical evidence of this study under the regulatory environment is distinctive in literature, particularly the banking sector from an emerging economy.

Building on theoretical proposition outlined by Abrahamson (1991), this study has explored contextual and organisational factors that influenced in ERM diffusion as an innovation. A diverse range of diffusion factors both from supply-side and demand-side has been revealed that influenced in diffusion. These factors reflect population characteristic to understand the process of ERM diffusion at the primary stage in the banking sector of Bangladesh. The empirical evidence of diffusion factors and their features are summarised in Table 6.1.

In the given context, the evidence shows that the outside-influence dimension of Abrahamson's (1991) framework is highly applicable to draw the reality of ERM diffusion. The forced-selection perspective of this dimension has high explanatory power in the background of the regulatory environment in an emerging economy. The notion forced-selection provided a framework to explore the supply-side diffusion factors and insights into their role in the diffusion of ERM across the banking sector. Despite, evidence shows that the efficient-choice perspective is also dominant in simultaneous with the forced-selection perspective in explicating the adoption of ERM across the banks. Conversely, the applicability of imitation-focus dimension is not largely evidenced in this context. Therefore, it may be argued that ERM diffusion is the result of forced-selection and efficient-choice in banking sector under a regulatory environment. Thus, forced-selection and efficient-choice perspectives are also useful to explain the ERM diffusion at the primary stage.

In the context of the study, it is revealed that all the perspectives are not equally applicable to document ERM diffusion under a regulatory environment. Hence, the empirical evidence of this study supports to arrive a paradox resolution between the dominant perspective of innovation diffusion i.e. efficient-choice and forced-selection perspective of Abrahamson's (1991) framework by reducing the theoretical tensions between these perspectives. The evidence shows that the forced-selection and efficient-choice perspectives may coexist in providing an account of innovation diffusion, particularly under a regulatory environment. Each perspective has captured vital aspects of ERM diffusion. Hence, this hybrid context of diffusion helps to argue that the diffusion of ERM in the banking sector under the regulatory environment is a technically efficient choice at the primary stage of diffusion.

With respect to forced-selection, evidence shows that diffusion factors outside the banks mainly compelled them to adopt ERM. It is found that the regulator mainly mandated the ERM in the sector. As an outsider, the central bank had absolute control over the banks in the industry. The ERM sophistication and the risk-based supervisory approach of the central bank significantly enforced the diffusion of ERM in banks. As a result, ERM diffusion has been fueled across the banks in the industry. The adoption of ERM among the banks following the mandatory regulation warrants their legitimacy towards the central bank and also offers political efficiency through reducing regulatory cost. Consequently, diffusion of ERM is perceived as a regulatory-driven phenomenon in the industry. Prior literature also supports this perception (e.g. Khan *et al*., 2016; Lechner and Gatzert, 2018).

Literature shows that regulators in many developed countries, like Canada, the United States, the United Kingdom, Australia and New Zealand, have forced the regulatees to adopt and implement ERM (Kleffner *et al.*, 2003). Even in the USA, the ERM framework is legally required for financial institutions like banks, security brokerage firms, insurance, hedge funds and mutual funds (Whitman, 2015). Besides, Pagach and Warr (2011) claim that banks are the leaders in ERM adoption due to regulation. Likewise, Beasley *et al.* (2008) assert that banks are embracing ERM to manage risks across the entity in response to the regulatory requirements. Therefore, regulation lies at the heart of the ERM (Huber and Scheytt, 2013). Thus, the evidence of this study is consistent with the apparent perception that ERM is a regulatory-driven phenomenon.

Although ERM diffusion is perceived as a regulatory-driven phenomenon in the banking sector, the reality of the diffusion is beyond the regulation. The evidence of diverse diffusion factors through the notions of forced-selection and efficient-choice indicate that the diffusion of ERM is not the result of only regulation in the regulatory environment. In fact, ERM diffusion is influenced directly and indirectly by other existing factors in addition to regulation. Those factors, along with the regulation, compelled the banks to adopt ERM. However, the reality of ERM diffusion in the regulatory environment is depicted in Figure 6.1.

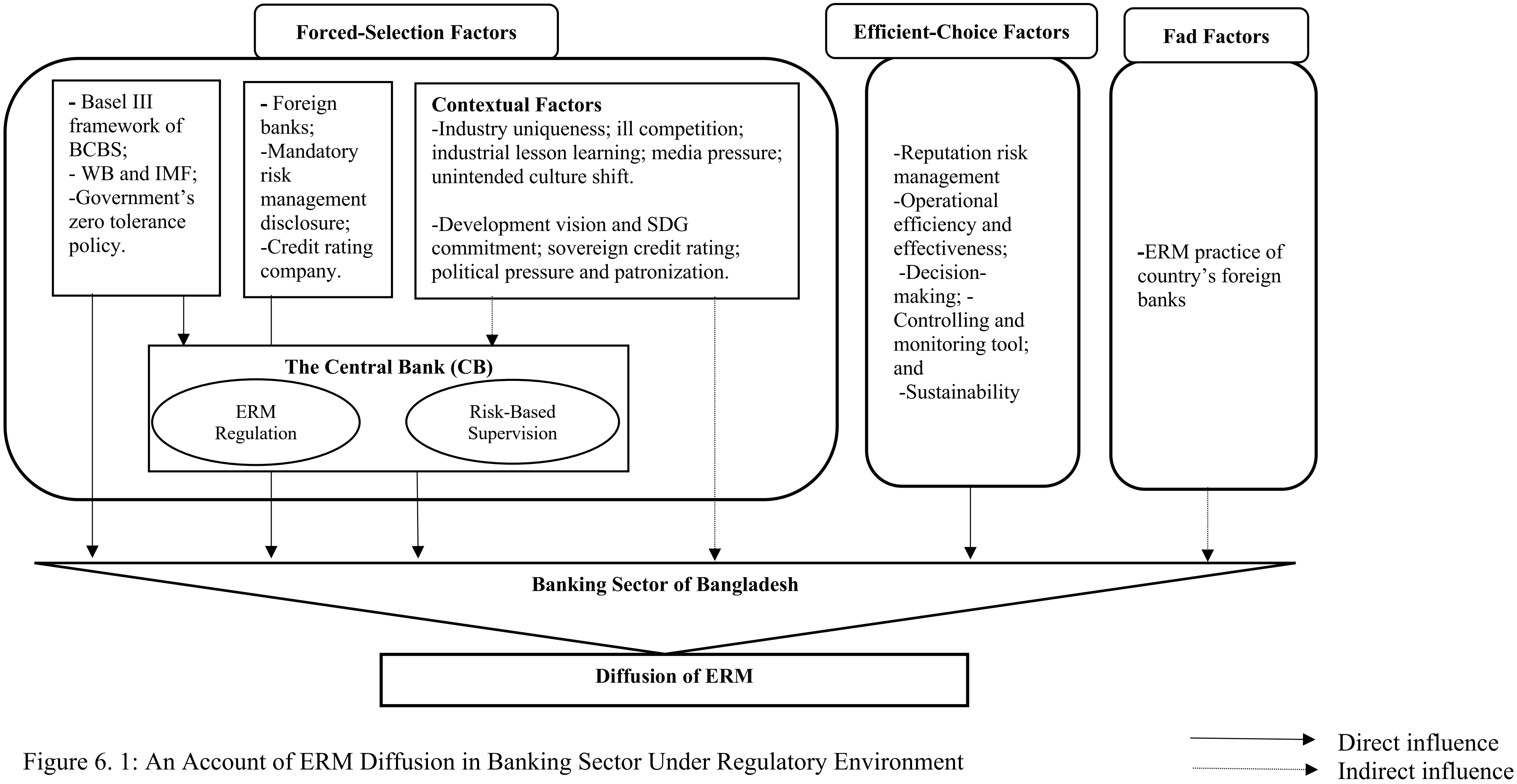

Figure 6. 1: An Account of ERM Diffusion in Banking Sector Under Regulatory Environment

The presence of diverse diffusion factors in the regulatory environment reflects that the diffusion of ERM is not the result of pure regulation. In fact, those diverse factors have exerted direct and indirect pressure on the central bank as well as on the industry. Evidence shows that the Basel-III framework, development partners, government's zero-tolerance policy directly influenced the central bank as well as the industry to adopt a comprehensive and integrated risk management practice. Besides, the diffusion factors like foreign counterpart banks, disclosure requirements, credit rating company considerably influenced the industry to adopt ERM.

On the other hand, diffusion factors from industry context, such as industry uniqueness, ill competition, industrial lesson learning, media pressure, and unintended culture shift, along with country-specific factors, like, development visions and SDG commitment, sovereign credit rating and political pressure and patronization, also indirectly influenced the central bank as well as the industry. The central bank, influenced by these diffusion factors directly and indirectly, realised that an improved and integrated risk management practice is imperative for the banking industry for its stability, sustainability and to remain compliant with the international regulation, i.e. Basel-III framework. Consequently, the central bank embarked on risk management reform based on ERM philosophy under regulation. This ERM regulation put legitimate pressure on the banks. As a result, diffusion of ERM has been fuelled across the banks in the industry. In this reality, the diffusion of ERM is perceived as a regulatory-driven phenomenon in the industry.

However, it is unearthed that ERM regulation is well accepted in the industry. In fact, the diffusion of ERM has been progressed in the banking sector of Bangladesh in a local way. It is revealed that the distinctive diffusion factors in the context of the industry as well as the socio-economic and political environment of the country warrant regulation for the diffusion of ERM in the banking sector. Consequently, the interviewees were in favour of ERM regulation. Like Khan *et al*. (2016), it may be argued that it is less likely to diffuse ERM in the banking sector of Bangladesh as an emerging economy without regulation. Besides, Arena *et al.* (2010), Mikes (2009, 2011) and Tekathen and Dechow (2013) also advocate in favour of a local interpretation of ERM. They claim that ERM is always implemented and interpreted in a local way, despite having worldwide acceptability of the philosophy.

Regardless of external factors of diffusion under forced-selection perspective, it also reveals that ERM is diffused in the industry as a choice of efficient innovation. Banks have taken rational choice in terms of their risk management practice because ERM is beneficial to them. The evidence of ERM usefulness in terms of reputation risk management, operational efficiency and effectiveness, decision-making, controlling and monitoring tool, and the area of sustainability reflects the efficient choice of ERM. Evidence shows that banks are certain about their goals in terms of ERM and the ways to achieve those goals. Consequently, ERM is internally mandated at the organisational level. Hence, it may be argued that the diffusion of ERM is also a choice of technically efficient innovation.

Therefore, it has been exposed that the diffusion of ERM in the regulatory environment is beyond the regulation. The diffusion of ERM is not only the result of regulation as a factor of forced selection but also an efficient choice of innovation. Thus, the diffusion of ERM at the primary stage becomes successful following the factors under forced-section and efficient-choice perspectives. Factors under these perspectives lead the ERM to be taken for granted as a risk management innovation in the sector.

At the same time, this study provides less evidence of diffusion factors from fashion and fad perspectives. Under these perspectives, organisations remain uncertain about goals and hence, imitate other organisations within the group (fad) or outside the group (fashion). Sometimes these perspectives fulfil symbolic function instead of boosting organisational economic performance and facilitate to adopt technically inefficient innovation. Under this account, the evidence of the study shows that the diffusion of ERM in this context did not facilitate through fashion and fad perspectives. Although it is found a factor from fad perspective where few local banks followed the ERM practice of country's foreign banks, it was not the reason of uncertainty rather as a reason of perceived usefulness of the ERM. Thus, it may be contended again that the diffusion of ERM is a technically efficient innovation.

The evidence of ERM diffusion as an efficient choice is also similar to the researchers who have advocated the reason for ERM diffusion beyond regulation. For instances, Pagach and Warr (2011) argue that direct economic benefits are the main reason for the adoption of ERM, rather than merely complying with regulatory pressure. Likewise, Manab *et al*. (2010) find that ERM is not only driven by corporate governance compliance, but also for best business practice, improved decision-making, survival of a company and value creation. Similarly, Altuntas *et al.* (2011) also acknowledge that the value proposition of ERM leads to the adoption instead of regulatory compliance. In addition, Jabbour and Abdel-Kader (2016) provide evidence that ERM is seen as a necessity that adds value rather than as a burden on insurance companies in the UK. They found that early adopters of ERM were mostly driven by internal strategic reasoning, although regulation influenced the late adopters. In another paper based on the USA, Whitman (2015) concludes that ERM is recognised as a value-contributing best practice in corporate governance, even when legal standards do not require it, although ERM is legally required for US financial institutions. Furthermore, Viscelli *et al.* (2017) conclude that ERM is mainly implemented to meet the strategic need, which is a motivation for launching, rather than regulatory and compliance reasons, although they find limited integration between ERM and strategy. With the empirical evidence, this study intends to take a position with above researchers by advocating that diffusion of ERM in a regulatory environment is a result of both forced-selection and efficient-choice which offer both political and technical efficiency of ERM in the industry. Hence, diffusion of ERM is regarded as a technically efficient innovation in the banking sector under regulation in the emerging economy, Bangladesh.

However, prior studies in the context of Bangladesh, as an emerging economy, shows ceremonial adoption of various innovations to ensure legitimacy and reduce regulatory cost, for example, Anglo-American corporate governance model (Uddin and Choudhury, 2008; Siddiqui, 2010) and international accounting standards (Mir and Rahaman, 2005). Despite, in the same context, the evidence of this study shows that the adoption of ERM is beyond the ceremonial adoption in the banking sector. In an emerging economy, substantive diffusion is usually unexpected, particularly under regulatory environment. In this context, the findings of this study provide a new insight into ERM diffusion under regulation. Evidence shows that ERM is diffused as an efficient choice in the banking sector under mandatory regulation because of its usefulness. Consequently, the primary stage of diffusion becomes successful following ERM regulation and technical efficiency, which is relatively surprising in the context of Bangladesh. In fact, regulation formalises the technical efficiency of ERM as an efficient innovation in the banking sector of Bangladesh. Consequently, the sophistication of ERM and its technical efficiency in terms of firm performance and value creation could be taken for granted.

6.3 Conclusion of the Chapter

This chapter aimed to provide an account of ERM diffusion under the regulatory environment. Drawing on Abrahamson's (1991) typology, the evidence shows that the diffusion of ERM is the result of factors under forced-selection and efficient-choice. Diverse diffusion factors have been revealed from the field study following the notions of forced-selection and efficient-choice. These two perspectives are dominating in explaining the ERM diffusion under the regulatory environment. Hence, this paradox resolution may be drawn from the empirical evidence with the coexistence of both force-selection and efficient choice factors in ERM diffusion process under a regulatory environment. Consequently, ERM is regarded as an efficient innovation at the organisational level.

Nevertheless, as the diffusion is progressed under regulation, it is perceived as a regulatory-driven phenomenon. However, the existence of other diffusion factors, for instances, Basel-III framework, the WB and the IMF, government's zero-tolerance policies, counterparty foreign banks, mandatory disclosure, credit rating companies, industry-specific and country-specific factors, indicates that the diffusion of ERM is not the result of pure regulation. Actually, those factors influenced the central bank and the industry directly and indirectly for the diffusion of ERM. In fact, these factors put considerable pressure on the central bank for an integrated and comprehensive risk management practice for the industry. Consequently, the central bank realised the need for ERM and embarked on risk management reform through ERM regulation. Thus, diffusion of ERM has been fueled across the industry and perceived as a regulatory-driven phenomenon.

However, the regulation is well accepted in the industry. The industry distinctiveness and the socio-economic and political factors of the country warrant the mandatory regulation for ERM diffusion. Hence, concern has shown that it is unlikely to diffuse ERM in the banking sector of Bangladesh as an emerging economy without regulation.

Regardless of factors under forced-selection, the usefulness of ERM is well established in the sector. Banks have adopted ERM as an efficient choice. Banks are certain about their goals in terms of ERM and the ways to achieve the goals. Imitation is less dominant in this diffusion process. Consequently, ERM is regarded as a technically efficient innovation and mandated internally at the organisational level. This evidence is surprising in the context of Bangladesh, where prior studies mostly document ceremonial adoption of various innovations, such as code of corporate governance, international accounting standards.

In fact, the usefulness of ERM has been formalised by regulation. Therefore, ERM is now a visible practice in the industry. The evidence of ERM diffusion as an efficient choice warrants high probability of substantive use of ERM, particularly in the secondary stage of diffusion, instead of a symbolic adoption to comply with the regulation. Consequently, the regulatory sophistication of ERM and its technical efficiency could be taken for granted as a risk management practice in the banking industry under regulation.

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Chapter 7

Incremental Change and Organisational Adaption

ERM triggers organisational change. Hence, it considers as a change driver in the organisation. Despite, little is known regarding ERM and organisational change, particularly incremental change and how organisations adapt to this change. Thus, the aim of this chapter is twofold. It aims to explicate the incremental change following the regulatory diffusion of ERM and demonstrate how banks adapt to incremental change. In order to achieve these aims, the chapter is structured into three sections. Empirical evidence in respect of incremental change, external factors and the organisational dynamics are documented in Section 7.1. This evidence is useful to understand the nature of incremental change and how banks adapt to this incremental change. Hence, Section 7.2 theorises how incremental change occurs following the diffusion of ERM under a regulatory environment and how banks adapt to the incremental change following the diffusion and institutionalise the ERM as an organisational practice. The chapter ends with a conclusion in Section 7.3.

7.1 The Evidence of Change, External Factors and Organisational Dynamics

This empirical section is organised into two parts. The first part 7.1.1 presents the evidence of risk management practice in the banks before the diffusion of ERM. Besides, this part also documents the organisational changes following the diffusion of ERM in the banks to understand the incremental change. On the other hand, the second part 7.1.2 provides evidence of external factors and the evolving organisational dynamics following the diffusion of ERM to demonstrate the organisational adaption process towards the incremental change.

7.1.1 The Evidence of Change: Before and After the Diffusion of ERM

It is noted that the formal movement towards ERM in the banking sector has been started since 12 February 2012 following the regulatory guideline on integrated risk management. Despite, the diffusion of ERM was in the primary stage until 2015. However, ERM has received momentum following the regulatory pronouncement on 9 September 2015 regarding ERM sophistication. Consequently, the diffusion of ERM has been fuelled across the banks in the industry and brought organisational change. Having said that, the evidence of risk management practice in the banks before formal diffusion of ERM, and the organisational changes following the diffusion are presented below:

A. Risk Management Practice Before Diffusion of ERM

The risk management practice before the diffusion of ERM in the banks was called as "traditional risk management (TRM)". The interviewees provided distinctive features of the TRM until the diffusion of ERM.

The interviewees mentioned that risk management practice of the banks was unstructured before the formal adoption of ERM. They mentioned that risk management was in-build with the other department in the banks, and sometimes it was neglected. Besides, they added that risk management practice was very focused to manage a particular type of risk, for instance, credit risk. Also, the policy guidelines on risk management were unclear. In support of this feature, two interviewees pronounced:

> *Before risk management division, it [RMD] was under ICC [Internal Control and Compliance]. Risk management was a subunit of the ICC. To some extent, a neglected issue. We did not pay any attention. (SB-11)*

In the past, basically, we put focus on credit risk management. There was a credit risk management department. They were concerned only for the credit risk. For any loan proposal, they assessed the credit risk and escalated the file to the Management Committee, and thereafter, escalated to the Board. (SB-4)

Several interviewees stated that risk management practice of the banks before ERM was fragmented. They specified that risk was managed by the respective department in the banks based on the core risk management guidelines issued by the BB. One of them added that there was no dedicated team for risk management before ERM. They also mentioned that risk was managed on a silo basis, and there was no coordination and integration among the departments. As a result, the top management and the board were not aware of the total risks of their bank. Moreover, the risk reporting was unorganised. The interviewees quoted:

The risk was managed at anyhow in the past. Every department was responsible for its own risk. They looked at their own risk on a stand-alone basis. Besides, there was an internal audit under the ICC. They also helped in risk management. (SB-26)

In the past, the risk was managed by the respective division with their views. There was a problem of coordination. To overcome the problem of coordination, it is now integrated. (SB-8)

It [RMD] was a unit in the past. Reporting was very scattered. (SB-12)

Besides, many of the interviewees highlighted that risk management in the past was subjective and less methodical. They said that risk was not quantified and not expressed mathematically. One of them added that the main focus was given on the 5Cs to address the risks. One interviewee quoted:

Risk and risk management exist from the beginning of the banking business. But in the past, the risk was not quantified, not expressed mathematically. Now the risk is measured categorically. In the past, risk management was subjective, but now risk management is objective. (SB-16)

Risk management, in the past, was less methodical. We put the main focus on 5Cs, that was a tool to address the risks. We looked at the historical record, payment behaviour, collateral support, social status, dealings with a client. (SB-22)

Furthermore, several interviewees highlighted that there was a lack of uniformity in risk management practice throughout the industry before formal diffusion of ERM. They also mentioned that banks did not follow the core risk management guidelines of the CB effectively. Those guidelines were used as a stand-alone basis. One of the interviewees also added that there was no comprehensive risk reporting before the diffusion of ERM. A few formats were reported to the BB to ensure the regulatory compliance. Thereby, the regulator was also not aware of the total risk of the industry. Highlighting this fact, two interviewees stated:

Banks did not follow the core risk management guidelines effectively. The different bank complied in different ways. Core risks guidelines did not implement effectively in the industry. Hence, Regulatory supervision was ineffective. (SB-18)

In the past, the practice was just reporting. There were some formats. We submit the same to the Bangladesh Bank. (SB-12)

Moreover, the interviewees indicated that, until 2015, risk management practice in the banks was at the capacity building stage. Banks put more focus on the requirement of capital maintenance under the Basel framework to ensure their compliance. As a result, banks did not get much opportunity to pay attention to integrated risk management practice. However, one of them also added that integrated risk management was started under the Basel implementation unit before the formal adoption of ERM. One interviewee quoted:

Requirements of the Basel-II were stringent. Our paid-up capital was Tk 40-50 core, but under Basel-II requirement, it went-up Tk 400 crore paid-up capital at least. We mainly put emphasis on capital management over the last 6/7 years. We did not get the opportunity to pay much attention to risk management. Although there were separate divisions for core risk management. (SB-2)

B. Organisational Change after ERM Diffusion

In describing the organisational change after diffusion of the ERM, the interviewees mainly indicated to the structural and operational changes in the banks.

I. Structural Changes

All of the interviewees highlighted the structural changes following the diffusion of ERM. The risk management disclosure of the banks in their annual report also reflected this structural change. Structural homogeneity of risk management is the main outcome of the ERM regulation. Indicating to the structural change, one interviewee stated:

> *I can say that phenomenal development happened in the last couple of years in risk management practice in the banking sector. Structurally it has been developed a lot. Our risk management structure is at the international competitive level. The framework which is provided by the Bangladesh Bank is very robust. We have a risk committee at the management level. They are also sitting in risk management meeting every month. (SB-22)*

Indicating to the RMD, another interviewee said:

> *Look at this department [indicating to the RMD], there was no existence of this department in the past. (SB-5)*

However, the documentary evidence showed that this structural change was the result of regulatory promulgation on ERM sophistication. The BB promulgated the regulatory circular on 9 September 2015. Soon after this promulgation, banks established a separate division under the title “RMD” with a “CRO” as the Chief. An employee is appointed as “Head of the RMD” following the CRO. Besides, the divisional organogram and the communication hierarchy are also established in banks as prescribed in the regulatory circular.

Moreover, a risk management committee is formed at the management level. Likewise, monthly, half-yearly and yearly risk reports are prepared by the banks following the prescribed formats. In addition, it is found that a risk committee is formed at board-level following the provision of the Bank Companies Act.

However, it is further found that the structural changes in banks were not limited to the regulatory prescription. It is also evidenced that some of the banks, although larger in size, have made additional structural changes after the diffusion of ERM. One of the interviewees said that they have formed a second layer risk management committee. Another interviewee mentioned that his bank has integrated the back-office and the front-office and installed new software for risk identification throughout the bank. Likewise, another interviewee said that they have formed a pool of surveyors for the collateral survey. Similarly, another interviewee mentioned that they have formed risk management unit at branch level, regional level and also at divisional level after the diffusion of ERM for better management of risk. For example, one interview stated:

> *First thing what we have done is that we have massively changed the organogram of the bank. Branch Office, Back office, Central operation all have come under that organogram so that it helps to ensure accountability [...] in our integrated framework, we have established another risk management committee in the second tier of the management in addition to the Board-level and the Management-level risk committee. We have established this second-tier risk committee for the interest of our risk management practice. (SB-11)*

In sum, structural changes have occurred in banks soon after the regulatory pronouncement regarding ERM sophistication. Despite, the structural changes were not limited to the regulatory promulgation. Numerous structural changes have occurred in banks in various forms in addition to the regulatory sophistication of ERM after the formal diffusion.

