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Implementation of Enterprise Risk Management practices

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Submitted for Ph.D. in Management,

University of Edinburgh Business School, 2017

Declaration

This thesis has been completed by Ruchi Agarwal under the supervision of Prof Jake Ansell and Prof Tom Archibald and has not been submitted for any other degree or professional qualification. I declare that the work presented in this thesis is entirely my own except where indicated by full references.

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Preface

There are five papers attached in Appendices. Paper one ‘Strategic Change in Enterprise Risk Management (ERM)’ has been published in Journal of Strategic Change (ABS 2*) in July 2016. Paper two ‘A Multiple perspective view to rampant fraudulent culture in Indian insurance industry’ is accepted for publication in International Journal of Indian Culture and Business Management (ABS 1*) in March, 2017. Paper three ‘Multi-layered blended risk governance in regulated industry’ is under review in ‘Regulation and Governance’ (ABS 3*) and paper four ‘Early adopters of institutional creativity in Integrated Risk Reporting (IRR)’ is under review in International Journal of Disclosure and Governance (ABS 2*) and fifth paper is a working paper ‘Enterprise Risk Management in normal, volatile and crisis situations’. Papers are also presented in 10 international peer reviewed conferences.

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Abstract

The existence of complexity, uncertainty and ambiguity in current business environment promotes corporates need to establish good risk governance. Enterprise Risk Management (ERM) has been considered as a way to achieve good risk governance to deal with both upside (e.g. exploit opportunities) and downside (e.g. reduce insolvency) of risk and uncertainty. ERM holistically treats all risk to achieve organisation objective in normal, volatile and crisis situations. The thesis tackles issues in the implementation of ERM and how it has been adopted and implemented in Indian and UK insurance market. Mixed research methods have been employed from a qualitative stand point to explore the research issues, consisting of two surveys in UK and India, over 50 interviews and two case studies in the Indian and UK insurance markets. The research revealed that there is an ambiguity in the understanding of the definitions of ERM and risk appetite across both countries. Major issues in ERM implementation in Indian insurance market are fraud, under-risk reporting and insufficient resources to develop an appropriate risk culture. In the UK insurance market issues are related to customer complaints, fines/penalties, over-risk reporting and lack of capital efficiency. Regulatory risk seen as a major risk in both market, though, in the Indian market lack of regulation is the issue whereas in the UK insurance market lack of clarity in insurance regulation has been emphasised. From intuitional theory and strategic change perspective, the research presents cross-country comparative case studies highlighting four emerging ERM strategies based on the different state of development and maturity of companies: ‘Rudimentary’, ‘Anticipatory’, ‘Resilient’ and ‘Transformatory’ strategies. The case studies highlight the issues within the two insurance companies both internally and externally in a nascent and a mature market. Before companies can adopt a transformatory strategy, both companies require a fundamental understanding of strategic change that eventually can pave the way to good risk governance. Adopting the cognitive lens of strategic change will not only enhance company specific risk-based capabilities but it will improve industry risk-based capabilities through development of professional competence.

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Chapter 1 Introduction

1.1 Focus of the research

The current regulations in financial industry demand a high level of transparency within institutions. Cyber-attacks, terrorist attacks and increased volatility in financial markets and the bailout of companies such as American International Group (AIG) and Enron in the recent past have led companies to adopt approaches beyond Traditional Risk Management (TRM). Recently, ERM brought a shift from 'separatist approach' to 'integrated approach' to include risk in a holistic manner and considered as a way to implement risk governance in the financial industry.

Risk governance is part of Governance, Risk and Compliance (GRC), an umbrella term, and deals with the management of risk and uncertainty by establishing risk related policy and controls. Drawing upon Institutional theory, a sociological theory, describing the behaviour of