II. Operational Changes

It is also evidenced that ERM has influenced in day to day operation in banks in simultaneous with the structural changes. On discussion over operational changes, the interviewees highlighted several areas of the banks where ERM have touched. Identified operational changes are documented underneath:

The area of risk management itself. All the interviewees acknowledged that the risk management practices of banks have changed substantially following the diffusion of ERM. The interviewees said that the risk management system is now integrated. Risk is now handled centrally, putting the focus on risk appetite statement. All cross-functional teams within banks are now aware of the enterprise-wide risks along with the mitigation techniques. The interviewees also added by saying that the risks are now documented. It is objectively assessed and accelerated from the bottom to the top and even to the board. Additionally, they highlighted that a new organisational position and communication hierarchy have been established in banks for risk management practice following the diffusion of ERM. Moreover, bank-wide risks are now documented in the risk reports, namely, CRMR, MRMR, RAS. One interviewee stated:

> *What I found in the past that if any problem arises at any level, it was solved at that level. It was not disseminated to the other departments. Now all things are doing centrally. Now we have centralised credit division and centralised L/C opening department. All things are now integrated. (SB-13)*

The area of credit risk management. Most of the interviewees highlighted the change occurred in credit risk management following the diffusion of ERM. In describing the change, one of the interviewees mentioned that they now need to look into the risk appetite of their bank, along with the geographical concentration of the investment, divisional concentration, industry concentration, large loan exposure, single borrower exposure, NPL rate, and many more, before making any investment decision. Some interviewees also highlighted the area of borrower assessment, collateral assessment and the documentation system, which have also been changed under credit risk management system after the ERM diffusion. Two interviewees stated:

Now I need to ensure the credit rating of my borrowers by a third party. Now we can draw the difference. (SB-17)

Here comes a discipline in investment which did not exist before ERM. Now, the borrower cannot get any loan just showing building and factory. Now it requires proper documentation and assessment before providing that loan. (SB-2)

The area of capital management. Several interviewees highlighted the area of capital management, which has changed after the diffusion of ERM. They stated that the capital of banks is now integrated with risks under the Basel framework. It depends on risk-weighted assets. Therefore, all risks are required to take into consideration to maintain the optimum capital. One of the interviewees added that banks need to prepare a half-yearly comprehensive risk report after the diffusion of ERM, which helps banks to see every corner of the risk. With this report, a bank can choose the best mode of capital injection in case of a capital shortfall. Another interviewee added by saying that under the ERM environment, banks first determine the required capital before providing any loan to the borrower. It is a significant change in capital and credit management. Indicating to the change in capital management, one interviewee stated:

Loan portfolio and capital assessment are linked together. How much capital do I need, to what extent I can provide the loan, which mode should I take for capital injection, should capital raise through issue of right share or fresh injection or issue of subordinate bond and many more, these sorts of decisions are coming from the risk management division, which is a part of capital management. (SB-18).

The area of culture. Most of the interviewees highlighted a substantive change in organisational cultural following the diffusion of ERM. The interviewees stressed that risk awareness has increased significantly in banks from top to bottom. Banks are now organising a training on ERM at regular interval, which helps to increase the risk awareness throughout the bank. Besides, the risk committees meeting at management level and at board-level help them to be aware of the risks on a regular interval, one interviewee added. Moreover, another interviewee stated that everyone in his bank becomes a risk manager. Employees are now aware of the ownership of the risk and its mitigation techniques. They can take a decision considering the impact of the risk towards the bank and their own career. Above all, the attitude of the employees has been changed, one interviewee added. Consequently, risk awareness prevails in every corner of banks after the formal diffusion of ERM. Two quotations are mentionable in this regard:

> *It was not happened in the past to bring every risky matter in the attention to the Management and to the Board. Now every risky matter is accelerated to the Board level Risk Committee via Management and thereafter at the Board. As such, they are much aware of the consequence of any decision. (SB-4)*

> *One of the important changes is that we always keep in our mind the impact of the action before doing any job…[…]…now everyone thinks the impact before doing his job. Impact not only on the bank but also in terms of his career. (SB-16)*

The area of Management Control System (MCS). Most of the interviewees indicated to the changes occurred in MCS after the diffusion of ERM. They said that the MCS becomes a risk-based control system. The interviewees stated that banks are now preparing risk appetite statements (RAS), which is the beginning of risk-based control. Besides, one interviewee added that the CRMR acts as a dashboard of management control. Furthermore, several interviewees indicated the integration of budget and performance appraisal system with "risk" under the ERM approach. They said that the budget is now prepared following the RAS and the performance is appraised after adjusting the impact of risk. In support of this change, the interviewees quoted:

> *We have to prepare the risk appetite statement every year. Everyone has to work within the framework of the set appetite. It is basic. Everything is defined in RAS specifically. It is an important change that brings down everyone within an appetite. (SB-13)*

> *We have linked risk with performance. We have started a risk-based performance appraisal. Branch managers become aware. (SB-16)*

Due to the implementation of ERM, the system has been upgraded. Now we have MIS division. We can see the real-time data at any time from the system. Monitoring tools are no longer manual. (SB-2)

Finally, the area of IT infrastructure. Several interviewees highlighted the change that occurred in the area of IT infrastructure after the diffusion of ERM. One interviewee said that they had to change their software to follow the ERM practice. Another interviewee believed that IT infrastructure is one of the preconditions for the effective practice of ERM, because of data relevance, reliability and timeliness. Another interviewee added by saying that the monitoring system has been strengthened due to upgrading the IT infrastructure under ERM. Interviewee quoted:

We have formed an MIS division. We had to change the software to support the risk management report. We have migrated from one system to another system to generate a report from the branch level. We have changed our software. (SB-2)

In sum, it is evidenced that change has occurred following the diffusion of ERM in banks. The change was started soon after the regulatory promulgation on ERM sophistication in September 2015. It was captured during the interview period from April 2017 to August 2017. The evidence showed that ERM has influenced almost every part of the banks soon after the diffusion. Both structural and operational changes have occurred in simultaneous following the diffusion of ERM. Consequently, banks have shifted from the TRM to the ERM along with structural and operational changes.

However, the empirical evidence, based on interview discussion and the documentary analysis, over the features of TRM and the organisational change following the regulatory diffusion of ERM are summarised in Table 7.1 as below:

<table>
<tr><td colspan="2">The TRM and Organisational Change</td></tr>
<tr><td colspan="2" align="center">TRM and its Features</td></tr>
<tr><td colspan="2">-Unstructured and narrow focus;
-Fragmented and non-integrated;
-Subjective and less methodical;
-Lack of uniformity; and
-Capacity building stage.</td></tr>
<tr><td colspan="2" align="center">ERM and Organisational Change</td></tr>
<tr><td>Structural Changes
-Establishment of RMD as a separate division;
-Formation of Board and Management level risk committee;
-Appointment of CRO and Head of RMD;
-Establishment of Eight Desks in RMD;
-Formal organisational hierarchy and communication line;
- Formation of second layer risk committee;
-Change of organogram;
-Integration of back-office and front-office;
-Installation of risk identification software;
-Formation of surveyors' pool;
-Formation of risk management unit at branch, regional and divisional level;
-Formation of SRP Team; and
-Emergence of new risk reports (MRMR, CRMR, RAS, ICAAP).</td><td>Operational Changes
-Changes in risk management approach (integrated, focused on RAS, the involvement of all functional teams, risk documentation, objective assessment, acceleration from bottom to the top);
-Changes in credit risk management (change the decision-making criteria, change in borrower assessment, and collateral assessment);
-Changes in capital management (put the focus on risk-weighted assets, determine capital before investment decision, influence on the mode of capital injection);
-Changes in risk culture (through a change in risk awareness and risk management approach);
-Changes in the management control system (through RAS, CRMR, budget, performance appraisal); and
-Change in IT infrastructure (new MIS, system up-gradation, timely information)</td></tr>
</table>

Table 7. 1: Features of TRM and the Organisational Change

7.1.2 External Factors and Organisational Dynamics

This section presents the empirical evidence of external factors that stimulated the ERM template and the evolving organisational dynamics following the diffusion of ERM. The interplay between the organisational dynamics and the contextual factors will help to demonstrate the organisational adaption process to the incremental change. Drawing on the framework of "neo-institutionalism", empirical evidence is presented underneath:

A. External Stimulating Factors of ERM Template

It is found that change has occurred in the sector following the diffusion of ERM. However, the external factors mainly stimulated this organisational change. ERM template was derived from the contextual factors. Both market and institutional factors exerted pressure to produce the ERM template for the industry. The market factors influenced mainly to increase the demand for ERM, whereas, the institutional factors employed pressure to diffuse this template throughout the industry. However, contextual factors are documented below:

i) Market Factors

It is evidenced that competition, industrial vulnerability and concerns over depositors' interest have influenced the industry to increase the demand for ERM. The intensity of these market factors is also explored, which is narrated underneath:

The interviewees believed that competition is a significant factor that led to an increase in the demand of ERM in the sector. They indicated the growing number of banks, which was incompatible with the economy. Thereby, the excess number of banks induced to grow an unhealthy business competition in the industry. Consequently, it destroyed the level playing field. This unhealthy competition became a threat to stability and sustainability of the industry. One interviewee added that there was no consistency between the risk and the return in the industry due to that unhealthy competition. Even, another interviewee said that the regulator could not control this ill competition. However, one interviewee clarified this unhealthy competition in the following way:

> *The market becomes distorted because the number of banks has been increased compared to the size of the economy. I can say this, although I am not an economist. Here grows an ill competition. For example, one bank offers 5% interest rate for FDR, whereas another bank offers 8%. It indicates that people have no confidence in that bank. It becomes risky banking. But that is not supposed to be. Say, one bank offers Tk 5 core as a loan, whereas another bank offers Tk15 core. Then what will be done by the client with the additional fund like Tk10 crore? Either he will use that fund to another business or repatriate outside of the country through the informal way. For these reasons, the discipline of the industry is distorted. (SB-7)*

Similarly, most of the interviewees indicated the vulnerability of the industry. They highlighted several issues which increased the risk of industrial disaster, for instances, the growing burden of NPL (non-performing loan), direct political influences, growing industrial scams, the cultural shift of the industry people and the inability of the CB in performing its regulatory duty independently. The burden of the NPL is continuously growing in the industry from long since (Siddiqui and Podder, 2002; World Bank, 2019a). It is now a burning concern to the regulator. Besides, the governance of the banks is influenced by political pressure (Reaz and Arun, 2006; Uddin *et al.*, 2018).

Also, a tendency is growing among the borrowers to be a wilful defaulter due to political power and influence, particularly in the state-owned banks. Moreover, the industry has witnessed drastic scams like Hallmark, Basic Bank, Bismillah Group, fund heist and many more in recent years.

Furthermore, the BB could not perform its regulatory duty autonomously due to political influence. Sometimes regulatory forbearance was given to the defaulters under political pressure. It is further noted from the documentary analysis that all the related stakeholders, for instances, development partners (like the WB, the IMF), retired bankers, economists, professors, researchers, think tanks, business chambers, business owners' associations, accountancy body, civil society, politicians and even the parliamentarians have shown their concerns about the banking industry of the country. Consequently, demand is growing in society for an independent banking commission and a strong Taskforce. In addition, civil society has urged for comprehensive risk management and its effective use in the banking sector. On this background, the demand for ERM increased in the sector to ensure its stability and sustainability. One interviewee asserted:

> *Political influence is a very big factor in our economy. Actually, it is politically led economy. Think about government banks. Everybody knows this. Non-compliance and violation of regulations start from there. In spite of having BB rules and regulation, why they [BB]were not able to protect the fraud and forgery. It is due to political supervision and dominance. There is a lack of commitment. (SB-4)*

Finally, the concern over depositors’ interest. Most of the interviewees stated that banks are a highly levered industry. Banks deal with depositors’ money and confidence. Therefore, the safeguard of depositors’ interest is a vital concern to the banks. The interviewees believed that ERM is highly needed to safeguard their interest and maintain their confidence. One interviewee stated:

> *We [banks] are dealing with public money. We also deal with public confidence. If they believe that it is not safe to keep a deposit in my bank, then it will be a crisis. Besides, you have to meet their demand on time. Otherwise, there will be a liquidity crisis. (SB-19)*

In sum, it is revealed that the market factors influenced to increase the demand of ERM for the banking sector. The ill competition in the industry, the increasing risk of vulnerability and the concern regarding the depositors’ interest highly influenced to increase the need for a comprehensive and holistic risk management practice for the industry.

ii) Institutional Factors

Institutional pressure for ERM was aroused through the regulative, normative and cognitive mechanism in the industry. It is evidenced that the ERM regulation, Basel III requirements, international credit rating agencies, development partners exerted regulative pressure for ERM in the industry. On the other hand, normative pressure was aroused from professional development, training and learning and usefulness of ERM. Furthermore, cognitive pressure was marked from ERM practice of the country's foreign banks and inter-bank transfer of the risk experts.

The compulsory regulation of the BB. All the interviewees opined that ERM template in the industry is generated from the regulatory prescription and the "risk-based" regulatory approach of the CB. Banks have adopted the ERM throughout the industry following this regulatory prescription. Besides, the supervisory initiatives of the BB under the "risk-based" supervisory approach also put regulative pressure on the banks to adopt the ERM. It is found that "risk-based" supervisory approach of the BB includes determining the "risk rating", "CAMELS rating" and assessing the monthly, half-yearly and annual risk reports, stress testing report, including the meeting minutes of the risk committees and many more, based on which necessary regulatory measures are taken by the BB. Two interviewees stated:

> *I can say it is a regulatory imposed phenomenon. […] so, the ERM concept is given by the regulator. Banks were not driven by themselves. (RG-5)*
>
> *If the risk rating is below 3, we do not allow to open a new branch or not provide any license for an AD [Authorised Dealer] branch. Hence, the risk rating is counted as a negative indicator. (RG-1)*

Similarly, it is found that the BB has made it mandatory to comply with the requirements of the Basel III framework being a member of the global financial community. The interviewees highlighted various requirements of the Basel III framework, for instance, risk-based capital maintenance, quality of the capital, non-risk-based leverage ratio, ICAAP document, dialogue between SRP and SREP Team, capital charge and many more which put significant pressure on the banks to adopt ERM. One of the interviewees also stressed that the ERM template has emerged from the Basel requirements. Thus, the CB put regulatory pressure for ERM to remain compliant with the Basel III framework. In addition, several interviewees added by saying that banks could not establish any trade relationship with any foreign bank without compliant with the Basel-III framework. The regulator also acknowledged the need for Basel III compliance. However, the interviewees mentioned:

> *Activities of our banks are now not limited within the country. They are doing business globally. For doing this business, they have to comply with the internationally accepted standard. (RG-1)*
>
> *Basel is basically a total framework. Everything covers under Basel like risk management, corporate governance. (RG-3)*

Besides, it is revealed that the donor agencies, such as the WB, the IMF, and the international credit rating agencies, like S&P, Moody and Fitch Rating, also exerted pressure for ERM. Although they employed pressure on the BB for risk management reform and Basel-III compliance. It is noticed that the risk management reform was a policy recommendation of the WB under the FSAP. Also, the sustainability of the banking sector is one of the assessment criteria in the sovereign credit rating. The regulator also acknowledged these pressures. However, the interviewees quoted:

> *You know! IMF and WB, they are also following up the Bangladesh Bank about risk management implementation status. So, the regulator [BB] is also supervised by other agencies. This development agency is monitoring the progress of policy implementation. (SB-18)*
>
> *Foreign donors basically assess corporate governance, risk management practice, Basel compliant etc. When they provide any fund, they assess whether we implement those international standards…[…]… Moody /S&P/Fitch, they are doing the rating of the Country. This is also a matter of our country image. (RG-5)*

Furthermore, it is found that the risk management discipline has emerged as a professional discipline in the industry. Risk management is a complex and technical area. Professional competencies and skills are essential. Therefore, most of the risk people are pursuing various professional degree in risk management to provide this professional service. To develop professional competence, the BIBM has initiated a professional certification course in risk management in collaboration with the Frankfurt School. This professional development also employed pressure in the banks to adopt and implement ERM.

In addition, it is evidenced that banks are organising ERM training and workshop for learning and development on a regular interval. It also influenced the ERM adoption. Furthermore, it is revealed that the usefulness of ERM has established in the industry, and it is growing. The usefulness of ERM also put enormous normative pressure for ERM in the banks. The interviewees stated:

> *ERM practice creates a good corporate image in the market. We get a competitive advantage. It helps to build confidence among the investors and stakeholder also helps to ensure compliance with the regulations. (SB-21)*

> *Due to ERM, the risks of the banking sector have been reduced. So, what is happened… that the banking sector becomes a strength. Loan sustainability has been increased. We do not want any event like 'Hallmark' [biggest loan scam] in future. So, we are safe. (SB-2)*

Finally, it is found that the ERM practice of the country's foreign banks also exerted pressure for ERM in the industry. Besides, transfer of risk expert from the foreign banks to the local banks also put pressure for ERM. The interviewees quoted:

> *The multinational banks in the country actually introduced this [ERM] concept in the industry. In line with this thing, ERM is formalised in the industry. (SB-11).*

> *The transformation happened in our bank in risk management. This is happened due to the transfer of employees who did work in foreign banks. (SB-3)*

Management hires risk management personnel those who know better and have risk management experience. (SB-1)

In sum, it is revealed that the ERM template is contextually derived mainly through regulation. Consequently, banks become homogeneous in terms of risk management practice by adopting this template. The ERM template is prescribed by the regulator, and they have made it mandatory for the banks. It is also found that the requirement of the Basel III framework and the pressure from the international bodies, for instances, the BCBS, the WB, the IMF, S&P, Moody's Fitch Ratings, also influenced to derive the ERM template under regulation. Under this regulative pressure, the ERM template has diffused in the banking sector.

However, cognitive and normative pressure also influenced in deriving this template in addition to the regulative pressure. As a cognitive pressure, ERM practice of the country's foreign banks and inter-bank transfer of the risk experts influenced to adopt the ERM template. Furthermore, as a normative pressure, professional development, training and learning and the usefulness of ERM template highly influenced to derive this template in the industry. Therefore, the ERM template is institutionally derived in the sector in combination with the market pressure. Consequently, banks are structured in terms of this template in organising risk.

B. Evolving Organisational Dynamics

It is essential to recognise the organisational dynamics to understand the organisational response in adaption towards change. External factors alone are not sufficient enough to understand the organisational adaption process. Therefore, the evolving organisational dynamics that have been marked following the diffusion of ERM are enumerated below:

i) Emergence of RMD

It is evidenced that the RMD has evolved as a new organisational dynamic in banks following the diffusion of ERM and played an active role as a change agent. The RMDs played a vital role within banks in responding towards the external stimuli and in adaption to the change. It is revealed that the RMD has gained organisational significance within the banks following the diffusion of ERM. The regulatory empowerment and the operational embeddedness helped the RMD to gain this organisational significance. Consequently, the RMD actively led in adaption to the incremental change. Thus, the RMD has grown with power and control within the banks following the ERM diffusion. The interviewees provided various examples and clarifications in explaining how the RMD gains organisational significance.

Regulatory Empowerment

As per regulatory promulgation, RMD is mandatory for banks to establish as a separate and dedicated division for management of risks. Thus, the RMD has received regulatory identity in the banks. The documentary analysis showed that a CRO is prescribed to appoint as the Chief of the RMD following a member staff as divisional Head. Besides, a management-level risk committee is instructed to be formed with the Chair of the CRO where the "Head of the RMD" will act as a secretary. It is also instructed to hold the meeting of risk committee once in every month. The Head of the respective functional department is a member of the management-level risk committee.

Besides, the RMD is instructed to communicate the risk reports directly to the board level risk committee with a copy to the CEO. In addition, the RMD is entrusted with preparing the risk appetite statement on an annual basis, stress testing report, monthly and half-yearly risk reports based on the prescribed format. They are also instructed to submit those reports to the BB within a stipulated time. The board and the top management are much concerned about those risk reports because of having "risk rating" of an individual bank. The BB prepares the "risk rating" report of every individual bank based on the submitted risk reports and other documents. Approval of the regulator, on some certain issues, depends on this "risk rating". Thus, it is evidenced that this regulatory sophistication of ERM has empowered the RMD within the banks, and consequently, RMD has gained organisational significance. Indicating this regulatory empowerment, one of the interviewees stated:

> *Actually, Bangladesh Bank has empowered the RMD. Board is also concerned as there is a statutory sub-committee in the Board. We [RMD] are reporting to the Board's sub-committee with a copy to the MD and thereafter to the BB. So, why not employees cooperate us [RMD]? (SB-25)*

Operational Embeddedness

On the other hand, it is found that the function of RMD is embedded with day to day operation in banks. The interviewees highlighted several areas to signify the operational embeddedness of the RMD.

At first, in preparation of the strategic papers. All the interviewees indicated that the RMD plays a significant role in preparing the strategic papers within a bank. The Risk Appetite Statement (RAS) is now mandatory to prepare at the beginning of the year. After approval from the board, the RAS must require to submit to the BB within a stipulated time. Besides, banks require to prepare the MRMR and CRMR. These reports are also required to submit to the CB within a timeline. These risk reports are called strategic papers in banks. The risk limit, risk tolerance, portfolio investment, action trigger point and many more, are articulated in the RAS. One of the interviewees said that there is no scope to surpass the set parameters in the RAS. The CB monitors the individual bank based on the declaration in RAS.

On the other hand, the CRMR provides a comprehensive and holistic picture of a bank in every half year. Every aspect of a bank articulates in this report. The CRMR helps in taking an informed decision. Then, it is one of the essential responsibilities of the RMD to prepare these strategic papers and integrate all the risks across the bank, which ultimately helps in informed decision making. The interviewees stated:

> *Say, for credit risk, it is managed by credit risk management division separately. The respective division manages the core risks. But if you get the total picture of a bank in a report like market risk, operational risk, foreign exchange risk, credit risk etc., then it is very much helpful for decision making. Risk report [CRMR] helps to get a holistic view of the risks. (SB-7)*

Secondly, the role of RMD in the credit management process. Several interviewees highlighted the role of the RMD in the credit sanctioning process, particularly at the pre-sanctioning stage. One of them added that RMD helps to assess the loan paying capacity of a bank before sanctioning the loan based on the concept of risk-based capital. In describing the role in credit management, one interviewee stated:

> *You know! Around 86% risk in the banking sector is the credit risk. The job of RMD is at the pre-sanctioning stage of the credit, whereas ICC does work at post sanctioning stage. The pre-sanctioning stage is a vital part to mitigate the credit risk. Once you sanction the loan, you have to carry that risk. So, it is very tough to mitigate risk at post sanctioning stage. (SB-5)*

However, another interviewee also put stress on the day to day role of the RMD in banks. He said:

> *It is the responsibility of the RMD to have a holistic view of the risk on a continuous basis. Audit department usually goes to the branch once or twice in a year. But we [RMD] have no time limit. I can see all the factors right now, raise the concerns to the management. So, it becomes a day to day activity of the RMD. (SB-1)*

Thirdly, in establishing a counterparty relationship. Most of the interviewees stated that RMD plays a vital role in establishing a counterparty relationship with foreign banks. They said that risk management practice of the banks has gained importance among the foreign counterparts. The foreign banks review the risk management capacity of the local banks before entering into any business relationship. In this age of globalisation, the trade relationship with foreign banks is significant. Consequently, the role of the RMD has recognised in establishing this counterparty relationship. One interviewee quoted:

> *You know! Before establishing a relationship, their risk division [foreign banks] assesses due diligence of our risk management system. Sometimes, they come physically to visit us. They make an enquiry with the RMD and assess our risk management practice practically. (SB-13)*

Fourthly, in overcoming the inherent limitation of the board and CEO. Several interviewees highlighted the visible role of the RMD as a reason for the inherent limitation of the board and the CEO. ERM is a complex and new phenomenon in the industry. Professional expertise is required to lead the ERM. On this fact, one of the interviewees highlighted the inherent limitation of the board. He said that board members are supposed to lead the ERM, but their age, position, and business involvement do not support them to be expert in ERM. Sometimes, the members of the board are not interested in being trained with ERM. Highlighting the inherent limitation of the board, the interviewee quoted:

> *There is a subcommittee of the board, which is the board risk management committee. Member of that committee should have minimum knowledge of risk management. Actually, this phenomenon is new and a complex issue. Their age, position or busyness do not support to get aware of the risk management practice. Sometimes, they are not interested in getting that kind of knowledge, or they have not enough time despite having an interest. It is a vital factor in risk management practice. As a result, risk management activities are mainly initiated by the RMD itself. Basically, we [RMD] compel them to come under a defined framework of risk management. They [board] do not compel us [RMD]. (SB-6)*

Likewise, the interviewee also added by saying that the RMD now influences in strategic decision making in banks due to having the inherent limitation of the board members. In support of this, he provided an example:

When we [RMD] proposed to the board for Bond issue, our board were less interested. But when we explained the situation strategically from the risk management point of view, our board then agreed for issuing such Bond in support of the capital adequacy. (SB-6)

Similarly, another interviewee indicated to the inherent limitation of the CEO. He highlighted the contractual appointment of the CEO. He said that the tenure of the CEO is contractual for a limited period of time. Besides, the renewal of the tenure depends on the satisfaction of the board. Consequently, the CEO is not interested in taking the risk of short-term profit, which is highly preferable to the board, the interviewee added. Effective ERM practice may affect the short-term profit to achieve, which could affect the performance of the CEO. Therefore, the role of the RMD is visible. He stated:

[..]..top management [CEO/MD] in our country is temporary. They are appointed on a contractual basis like two years or three years and, above all, their renewal depends on the Board's decision. If they effectively implement the ERM, bank performance may be affected in the short run. For that reason, top management is less interested in the effective implementation of ERM. (SB-16).

Fifthly, in compliance champion. It is noted that the RMD has gained importance as a compliance champion in banks. There is excessive compliance in the banking industry compared to other industries. The interviewees said that compliance has a cost, but they believed that non-compliance is more costly than the compliance cost. The RMD plays a significant role to remain compliant with the external reporting, particularly towards the CB. Besides, board and top management are concerned regarding the "risk rating" of the CB under the "risk-based" supervisory approach, another interviewee added. Additionally, the "CAMELS rating" is another regulatory tool to the CB, another interviewee said. He also mentioned that the on-site inspection of the CB depends on the "risk rating" and the "CAMELS rating". Moreover, certain regulatory approvals like branch opening, AD license, dividend payment depend on that "risk rating".

Consequently, the RMD is regarded as a compliance champion in banks. In support of this role, the interviewees stated:

> *We [RMD] need to send all risk reports and meeting minutes to the Bangladesh Bank on time. It creates pressure on the RMD. (SB-2)*

> *Bangladesh Bank analyses our risk management papers individually. They do rating based on these papers. If risk rating is bad, there are some restrictions on us. (SB-20)*

> *These risk management activities of the banks are audited by the Bangladesh Bank twice in a year. They [BB] conduct their audit both at the Head Office and Branch Office. (SB-5)*

Finally, in monitoring and controlling role. Most of the interviewees highlighted that the RMD acts as the second line of defence in banks. They believed that RMD plays a significant role in monitoring and controlling because people at the functional level have not enough time to assess the risk and maintain its limit. One of the interviewees said that RMD helps to keep the business unit within the risk appetite and the risk limit. RMD also assists to press the trigger points for management action before the risk going out of control.

In sum, this evidence indicated that the RMD is embedded with day to day operation within a bank and gained importance in strategic decision making. The regulatory empowerment and operational embeddedness provide the RMD power and control to play an active role in operational and strategic decision making.

However, the evidence of departmental agent as an evolving organisational dynamic is similar to the findings of Arena *et al.* (2010), Vinnari and Skærbæk (2014), Jabbour and Abdel-Kader (2015), and Giovannoni *et al.* (2016). Although, they have identified the change agent as an individual under the title of “CRO” or “risk expert” or “risk manager”. However, the role of these individuals are also included under this departmental agency titled RMD.

Besides, the evidence of evolving organisational power and control of RMD following the diffusion of ERM is also consistent with the evidence provided by Arena *et al.* (2010), Giovannoni *et al.* (2014), Hall *et al*. (2015), Mikes (2009, 2011), and Meidell and Kaarbøe (2017). Hall *et al.* (2015) argue that the embodiment of expertise and tool-driven and tool-making activities of the risk experts give them competitive advantages over the other groups to influence in decision making in the organisational boundary. Meidell and Kaarbøe (2017) find that the risk managers influenced in decision making both vertically and horizontally. Even, Mikes (2008) highlighted the twin role of the CROs considering the operational embeddedness. She claims that the CROs are the compliance champions and at the same time playing the role of business partnering.

ii) The Commitment of the Board and the CEO

It is evidenced that the board's involvement and commitment have increased in banks following the diffusion of ERM. Most of the interviewees highlighted the growing commitment of the boards and the CEOs towards the ERM after the diffusion of ERM. One interviewee added by saying that the diffusion has received momentum due to the involvement of the boards and the CEOs in the banks. The tone of the practice is set by them throughout the bank, he added. Another interviewee said that the board of the banks is now much aware of the ERM because there is a compulsory risk committee at the board. In support of the board's commitment, one interviewee stated:

> *One of the advantages of our bank is "flexibility". The Board and the senior management, all are very flexible in terms of the new risk management framework or best practice framework. So, the first thing what we did, we have massively changed our organisational structure. (SB-11)*

Although a mixed view was evidenced while asked the question if this commitment is a result of the regulation. However, it is revealed that the commitment of the boards is the result of both "regulation" and "realisation". One interviewee stated:

> *In my bank, I would say it [ERM] is not only for imposition. It is gone through both imposition and realisation, parallelly. We took different initiatives in our risk management practice before BB's prescription like risk concentration, risk appetite etc. (SB-3)*

Several interviewees said that boards of the banks do not want to be non-complaint as the ERM is a regulatory requirement. While some other interviewees mentioned that the usefulness of ERM has increased among the board members. Risk committee on the board is one of the reasons to increase this awareness among the board members. To explain the commitment of the board, one interviewee stated that the board's chairman in his bank is also the chairman of the board risk committee. It reflected the realisation and awareness of the chairman regarding the usefulness of ERM and its value. Although one interviewee said:

> *Definitely they [Board] are committed but how much they are committed; it is a very difficult question! They want to implement the risk management issue in my bank. (SB-1)*

Another interviewee also highlighted the high commitment of the board and said:

> *Every board wants sustainability of their institution. In that case, their commitment level is also high. (SB-2)*

However, the evidence of the high commitment of the boards is also similar to the findings of Gendron *et al*. (2016). They find that the boardroom members maintain their confidence in the credibility of risk management as a reliable apparatus. Likewise, Vicelli *et al.* (2017) also claim that organisational actors believe that ERM provides strategic value.

iii) Less Resistance in ERM Implementation

Resistance is inevitable in the diffusion of any new organisational practice. However, it is found that banks did not face any mentionable resistance in adaption to change following the diffusion of ERM. As a reason, the interviewees highlighted the involvement of the board and the top management in this process. Moreover, ERM is a regulatory requirement. The board and the top management are much aware of the practice. One of the interviewees said that the adoption and implementation of the ERM become easy because of the top-down approach. Consequently, the conflict with the business is manageable in the banks. In this regard, two interviewees quoted:

> *Actually, when we roll out any practice with the approval of the Board and Top-level management, there is no scope to deny that. There is no scope to rigid or neglect. (SB-3)*

> *There is no resistance in my bank. I [RMD] can do the practice peaceful in my bank with the grace of Allah [the God]. (SB-17)*

Another interviewee also stated:

> *We [RMD] are not facing any resistance in terms of implanting the practice. We were able to let them [employees] understand. We are helping them to be skilled. We are encouraging themselves to create their second man to minimise their respective risk. In this way, we are creating a risk culture. Our employees are very spontaneous to take part in this process. (SB-10)*

Although evidence of conflict is found, however, it is manageable. The interviewee said:

> *I would not say that there is no resistance. Yes, we face resistance basically from the business. Conflict arises among inter-department. Business hampers due to risk management practice. However, we can resolve this. (SB-16)*

iv) Favourable Power and Authority Towards RMD

All the interviewees strongly stressed that adaption with any new practice depends on favourable support of the board and the top management. Because they are the source of power and authority. However, it is evidenced that the RMD has received privilege and authority from the board and the top management in adaption to the change. Therefore, the RMD leads the adaption to the change. One interviewee pointed out that the RMD needs to depend on the board and the top management because it is not possible to adapt any change without their favourable support and privilege. The interviewees stated:

> *Board is now aware of the risks. They are now giving us [RMD] the privilege. We are working for the interest of the bank so far by the grace of Allah. So, they appreciate us. (SB-25)*

> *I would say, first is Board, then management. Everything is approved by the Board. After the Board, the role of the CEO is very important. He establishes a link between Board and Management. I [RMD] have nothing to do if the CEO disagrees to implement or carry forward to the Board. (SB-17)*

v) Availability of Organisational Resources

The interviewees mentioned that organisational resources are needed in adaption to any change. One of the interviewees highlighted three types of resource on which the RMD depends on in adaption to change. These three types of resource incudes: IT resource, human resource and financial resource. One of the interviewees mentioned that ERM is a complex and technical phenomenon. Therefore, IT resource is essential for data relevance, reliability and timeliness. Another interviewee added by saying that IT resource is called as "risk rudder". At the same time, expert human resource is required to analyse the data and make it ready for an informed decision. Moreover, there is an involvement of cost for both IT and human resources. It is found that RMD has received favourable support for the required organisational resources in adaption to the change at a reasonable level despite having resource constraint in the banks. Two interviewees quoted:

> *We solely depend on MIS. It will be a great problem in reporting if we don't get reliable and relevant data on time. If we get data from the MIS, we will be able to prepare the required risk management report quickly. We also train the human resource for data input into the system. Otherwise, there will be garbage in, garbage out. (SB-25)*

> *Human resource at this moment is very important. You will find very few numbers of people who know about the implementation of risk management or capital risk management or some other related area of risk management. (SB-1)*

vi) Professional Development

It is found that the capacity of the banks has been increasing in the sector to cope with the change following the diffusion of ERM. Sufficient capacity is required to manage the transformation from one template to another. However, as a capacity for action, most of the interviewees indicated the growing professionalism in the risk management discipline. Several interviewees said that banks are now encouraging their risk people to develop professional skills in the area of risk management, and sometimes banks sponsor their risk experts to achieve the professional degree. Besides, some risk managers were also found to have a professional degree in the area of risk management like CERM, CISA, CAMLS, and many more. In addition, it is noted that BIBM has started a joint certification program on risk management in collaboration with the Frankfurt School. Besides, a CRO Forum has also formed at the BIBM for continuing professional development. In support of professional development, one interviewee asserted:

> *We have 20 people in my bank who qualified CISA [Certified Information System Auditor]. We have around 200 employees who are specialist in credit documentation [CDS]. I am also CAMLS [Certified Anti-Money Laundering Specialist] qualified. My bank incurred the cost to get that qualification. Twelve employees in my bank are CAMLS qualified. (SB-5)*

Besides, another interviewee also mentioned that professional expertise is also growing through the interbank transfer of risk personnel, particularly transfer from foreign banks to local banks. Risk management experience in foreign banks acts as a constructive factor to implement the ERM in the local banks.

vi) Evolving Risk Culture

It is found that the risk culture of banks has been evolving since the diffusion of ERM. It is also influenced to increase the capacity for action. It is revealed that risk culture is growing in banks in terms of risk awareness and risk management. One of the interviewees argued that the growing risk culture is helping everyone in banks to be a risk owner as well as a risk manager. As a result, employees can identify their own risk. Besides, they are also aware of mitigating techniques. However, the interviewees provided several examples in explaining this growing risk culture in terms of risk awareness and risk management in banks.

In support of the growing risk awareness culture, one of the interviewees highlighted the creation of a whistleblowing environment in his bank for risk identification. He stated that:

> *We have developed a communication system throughout the bank for a free flow of information […] we also assure our employees that you can raise your voice, and there will be no problem from the management. It is very effective to identify the risk at the branch level. (SB-25).*

Another interviewee indicated to the risk management training and workshop which are organising by his bank for the employees at all level to increase the risk awareness culture. Besides, another interviewee pointed out the integration of the risk with the performance appraisal system in his bank. He mentioned:

> *Now, the risk is articulated with the performance appraisal system. People are now much aware of risk-taking and risk management. (SB-16)*

Likewise, another interviewee highlighted the involvement of the functional people in the risk management process, which also influence in increasing the risk awareness throughout the bank. He said:

> *Now we are reporting under ICAAP. All departmental heads are involved in this process. Say, residual risk, Head of the CRM is involved. For any capital charge for residual risk, he will be responsible. As a result, he becomes aware. (SB-22).*

Similarly, to support the growing risk management culture, one of the interviewees indicated to their in-build software for pro-active identification of risk. He asserted:

Risk management is not like firefighting. Proactive identification is obvious. We have installed a software. It is an online module, inhouse build software. Every employee of my bank has access to this module. They can notify through this system if they find any risk or anticipate any risk around him. So, anyone can identify risk as well as can escalate the same to the top management. (SB-11)

Also, one interviewee highlighted the meeting of the risk committees in support of risk management culture. He asserted:

There is a monthly risk management meeting at management-level risk committee. Once they agreed with the risks, these are put into the report. Then the report is forwarded to the board level risk management committee with a copy to the MD. Thereafter, the report is placed before the board with further observation and recommendation. After that, those reports are mandatory to send to the Bangladesh Bank. So, this is this process. Who is not notified about the risks of the bank? The process compels everyone to get aware of the risk. (SB-28)

Furthermore, another interviewee provided evidence of some additional changes in support of risk management culture. He said:

We have extended something in addition to the BB requirements. Bangladesh Bank did not direct to have a separate wing for internal rating. We have established that wing in my bank. BB did not direct to have a wing for process reengineering. We have established a wing for process reengineering. These all are part of my risk culture. (SB-30)

However, the dynamic of cultural shift is also identified in the literature, although from a critical angle. Mikes (2009) found that the risk managers foster various calculative culture following the implementation of ERM, which she called "calculative culture". She argues that this calculative culture helps the risk experts to legitimise their boundary role within the organisation. However, the cultural shift in this study is found throughout the bank as a whole following the diffusion of ERM.

vii) Monitoring and Controlling Role

It is revealed that the RMD has emerged as a monitoring and controlling department in banks. This role of the RMD also influenced to increase the capacity in adaptation to the change. One of the interviewees also specified that someone has to monitor the diversified risk of the bank independently. It is noted that the RMD acts as a third eye in banks and helps to remain within the risk appetite. One interviewee stated:

> *When there is a risk management division, it gets separate recognition. Those who are working at the operational level have no time to look into risk management indicators. Now, as a division, we [RMD] are looking at different indicators both the macro level and micro level, putting the focus on the deviation or look at if any department breaches any set limit. (SB-22)*

Another interviewee provided an example in highlighting the monitoring and controlling functions of the RMD. He said:

> *For example, profitability target is usually given to a branch. Then the branch manager put his focus on the target. He becomes busy with his target and has no time to pay attention to risk management. He may take risk intentionally or unintentional to achieve the target. So, who will monitor this risk? RMD will review the risks and measure the level of risk acceptability. They [RMD] will set the mitigation tools for the branch manager and control his risk-taking behaviour to achieve their target. (SB-20)*

However, the role of the internal audit has also acknowledged in this process. The interviewees mentioned that the internal audit team works at on-site of the bank and also helps the RMD in policy development, implementation and validation. One interview stated:

> *RMD helps in rolling out of the process, and the internal audit helps in effective implementation of the process with inspection after implementation and follow it up. So, there is no overlapping. (SB-3)*

viii) Credibility and Interpersonal Skill

It is further revealed that the credibility of the RMD and the inter-personal skill of the risk experts are other dynamics that also influenced in increasing the capacity for action in adaption to change. One of the interviewees emphasised on the credibility of the RMD. He said that a credible relationship with the top management helps the RMD to accomplish the job successfully. He also emphasised on the inter-personal skill of the risk people, because the risk people need to interact with a vast array of functional people. Reflecting on the leadership capacity of the RMD, the interviewee stated:

> *If you are able to establish a credible and reliable relationship with the MD (obviously based on job expertise), it will be easy to get the work done. It helps the MD to grow confidence about the risk management people[...] I have created this environment with my top management with the grace of Allah [the God] and doing well…[…]… as a risk management person, we have to develop a cordial relationship with the people of other departments of the bank. You have to develop your own credibility by yourself among them. You are working with a bitter thing. You should be more dynamic to get the job done. (SB-17)*

In sum, the empirical evidence showed that the ERM template is derived from the organisational context. ERM is an externally driven phenomenon in the sector that promoted change. The contextual pressure for ERM has aroused from the market and the institutional context. However, the contextual pressure for change has amplified within the banks through the organisational dynamics. A range of organisational dynamics has evolved following the regulatory diffusion of ERM and acted as precipitating and enabling factors. The organisational dynamic through interacting with the contextual factors helped in adaption to change and institutionalised the ERM as a risk management practice. However, the empirical evidence is summarised in below Table 7.2 to theorise the organisational adaption process:

External Factor and Organisational Dynamics		
	Context	**Factors**
External Factors	**Market**	Competition; Industrial vulnerability; Depositors' interest
	Institutional	***Regulative Forces*** -ERM Regulation *(ERM template, risk rating, CAMELS rating, risk reports, meeting minutes);* -Basel-III Framework *(risk-based capital maintenance, quality of the capital, leverage ratio, ICAAP document, SRP Team, Disclosure)*;

<table>
<tr><td></td><td></td><td colspan="2">-International bodies (WB, IMF, S&P, Moody and Fitch Rating).

Normative Forces
Professional discipline; Training and workshop; Usefulness of ERM.

Cognitive Forces
ERM practice of the foreign banks; Transfer of risk experts</td></tr>
<tr><td rowspan="6">Organisational Dynamics</td><td colspan="3">Precipitating Dynamics</td></tr>
<tr><td colspan="2">Group Interest</td><td>Commitment</td></tr>
<tr><td colspan="2">-The emergence of RMD as the departmental change agent (Regulatory empowerment and organisational embeddedness - preparation of the strategic papers, influence in the pre-sectioning stage of the loan, establishing counterparty relationship, overcome the inherent limitation of the board and CEO, compliance champion, the second line of defence).</td><td>-High commitment of the Board and the CEO.
-Less resistance in ERM adoption.</td></tr>
<tr><td colspan="3">Enabling Dynamics</td></tr>
<tr><td colspan="2">Power and Resource</td><td>Capacity for Adaption</td></tr>
<tr><td colspan="2">-Favourable power and authority towards the RMD.
-Availability of the organisational resources.</td><td>-Professional development.
-Evolving risk culture (risk awareness culture and risk management culture).
-Monitoring and controlling division.
-Credibility and interpersonal skill.</td></tr>
</table>

Table 7. 2: Contextual Factors and Organisational Dynamics

7.2 Discussion

This section is about the theoretical interpretation of incremental change following the diffusion of ERM under regulation and the organisational adaption towards this change. Thus, this section is structured into two parts. In the first part, it is explicated how incremental change has occurred following the regulatory diffusion of ERM in banks. While in the second part, it is demonstrated how organisations adapt to incremental change.

7.2.1 Incremental Change Following Regulatory Diffusion of ERM

ERM is perceived as a driver of change. Change is the central issue in organisational life, although the notion is very vast. The organisational change includes a comprehensive coverage ranging from a change in individual behaviour, role, responsibility, accountability and values to change in an organisational hierarchy, structure and position.

However, change has been conceptualised in many ways in different literature. In accounting literature, Quattrone and Hopper (2001) state that an organisation change occurs when the entity passes from one identifiable and unique status to another. Likewise, Andon *et al.* (2007) also claim that change involves a transition from one clear point of being to another. In addition, Poole and Van de Ven (2004) define organisational change as a difference in form, quality or state over time. Drawing on this premise of change, the evidence of this study confirms that change has occurred in banks following regulatory diffusion of ERM. With this diffusion, banks have moved from the TRM template to the ERM template. In addition, an organisational shift has occurred in risk management practice by establishing the RMD as a separate and dedicated division under

ERM, which was absent in TRM. Thus, ERM may confirm as a driver of change in organisations.

Researchers have provided various dichotomies to conceptualise organisational change. However, based on the features of “radical” and “revolutionary” change, a framework has been developed to understand the incremental change, which was depicted in Figure 2.1 in Chapter 2 (Greenwood and Hinings, 1993, 1996; Burns and Scapens, 2000). Drawing on that framework and empirical evidence, incremental organisational change following the regulatory diffusion of ERM is depicted in Figure 7.1. Now it is theorised how incremental change occurs following the diffusion of ERM under regulatory environment.

Shifting Between the Templates

Empirical evidence indicates that an organisational shift has occurred in banks in risk management practice. Following the diffusion of ERM under regulation, banks have adopted ERM as a new template in place of TRM for risk management practice. Drawing on the developed framework of incremental change, ERM is considered as a new template for risk management, which is derived institutionally. The template of ERM has been enforced by the regulator and diffused across banks in the sector. Thus, evidence of shifting from TRM to the institutionally derived ERM template in risk management practice has endorsed an incremental change in banks.

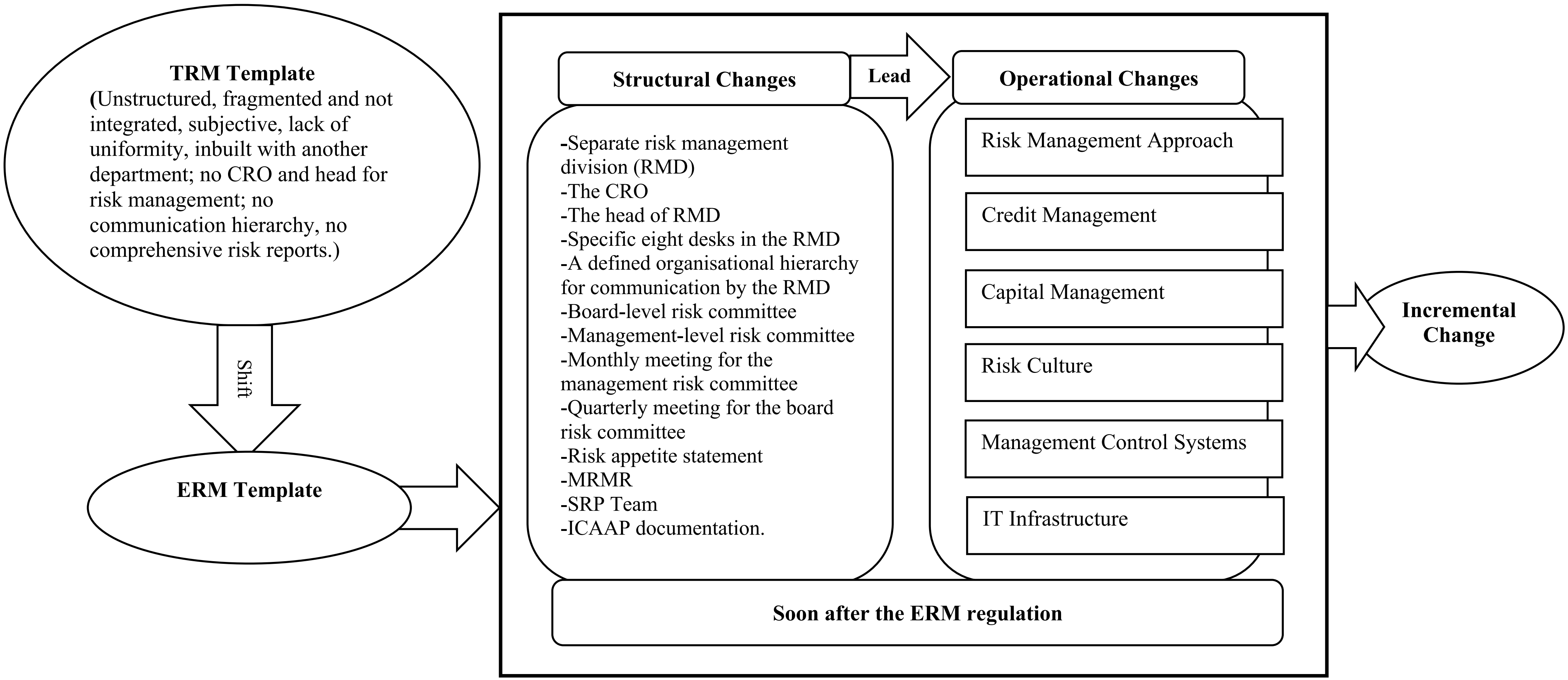

Figure 7. 1: Incremental Organisational Change Following Diffusion of ERM Under Regulation

The “ERM template” is featured with a dedicated division for risk management. The CRO is the chief of the division followed by the Head. The communication line is linked to the board’s risk committee. Integration of enterprise-wide risks is ensured through the preparation of various risk reports, namely, the RAS, the MRMR and the CRMR. On the other hand, the template of TRM was featured with a non-dedicated and non-integrated practice. The risk was managed on a silo basis under TRM. There was no dedicated risk management team or even any chief with the designation of CRO. The communication line was unclear. There was no comprehensive risk report for integrating enterprise-wide risks. Following the regulatory prescription, the “TRM template” has been replaced by the “ERM template”. It has disrupted the existing routines and institutions within banks. The institutional shift towards the ERM template has brought both structural and operational change. These changes have occurred relatively in a quick pace of time soon after the regulation. However, incidences of the ERM template are described below in support of the incremental change.

Incidences of the ERM Template: Structural Change

It is evidenced that the shift towards the ERM template has brought a structural change in banks. This change occurred soon after the ERM regulation in 2015. The annual report of banks for 2015 also supported this structural change. However, soon after the regulatory promulgation regarding ERM sophistication, banks established a separate and dedicated division for risk management. All banks have appointed a CRO as chief of the RMD followed by a divisional Head. A clear organogram of the RMD with a communication hierarchy has established. A risk committee has formed at the management level. Besides, various risk reports have prepared by banks on a monthly, half-yearly and annual basis. Enterprise-wide risks are now articulated into these risk reports. In addition, a risk committee has also formed at board level. Furthermore, an SRP team has formed to prepare an ICAAP document following the Basel framework. Besides, some other structural changes have also been evidenced in addition to the regulatory prescription following the ERM philosophy, such as formation of second tier management level risk committee, formation of surveyors' pool, establish risk management unit at branch level, zone level and district level, integrate front office with the back office and many more.

Incidences of the ERM Template: Operational Change

The ERM template affects almost every corner of banks. It has been revealed that the ERM template influences the people, processes and policies of banks simultaneously with structural change. This operational change has also occurred swiftly. Evidence of operational change was also found during the interview period from April 2017 to August 2017, soon after the regulatory promulgation in September 2015. Thus, the pace of operational change was relatively fast. However, following the structural change, operational change has occurred in banks. Major areas of operation change include risk management, credit management, capital management, risk culture, control systems and IT systems following the shift towards the ERM template.

A substantive change has occurred in the area of risk management following the ERM template. Risk is now managed in an integrated and holistic fashion in banks with a dedicated risk management team. An annual risk appetite statement and comprehensive risk management reports are now prepared at regular intervals through interaction with the risk committee at management and board levels. The board risk committee is now involved in the ERM process. All functional teams from top to bottom are aware of their own risks under the ERM template.

Nevertheless, at the same time, credit management and the capital management approach have also changed. Capital and credit management are now integrated following the concept of "risk-based capital". The ERM template has influenced the credit management and capital management approaches to maintain the optimum risk-based capital.

Besides, it has been revealed that the ERM template has touched organisational culture and management control systems in banks. Evidence shows that the risk-based cultural tone has been set in banks following the ERM template because boards are involved in the ERM process. Therefore, the risk awareness level has increased throughout banks from top to bottom. The commitment of the board has also increased towards ERM. Banks are now organising training, seminars, workshops for professional learning on ERM, which help them to develop risk culture.

In line with the culture change, management control systems have also affected in banks. Now, RMDs act as a hub in banks, and they now control and monitor the operation of functional departments of banks. RMDs act as second lines of defence. Besides, RAS is used as strategic control documents. In addition, CRMR is considered as dashboards of performance in banks. Moreover, banks have introduced risk-based budgeting and performance appraisal under the ERM template. Furthermore, banks have changed their IT infrastructure by upgrading their systems and software to get relevant and reliable data on due time.

Based on this evidence, this study intends to argue that incremental change has occurred in banks following the diffusion of ERM under regulation. Banks have moved from the TRM template to the ERM template in risk management practice. As a result, an institutional shift has occurred in risk management practice. However, the shift towards the ERM template has influenced both structural and operational change in banks. The structural change occurred swiftly, soon after the regulatory pronouncement. This structural change also influenced operational change at a quick pace of time. ERM has influenced almost every corner of banks, simultaneously with structural change. Thus, the ERM template has affected people, processes and policies of banks concurrently in a quick period of time following the shift. Consequently, this study wishes to claim that ERM is regarded as not only the driver of change but also the driver of incremental change, particularly under a regulatory environment.

Now, the organisational adaption to incremental change is demonstrated in the next section.

7.2.2 Organisational Adaption to Incremental Change

The study also aims to demonstrate how organisations adapt to incremental change following the diffusion of ERM. In order to achieve this aim, the study adopted the "neo-institutionalism" framework developed by Greenwood and Hinings (1996). This framework provided a holistic model to explore both contextual factors and organisational dynamics to understand the adaption and institutionalisation process. The contextual factors alone are not sufficient enough to provide an account regarding adaption to incremental change and institutionalisation of ERM unless they are accepted by organisations.

However, it has been revealed that incremental change in banks is the result of contextual factors. The external factors of change have been amplified within banks by internal dynamics. The interaction between contextual factors and organisational dynamics assisted banks in adaption to incremental change. Thus, this study explored the organisational homogeneity in adaption to the incremental change in the banking sector.

Consequently, this research dealt with the adaption process to incremental change, rather than creating a template of the change at field level.

Drawing on the framework, it is revealed that the ERM template in banks is promoted by external stimuli. The ERM template is mainly institutionally derived, which is generated from regulator of the industry. Once promoted by the regulator, the pressures for change have been filtered within banks by interaction with internal dynamics. It is evidenced that contextual factors put pressure on banks to act in a certain way in adaption to change. In response, banks acted homogeneously through internal dynamics and interacted with external factors.

Thus, the ERM template is originated from the organisational context and amplified within the banks through precipitating and enabling dynamics. The precipitating factors are mainly responsible for creating pressure for adaption to incremental change in banks, and the enabling factors are the necessary ones that assist in adapting to incremental change. Although the enabling factors are not able to lead incremental change by themselves, they act as enablers or make constraints in adaption to the change.

Based on the "neo-institutionalism" framework and empirical evidence, contextual, precipitating and enabling factors, along with their interactions, are depicted in Figure 7.2 to explain the organisational adaption to incremental change and institutionalisation of ERM.

Thus, ERM is an externally driven phenomenon in the banking sector. The template of ERM has been generated from the organisational context. It is mainly institutionally derived and enforced by regulators under compulsory regulation. Consequently, the ERM template has been amplified within banks and has influenced incremental change. Organisational dynamics in the form of precipitating and enabling factors have assisted in adaption to incremental change through interaction with the contextual factors. The interaction of contextual factors with organisational dynamics is also illustrated in Figure 7.2.

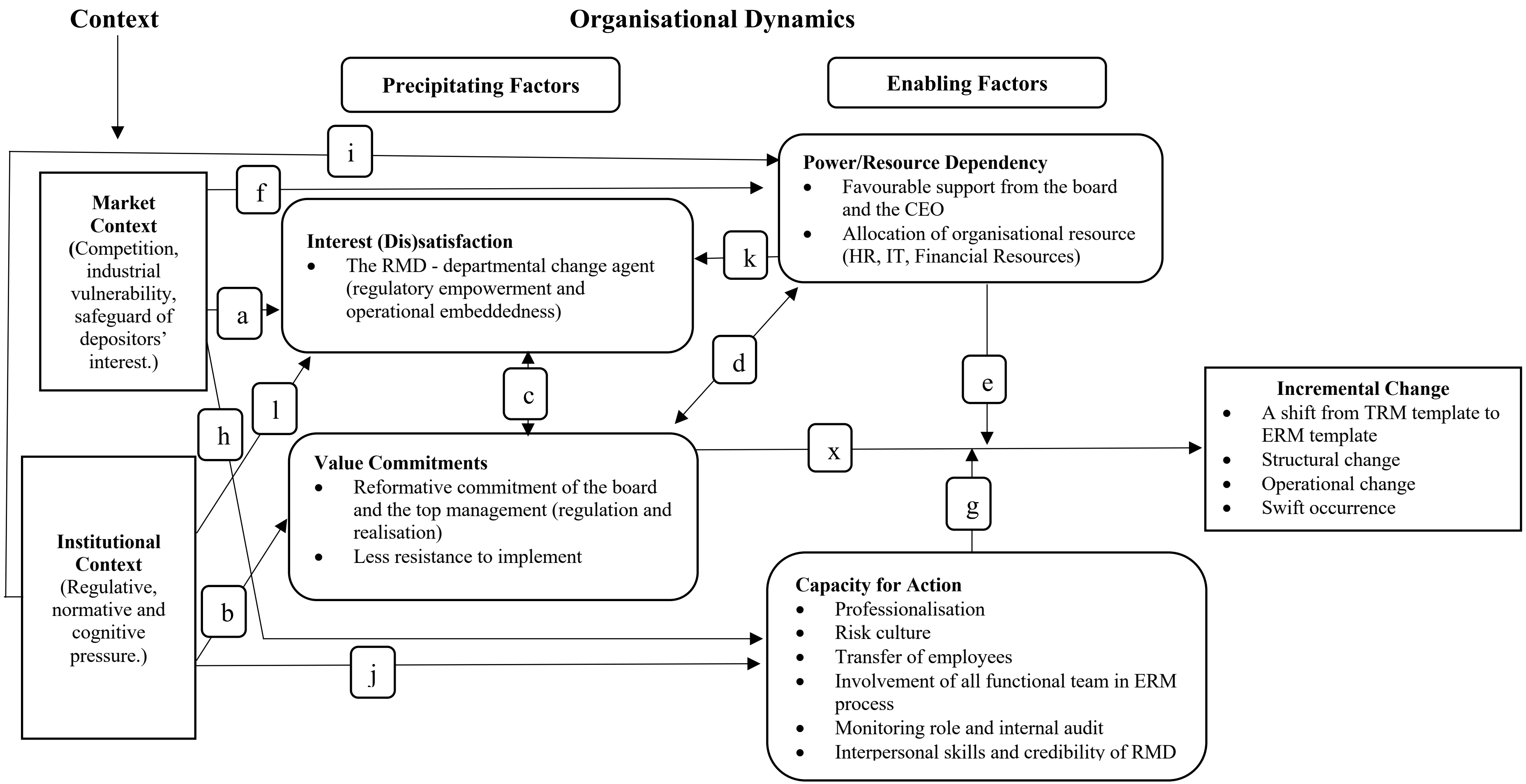

Figure 7. 2: Contextual Factors and Organisational Dynamics and Their Interaction

Organisational Dynamics: Precipitating Factors and Their Interaction

The role of organisational dynamics is vital to accept or reject any template derived institutionally. Thus, the “neo-institutionalist” framework provided a useful lens to identify precipitating and enabling factors of organisational dynamics within banks. According to the framework, precipitating factors mainly generate pressure for adaption to change within banks. The nature of interest and the commitment of functional groups act as precipitating factors for adaption to incremental change. In fact, functional groups act as change agents within organisations. The intensity, though, of those internal pressures for adaption with incremental change depends on contextual pressure.

Based on the framework, it has been revealed that a departmental agency in the name of RMD has evolved in banks following contextual pressure. Actors of RMD in the banks have played active agency roles in adaption to incremental change. The high-interest satisfaction of RMD towards the ERM template acted as the main precipitating factor in adaption. Actors of RMD were able to recognise their advantageous positions over other departments with the institutionally derived ERM template. Besides, RMDs have gained organisational significance due to its regulatory empowerment and operational embeddedness. As a result, it has received organisational power, position, control, status and privilege over other functional groups. Consequently, RMD in banks, as a functional group, are highly satisfied with the ERM template and promoted the incremental change.

RMDs have received legitimate identities in banks as a separate division by the regulation. The organogram of the RMD, the communication hierarchy, the roles and the responsibilities have all been outlined in the regulation. Therefore, RMDs have gained legitimate power to promote the ERM template within banks. Simultaneously, RMDs have gained organisational significance through operational embeddedness with day-today business. They are entrusted with preparing the strategic papers of banks. They help to maintain optimum risk-based capital based on the Basel III framework and can recommend feasible and optimum modes of capital injection in cases of capital shortfalls. Additionally, RMDs assist in credit sanctioning processes and play a significant role in establishing a relationship with foreign counterparties.

Furthermore, they lead risk management practices in banks due to having an inherent limitation of the boards and CEOs. Finally, RMDs have emerged as the second lines of defence within banks and play a role in internal control systems. As a result, they have received organisational power, control, status and privilege as a separate functional group. Consequently, actors of RMDs are able to recognise the connection between the ERM template and their advantageous position. Consequently, they are highly satisfied with the "ERM template" in banks and at the same time dissatisfied with the "TRM template".

However, the organisational significance of RMDs is the result of both market and institutional pressure. The interaction of the market and the institutional context with interest dis(satisfaction) of RMDs is represented by the lines "a and l" in Figure 7.2.

On the other hand, it is difficult to adapt to any change without a firm commitment of the board and top management. However, evidence shows that the boards of the banks have a favourable commitment in adaption the ERM template and incremental change. Likewise, the top management is also in favour of the change.

Although it is noted that this favourable commitment is the result of both "regulation" and "realisation". ERM is a regulatory phenomenon, and it is mandatory to comply. Therefore, the board does not want to be non-compliant. Besides, there is a risk committee on the board. The awareness of board members has increased regarding the usefulness of ERM. Consequently, less resistance is evident in adaption to the change throughout banks. Thus, adaption is the result of the reformative commitment of the board and top management due to ERM regulation and personal realisation regarding the usefulness of ERM.

However, commitment is affected by the institutional pressure. Line "b" in Figure 7.2 shows the influence of this pressure on value commitment. Additionally, a reciprocal relationship is noted between the RMD and the board and top-management commitment, which is also represented by line "c" in the Figure. The RMD also helps the board and top management to overcome the inherent limitation with the embodiment of expertise. In return, the RMDs receive privilege within banks.

Thus, the high-interest satisfaction of the RMD and the reformative commitment of the boards and top-level management towards the ERM template lead to adapt with incremental change, which is represented by line "x" in Figure 7.2. These factors act as precipitators in the adaption to incremental change and assist in institutionalising the ERM. However, the evidence of departmental agency is also similar to the findings of Arena *et al*. (2010), Vinnari and Skærbæk (2014), Jabbour and Abdel-Kader (2015) and Giovannoni *et al.* (2016).

Besides, Arena *et al.* (2010), Giovannoni *et al.* (2014), Hall *et al.* (2015), Mikes (2009, 2011) and Meidell and Kaarbøe (2017) have also drawn on the organisational power and position of risk experts. The evidence of this study regarding evolving power and position is also consistent with their findings.

Organisational Dynamics: Enabling Factors and Their Interaction

According to the framework, supportive power and resources, along with sufficient capacity for action, act as enabling factors for shifting towards change. The enabling factors act as necessary elements in the process of adaption to incremental change. The lack of enabling factors may create hindrance in adaption to change.

Having said that, it has been revealed that RMDs have received favourable support from boards and top management in adaption to incremental change. The reformative commitment of boards provides favourable support to RMDs in promoting the ERM template. Besides, there is an inherent limitation of boards and CEOs to lead ERM. Consequently, RMDs have received favourable authority and power from boards in banks. The reciprocal relationship between value commitment and supportive power dependencies is represented by line “d” in Figure 7.2.

Likewise, RMDs have received a favourable allocation of required resources, despite having resource constraints in banks. IT, human and financial resources are vital in adaption to incremental change. This resource allocation is also in favour of adopting the change. The supportive power and availability of the resources to RMDs are represented by line “k” in Figure 7.2.

Moreover, the regulatory pressure and usefulness of ERM provided favourable support to RMDs. In addition, market factors and institutional factors also favoured ERM. Hence, the influence of contextual pressures on power/resource dependency is represented by lines “i and f” in Figure 7.2. As a result, this supportive power and availability of organisational resources act as enabling factors in the process of adaption, which is drawn by line “e” in Figure 7.2.

On the other hand, it has been revealed that sufficient capacity is increasing in banks in managing the transition from the old template to the new template of risk management and adaption to change. It has been found that risk culture has evolved in banks. ERM awareness has increased among employees from top to bottom, including board members. Risk management expertise is growing with experience and professional development. CFO forums, training and workshops on ERM also influence in increasing sufficient understanding regarding ERM and increase the capacity for action. With the risk awareness culture, banks are mindful on the way to reach destinations under the ERM template. It has also been found that several banks have formed second-tier risk committees, established credit rating units and process re-engineering units, formed surveyor pools, created whistleblowing environments, developed software for risk identification throughout banks and much more. Thus, sufficient understanding regarding ERM template, growing risk culture and numerous organisational changes influence banks to increase sufficient capacity for adaption to incremental change.

Similarly, it has been revealed that motivation and leadership of RMDs have also increased. RMDs are now playing the roles of monitoring and controlling within banks. RMDs help banks to stay within risk appetites and assist in pressing the trigger points to control. Consequently, RMDs have emerged as the second line of defence. Furthermore, all functional teams of banks are involved in the ERM process. The Heads of respective functional divisions are members of the management-level risk committees, and RMDs lead to these. The CROs are the chairs of the management risk committees. The interpersonal skill of risk experts is also growing to manage all the functional groups within banks. In addition, the internal audits are also involved with the RMDs to assist them in policy formulation and implementation.

Thus, sufficient understanding of ERM, the leadership and monitoring roles of RMDs and the involvement of all functional groups in the ERM process show a high capacity of action in adaption. These factors act as enabling aspects in adaption to incremental change. The influence of the capacity for action in the adaption process is represented by line “g” in Figure 7.2.

However, market and institutional contexts have also influenced in increasing capacity for adaption in banks. This is represented by lines "h and j". The market provided risk experts to increase the capacity for adaption. On the other hand, institutional pressure, for example, professionalisation, the practice of the country's foreign banks and regulation, also influenced in increasing the capacity of banks.

Therefore, favourable support of boards and CEOs, availability of organisational resources, along with the growing implementation capacity of banks, are acted as enabling factors and influenced in speeding up the accomplishment of the incremental change.

7.3 Conclusion

In this chapter, incremental organisational change has been examined following the regulatory diffusion of ERM, along with organisational adaption to the incremental change. Following the regulatory diffusion, banks shifted from the "TRM template" to the "ERM template" swiftly, soon after the regulatory promulgation. Massive structural and operational change have occurred in banks following this institutional shift. ERM affects almost every corner of banks. Therefore, it is argued that ERM is a driver of incremental change in the organisational field, particularly under a regulatory environment. The evidence of incremental change extends the ERM literature in organisational change, following Jabbour and Abdel-Kader (2015) and Giovannoni *et al.* (2016).

ERM template is generated from an organisational context. It is mainly institutionally derived following the regulation. Consequently, it has brought an incremental change in banks. The evolving organisational dynamics following the diffusion of ERM responded to the incremental change through interaction with contextual factors. Both precipitating and enabling factors have evolved in banks. These organisational factors, through interaction with contextual factors, influenced in adaption to incremental change and institutionalised ERM in the banking sector.

The RMD's high-interest satisfaction towards the ERM template and the board's high commitment act as precipitating factors for adaption to change. RMDs play the role of departmental agencies and promote the ERM template in banks. Due to regulation and realisation, ERM has received a reformative commitment by boards and top-level management. As a result, organisational adoption has progressed with less resistance. These precipitating factors mainly lead in adaption to the incremental change.

On the other hand, favourable support of boards and top management and the availability of the required organisational resources act as enabling factors in adaption to change. Moreover, the sufficient understanding of ERM and its destination, the growing leadership and monitoring role of RMDs and the involvement of all functional parties in the ERM process have increased high capacity for action towards adaption. Thus, favourable power and resources and high capacity of actions act as enabling factors in adaption to incremental change.

The ERM template is derived from contextual pressures, particularly from regulation. It has been amplified throughout banks by interaction with precipitating and enabling factors, and, thereafter, the practice has been taken for granted. The movement towards an institutional template confirms the institutional change in risk management practice.

ERM is now embedded in the day to day operation of banks. Consequently, it has been revealed that the usefulness of ERM has been meaningfully established in the field. Likewise, the capacity for actions is also increasing throughout the industry. Therefore, it may be argued that the institutionalisation of ERM in banks is not only the result of regulation to ensure regulatory legitimacy, but also for the intention of substantive use.

Chapter 8

The Design Choice of the MCS

It is evidenced from the previous chapter that incremental change occurs in banks following the regulatory diffusion of ERM, and the ERM is institutionalised as an organisational practice. However, the management control system (MCS) of banks is not an exception to this change. Despite, it is yet to see empirically how the MCS of the banks reshapes following the diffusion of ERM. Therefore, the chapter intends to provide an account regarding the configuration of MCS following the diffusion of ERM in banking sector drawing on the framework of "MCS package" developed by Malmi and Brown (2008). In order to achieve this aim, this chapter is structured into three sections. Section 8.1 presents the empirical evidence of this study. Drawing on the control typologies of the "MCS package", this study explored the control elements that have been shaped and reshaped following the diffusion of ERM and documented "how". Based on empirical evidence, it is theorised in Section 8.2 how the "MCS package" reshapes following the diffusion of ERM. Thus, the focus of the study is to understand the configuration of the design choice of "MCS package" following the diffusion of ERM in the banking sector. As such, it is not the objective of this study to assess the outcomes of the "MCS package" or its effectiveness as a result of ERM diffusion. The chapter ends with a conclusion in Section 8.3.

8.1 Configuration of the Elements of MCS Package

Based on interview and documentary analysis, it is found that a number of control elements have shaped and reshaped in banks following the regulatory diffusion of ERM.

Drawing on the control typologies of the “MCS package” framework, the identified control elements and their configuration are enumerated underneath:

8.1.1 The Risk Appetite Statement (RAS)

The interviewees acknowledged that ERM has emerged as a control mechanism in the banks. They said that the control begins with the preparation of the risk appetite statement (RAS). Banks need to prepare RAS at the beginning of the year on an annual basis and required to submit to the BB within March for every calendar year after taking approval from the board. The interviewees also said that the RAS of banks acts as a boundary setting and boundary preserving control tool.

One interviewee highlighted that banks need to define their area of investment, sectoral concentration and the investment portfolio in the RAS. In addition, banks need to define their risk appetite, risk tolerance and risk limit within the RAS, along with a trigger point for management action. These are the control parameters under the RAS, the interviewee added. Further, another interviewee mentioned that there is no scope to go beyond the risk appetite and the risk limit as determined at the beginning, and even, there is no scope to take any sudden decision beyond the declaration in the RAS, because the CB supervises every bank based on the declaration in RAS. A few quotations of the interviewees are mentionable in this regard:

> *Risk appetite statement is an important control document. BB provides some guidelines on how to prepare this document. However, you have to choose your own area of business, and that shall be documented in the risk appetite statement. In my risk appetite statement, I have defined my area of investment under the portfolio and set the limit for each category of investment out of a total of 100 per cent. For example, I set the limit of investment in House Building Sector, say, 10% of my total investment. Accordingly, I allocate the rest of the percentage to all of my investment portfolio based on my risk appetite. (SB-12)*

> *In the risk appetite statement, I need to declare the areas of my investment, maximum limit, sectoral concentration etc. It is a control tool, helps in monitoring and controlling. (SB-19)*

> *[…] I have to tell the Regulatory Body [the BB] about my risk appetite. I have to set my risk appetite for each category of investment under my portfolio. (SB-1)*

> *It [RAS] also helps in setting the management action trigger (MAT) as a part of the control function. It is an overall control mechanism. (SB-12)*

However, it is noted that the RAS is considered as a strategic paper in banks. In support of this, one interviewee indicated that the RAS reflects the strategic focus of banks in addition to the operational planning. It also helps to define the boundary of the business. He said that the RAS integrates the long-term goals of a bank. He quoted:

> *Preparation of the risk appetite statement is mandatory. It shall be submitted with the BB after Board's approval by the end of March for every year. Risk appetite statement reflects the strategic planning of the bank. It reflects the bank's capital management, growth, profitability, dividend expectation, potential business etc. Strategic aspects of a bank are now underpinned within the risk appetite statement. Focusing on this risk appetite, we need to set risk tolerance line, trigger point etc. It helps to set the boundary of the business. (SB-28)*

Another interviewee highlighted the process of preparing the RAS in the banks. He mentioned that the RAS is prepared by following the participatory approach. The Head of the respective functional department is involved in the preparation of RAS. Each department sets their respective targets and goals. The RMD helps to aggregate those expectations and summarises in RAS. Another interviewee added that the RAS is approved by the board and, afterwards, banks submit it to the BB. Consequently, the RAS becomes a self-imposed control tool in the banks. One interviewee said:

> *You know! The risk appetite is not prepared by the RMD. Based on their own experience, Head of all functional departments decide the risk appetite of a particular area after discussion. Board approves the risk appetite statement once it is ready and it requires to submit with the BB by the end of March for every calendar year. (SB-12)*

Besides, several interviewees provided examples in explaining the role of the RAS in behavioural control of the functional departments, and even, the board members. One interviewee stated:

> *For example, we set a geographical risk appetite for our credit department. We define the limit. It will be a non-compliance if they [credit department] exceed the set limit. So, it [RAS] helps to bring the credit operation under control. (SB-6)*

Similarly, another interviewee quoted:

> *We can see the sectoral concentration from the risk appetite statement. We need to declare the sectoral limit at the beginning of the year, and we submit the statement to the BB after the Board's approval. We have to work within the set boundary. If we find any loan proposal which exceeds the set limit, we inform the Board. We communicate with the Board that we have no scope to cross that limit as we have already declared the limit to the BB. So, it [RAS] helps me to control the behaviour of the Board people. (SB-19)*

However, the documentary analysis indicated that the RAS has emerged in the banks following the diffusion of ERM under regulation and becomes a formal control tool both for the regulator and the regulatees, i.e. banks. However, BB's instruction regarding the RAS is quoted below:

> *The RMD shall determine the risk appetites on a yearly basis for all possible measurable risk areas. These areas include, but are not limited to, sector, industry and area- wise loan targets, credit concentration among top-20 borrowers, off-balance sheet exposure as a percentage of total assets, the annual growth rate for loans and advances, limitations on the percentage of financial liabilities sourced from the top-10 suppliers, the gaps between total assets and liabilities in different time buckets of the liquidity profile, the gap between rate-sensitive assets and rate-sensitive liabilities in different time buckets, various ratios regarding liquid assets, expected loss from operational risk, and the Capital to Risk-weighted Asset Ratio (CRAR) after applying stress test. These risk appetites must be approved by the Board and sent to this department by the end of the first quarter of every year (Bangladesh Bank, 2015a).*

Furthermore, it is marked that the BB has shifted from the "compliance-based" supervisory approach to the "risk-based" approach. It is revealed that the RAS is one of the supervisory and regulatory tools to the BB. The BB analyses and monitors the implementation status of the RAS on a continuous basis as a part of their regulatory supervision of the banks. Following disclosure is noted from the annual report of the BB:

> *BB also instructed the banks to prepare their risk appetite statement every year for all possible measurable risk areas in line with the strategic planning of their bank and to submit the statement to DOS by the end of the first quarter of every year after taking board approval. BB analyzes the statements and monitors its implementation status on a regular basis (Bangladesh Bank, 2017, p. 45).*

In support of this, one of the interviewees also stressed that the RAS acts as an industry control tool which is used by the regulator to control and monitor the industry. He said:

> *Certainly, RAS is a management control tool. It is applicable for all scheduled bank in the industry. Thereby, it is an industry control mechanism. (SB-28)*

8.1.2 The Risk-Based Budgeting

It is revealed that the budgetary system of the banks has changed after the diffusion of ERM. The interviewees said that the budgetary system in banks is now a risk-based budgetary system. Banks are now following risk-based budgetary control after the ERM diffusion. Highlighting the branch wise budgeting, several interviewees mentioned that budget at the branch level is now prepared following the RAS. One interviewee added that RAS and budget are now integrated under the ERM approach, and it puts a comprehensive mechanism in the MCS. In this respect, a few quotations are mentionable:

> *Budgetary control is a traditional form of control. But mixing with risk management, budgetary control creates a comprehensive dimension of control. Risk appetite helps in budgeting. It is appetite control. (SB-19)*

> *Budget is now driven by risk. So, it is risk-based budgetary control. Now, everything is driven by risk like risk-based audit, risk-based capital, risk-based performance appraisal. Risk is a significant control issue. (SB-17)*

> *The budget is prepared by the management. But this preparation is routed through the risk management division. Sectoral allocation is a management decision, but the limit is set through the risk management process. (SB-8)*

In addition, one interviewee mentioned that they also prepare a shadow budget based on risk and risk-based capital, which help them in maintaining the optimum capital. He said:

> *We [RMD] prepare a shadow budget based on the risks. We provide a quarterly budget to the CEO and Risk Management Committee of the Board by setting loan target commensurate with the risk-based capital. It helps to maintain cost-effective capital. (SB-17).*

In sum, the traditional budgetary control has been changed following the diffusion of ERM in the banks. The budget is now integrated with the RAS. It becomes a risk-based budgeting and very comprehensive control tool, particularly for branch level managers.

8.1.3 Emergence of the Risk Reports: MRMR and CRMR

It is found that banks are now preparing monthly and half-yearly risk reports following the diffusion of ERM. The interviewees argued that these risk reports are a self-controlled tool in the banks. One of the interviewees said that the CRMR is a blueprint of banks. Every aspect of a bank needs to include in this report. The CRMR helps a bank to see the bank's position and the risks with a holistic and integrated manner. It is also integrated with the RAS. Besides, these risk reports are mandatory to submit to the BB. It is also noted that the BB determines the "risk rating" of the banks based on these risk reports. One interviewee added that there is no scope to manipulate the risk reports. However, another interview stated:

> *RMD submits the risk management reports to the Bangladesh Bank. There is a half-yearly report called CRMR (Comprehensive Risk Management Report). It is about 67/65 pages. This report is good enough for a proper rating of a bank. You can understand the health of the bank by looking at this report. There is no scope to provide fabricated data in the report. (SB-28)*

After analysing the CRMR of a bank, it is revealed that it acts as a hybrid control tool in banks. The template of the CRMR is developed by the regulator as a minimum disclosure for banks, including qualitative and qualitative aspects. Putting the focus on qualitative disclosure, one interviewee mentioned:

> *[…] another thing you require to provide is information about the total number of the employees, their age, termination, turnover, etc. a lot of things. There are 88 points on the qualitative aspect. (SB-5)*

However, it is found that banks require to prepare the CRMR by providing information into nine segments. These nine categories include investment risk, market risk, liquidity risk, operational risk, reputational risk, core risk, compliance risk, capital management and money laundering risk. Among these risks, investment risk disclosure is very comprehensive. Both quantitative and qualitative information is required to disclose under 27 categories as a minimum for investment risk. Bank-wide risks are now integrated into this report.

Similarly, the MRMR is prepared following the CRMR in concise version. The major areas of the disclosure in MRMR include assessment of capital adequacy, assessment on operational risk, large loan investment with funded and non-funded categories including their limit and outstanding balance, top 30 depositors, investment performance branch wise, and comparison with the budget, sectoral and divisional performance of the investment, liquid asset, recovery, profitability, loan classification, investment growth, top 20 defaulters, deposit mix with growth, top 10 depositors and many more. The RMD requires to provide an assessment on the given disclosures in those reports along with some recommendations.

It is further noted from the disclosure in the annual report of the CB that the BB evaluates the risk reports of the banks and provide constructive recommendations for improvement. In addition, the risk reports are used to determine the “risk rating” of the banks. The BB also conducts “risk-based” inspection based on the risk reports. The BB disclosed:

Based on the CRMR and MRMR submitted by the banks, DOS regularly evaluates the risk management activities of each bank and provides constructive recommendations to improve their conditions (Bangladesh Bank, 2018a, p. 46).

BB determines the comprehensive risk management rating of each bank on the half-yearly basis based on available information in the CRMR, minutes of enterprise risk management committee (ERMC) and board risk management committee (BRMC) meetings, the compliance status of BB instructions submitted by banks and other sources (Bangladesh Bank, 2018a, p. 46, 47).

Thus, the risk reports have emerged as a hybrid control tool in the banks following the regulatory initiatives of ERM. Both qualitative and quantitative aspects of the banks are required to disclose in these reports. These reports act as a self-control tool for the banks. Similarly, risk reports are also a vital control tool to the regulator.

8.1.4 The Capital Maintenance Document and the ICAAP Document

ERM and Basel Framework are intertwined. It is revealed that ERM is imperative to comply with the Basel III framework. Putting the focus on the Basel, one of the interviewees highlighted the requirement of capital maintenance and the ICAAP documentation of the Basel framework, which act as control tools in the banks. He said that the capital maintenance requirement under the Basel III framework is sufficient enough to control the balance sheet items of a bank. Besides, banks require to submit the risk-based capital maintenance statement to the BB in every month. The interviewee stated:

[…] just the requirement of capital maintenance, which is a minimum of 10% of risk-weighted assets is more than enough. Because the management of the full balance sheet comes under the requirement of this 10% obligation. (SB-30)

Besides, it is also noted that the ICAAP document also acts as a control tool in banks. As per pillar-II under Basel-III framework, banks must comply with the Supervisory Review Process (SRP). Part of that, banks must prepare a document called

ICAAP (Internal Capital Adequacy Assessment Process) document showing an assessment regarding the adequacy of capital, considering the risk profile of the bank. It must be submitted to the BB after taking approval from the board. Afterwards, the BB reviews the adequacy of the statement of ICAAP through an exclusive meeting with the bank's SRP Team. After that, the BB charges additional capital in case of non-compliance or inadequacy in capital maintenance. One of the interviewees said:

> *If there is any deficiency to meet those requirements [SRP requirements], there comes the question of additional capital under ICAAP. It could be a burden. (SB-6)*

As a result, this document also acts as an essential formal control tool to ensure the adequacy of the required capital of a bank as per Basel III framework.

8.1.5 The Risk-Based Performance Appraisal

It is revealed that the performance appraisal system has reshaped following the diffusion of ERM, which is considered one of the vital management control elements. One interviewee stressed that the performance appraisal system is renamed as risk-based performance appraisal system under the ERM approach. Another interviewee mentioned that the risk impacts are now integrated with the performance appraisal system, particularly for measuring the performance of branch managers.

To clarify, he said that management now considers not only the nominal profit generated in any branch in performance appraisal, but also considers the quality of the profit. For example, he said that if any additional capital is charged due to non-compliance of the branch manager or if any additional provision is required due to low quality of the branch assets, that impact will be adjusted with the nominal profit of that branch to measure the performance of the branch manager under risk-based performance appraisal system.

The interviewee also mentioned that this risk-based appraisal system significantly influences the behaviour of the branch manager. As a result, branch managers are now much aware of risk and risk management. They always think about the impact of the risk towards the banks as well as their career before taking any action. It is also revealed that the risk-based performance appraisal system helps to ensure the goal congruence of the banks and the employees. The interviewee quoted:

> *Risk management concept has now been tagged with performance appraisal system. It becomes a reliable monitoring and controlling tool. We have communicated the message at the down of the line, i.e. at the operational level. So, everyone is concerned about the impact of his job not only for the bank but also for his performance/career impact. It is called 'Risk-based performance appraisal'. People are now much aware of risk-taking and risk management. For example, the profit of the two branches is equal, say Tk 100 million. But asset quality is different. In that case, we take into consideration the additional capital or additional provision required in the branch due to different assets quality, i.e. cost of residual risk. Performance of a branch is determined after netting of such provision or additional capital with branch profit. Now risk has been tagged with the capital. The more risk you take, the more capital you have to allocate. If the branch needs more capital for any action of the branch manager, that will impact on his performance. As a result, the awareness level has been increased. (SB-16).*

8.1.6 The Risk Committee at the Board

It is found that the governance structure of banks has also restructured under the ERM approach. Documentary evidence showed that a risk committee is mandatory at board level as per provision of Section 15 of the Bank Companies Act 1991 (Revised as of 2013). The function of the board-level risk management committee has also been defined. This legal requirement compels the board to get involved in the ERM system within a bank. One of the interviewees mentioned that the board is now actively involved in the risk management process due to having a risk committee at the board level.

Likewise, another interviewee said that his board is continuously following up the risk management issues with the RMD. Besides, formal communication line has been established between the board risk committee and the RMD based on regulatory prescription. Moreover, it is noticed that the meeting of the board risk committee is held on a regular interval, and banks require to disclose this information in their annual report. The legal provision and active involvement of the board members help to set the tone of the risk culture, which also influence in e management control system. Indicating to the seriousness of the board, one interviewee quoted:

> *In that sense, we [RMD] are very lucky enough. The people who represent our Board are very well known not only for the sake of the directorship of the bank but for their own name and fame in the society. They are much concerned for good governance and sustainability of the bank rather than profit maximisation. (SB-3)*

It is also noted from the annual report that all the sampled banks have a board-level risk management committee, and banks also disclosed the role and responsibility of the committee. The board-level risk committee is a significant element of the administrative control in banks under the ERM.

8.1.7 The RMD - a Structural Control

It is found that a new form of structural control has emerged in banks following the diffusion of ERM. A structural change has occurred in the banks following the regulatory prescription through establishing a separate division for risk management. With eight separate risk management desks, the RMD has emerged as a structural controller in the banks. It is also found that the regulatory prescription provides authority and responsibility to the RMDs in monitoring and controlling the risk management function of the banks. Besides, banks are advised to entrust on the RMD in implementing the necessary actions as per core risk management guidelines.

On the other hand, a CRO has appointed as chief of the RMD followed by a divisional Head. It is further noticed that the RMD prepares the risk reports both monthly and half-yearly, prepares the risk appetite statement, prepares the meeting minutes of the management level risk committee, helps in determining the optimum capital level, and ensure the regulatory compliance. In addition, structurally, the CRO is the chair of the management-level risk committee. With regulatory support, the RMDs has received structural power and gained organisational significance in the banks. The RMD is now a hub in banks and acts as an umbrella. Furthermore, the communication line of the RMD has defined. The RMD recommunicates the risk reports directly to the board's risk committee with a copy to the MD/CEO. These structural changes following the ERM regulation have influenced to establish a structural control within the banks. Thus, structural control has emerged following the implementation of ERM through establishing the RMD as a separate division. One of the interviewees mentioned:

> *You will not get the desired result if you do not define the role, responsibility and authority, and make the people accountable. In the ERM template, everything is defined. Who will be the CRO, what will be the role of Head of RMD, what will be the communication system, what type of reports shall prepare, how MD will be communicated, how to integrate the cross-functional departments and many more. Everything is defined in the ERM template. So, ERM becomes a part of the internal control system, helps to ensure accountability and monitoring. (SB-4)*

8.1.8 Management-Level Risk Committee, Meeting and Meeting Minutes

It is found that banks have formed a risk committee at management-level according to the regulatory prescription. The Head of the respective functional division is a member of the committee, where the CRO acts as a Chair. The Head of the RMD also acts as a secretary of the committee. The management-level risk committee is also an important control element in the banks.

Besides, it is informed by the interviewees that management-level risk committee meets once in every month. After the meeting, banks submit the meeting minutes to the BB by the following month. Besides, the interviewees mentioned that board-level risk committee meets at least once in every quarter, and banks also submit the meeting minutes to the BB by seven days following the meeting. One of the interviewees indicated that the formation of the risk committees, holding a meeting on a regular interval, preparation and submission of the meeting minutes, have brought the banks under a control system. He also said that the risk committee meeting helps in the documentation of the risks, including their follow-up. Another interviewee added that risk committees' meeting acts as a useful control tool in monitoring and following up the risks. In this regard, two interviewees quoted:

> *We need to provide a follow-up note in every meeting about the decision of the last meeting. We need to update and implement all decision before the next meeting. Besides, there is a pressure for regulatory audit by the Bangladesh Bank. So, we are executing all decisions as quickly as possible before the next meeting. (SB-2)*

> *We [RMD] report every month based on the management-level risk committee meeting. Every problem is identified in the monthly report and management also follows up the comments. There is no scope to escape the problem. (SB-19)*

8.1.9 The Core Risk Management Policies and the Core Risk Rating

The interviewees mentioned that banks have their own core risk management policy. It has approved by the board. In fact, it is noted that the BB has issued risk management guideline in the areas of six core risk. Besides, the BB has also issued an integrated risk management guideline and made it mandatory for banks to develop core risk management guidelines. It is also mandatory for banks to develop an integrated risk management guideline following the BB's guideline as a minimum. Accordingly, banks have developed the risk management policy in six core risk areas. Moreover, one interviewee indicated that they also have departmental ISO for risk management. These core risk management guidelines and ISO are also part of the control system in the banks. The interviewee said:

> *We have department wise* Internal Standard of Operation (ISO). *We also practice risk management in department wise. (SB-3)*

In addition, it is found that the BB has suggested the banks for developing their own methodology to assess the implementation of the six core risk management guidelines and asked for internal core risk rating at least annually. Besides, it is noted that there is a provision to charge additional capital if the internal core risk rating of any core risk area falls below a certain level. The regulatory provision is as follows:

> *If rating in any of the core risks falls below a certain level, a bank should maintain additional capital for that/those risk/risks.* (Bangladesh Bank, 2014, p. 58)

Furthermore, it is found that banks require to disclose the internal risk rating of six core risks both individually and collectively in their CRMR in every half year. Finally, the disclosed rating is also inspected by the BB. Thus, these core risk management policies, ISO and integrated risk management guidelines have emerged as a control mechanism in the banks following the diffusion of ERM.

8.1.10 Risk-Based Cultural Tone at the Top

It is revealed that the culture of the banks has significantly evolved after diffusion of the ERM. The interviewees indicated to the emergence of risk-based cultural control following the ERM diffusion. It is found that boards of the banks are involved in the ERM process. Due to having a risk committee on the board, board members are much aware of the risk and its management. Thus, the risk-based cultural tone has been set by the board in banks. Besides, there is a regulatory consequence in case of non-compliance with the ERM. As a result, the ERM is a top-down process in the banks. Hence, there is less resistance in implementing ERM. One interviewee said:

> *There is no resistance from the Board level and the management level in my bank. Rather they encourage to follow the best practices. Because the view of my bank is to go to the next level. Besides, there is no resistance at the root level. It is a matter of mind-set. (SB-11)*

8.1.11 Risk Awareness

Besides, it is noticed that risk awareness has increased throughout the bank following the diffusing of ERM. Actually, it is the result of a risk-based cultural tone set by the top in banks. One of the interviewees said that there is no scope to be ignorant in the ERM process. Everyone becomes a risk manager under the ERM movement. One interviewee stated:

> *Under this ERM practice, we are trying to create risk awareness so that everyone becomes a risk manager [..] Risk awareness has been enhanced significantly. I can remember, when I put a drive for external credit rating for our clients in 2013, business-people were shouting. They were asking why you need rating the client after disbursement of the loan. They did not understand the necessity of credit rating. Now if you talk about rating with any junior of my bank, you will able to understand their awareness. (SB-30)*

The interviewees indicated that the usefulness of ERM has increased among the board members in respect to the stability and sustainability of banks. Besides, people are much aware of their action. All parties are involved in the ERM process. One interviewee said:

> *Risk awareness culture has been growing. Now people are doing their job after thinking its impact towards the bank, short term, long term and even self-impact. (SB-16)*

Thus, the risk culture and risk awareness have appeared as a control tool following the ERM diffusion in banks.

8.1.12 Formal Commitment Towards the ERM

It is marked from disclosure in the annual reports of banks that board and Management have shown their formal commitment towards implementation and practice of ERM. A separate chapter is incorporated in annual report by the banks regarding disclosure on risk management practice, including their commitment. This disclosure also reflects the risk culture of the banks and the value commitment of the board towards the ERM.

8.1.13 Structural Change Under ERM

Massive structural changes have been found in banks following the regulatory prescription. Establishment of RMD as a separate division for management of risk is one of the vital structural change in banks, which represent a symbol of risk culture within the banks. The RMD in banks has received regulatory power. The position of CRO and Head of the division are regulatory post. The RMD is empowered to monitor and implement the core risk guidelines. Consequently, the ERM practice becomes more visible in banks. One of the interviewees said:

> *Risk management division (RMD) is an important part of the banks. Previously there was no such division, you know! (SB-1)*

The regulatory instruction regarding RMD is as follows:

> *Banks shall entrust in the RMD the responsibility of monitoring implementation of required corrective action, related to objections revealed in the inspections conducted on the basis of the core risk management guidelines (Bangladesh Bank, 2015a).*

Besides, several interviewees highlighted some change initiatives in addition to the regulatory prescription, which is also influenced structural change. This is the result of risk culture in the banks following the diffusion of ERM. For instance, the formation of the second-tier risk management committee, using customised software for creating whistling blowing environment for identification of risk, formation a pool of surveyor for valuation of the security and collateral, establish internal rating wing, establish process engineering department. One of the interviewees said:

> *There is a requirement of valuation of security and collateral by third party surveyor. We are dependent on them for valuation. But we have improved the*

> *process. Say, there are 30 surveyors, but we have a shortlist of 17 from them. We also take recommendation from the branch manager before their enlistment. We keep them under strict monitoring. In case of any claim or allegation against any surveyor, we de-list them. So, what is happening? The message is communicated to everyone. The branch manager is also accountable for his recommendation. These steps help us in the integration of the system though it took time. (SB-30)*

8.1.14 A Well-defined Communication Hierarchy

It is found that the RMD has given privilege through the regulatory prescription in communication after defining its roles and responsibilities in banks. The RMD is advised to communicate the risk reports directly to the risk committee at the board, giving a copy to the CEO. Besides, it is found that the CRO has appointed from the top position of the management like AMD/DMD level. This signifies the symbolic risk culture within the banks. One of the interviewees indicated that:

> *Here, the reporting line is very clear. Roles and responsibilities, job descriptions and hierarchy, are also clearly defined [RMD] so that implementation could be effective. (SB-11)*

8.1.15 Risk Committees and Risk Reports

It is noted that banks have formed two risk committees following the regulatory and legal provisions. One risk committee is formed at board level and another one at the management level. Besides, banks are preparing various risk reports like monthly, half-yearly and annually. There is also a provision for a formal meeting of the risk committees on a regular interval. In addition, banks need to prepare the meeting minutes following the meetings and must submit the minutes to the BB. This represents a symbol of risk culture in the banks, that also influence in cultural control.

8.1.16 Formal Risk Management Training

The interviewees mentioned that banks are organising formal training on comprehensive risk management as well as in the areas of core risk management, Basel implementation and many more on a regular interval. It helps them to increase risk awareness among the employees. It also influences in growing the risk culture throughout the bank. Further, it is noted that ERM training and its disclosure in CRMR are also mandatory for banks, including the number of participants. Sometimes, ERM training is provided by the regulator, one interviewee added. Two interviewees quoted:

> *Yes, last year we have conducted a risk management workshop in our all branches. This training is continuing. We are conducting on a regular basis, though expensive. (SB-2)*

> *They [BB] are very co-operative. They are organising seminar, workshop and training. When I [risk manager] face any difficulty, I discuss with them. They are always positive in mind. (SB-4).*

8.1.17 The CRO Forum

The interviewee mentioned that a CRO Forum is formed at the BIBM. This is also part of risk culture in the industry which has been emerged following the ERM movement. The interviewees said that it is a good platform where all the CROs can share their practical experience and can recommend for necessary actions. Meeting of the CROs is held in every quarter. It also influences in developing the risk culture in the industry. Interviewees said:

> *There are some forums in the banking industry. Like forum for the bankers called Association of Banks, Bangladesh (ABB), an association of bank owners like BAB (Bank Owners' Association of Bangladesh) and a CRO Forum in the BIBM. Many workshops organised in CRO Forum related to the comprehensive risk management. (SB-11)*

> *We [CRO/Head of RMD] provide our opinion in CRO Forum in the BIBM. They [BIBM] collect our opinion, compile them and update us in the following meeting. (SB-26)*

8.1.18 Professionalisation of the Discipline

The interviewees indicated that ERM is a complex and technical phenomenon. It is relatively new in the banking sector of Bangladesh. Hence, there is a shortfall of risk expert, they added. As a result, people are developing their expertise with professional degrees in the area of risk management. It is also found that the BIBM has launched a professional degree in risk management in collaboration with the Frankfurt School of Germany to support professional development.

Besides, the regulator has also given the legitimacy of risk management function as a separate task in the banks. Thus, RMD and risk management have gained legitimacy in banks. Thereby, risk management has emerged as a professional discipline in the industry. One interviewee added that some banks are also sponsoring their risk experts to develop professional expertise. The risk management has evolved as a distinct discipline in the sector with the embodiment of expertise and complex notion. Professional development is now part of the risk culture in the banks. To support this fact, two interviewees quoted:

> *Employees [risk personnel] are now becoming aware of risk management practice. They are now training up themselves. They are studying about this subject. This is an exceptional change. (SB-10)*

> *My bank is also helping to develop professional expertise in the risk management issue. (SB-5)*

It is also noted that some risk managers have a professional degree like chartered accountancy and cost and management accountancy. They are working as a Head of the risk management division of the banks. Some of them also have a professional degree in risk management areas. Professional development is growing in the sector.

8.1.19 Organisational Significance of RMD in Terms of Power and Control

It is revealed that the RMD has gained organisational significance in banks as a result of regulatory empowerment. One interviewee mentioned that the RMD acts as a hub in banks and the second line of control. The scope of the RMD has been evolved with the role of monitoring and controlling, he added. Consequently, the RMD has gained organisational privilege, power, control and status. It is also found that this growing power and status influences in employee motivation in RDM. These factors influence in creating the clan culture within the RMD. Indicating this culture, the interviewees said:

> *Once upon a time, to work in a risk management division, I considered it as a transit period for myself. But now I don't think so. There is a scope to work in the risk management division. From this seat, I can see the whole view of my bank. It is no longer considered as transit in a banking career. (SB-30)*

> *Actually, there is a difference between internal audit and RMD. Internal audit is doing post facto job after the event. But the job of the RMD is before the event, i.e. related to future. The nature of the job of these two departments is different. RMD helps to set the criteria or policy, and it is the responsibility of the internal audit to do their audit based on that established criteria or set policies. They help in monitoring. (SB-4)*

In fine, this section delineates the empirical findings regarding the control elements that have been shaped, reshaped and evolved following the regulatory diffusion of ERM. Drawing on the control typologies of the "MCS package" framework, this study explored a number of control elements of the MCS in banks that have been reshaped and emerged following the ERM diffusion. Moreover, this section describes how the control elements are reshaped and evolved following the diffusion. However, based on the empirical evidence, it is theorised in the next section how the notion of "MCS package" reshapes as a notion of a "risk-based MCS package" following the regulatory diffusion of ERM in the banks.

8.2 Discussion: Design Choice of MCS Package Following ERM Diffusion

This chapter intends to provide an account of how the “MCS package” has been reshaped following the regulatory diffusion of ERM. In order to achieve this aim, this study explored the control elements of the “MCS package” that have evolved or reshaped following the diffusion of ERM in the banking sector. Drawing on the overarching conceptual framework of the “MCS package” proposed by Malmi and Brown (2008), a variety of control elements, along with their evolving control nature, have been documented. The empirical evidence of the control elements is depicted within the framework of “MCS package” in Figure 8.1:

<table>
<tr><th colspan="7">MCS Package</th></tr>
<tr><th colspan="7">Cultural Controls</th></tr>
<tr><th colspan="2">Value-Based Control</th><th colspan="3">Symbol-Based Control</th><th colspan="2">Clan Control</th></tr>
<tr><td colspan="2">Risk-based cultural tone at the top, risk awareness, commitment towards ERM.</td><td colspan="3">Formation of RMD as separate divisions, defined communication hierarchy, risk committees, risk reports, second-tier risk management committees, customised software for risk identification, Whistleblowing environment, pools of surveyors, formal risk management training, CRO forum.</td><td colspan="2">Professionalisation of the discipline, organisational significance with power and control.</td></tr>
<tr><th colspan="2">Planning Controls</th><th colspan="4">Cybernetic Controls</th><th rowspan="2">Reward and Compensation Controls</th></tr>
<tr><th>Long-range planning</th><th>Action planning</th><th>Budget</th><th>Financial Measurement</th><th>Non-Financial Measurement</th><th>Hyb-rid</th></tr>
<tr><td colspan="2">Risk appetite statement (RAS) (strategic paper, management action trigger, participatory approach in preparation and self-imposed control tool, behavioural control tool, regulatory control tool)</td><td>Risk-based budgeting (branch wise budget)</td><td colspan="3">Risk management reports (CRMR; MRMR); capital maintenance document and ICAAP document</td><td>Risk-based performance appraisal</td></tr>
<tr><th colspan="7">Administrative Controls</th></tr>
<tr><th colspan="3">Governance Control</th><th colspan="2">Organisational Structure</th><th colspan="2">Policies and Procedure</th></tr>
<tr><td colspan="3">Risk committee at the board level</td><td colspan="2">RMD a separate division with CRO and head, management-level risk committee, meeting and meeting minutes</td><td colspan="2">Core risk management policies and core risk rating, integrated risk management guidelines, department wise ISO.</td></tr>
</table>

Figure 8. 1: Design Choice of MCS Package Following Diffusion of ERM

Empirical evidence shows that a variety of management control elements have evolved and been reshaped following the regulatory diffusion of ERM. It has been revealed that control elements of the "MCS package" have been configured following the notion of "risk" after diffusion of ERM. Consequently, this study intends to argue that the "MCS package" has been reshaped as a "risk-based MCS package" following the diffusion of ERM in the banking sector. However, it is explained below in detail how the "MCS package" has been reshaped as a "risk-based MCS package".

8.2.1 Risk-Based Cultural Control

The control element of the package begins with cultural control. According to this typology, evidence shows that the culture of banks has evolved following the diffusion of ERM. Organisational culture has been reshaped in banks based on the notion of "risk" and turned into "risk culture". This risk culture induces risk-based cultural control. Risk culture is growing in banks and helping to establish values, beliefs, symbols, norms and ways of behaving, which ultimately control employees' behaviour. Besides, risk culture acts as an umbrella within banks, which provides a contextual frame for the rest of the control elements of the package.

Evidence shows that regulatory diffusion of ERM has the effect of evolving value-based, symbol-based and clan control under cultural control. Boards are now one of the important elements of the ERM process. The awareness level of board members has increased due to having risk committees at the boards in banks. Consequently, the risk-based cultural tone has been set at the top, which prevails throughout banks. As a result, less resistance has been evidenced in banks in adopting and implementing ERM. Besides, in banks' annual report, boards and top management have expressed their formal commitment towards ERM. This risk-based organisational culture and the formal commitment of boards and top management indicate the value-based cultural control that influences the behaviour of employees to act in a certain way.

Besides, various change initiatives, including structural changes, have been found following the diffusion of ERM in banks – for instance, the formation of RMD, the appointment of CRO as chiefs the defined communication hierarchy of RMD, the formation of risk committees at management level and board level, the preparation of various risk reports, the formation of the second-tier risk management committee, the development of customised software for identification of risks, the establishment of whistleblowing environment, the formation of surveyors' pool, formal risk management training at a regular interval, the formation of CRO forum and many more. These changes represent the symbol-based risk culture within banks.

Furthermore, it has been revealed that a distinct sub-culture has emerged within RMDs with the embodiment of complexity and expertise of the discipline. Professional expertise and a legitimate position provide RMDs with power, control, privilege and status within banks. This sub-culture confirms the notion of clan control of Ouchi (1979).

Thus, evidence confirms the emergence of risk-based cultural control following the diffusion of ERM. This risk culture is initiated from the top and consequently prevails throughout banks. It is the result of the strong commitment of boards towards ERM. It is growing within banks and influences employees' behaviour and their thoughts. The risk culture helps employees to become aware of risks and their impacts. As a result, they act in a desirable way. Under this risk culture, every employee becomes a risk owner as well as a risk manager. This risk-based cultural control is the most powerful control element in banks, and now it is visible after the diffusion of ERM.

8.2.2 Risk-Based Planning Control

Evidence shows that planning control has evolved following the diffusion of ERM. Elements of planning control have emerged based on the notion of "risk" after ERM diffusion. Consequently, planning control in banks has been turned into "risk-based planning control".

Evidence shows that the RAS has emerged under planning control following the regulatory diffusion of ERM. It acts as an element of action control, although it also reflects banks' visions and goals. Banks prepare the RAS on an annual basis, reflecting the strategic focus. It also acts as an ex-ante form of control. However, the RAS is regarded as a boundary setting and preserving control tool in banks. It helps not only to determine the management action trigger point after determining the risk appetite, risk tolerance and risk limit, along with the total investment portfolio but also helps in pressing the trigger point for management action before things go out of control.

Banks are required to submit the RAS to the CB after taking approval from the boards. Once approved by the board, the RAS becomes a formal control tool for regulators and banks. The RAS is also considered a self-imposed control tool due to following a participatory approach in its preparation. Therefore, the RAS significantly influences to control the behaviour of the people at functional departments of banks. It even helps to control the behaviour of board members as it is approved by them. There is no scope to operate beyond the RAS as the CB inspects every bank based on declaration in RAS.

To summarise, the RAS gains organisational significance as a benchmark to monitor and control the functions and behaviour of all parties in banks. It acts as an important ex-ante form of control. It influences the control of behaviour of board members and functional departments and acts as a self-imposed control tool due to its bottom-up approach in its preparation. There is no scope to manipulate this statement, and it is required to be submitted to the CB. The CB also uses the RAS as a supervisory tool. Thus, the RAS is a tool for both strategic and operational control, prepared following the notion of "risk" in the banks.

8.2.3 Risk-Based Cybernetic Controls

The evidence shows that elements of cybernetic control are shaped and reshaped based on the "risk" notion following the diffusion of ERM. Consequently, cybernetic control has been turned into "risk-based cybernetic control".

Budget is one of the important control elements of cybernetic control and the most universal control tool. However, evidence shows that the budgetary system of banks become "risk-based budgeting" after the diffusion of ERM. In banks, budgets are now prepared considering risk and are integrated with the RAS. Thus, budgets reflect risk appetite, risk tolerance and risk limit of banks. It has been revealed that banks now set "risk-based targets" in their budgets to measure the performance of employees, particularly branch managers. Besides, banks take necessary actions based on the variance between risk-based budgeting and actual performance. Thus, ERM challenges the traditional form of budgeting in banks. "Risk-based budgeting" has replaced "traditional budgeting" after the diffusion of ERM.

Also, the evidence shows that hybrid control elements have emerged under cybernetic control following the diffusion of ERM. The CRMR, the MRMR, the capital maintenance statement and the ICAAP document are considered as hybrid control tools in banks. These reports include both financial and non-financial measures for reporting and controlling.

Evidence shows that banks are required to provide around 59 types of disclosure in CRMR as a minimum with a comparative analysis. Additionally, around 88 points are required to be included in this report as a qualitative disclosure. The CRMR is prepared every six months and reflects all aspects of banks with comparative disclosures and analysis. This report integrates all the risks of banks. Consequently, it is considered as a blueprint and a risk scorecard. Besides, the MRMR is prepared every month in line with the CRMR to ensure consistency in controlling and monitoring. These risk reports are acting as hybrid control tools in banks following the diffusion of ERM.

In addition, the capital maintenance statement and the ICAAP document under the Basel III framework are also considered important control tools. Capital of banks is now maintained considering credit risk, market risk and operational risk under Pillar 1 of the Basel III framework. All balance sheet items are now part of capital calculations under the notion of “risk-weight assets”. Thus, this risk-based capital is maintained based on the ERM approach. Besides, banks need to submit these risk-based capital statements to the CB every month. Consequently, these act as control tools under the ERM approach.

Furthermore, the ICAAP document under the Basel III framework also acts as a control tool in cybernetic control. There is a meeting between CB’s SERT team and banks’ SRP teams to evaluate the ICAAP documents on an annual basis. The CB charges “additional capital” in case of deficiency in ICAAP documentation. Therefore, regulatory provisions regarding SRP in terms of risk management also stimulate a strong management control system. The ICAAP document helps in monitoring and controlling all affairs of banks, putting the focus on risks.

To summarise, the budgets of banks have been reshaped as “risk-based budgeting” after implementing ERM. Besides, hybrid control tools such as the MRMR, the CRMR, the capital maintenance statement and the ICAAP document have emerged under cybernetic control following the notion of “risk”. Thus, elements of cybernetic control have been reshaped following this notion. Consequently, cybernetic control in banks has also been reshaped as “risk-based cybernetic control”.

8.2.4 Risk-Based Reward and Compensation

Evidence shows that the performance appraisal of banks has also been reshaped following the diffusion of ERM. Performance appraisal systems have been redesigned considering risk impact. Consequently, these systems have been turned into "risk-based performance appraisal” systems under ERM.

The evidence reflects that risk-based budgetary control helps in risk-based performance appraisal, particularly at branch level. Budget and performance appraisal are now integrated considering “risk” in MCS. As a cybernetic control tool, budgetary control provides the result of the nominal performance of a branch in numerical value. However, this nominal profit is part of the traditional performance appraisal system. However, this nominal value is converted into real return under the risk-based performance appraisal system. The real performance of a branch manager is measured after adjusting the risk impact with this nominal result. The requirement of any additional capital due to default in managing investment or deteriorating quality of any assets is adjusted with the nominal result of a branch to determine the real performance. As a result, risk-based performance appraisal significantly influences employees’ behaviour in risk-taking and risk management. The risk awareness level has increased throughout banks under this control system. In addition, this risk-based performance appraisal system influences the achievement of goal congruence between employees and banks. Under the risk-based appraisal system, the behaviour of branch managers is consistent with the objectives of banks and also motivational for real performers. Thus, reward and compensation control has been reshaped after ERM diffusion and is acting as a significant control tool in banks.

8.2.5 Risk-Based Administrative Control

Evidence also shows that elements of administrative control have been influenced after ERM diffusion. It has been revealed that ERM philosophy influences governance systems of banks, organisational design and structure, communication hierarchy, job design, and policy and procedure. It is noted that control elements of administrative control have also been reshaped following the notion of "risk" under ERM. Consequently, administrative control has been turned into "risk-based administrative control".

Evidence shows that governance structure has changed in banks under the ERM philosophy. A board-level risk management committee has been formed with defined roles and responsibilities regarding the management of risk. As a result, ERM has become a top-down approach and an effective control mechanism due to the involvement of governance members.

Besides, it is noted that structural control has emerged following ERM diffusion. Structural changes, through establishing separate divisions for risk management, new organograms of RMD and formation of a management-level risk committee, reflect structural control within banks. In addition, preparation of risk management reports and risk appetite statement, holding meetings of risk committees and preparation of meeting minutes are all part of administrative control in banks that have been emerged after the diffusion of ERM. Besides, decisions of the risk committees, their implementation status, including follow-up, all are documented in the minutes of the meetings. Thus, the meeting minutes are also considered vital administrative control tools.

Moreover, policy and procedural control have also evolved following ERM diffusion. Banks have developed core risk management guidelines and integrated risk management guidelines, although a few banks have internal standards for operation (ISOs) for various departments. These are all part of the policy and procedural control. Thus, elements of administrative control have been reshaped following the notion of "risk", and therefore, administrative control has been turned into "risk-based administrative control" following the regulatory diffusion of ERM.

Finally, the design choice of MCS has evolved following the diffusion of ERM. Evidence shows that control typologies of the "MCS package" have reshaped following the regulatory diffusion of ERM by putting the focus on the notion of "risk". Thus, it may be argued that the "MCS package" has turned into the "risk-based MCS package" in the design choice of MCS following the diffusion of ERM.

8.3 Conclusion

This chapter aimed to see empirically how the design choice of MCS has been influenced following the diffusion of ERM in banks. Drawing on the framework of the "MCS package" proposed by Malmi and Brown (2008), the study explored control elements that have been shaped and reshaped following the diffusion of ERM.

Evidence shows that ERM influences the design choice of management control systems. This empirical evidence confirms the claim of Huber and Scheytt (2013) that ERM challenges the traditional form of management control. Besides, according to Huber (2009), it can be said that the influence of ERM over management control systems is quite striking.

In addition, this study is a response to the call given by Chenhall and Mores (2015) to provide evidence that ERM as an organisational and management innovation influences the evolving of MCSs in service organisations. Furthermore, control researchers argue that risk management is considered as a cornerstone of modern management control (Scheytt *et al.*, 2006; Bhimani, 2009; Soin and Collier, 2013). The empirical evidence of this study also supports this argument.

It has been revealed that control elements of the “MCS package” have been reshaped following the diffusion of ERM. Based on control typologies of the “MCS package” framework, it has been revealed that the culture of banks has evolved and has turned into “risk-based culture”, and acts as a cultural control. Similarly, planning control has been reshaped following ERM diffusion. Planning control has become “risk-based planning control”. Likewise, elements of cybernetic controls, reward and compensation controls and administrative controls have also evolved based on the notion of “risk” following the diffusion of ERM. Consequently, these typologies have become “risk-based cybernetic controls”, “risk-based reward and compensation control” and “risk-based administrative control”. Drawing on the evidence, this study argues that the design choice of the “MCS package” has evolved following the regulatory diffusion of ERM. After reshaping, the framework of the “MCS package” has emerged as a “risk-based MCS package” in an organisational field following the diffusion of ERM under regulation.

However, evidence of this study demonstrates how ERM as a new control innovation comes under the boundary of the management control system and enriches the ERM and control literature. Besides, evidence of ERM under the MCS also helps to make sense of the diffusion of ERM in the field and enrich the body of management control literature (Mikes, 2009).

In addition, this study is a response to the research calls of Gooneratne and Hoque (2013) and Berry *et al.* (2009). Gooneratne and Hoque (2013) have asked for an exploration of the interplay of risk management and MCSs in banks, particularly in emerging economies. Berry *et al.* (2009) have urged for more empirical research in studying ERM and MC in organisations. Moreover, the use of the “MCS package” in understanding the design choices of MCSs following ERM diffusion extended the applicability of the framework and responded to the research call on the “MCS package” by Otley (2016) and Bedford and Malmi (2015).

Chapter 9

Conclusion

9.1 Introduction

This research was motivated on the background of the growing potential of ERM research, the emerging debate on regulatory diffusion and usefulness of ERM and the distinctive contextual setting. ERM is a new phenomenon in academia (Meidell and Kaarbøe, 2017). Therefore, ERM research is still in its early stage. It is also unproven and evolving (Beasley *et al.*, 2015; Mikes and Kaplan, 2015). There are many potential areas for empirical research to provide additional insight into diverse parts of ERM research (Viscelli *et al.*, 2016). Besides, the contextual background provides a distinctive research context to investigate the evolving dimensions of ERM research under a regulatory environment.

Consequently, this study was interested in investigating ERM phenomena from three diverse but interrelated areas of ERM research in the context of the banking sector of Bangladesh. At the outset of the investigation, the study aimed to find out how ERM is diffused in the banking sector under the regulatory environment. ERM has progressed in the banking sector of Bangladesh under a regulatory reform. Thus, this area of research helps to understand whether the diffusion of ERM has resulted from pure regulation or has any other reason that is consistent with its goal. Insight of this area of research also assists in taking part in the debate on regulation and ERM usefulness.

ERM is regarded as a driver of organisational change (Jabbour and Abdel-Kader, 2015). Banks also adapt to this change following the diffusion. Thus, this area of research aimed to understand incremental change following the regulatory diffusion of ERM and how organisations adapt to this change. This area of study helps to conceive ERM not only as a driver of change but also a driver of incremental change. Besides, the organisational adaption process helps to recognise the institutionalisation mechanism to institutionalise ERM as an organisational practice.

Also, ERM is perceived as a management control innovation. It is also considered the cornerstone of modern management control (Bhimani, 2009; Soin and Collier, 2013). However, the diffusion of ERM has also influenced MCS. Thus, ERM and MCS are now intertwined in organisations. Hence, the aim in this area of study was to understand the influence of ERM in the design choice of MCS in organisations following the diffusion. The insight of this area of research helps to understand how ERM influences elements of MCS and how the "MCS package" reshapes following the diffusion of ERM.

In order to achieve the aims, this study developed an integrated theoretical framework based on the insight of Abrahamson's (1991) diffusion framework, "neo-institutionalism" (Greenwood and Hinings, 1996) and the framework of the "MCS package" (Malmi and Brown, 2008). To investigate the ERM phenomena, this study adopted the "interpretivism" paradigm and employed qualitative research methodology. Data was collected mainly through semi-structured interviews. However, secondary information was also used to triangulate primary data.

A total of 37 interviews were conducted. Thirty interviews were conducted with the "Head of RMD" in 30 banks. They were the targeted interviewee. On the other hand, five interviews were conducted with the central bank's employees, those who were involved in risk management reform. Additionally, two interviews were conducted with two risk management researchers in the BIBM. Besides, secondary data was collected from annual reports, circulars, policy guidelines, internal risk management reports, country-related reports, applicable laws, published articles, newspapers and websites.

All interviews were recorded and transcribed as verbatim. A systematic data analysing framework was followed for data analysis. Thematic data analysis method (Braun and Clarke, 2006) was used for coding, based on a "top-down" approach (Auerbach and Silverstein, 2003). The "top-down" approach is considered as a theoretical or deductive approach to data analysis. Findings were presented in three empirical chapters of this thesis, along with discussion.

However, the concluding chapter is organised into five sections. Section 9.2 revisits the research questions in the respective area of research. Section 9.3 presents the contributions of this research. Section 9.4 acknowledges the limitations of this study. Section 9.5 ends the chapter with a direction regarding future potential research in the ERM field.

9.2 Revisiting the Research Questions

In this section, the research questions are revisited based on empirical evidence in three areas of the ERM field and synthesised to show how this evidence contributes to answering the research questions.

9.2.1 ERM Diffusion Under Regulatory Environment

Prior research puts more focus on identifying organisational determinants as adoption factors of ERM (Colquitt *et al.*, 1999; Lechner and Gatzert, 2018). Empirical research is limited to explore diffusion factors that influence the diffusion of ERM, particularly under a regulatory environment. Besides, there is a lack of research that applies a qualitative approach to understand the reality of ERM diffusion under a regulatory environment. Moreover, a debate is growing regarding regulatory diffusion and usefulness of ERM. Thus, the research question in this area of study was: *How does ERM diffuse in the banking sector under a regulatory environment?*

Drawing on the insight of Abrahamson's (1991) diffusion typology, the evidence shows that the ERM diffusion is the result of forced-selection and efficient-choice in the banking sector under the regulatory environment. These two perspectives are useful to delineate the ERM diffusion at primary stage under the given context as the applicability of imitation-focus dimension is not largely evidenced.

A diverse range of diffusion factors has been revealed from the field study that influenced in ERM diffusion. Despite, it is perceived in the industry that the diffusion of ERM is the result of compulsory regulation. Apparently, it seems that regulation is the main factor of ERM diffusion in banks because the diffusion gained momentum after the regulatory initiatives. But the presence of multiple diffusion factors both from supply-side and demand-side reflects that the diffusion is beyond the factor of regulation. In fact, the other external factors influenced in the process of ERM diffusion directly and indirectly in addition to the regulation. Those factors, along with the regulation, have compelled the banks to adopt ERM.

Evidence shows that the other external factors under the forced-selection perspective directly and indirectly exerted pressure on the central bank to initiate risk management reform. Realizing the need for ERM, the central bank embarked on risk management reform following the ERM philosophy and promulgated the regulation for ERM adoption. In fact, the pressure of all other external factors has emerged in the sector through ERM regulation. Consequently, ERM diffusion has been fueled across the banks in the industry. Surprisingly, the regulation of ERM is well accepted in the industry because of the industry features and the socio-economic and political factors of the country. In an emerging economy, like Bangladesh, it is unlikely to diffuse any innovation in the banking sector without regulation.

Regardless of external factors of diffusion, it also reveals that ERM is diffused in the industry as a choice of efficient innovation. Banks have taken a rational decision for ERM in terms of their risk management practice because ERM is beneficial to them. Banks are certain regarding their goals following the adoption of ERM. Consequently, ERM is internally mandated at organisational level. Hence, it may argue that the diffusion of ERM is also a choice of technically efficient innovation. In fact, regulation facilitates to formalise the usefulness of ERM in the sector.

In fact, the evidence of ERM diffusion as an efficient choice under regulation is surprising in the context of Bangladesh, because prior literature shows mainly ceremonial adoption of various innovations, such as code of corporate governance, international accounting standards.

Thus, the diffusion of ERM is not only the result of regulation as a forced selection but also a choice of efficient innovation. The evidence of efficient selection as diffusion factor under regulation is also consistent with prior literature, for instance, Pagach and Warr, 2011; Manab *et al*., 2010; Altuntas *et al.*, 2011; Jabbour and Abdel-Kader, 2016, Whitman, 2015; Viscelli *et al.*, 2017. ERM is regarded as a technically efficient innovation in a regulatory environment and has taken for granted as a risk management practice in the banking sector.

9.2.2 Incremental Change and Adaption

The ERM field has taken a naïve view understanding the organisational change. Hence, there is a research call in the area of organisational change (Bromiley *et al.*, 2015). However, ERM research is growing in the area of change. Until recently, researchers put the focus on particular areas of organisations to understand change following the implementation of ERM, for instance, change in capita allocation routines (Jabbour and Abdel-Kader, 2015) and risk management approaches (Giovannoni *et al.*, 2016). Besides, these researchers applied the "processual view" to understand "evolutionary" change. Consequently, the ERM literature remains silent in exploring incremental change following the diffusion of ERM. Besides, researchers have attempted to understand ERM in practice after implementation, along with the evolving organisational dynamics (Arena *et al*., 2010; Hall *et al*., 2015; Mikes, 2009, 2011). Hence, research is limited to understand how organisations adapt to incremental change following the diffusion of ERM and institutionalise this template. Thus, the research questions of this section were:

a) *How does incremental change occur in banks following the regulatory diffusion of ERM?*
b) *How do banks adapt to incremental change following the diffusion of ERM?*

Drawing on the framework of incremental change presented in Figure 2.1, it has been revealed that banks have shifted from the "TRM template" to the "ERM template" following the diffusion of ERM. This shift occurred swiftly, soon after the regulatory promulgation in 2015. Besides, shifting to the "ERM template" has brought both structural and operational changes within banks simultaneously. Massive structural changes have occurred following the regulatory prescription of ERM sophistication. This structural change has disrupted existing routines and institutions within banks. Simultaneously, operational changes have also occurred following the structural changes in a quick period of time. Thus, incremental change has occurred in banks through shifting towards the "ERM template" following structural and operational changes simultaneously, within a short pace of time. Therefore, ERM enforces incremental change. Hence, this study would like to argue that ERM can be regarded not only as a driver of change, but also a driver of incremental change, particularly under regulation.

On the contrary, evidence shows that the ERM template has been derived from the organisational context arising from the market and institutional pressures. However, the ERM template is mainly institutionally derived and enforced by the regulator. After that, the template has been amplified throughout banks with the interaction of precipitating and enabling factors.

Evidence indicates that new dynamics have evolved in banks following the diffusion of ERM under regulation. A new departmental agency under the title of RMD has emerged in the banks that played the main agency role in adaption to incremental change. The RMD, as a departmental agency, is the main precipitating factor for adaption to incremental change because it has gained organisational significance through regulatory empowerment and operational embeddedness. Besides, actors of RMD were able to link their power, interest, status and dominance with the ERM template. As a result, actors of RMD were highly dissatisfied with the "TRM template" that was in use in banks and extremely satisfied with the new "ERM template".

Besides, boards and CEOs have a reformative commitment in adaption to the incremental change in banks. This reformative commitment is not only the result of "regulation" arising from contextual factors but also the result of "realisation" about the usefulness of ERM. As such, less resistance is evidenced in banks in shifting to the ERM template. Thus, the extreme interest satisfaction of RMDs towards the ERM template and the reformative commitment of boards and CEOs through interacting with contextual factors acted as precipitating factors within banks that lead to adaption to incremental change.

Yet, precipitating factors are not capable enough to lead adaption successfully unless supported by enabling factors. The enabling factors have also evolved following ERM diffusion. It has been revealed that RMDs received favourable support from boards, along with the required organisational resources that acted as enabling factors in adaption. Additionally, increasing capacities for action, for instance, professional development, training, the involvement of cross-functional teams and leadership of RMDs, were also found as enabling factors in the adaption process. Thus, these factors acted as enabling factors and supported the precipitating factors.

Consequently, precipitating factors, with the support of enabling factors, lead to adaption to incremental change following the diffusion of ERM in banks. The ERM template is institutionally generated from the context of banks. However, contextual pressures were not sufficient enough to institutionalise ERM as an organisational practice. Contextual pressures influenced the evolution of both precipitating and enabling dynamics within banks. Thus, precipitating factors, in support with enabling factors through interaction with contextual factors, assisted in adaption to incremental change following the diffusion of ERM. Consequently, ERM is taken for granted as an organisational practice in banks.

9.2.3 Design Choice of MCS

It is yet to be seen empirically how management control system (MCS) of banks has been influenced following the diffusion of ERM under a regulatory environment. Therefore, this segment of the ERM research intended to provide an account regarding the configuration of the "MCS package" following the diffusion of ERM in banks. Thus, the research question in this area was: *How does the "MCS package" reshape following the diffusion of ERM?*

Drawing on the framework of the “MCS package” developed by Malmi and Brown (2008), this study explored the control elements that have been (re)shaped following the regulatory diffusion of ERM. However, evidence shows that ERM has influenced the design choice of MCS. The control elements of the “MCS package” have been configured following the regulatory diffusion of ERM. Based on the control typologies of the “MCS package”, it has been revealed that risk culture has significantly evolved in banks following the diffusion. Boards are involved in the ERM process, and the risk-based cultural tone has been set from the top, which prevails throughout banks. Boards’ commitment towards ERM reflects the value-based risk culture. Besides, evidence of RMDs, risk committees, risk reports and diverse risk management initiatives also reflects the symbol-based risk culture within banks. In addition, the growing power and status of RMDs also reflect the subcultures within banks. However, this “risk-based culture” plays the role of cultural control in banks.

Likewise, planning control in banks begins with the RAS. The RAS is prepared considering the risk appetite, risk limit and risk tolerance of a bank. Thereby, elements of planning control have mediated with risk. Consequently, planning control has turned into “risk-based planning control”. Similarly, budgets are now prepared considering risk, in line with the RAS. Besides, elements of hybrid control, such as the CRMR, the MRMR, the ICAAP document and the capital maintenance document are now prepared following the notion of “risk”. As a result, elements of cybernetic control are now mediating with risk and this control has also turned into “risk-based cybernetic control”.

Similarly, the risk impact is now included in the performance appraisal system. As a result, performance control has turned into “risk-based reward and compensation control”. Furthermore, the formation of risk committees at the board level reflects governance control under the typology of administrative control. Moreover, the RMD as a separate division, the defined organogram of the RMD with the CRO as chief, the risk committee at management level, and the meeting and minutes of risk committees also play the role of structural control. Also, the evidence of risk management guidelines and departmental policy procedures ensure procedural control in banks. With these movements, administrative control of banks has also turned into “risk-based administrative control”.

Consequently, it has been revealed that the control typologies of the “MCS package” have been reconfigured based on the notion of “risk” following the diffusion of ERM. Hence, this study argues that the “MCS package” turns into the “risk-based MCS package” following the diffusion of ERM in banks.

9.3 Contribution of this Thesis

This study has investigated three dimensions of ERM research. These areas of studies make several contributions, both empirically and practically.

9.3.1 Empirical Contribution

In the area of ERM diffusion, the study contributes to the knowledge gap by providing a holistic account regarding the diffusion of ERM in the banking sector under a regulatory environment. This research provides evidence that the diffusion of ERM is the result of forced selection and efficient choice in the banking sector the under regulatory environment. The usefulness of ERM is meaningfully established in the sector and influenced in the diffusion. Consequently, ERM is mandated internally at organisational level. With this evidence, this study belongs to the group of researchers who have advocated the reason of ERM diffusion beyond regulation (e.g. Manab *et al.*, 2010; Altuntas *et al.*, 2011; Pagach and Warr, 2011; Whitman, 2015; Jabbour and Abdel-

Kader, 2016; Viscelli *et al.*, 2017). Besides, evidence in this area of study provides an account of how ERM diffuses in a local way under the regulatory environment in the banking sector of Bangladesh as an emerging economy. The industry-specific and country-specific diffusion factors are relatively new in the ERM literature. However, it has been revealed that these factors warrant ERM regulation in the banking sector, as an emerging economy, for the diffusion of ERM. Moreover, the application of a qualitative approach to investigate the reality of ERM diffusion under a regulatory environment enriches the ERM diffusion literature.

Additionally, the study contributes in line with the contribution made by Giovannani *et al.* (2016) and Gendron *et al.* (2016) to the apparent contradictions between ERM failure and the wholesome growing diffusion. In light of the recent financial crisis and corporate failure, the efficacy of ERM has been questioned (Power, 2009). Despite this, the adoption and implementation of ERM are growing, particularly in financial organisations. On this paradox, evidence of this study shows why ERM is taken for granted in banks under a regulatory environment, despite the argument of “relevance loss” of ERM (Power, 2009).

Furthermore, the evidence of ERM diffusion in the context of Bangladesh as an emerging economy is surprising. Because prior literature in the context of Bangladesh reflects ceremonial adoption of various innovations, for example, Anglo-American corporate governance model (Siddiqui, 2010) or international accounting standards (Mir and Rahaman, 2005), to ensure legitimacy and reduce the regulatory cost. The evidence of forced selection and efficient choice as diffusion factors of ERM enrich the ERM diffusion literature in the context of Bangladesh. The usefulness of ERM is formalised following the regulation in the banking sector.

Moreover, the empirical evidence validates the paradox resolution between the dominant perspective i.e. efficient-choice perspective and the forced-selection perspective of Abrahamson's (1991) diffusion typology. It may be argued that forced-selection and efficient-choice perspectives are useful to provide an account of the primary stage diffusion under a regulatory environment.

In the area of incremental change and adaption, this study contributes by providing evidence that ERM is not only a driver of change but also a driver of incremental change, particularly under regulation, and extends the ERM literature in the area of change, along with Giovannoni *et al.* (2016) and Jabbour and Abdel-Kader (2016).

Besides, the area of adaption of this study provides an account of the evolving organisational dynamics following the regulatory diffusion of ERM and the contextual factors arising from the environment of the industry. The account of the evolving precipitating and enabling dynamics and their interaction with external factors helps to understand how banks adapt to incremental change following the regulatory diffusion of ERM. The evidence of the RMD, as a departmental agency, is relatively new in the literature as an evolving organisational dynamic. The RMD, as a departmental agency, along with its evolving power, position, status and expertise, mainly leads in adaption to the incremental change. The account of organisational dynamics and their interaction with contextual factors enriches the ERM literature in understanding the organisational adaption process.

Additionally, the adaption study validates the applicability of the framework of "neo-institutionalism" to understand the organisational adaption process to incremental change. Neo-institutional theory mainly puts focus on the homogeneous response ("isomorphism") of organisations in view of legitimacy. Besides, the neo-institutional theory is weak in identifying organisational dynamics in understanding organisational change. On the other hand, old institutional theory mainly puts focus on internal rules, routines, values, power and informal structure. To overcome the limitations of both of the notions and to understand change, Greenwood and Hinings have developed the "neo-institutionalism" framework, drawing on the notion of "old" and "new" institutionalism. This framework is suitable to draw the adaption process towards incremental change after identifying contextual factors and the evolving organisational dynamics. Thus, evidence to employ the "neo-institutionalism" framework in understanding the organisational adaption response towards incremental change and the institutional mechanism extends the applicability of this framework, in line with Liguori and Steccolini (2012), to understand accounting change, and Giovannoni *et al.* (2016), to understand risk management change within an organisation.

In the area of MCS, this study responds to the research calls commended by Berry *et al.* (2009), Mikes (2009), Gooneratne and Hoque (2013), Soin and Collier (2013) and Chenhall and Moers (2015). This area of study provides an account of how ERM, a new management control innovation, comes under the boundary of MCS, which enriches the management control literature (Mikes, 2009).

Besides, this area of study also responds to the research call urged by Otley (2016) that the package concept has not been considered seriously in empirical research to understand MCS design. Therefore, this study provides empirical evidence drawing on the framework of the "MCS package" proposed by Malmi and Brown (2008). Based on the notion of the MCS as a package, this study demonstrates that the control typologies of the "MCS package" are (re)shaped based on the notion of "risk" following the diffusion of ERM under regulation. Consequently, this study provides evidence on how the "MCS package" turns into a "risk-based MCS package" following the diffusion of ERM in banks and extends the applicability of this framework to understand the design choice of the MCS following diffusion of a new control innovation.

9.3.2 Practical Contribution

This study also has a practical contribution. Risk management reform was a policy recommendation of the WB and the IMF for the banking sector of Bangladesh. Following this, the central bank initiated risk management reform under regulation based on ERM philosophy. Besides, there is a conflict of interest between the regulator and the regulatee in terms of the objective of any new regulatory initiative. On this conflict, empirical evidence of this study is useful to the regulator and the development partners of the country to comprehend how regulatory initiatives of ERM become successful in diffusion across the banks in the industry and how ERM regulation is perceived and accepted by the regulatees in the industry. Besides, the evidence may be useful to the government, the international standard-setting bodies for financial institutions and foreign banks.

Similarly, empirical evidence of this study may be useful to regulators in other industries to take ERM initiative across industries under regulation, for example, the insurance sector, the aviation sector, or the oil and fuel sector.

Moreover, the findings also have implications for individual bank of the industry. The evidence of diverse diffusion factors and their intensity of pressure may help the individual bank to assess the background of ERM diffusion and its significance. It would be useful to the actors to take necessary measures for effective use of ERM, rather than a ceremonial adoption, to ensure legitimacy towards the regulators and the society.

In fine, the empirical evidence may be useful for actors in the banks in understanding organisational power and politics following the diffusion of ERM, along with the appropriate design choice of the management control system based on risk-based management control.

9.4 Limitations of this Study

This research study is not free from limitations. The limitations of the study are admitted below.

Firstly, in understanding change, the authors suggest to consider more than three years after the diffusion to gain some indication of the change (Greenwood and Hinings, 1996). Besides, a detailed case study or comparative case study is suggested from a methodological point of view to understand the interaction of precipitating and enabling factors in light of institutional pressure over time. Moreover, concepts of power, interest, motivation, status and leadership are very difficult in organisations to measure.

The ERM regulation is formally effective from 9 September 2015 in the banking sector. Following the regulatory prescription, banks have made the required structural change, which has also affected operational change simultaneously. Therefore, incremental change after ERM diffusion mainly started in September 2015 following regulation. Empirical evidence for this study was collected during the period from April 2017 to August 2017, which was relatively short after the regulatory promulgation in 2015. Hence, some other interesting insights could be found if the data were collected after the passing of at least three years after the regulatory change.

Despite, change can happen at different levels, including field, organisation and department. Thus, it can be investigated at different levels of analysis (Dent *et al*., 2004). Based on this premise, this study targeted field-level research in the banking sector where all the banks are subject to similar diffusion pressure. Thus, this study provides an account of a homogeneous response in adaption to change at the field level.

Secondly, this study purposively selected the "Head of RMD" of banks as targeted interviewee to understand the ERM phenomena under investigation, although the reason for the selection was described in the methodology chapter. However, the insight of incremental change could be different if the interviews were taken from other functional departments of banks, in addition to RMD. Different organisational dynamics could be revealed if another functional group were considered for interviews. For example, adaption resistance could be vivid if the interviews were taken from the "Credit Department" of banks. Besides, due to lack of access, it was not possible to conduct any interview with the top officials of the regulator, such as governor or deputy governor, although interviews were taken with the officials of the regulator those who were directly involved in risk management reform process. Data could be more insightful if the views of the top officials were taken.

Thirdly, the study is at the field level in the banking sector of Bangladesh. All banks are under similar environmental pressures in the industry. In understanding the diffusion, organisational response and MCS, a homogeneous response is taken into consideration throughout the industry. However, the evidence could be varied at the organisational level because of organisational heterogeneity, size, maturity, profitability and much more.

Finally, in this study, the main method of data collection was semi-structured interviews, although, Silverman (2001) highlights that this method encompasses the potential of bias on the interviewee and the interviewer in interpreting social reality. However, this inherent limitation was addressed through corroborative evidence collected from multiple sources, like documentary evidence, annual reports, newspaper reports and many more.

9.5 Future Potentials of ERM Research

ERM research is relatively new in academia and yet to reach its maturity stage. After revisiting the scope of this study and the limitations, this research finds more scope to explore and unearth the potential areas in ERM research. The evidence of this study is based on the field-level analysis. Hence, it could be useful to adopt a detailed case study to explore management accounting and performance measurement changes following the implementation of ERM in banks. Besides, the relevance of ERM is recognised in terms of sustainability. It may be a suitable area of research to investigate how ERM in banks impacts on stability and sustainability, drawing on a longitudinal case study. A sustainability framework could be developed to assess the relevance of ERM.

ERM is a top-down approach. Thus, it might be useful to explore how ERM influences to shape of governance in organisations. A comparative case study based on interviews and participant observation may be useful to unearth this phenomenon. Additionally, it is found that the risk appetite statement (RAS) is a strategic control element under the ERM approach in banks. Hence, there is ample opportunity to see how ERM influences in preparation of RAS and how RAS mediates with other control elements within banks under ERM environment. An in-depth case study based on interviews at different layers may be suitable to explore this phenomenon.

Likewise, it is noted that credit rating company and external auditors are the major stakeholders of ERM. It might be explored as to how credit rating company or external auditors use ERM in their rating and statutory audit processes and to assess the relevance of ERM.

Moreover, it is marked that ERM is using by the regulator as a regulatory toolkit for supervision and regulation of the industry. This may be a good area of research to investigate the effectiveness of ERM as a regulatory toolkit in the banking sector from the regulator's perspective. Drawing on the implementation challenges of ERM in the sector, the effectiveness of ERM as a regulatory toolkit might be assessed. Semi-structured interviews may be conducted to unearth this facet. Besides, it might be investigated as to why the regulators use ERM as a regulatory toolkit.

However, these areas of research might be informed with the notions of institutional logics, institutional works, institutional complexity, political economy theory, resource dependency theory, signalling theory and many more, as suitable to address the research question(s).

-The End-

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Appendices

Appendix A: List of Scheduled Banks as of 31 December 2016 (Population)

Total No	Name of the bank (Population)	Date of incorporation with RJSC/others	Branch as on March 2017
State-owned Commercial Banks (SCB): Total 6			
1	Sonali Bank Limited	Established by Presidential Order 26/1972 in 1972 as Sonali Bank.	1210
2	Janata Bank Limited	Established by Presidential Order 26/1972 in 1972 as Janata Bank.	912
3	Agrani Bank Limited	Established in 1972 as Agrani Bank through Presidential Order	935
4	Rupali Bank Limited	Established in 1972 as Rupali Bank through Presidential Order 26.	565
5	BASIC Bank Limited	Incorporated on 21 January 1989 as joint venture. (Govt 30% and BCC Foundation 70%)	68
6	Bangladesh Development Bank Limited (BDBL)	Incorporated on 31 December 2009	44
Development Financial Institutions (DFIs)/Govt Specialised Banks: Total 2			
7	Bangladesh Krishi Bank	Established in 1973 as Specialized bank through Presidential Order 27	1031
8	Rajshahi Krishi Unnayan Bank	Established in 15 March 1987 as Specialized Bank through Presidential Order 58 in 1986.	379
Private Commercial Banks (PCBs): Total 40			
	First Generation Commercial Banks		
9	Uttara Bank Limited	Established in 1972 through Presidential Order as Pubali Bank.	229
10	Pubali Bank Limited	Established in 1972 through Presidential Order as Pubali Bank.	454
11	AB Bank Limited	Operation starts 12 April in 1982	104
12	National Bank Limited	Incorporated in 1983	191
13	The City Bank Ltd.	Began from 23 March 1983	120
14	Islami Bank Bangladesh Ltd	Operation starts from 30 March 1983	318
15	IFIC Bank Limited	Operation starts from 1983	135
16	United Commercial Bank Limited	Operation starts from 29 June 1983	168
17	ICB Islamic Bank Ltd.	Incorporated in 1987	33
	Second Generation Commercial Banks		
18	Eastern Bank Limited	Established in 1992	82
19	National Credit & Commerce Bank Ltd	Operation starts from 17 May 1993	106
20	Prime Bank Ltd	Registered on 17 April 1995	145
21	Southeast Bank Limited	Registered on 12 March1995	
22	Dhaka Bank Limited	Incorporated in 1995	94
23	Al-Arafah Islami Bank Limited	Incorporated on 18 June 1995	140
24	Social Islami Bank Ltd.	Established in 1995	125
25	Dutch-Bangla Bank Limited	Operation starts from 3 June 1996	165
	Third Generation Commercial Banks		

26	Mercantile Bank Limited	Incorporated on 2 June 1999	
27	Standard Bank Limited	Registered on 11 May 1999	114
28	One Bank Limited	Registered on May 1999	
29	EXIM Bank Limited	Registered on 3 August 1999	113
30	Bangladesh Commerce Bank Limited	Operation starts from 16 September 1999	48
31	Mutual Trust Bank Limited	Operation starts from 24 October 1999	111
32	First Security Islami Bank Limited	Operation starts from 25 October 1999	158
33	Premier Bank Limited	Operation starts from 26 October 1999	99
34	Bank Asia Limited	Operation starts from 27 November 1999	114
35	Trust Bank Limited	Registered on 17 Jun 1999	110
36	Shahjalal Islami Bank Limited	Operation starts from 10 May 2001	103
37	Jamuna Bank Ltd	Operation starts from 3 June 2001	112
38	BRAC Bank Limited	Operation starts from 2001	181
	Fourth Generation Commercial Banks		
39	The Farmers Bank Ltd	Operation starts from 03 June 2013	52
40	Meghna Bank Limited	Registered on 20 March 2013	37
41	Midland Bank Limited	Operation starts from 20 June 2013	21
42	South Bangla Agriculture & Commerce Bank Limited	Registered on 25 March 2013	54
43	NRB Global Bank Limited	Registered on 25 July 2013	37
44	Modhumoti Bank Ltd.	Get license on 09 June 2013	23
45	NRB Bank Limited	Operation starts from 28 May 2013	
46	NRB Commercial Bank Limited	Operation starts from 18 April 2013	51
47	Union Bank Limited	Operation starts from 20 May 2013	58
48	Shimanto Bank Limited	Awarded license 21 July 2016	3
	Foreign Commercial Banks (FCBs): Total 9		
49	State Bank of India	Operation started from 5 May 1975	5
50	Habib Bank Ltd.	Operation started from 9 July 1976	7
51	National Bank of Pakistan	Operation started from 31 August 1994	
52	Standard Chartered Bank	Operation started from 1994	18
53	Citibank N. A	Operation started from 24 June 1995	3
54	The Hong Kong and Shanghai Banking Corporation. Ltd.	Operation started from 1996	
55	Woori Bank	Operation started from 21/09/1996	
56	Commercial Bank of Ceylon Limited	Operation started from 6 November 2003	11
57	Bank Al-Falah Limited	Operation started from 16 May 2005	7

Source: Report on Financial Institutions of Bangladesh 2016-2017, Ministry of Finance (GOB)

Appendix B.1: Selection Criteria and Name of Sampled Bank

	Name of the Bank (Population)	Listing Status (Sample 20 out of 30)	Islami bank status (Sample 4 out of 8)	Sampled Bank's Name (Used Code: SB)
State-owned Commercial Banks (SCB): Total 6 (Sample 2)				
1	Sonali Bank Limited	-		Sonali Bank Limited
2	Janata Bank Limited	-	-	-
3	Agrani Bank Limited	-	-	Agrani Bank Limited
4	Rupali Bank Limited	Yes	-	-
5	BASIC Bank Limited	-	-	-
6	Bangladesh Development Bank Limited (BDBL)	-	-	
Development Financial Institutions (DFIs)/Govt Specialised Banks: Total 2				
1	Bangladesh Krishi Bank	-	-	-
2	Rajshahi Krishi Unnayan Bank	-	-	-
Private Commercial Banks (PCBs): Total 40 (Sample 25)				
	First Generation Commercial Banks: Total 9 (Sample 6)			
1	Uttara Bank Limited	Yes	-	Uttara Bank Limited
2	Pubali Bank Limited	Yes	-	Pubali Bank Limited
3	AB Bank Limited	Yes	-	AB Bank Limited
4	National Bank Limited	Yes	-	-
5	The City Bank Ltd.	Yes	-	The City Bank Ltd.
6	Islami Bank Bangladesh Ltd	Yes	Yes	Islami Bank Bangladesh Ltd
7	IFIC Bank Limited	Yes	-	IFIC Bank Limited
8	United Commercial Bank Limited	Yes	-	-
9	ICB Islamic Bank Ltd.	Yes	Yes	-
	Second Generation Commercial Banks: Total 8 (Sample 8)			
10	Eastern Bank Limited	Yes	-	Eastern Bank Limited
11	National Credit & Commerce Bank Ltd	Yes	-	National Credit & Commerce Bank Ltd
12	Prime Bank Ltd	Yes	-	Prime Bank Ltd
13	Southeast Bank Limited	Yes	-	Southeast Bank Limited
14	Dhaka Bank Limited	Yes	-	Dhaka Bank Limited
15	Al-Arafah Islami Bank Limited	Yes	Yes	Al-Arafah Islami Bank Limited
16	Social Islami Bank Ltd.	Yes	Yes	Social Islami Bank Ltd.
17	Dutch-Bangla Bank Limited	Yes	-	Dutch-Bangla Bank Limited
	Third Generation Commercial Banks: Total 13 (Sample 6)			
18	Mercantile Bank Limited	Yes	-	Mercantile Bank Limited
19	Standard Bank Limited	Yes	-	Standard Bank Limited
20	One Bank Limited	Yes	-	-
21	EXIM Bank Limited	Yes	Yes	-
22	Bangladesh Commerce Bank Limited	-	-	-

23	Mutual Trust Bank Limited	Yes	-	-
24	First Security Islami Bank Limited	Yes	Yes	-
25	Premier Bank Limited	Yes	-	-
26	Bank Asia Limited	Yes	-	Bank Asia Limited
27	Trust Bank Limited	Yes	-	Trust Bank Limited
28	Shahjalal Islami Bank Limited	Yes	Yes	Shahjalal Islami Bank Limited
29	Jamuna Bank Ltd	Yes	-	Jamuna Bank Ltd
30	BRAC Bank Limited	Yes	-	-
	Fourth Generation Commercial Banks: Total 10 (Sample 5)			
31	The Farmers Bank Ltd	-	-	-
32	Meghna Bank Limited	-	-	Meghna Bank Limited
33	Midland Bank Limited	-	-	-
34	South Bangla Agriculture & Commerce Bank Limited	-	-	South Bangla Agriculture & Commerce Bank Limited
35	NRB Global Bank Limited	-	-	NRB Global Bank Limited
36	Modhumoti Bank Ltd.	-	-	Modhumoti Bank Ltd.
37	NRB Bank Limited	-	-	-
38	NRB Commercial Bank Limited	-	-	NRB Commercial Bank Limited
39	Union Bank Limited	-	Yes	-
40	Shimanto Bank Limited	-	-	-
Foreign Commercial Banks (FCBs): Total 9 (Sample 3)				
1	State Bank of India	-	-	-
2	Habib Bank Ltd.	-	-	Habib Bank Ltd.
3	National Bank of Pakistan	-	-	-
4	Standard Chartered Bank	-	-	-
5	Citibank N. A	-	-	-
6	The Hong Kong and Shanghai Banking Corporation. Ltd.	-	-	-
7	Woori Bank	-	-	Woori Bank
8	Commercial Bank of Ceylon Limited	-	-	Commercial Bank of Ceylon Limited
9	Bank Al-Falah Limited	-	-	-
The Bangladesh Bank (Central Bank)				
Bangladesh Bank (Employees related with risk management policy reform)				RG_1
				RG_2
				RG_3
				RG_4
				RG_5
Bangladesh Institute of Bank Management (BIBM)				
BIBM (Risk Management Researcher)				BIBM_1
				BIBM_2

Appendix B.2: Interview Details

SL. No.	Name of Bank	Head of the RMD (Official Designation)	Interview Time in Minutes	Interview Date
1	Modhumoti Bank Ltd.	Assistant Vice President, Risk Management Division	48.55	10 April 2017
2	Mercantile Bank Limited	Senior Executive Vice President & Head of Risk Management Division	37.27	13 April 2017
3	Eastern Bank Limited	Head of Risk Management Division	35.09	16 April 2017
4	Dhaka Bank Limited	First Vice President Basel Unit	29.25	16 April 2017
5	Islami Bank Bangladesh Ltd	Vice President, Risk Management Wing	53.2	17 April 2017
6	Social Islami Bank Ltd.	Executive Vice President & Head of Risk Management Division	60.35	02 May 2017
7	Southeast Bank Limited	Head of Risk Management Division	37.2	02 May 2017
8	Jamuna Bank Ltd	Vice President & Head of Risk Management Division	37.2	07 May 2017
9	Sonali Bank Limited	Deputy General Manager	38.4	11 May 2017
10	Pubali Bank Limited	Head of Risk Management Division	34.5	14 May 2017
11	Prime Bank Limited	Senior Vice President Risk Management Division	37.1	15 May 2017
12	Trust Bank Limited	Senior Vice President & Head of Risk Management Division & Basel	40.34	15 May 2017
13	NCC Bank Limited	Senior Vice President & Head of Risk Management Division	53.51	22 May 2017
14	Uttara Bank limited	Deputy General Manager	26.13	23 May 2017
15	Agrani Bank limited	General Manager	53.3	18 June 2017
16	AB Bank Limited	Executive Vice President & Deputy CRO & Head of Risk Management Division	51.46	18 July 2017
17	Dutch Bangla Bank Limited	Head of Risk Management Division	44.17	24 July /2017
18	Shahjalal Bank Limited	Senior Vice President & Head of Risk Management Division	33.3	16 July 2017
19	SBAC Bank Limited	First Vice President, Head of Credit Administrative Division & Risk Management Division. Principal, Training Institute.	32.55	20 July 2017
20	NRB Commercial Bank Limited	Senior Vice President & Head of Risk Management Division	42.4	23 July 2017
21	NRB Global bank limited	Head of Risk Management Division	29.55	24 July 2017

22	Standard Bank Limited	CFO Head of RMD, Acting Company Secretary	37.1	25 July 2017
23	CBC	Deputy Chief Manager Integrated RMD	36.56	25 July 2017
24	Meghna Bank Limited	Deputy Managing Director	22.53	27 July 2017
25	Al Arafa Bank Limited	Senior Vice President Risk Management Division	31.1	30 July 2017
26	IFIC Bank Limited	In-Charge Risk Management Division	29.47	30 July 2017
27	Woori bank Limited	Principal Officer Financial Administration Division	30.12	1 August 2017
28	City Bank Limited	Company Secretary and Head of the Risk Management Division	35.58	6 August 2017
29	Habib Bank	Head of Risk Management Division	32.9	17 August 2017
30	Bank Asia Limited	Vice President Head of Risk Management Division	48.24	21 August 2017
31	BIBM-1	Director General	14.44	29 May 2017
32	BIBM-2	Risk Management Advisor	26.58	7 August 2017
32	Bangladesh Bank	Joint Director Department of Off-Site Supervision	45	07 May 2017
34	Bangladesh Bank	Joint Director & Project Manager PSPDSME-PIU	19.21	09 May 2017
35	Bangladesh Bank	Joint Director Financial Stability Department	54.59	11 May 2017
36	Bangladesh Bank	Joint Director Department of Banking Inspection-1	30.07	24 May 2017
37	Bangladesh Bank	Joint Director Banking Regulatory & Policy Department	30.26	04 June 2017

Appendix C.1: Semi-Structured Interview Questions for Risk Manager

Interview Questions for CROs/Head of RMD

Date of Interview:
Time:
Interview Code:
Name of Respondent:
Organisation and Position:

Dear Participant

Good morning/afternoon. I am very glad to meet to you and like to give thanks for agreeing to participate in this research. This research study gives focus to understand the driving factors of Enterprise Risk Management (ERM) adoption and implementation in banking sector, its current practices and challenges, organisational changes, management control that it brought in risk management practice and ERM regulation.

As a researcher, I follow Ethical Code of Conduct and like to reassure that all information will be treated confidentially and will be kept securely. Data will be used purely for academic research purpose. Neither your name nor the name of your company will be published anywhere.

Before proceeding to the next, I like to take your permission to record our conversion.

A. General Information:

1. Could you tell me your current position in Risk Management Division? What was previous position?
2. Are you responsible for any other department of bank?
3. Could you tell me your experience and professional qualification in risk management practice in bank?
4. Could you tell me your age range? 30-35, 36-40, 41-45, 46-50, 51-55, 55-60, any other.
5. Could you tell me internal and external training program on ERM you have attained?

B. Diffusion and Adoption of ERM

1. What is meant by ERM? What is the objective of ERM?
2. What external factors lead to adopt ERM in your bank?
3. What internal factors leads to adopt and implement ERM? Is ERM internally driven phenomena in your bank?
4. Could you tell me external benefits of ERM implementation?
5. Could you tell me internal benefits of ERM implementation?

6. Could you tell me the major steps you have followed in implementation of ERM? Are you following any framework/global standard? Is there any influence of normative guidelines in implementing ERM?
7. How risk is identified under ERM framework in your bank? Is it 'bottom-up' or 'top-down' approach?
8. What are the key organisational factors (i.e organizational structures, designs, processes or best practices) important for effective ERM implementation?
9. What are the different challenges embedded in adoption and implementation of ERM?
10. Does this new paradigm shift affect the business or operation or profit or bottom line of earnings?
11. What is the role of the Bangladesh Bank in effective implementation of ERM?

C. Organisational Change and Organisational Response

1. Could you tell me how risk management practice was prevailed before adoption of ERM?
2. What type of organisation changes have been occurred due to implementation of ERM? (Before and after ERM with example).
3. Is there any organisational factor on which need to depend for such organisational change? Why?
4. Which interested groups/functional groups in organisation highly lead to implement of ERM? Did they oppose previous template of Risk Management?
5. Could you tell me the value commitment of interested group in such changes?
6. How does internal audit involve in ERM process?
7. Was there any resistance of change? How did you manage such resistance? Does one size fit for all?
8. Is there any role of organisational cultural to cope with the change?

C. Management Control

1. Do you think ERM is a new form of management control system? How?
2. Which control elements are affected or evolved following ERM practice?

D. ERM Regulation

1. Do you think ERM should be regulated? Why?
2. What are the factors driving to regulate ERM in banking sector?
3. Why are you following imposed regulatory framework of ERM? Is it a compliance exercise for legitimacy reason?
4. Above all, success of ERM in banking sector depends on:

I really appreciate you for your valuable time for this interview. However, I may need to contact with you again.

Appendix C.2: Semi-Structured Interview Questions for Regulator/Researcher

Interview Questions for Regulator/Researcher

Date of Interview:
Time:
Interview Code:
Name of Respondent:
Organisation and Position:

Dear Participant

Good morning/afternoon. I am very glad to meet to you and like to give thanks for agreeing to participate in this research. This research study gives focus to understand the driving factors of Enterprise Risk Management (ERM) adoption and implementation in banking sector, its current practices and challenges, organisational changes that it brought in risk management practice and ERM regulation.

As a researcher, I follow Ethical Code of Conduct and like to reassure that all information will be treated confidentially and will be kept securely. Data will be used purely for academic research purpose. Neither your name nor the name of your company will be published anywhere.

Before proceeding to the next, I like to take your permission to record our conversion.

A. Adoption and Implementation of ERM

1. What is meant by Enterprise Risk Management/Integrated Risk Management/ Comprehensive Risk Management? What is the objective of ERM?
2. What external factors lead to adopt and implement ERM in banking sector of Bangladesh?
3. Why do scheduled banks adopt and implement ERM? Is ERM internally driven phenomena? Why? Why not?
4. Could you tell me benefits of ERM implementation in banking sector?
5. How the ERM framework is developed for banking industry?
6. Could you tell me how central bank monitor ERM implementation and practice of scheduled banks?
7. What is central bank's expectation in terms of implementation and practice of ERM in banking sector?
8. What are the major challenges embedded in implementation and practice of ERM in banking sector of Bangladesh?
9. What role Bangladesh Bank is playing for effective implementation and practice of ERM? / What tools and techniques are using by BB for effective implementation of ERM?

B. Organisational Change and Organisational Response

1. How risk was managed and monitored before ERM?
2. Do you think that schedule banks are ready to implement of ERM and address this organisational change? What is the role of the central bank in this case?
3. Do you believe that appointing CRO from DMD level is a good solution in RMD hierarchy? Why this divisional change?
4. Have you assessed the issue of organisational resistance that might arise to cope with this change at practice/operational level? How?
5. What is the future of ERM in banking sector?

C. ERM Regulation

1. Do you think ERM should be regulated? Why?
2. What are the factors driving to regulate ERM in banking sector of Bangladesh?
3. Does ERM become a compliance exercise due to regulation in banking sector? What is your opinion?
4. Does 'one size fit for all' due to regulation regarding ERM?
5. Despite regulation and robust ERM, default risk is increasing in the banking sector. Why this is happening? What factors override the ERM practice?
6. What are the key factors for success of ERM?

I really appreciate you for your valuable time for this interview. However, I may need to contact with you again.

Appendix D: Participant Information Sheet

University of Essex

ESSEX BUSINESS SCHOOL

Participant Information Sheet for Research Project

Dear participant,

I, Mohammad Moniruzzaman, am currently carrying out a piece of research study titled "*Enterprise Risk Management (ERM) in the Banking Sector: Evidence from Bangladesh*" under the supervision of Professor Stuart Manson and Professor Thankom Arun at University of Essex.

I am investigating the driving forces behind the diffusion of the ERM in banking sector of Bangladesh along with ERM practices and challenges. I am also exploring the organisational changes that have been occurred following diffusion of the ERM. Moreover, I am exploring the change in design choice of the management control system following the diffusion of the ERM. I am highly interested in your experiences of being a Head of the risk management division of the bank.

This information sheet provides you with information about the study and your rights as a participant.

What does taking part in the research involve?
If you agree to participate in this study, I will be taken your interview. The interview will take place in any convenient place of you and will last no longer than 40-50 minutes. The answers which you provide will be recorded through audio recording. All information collected will be kept securely and will only be accessible by myself and my supervisors.

Do I have to take part?
Naturally, there is no obligation to take part in the study. It's entirely up to you. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If publications or reports have already been disseminated, these cannot be withdrawn, however, these will only contain anonymised or aggregated data. If you decide to participate in the study and then change your mind in the future, you can withdraw at any point, even after the data has been collected.

Will my taking part in this study be kept confidential?
All information collected will be kept securely and will only be accessible by myself and my supervisors. If you are mentioned individually in my report then a participant number or pseudonym will be used and identifying details will be removed. A copy of the information which we record about you, but not other participants, will be provided, free of charge, on request.

What happens if something goes wrong?
If you are harmed by taking part in this research project, there are no special compensation arrangements. Regardless of this, if you have any concerns about any aspect of the way you have been treated during this study, then you should inform the student and/or the supervisor (details below).

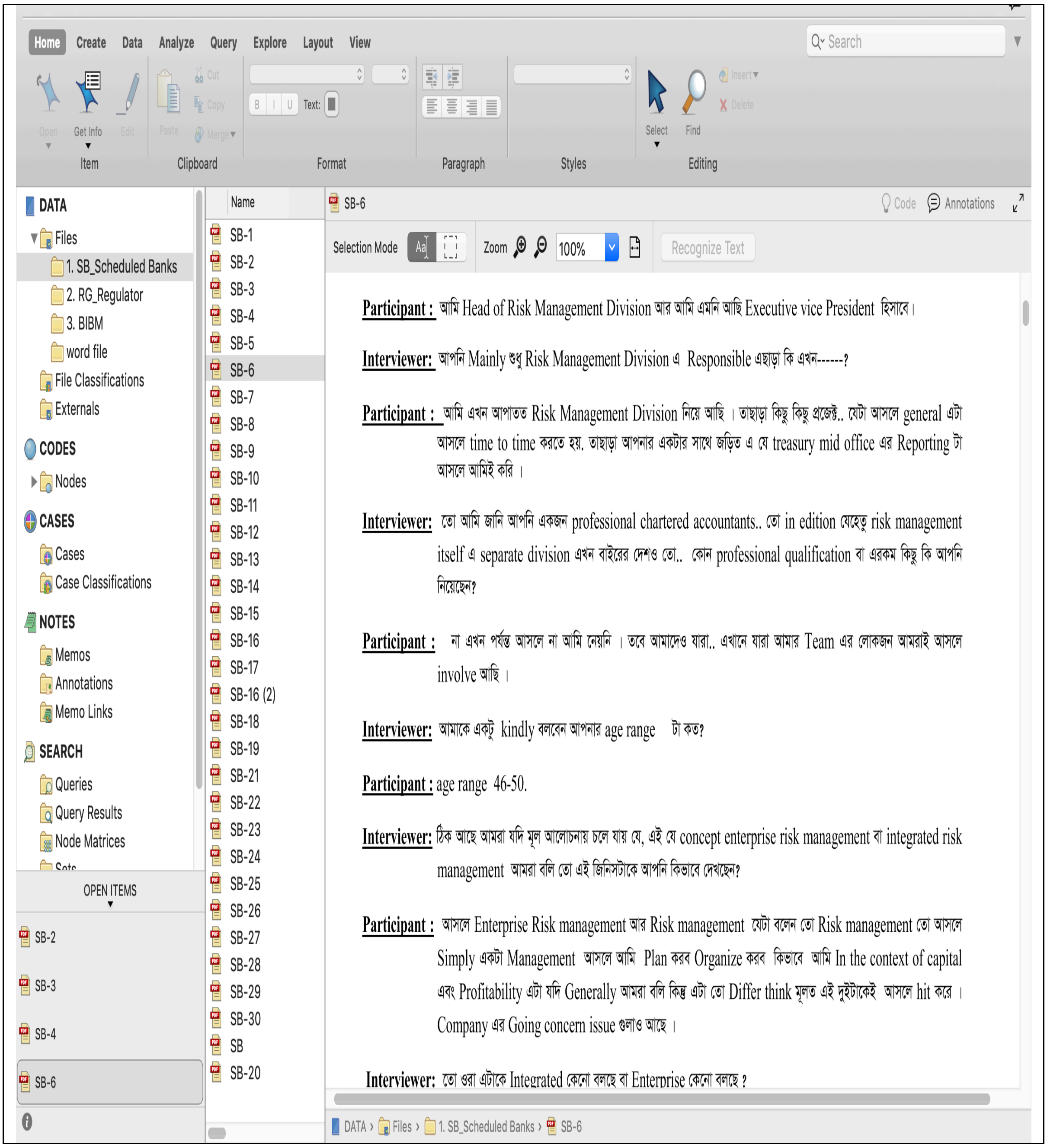
I would be very grateful for your participation in this study. Consent form is enclosed for your informed consent. If you need to contact us in future, please contact me (mmonir@essex.ac.uk) or my supervisor Professor Stuart Manson (manss@essex.ac.uk).

You are welcome to ask question at any point.

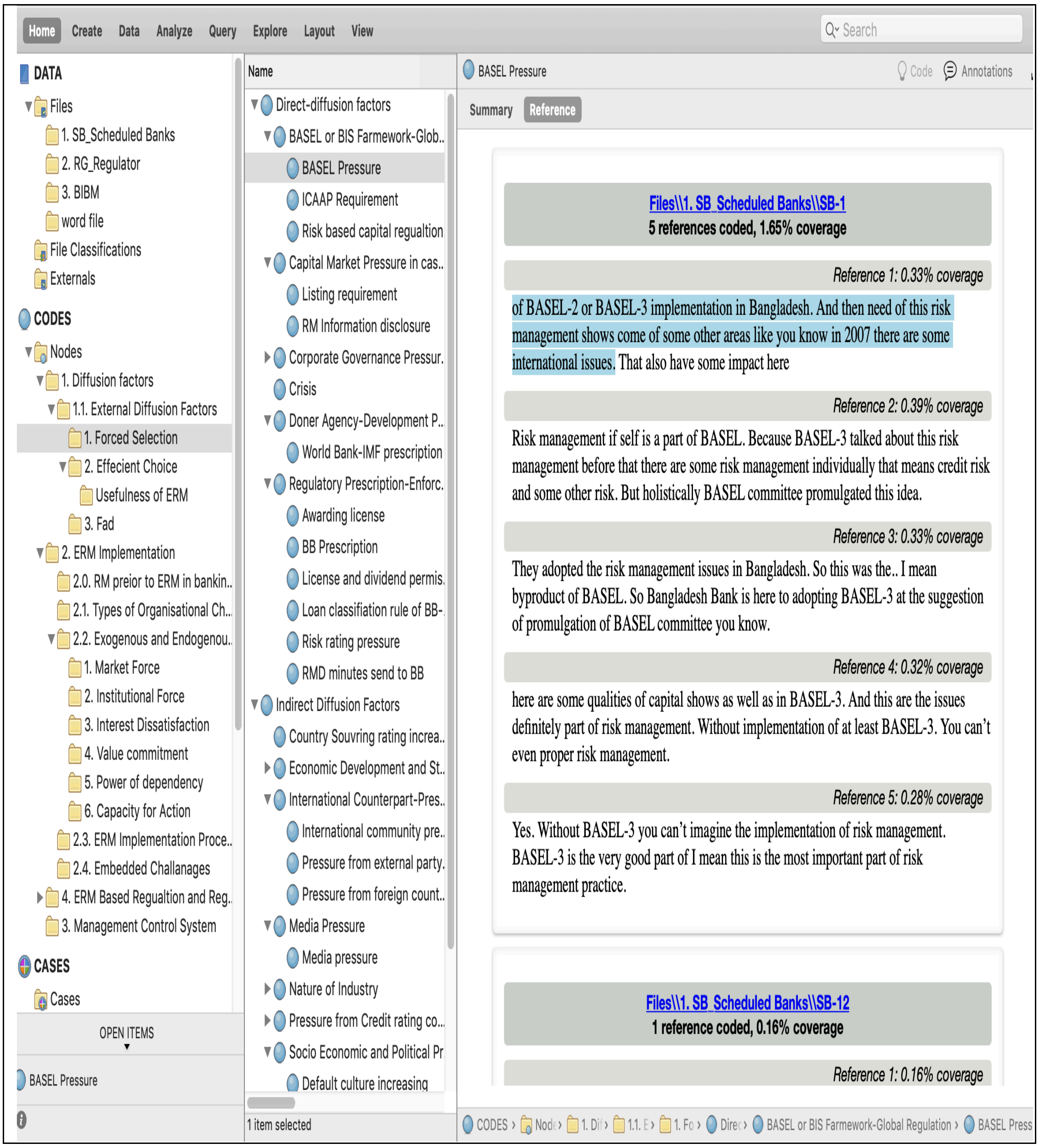
Yours truly,

Mohammad Moniruzzaman
Phd Candidate in Accounting and Finance
Essex Business School, University of Essex, The UK
+447501019589, +8801716785231

Appendix E.1: An Excerpt of Verbatim of Interview Data in NVivo



Appendix E.2: Data Coding Framework in NVivo



Appendix E.3: An Excerpt of Refined Data Set

Empirical Chapter One:

First Research Question: How does ERM diffused in banking sector of Bangladesh under regulatory environment?

Objective: The objective of this chapter is to investigate the diffusion factors that drive to diffuse ERM in banking sector under regulatory environment.

Theoritical Constructs		Probable Theme		Quotation as verbatim
Forced-Selection	Direct Forces	Central Bank and Regulatory Enforcement	Risk Rating	তারপরে কেন, কোন প্রেক্ষাপটে, তারপর আমরা Comprehensive Risk Management এর Report যেটা পাঠাচ্ছি DOS এ যাচ্ছে। Overall DOS Review করতেছে। সেখানে মনে করেন**, Low, Moderate, high**. বিভিন্ন রকম Risk গুলো একটা Bangladesh Bank এর **এবং Risk Rating গুলো CAMELS rating এ যুক্ত হচ্ছে।** This is very important. (SB-10)
				আরেকটা জিনিস বলার আছে বাই দ্যা বাই রিস্ক ম্যানেজমেন্ট এর উপর পেপার বের করার বাংলাদেশ ব্যাংক একটা কাজ করে.... তারা কিন্তু রেটিং করে৷ ক্যাবেল রেটিং এর আবার ক্যামেলস কে ইনফ্লুয়েন্স করে৷ এটা একটা বড় একটা প্রেশার হিসেবে কাজ করে..... (SB-13)
				ক্রেডিট রেটিং তার বেনিফিট পাই।ইভেন সেন্ট্রাল ব্যাংক বছরে কম্প্রেহেন্সিভ রিস্ক ম্যানেজমেন্ট রেটিং করে সেখানেও একটা প্রিভিলেজ পাই। (SB-16)
				এখন banking sector এ আরেকটি rating হয় comprehensive risk management rating. এই comprehensive risk management rating অনেকগুলো component কে সংযুক্ত করে আমাদের regulator rating টা করে। যার comprehensive risk management rating **টা ভাল, তাকেই ধরা হয় তার ভিত্তি ভাল। যদিও এটা খুব confidential. এটা সাধারণত বাইরে প্রকাশ করার নিয়ম নাই। (SB-18)**
				আনরা আবার যে **কাজগুলি করি তার উপর Bangladesh bank প্রতিটা বছরে দুইবার rating** করে। CAMELS না CAMELS তো আলাদা। **আরেকটি risk rating আছে।** একটা risk rating কোরে আমরা দুইটা রির্পোট পাঠায়। এক হল June বেইজ আরেকটা হল December বেইজ।এর উপর ভিত্ত করে বাংলাদেশ bank আরেকটা comprehensive risk rating করে। এই যে risk rating আছে। এই risk rating গুলো যদি আমরা internal cap এর চেয়ে অনেক বেড়ে যায়। **আমরা যদি আমি ঠিক মত manage করতে না পারি, ওখানে কিন্তু আমার rating ভাল আসবে না। তখন আমরা বলতে পারি....By default** আপনার এটার মধ্যে রাখতে হবে। (SB-19).
				একটা বিষয় হচ্ছে যে, Bangladesh bank কিন্তু এখন risk management rating করে আলাদা.. আগে Bangladesh bank শুধু camels rating করত কিন্তু এখন risk management rating করে half yearly basis. (SB-2).
				রিপোর্ট যাই সাথে সাথে বাংলাদেশ **ব্যাংকে একটা রিপোর্ট যাই।** বাংলাদেশ ব্যাংক আমাদের এই রিপোর্ট নিয়ে আবার আলাদা ভাবে **এনালাইসিস করে, এবং রেটিং করে, রেটিং যদি খারাপ** হয় এই জন্য আমাদের অনেক restrictions আছে। (SB-20).
				াতে আমি যতটুকু জানি বা বিশ্বাস করি সব ব্যাংকই করে ফেলেছে.. কারন এটা না করে কোন কিছু করার সুযোগ নাই। কারন হল Ultimately it will a effect আর **Directly hit to your.. Capital as well as rating.. (SB-6)**

Appendix F: Ethical Approval

University of Essex

Application for Ethical Approval of Research Involving Human Participants

1. Title of project: **Enterprise Risk Management (ERM) in the Banking Sector of Bangladesh.**

2. The title of your project will be published in the minutes of the University Ethics Committee. If you object, then a reference number will be used in place of the title.
Do you object to the title of your project being published? **No X☐**

3. This Project is: ☐ Staff Research Project ☐X **Student Project**

4. Principal Investigator(s) (students should also include the name of their supervisor):

Name:	**Department:-**
Mohammad Moniruzzaman	Principal Investigator
Professor Stuart Manson-1st Supervisor	Essex Business School
Professor Thankom Arun-2nd Supervisor	Essex Business School

5. **Proposed start date:** Interview to be conducted from 20 April 2017

6. **Probable duration:** 5 months till end of August 2017

7. Will this project be externally funded? **Yes X☐**
If Yes,

8. What is the source of the funding?
Commonwealth Scholarship Commission (CSC).

Research and Enterprise Office (smp) Page: 1 of 7

Page 1 of 2

9. If external approval for this research has been given, then only this cover sheet needs to be submitted

External ethics approval obtained (attach evidence of approval) Yes ☐ / No ☒

Declaration of Principal Investigator:

The information contained in this application, including any accompanying information, is, to the best of my knowledge, complete and correct. I/we have read the University's *Guidelines for Ethical Approval of Research Involving Human Participants* and accept responsibility for the conduct of the procedures set out in this application in accordance with the guidelines, the University's *Statement on Safeguarding Good Scientific Practice* and any other conditions laid down by the University's Ethics Committee. I/we have attempted to identify all risks related to the research that may arise in conducting this research and acknowledge my/our obligations and the rights of the participants.

Signature(s): ....[signature]..........

Name(s) in block capitals: .... MOHAMMAD MONIRUZZAMAN

Date: .... 27 March 2017 ....

Supervisor's recommendation (Student Projects only):

I have read and approved the quality of both the research proposal and this application.

Supervisor's signature: ....Stuart Manson ....

Outcome:

The departmental Director of Research (DoR) / Ethics Officer (EO) has reviewed this project and considers the methodological/technical aspects of the proposal to be appropriate to the tasks proposed. The DoR / EO considers that the investigator(s) has/have the necessary qualifications, experience and facilities to conduct the research set out in this application, and to deal with any emergencies and contingencies that may arise.

This application falls under Annex B and is approved on behalf of the ESC ☒

This application is referred to the ESC because it does not fall under Annex B ☐

This application is referred to the ESC because it requires independent scrutiny ☐

Signature(s): ....[signature]..........

Name(s) in block capitals: .... STEFANO CIRELLA ....

Department: .... ESSEX BUSINESS SCHOOL ....

Date: .... 05/04/17 ....

The application has been approved by the ESC ☐

The application has not been approved by the ESC ☐

The application is referred to the University Ethics Committee ☐

Signature(s): ....

Name(s) in block capitals: ....

Faculty: ....

Date: ....

Appendix G: Signed Consent Form

SBAC Bank Limited
সাউথ বাংলা এগ্রিকালচার এ্যান্ড কমার্স ব্যাংক লিঃ
LOCAL BANK GLOBAL VISION

[redacted] CMA
BBA, MBA (DU)
First Vice President
Head of Credit Administration Division & Risk Management Division
Principal, Training Institute
+880 [redacted]
+8802 9577207-211, Ext.-230
+8802 9577212
[redacted]@sbacbank.com
www.sbacbank.com

ESSEX
BUSINESS
SCHOOL

Informed Consent Form

Dear Participant,

I, Mohammad Moniruzzaman, am employed in the department of Accounting and Information Systems, University of Dhaka as an Assistant Professor. Currently I amfull-time research student undertaking a PhD at the University of Essex, UK. The topic of my PhD is an investigation of "*Enterprise Risk Management (ERM) Practices in the Banking Sector of Bangladesh.*"I am supervising by Professor Stuart Manson and Professor Thankom Arunof the University of Essex.

I am investigating the driving forces behind the adoption and implementation of ERM in the banking sector of Bangladesh along with determining the actual ERM practices and the challenges in its introduction. I am also exploring the organisational changes that have been occurred due to the implementation of ERM and the relationship with ERM regulation by the Central Bank. In order to undertake this study, I am interviewing a number of key individuals in the banking sector in Bangladesh. In particular, I am interested in hearing their account and experiences of being involved in the risk management process.I would be grateful if you would agree to be interviewed and discuss some questions and issues related to my topic. In return, if you wish, I would share my research findings with you.

As a researcher, I follow an ethical code of conduct. I haveobtainedethical approval from the University of Essex. I would like to assure you that all information collected will be kept **securely and confidentially** and will be used only for my research purpose. Data will be anonymised and your identity will be protected. If data which you provide is used, then a participant number or pseudonym will be used. Data will only be accessible by myself and my supervisors. If you agree to participate in this studywith your consent,the interviewwill be recorded throughan audio recording.It might be held around 30-40 minutes in time. If required I will supply to you a transcript of the tape recording.

You are free to withdraw from the study at any time, without giving reasons and without penalty, even after the data have been collected.If you need to contact us in future, please contact me (mmonir@essex.ac.uk)or my supervisor Professor Stuart Manson (manss@essex.ac.uk).

Yours truly,

Mohammad Moniruzzaman, FCA
Phd Candidate in Accounting
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Statement of Consent:
I agree to participate in this research project voluntarily. I am aware of the purpose of the study and how information shared would be used. I have read and understood the information provided above. If, for any reason, at any time, I wish to stop the interview, I may do so without having to give an explanation. I give informed consent to participate in this interview.

Participant's signature 20/07/2017 **Date**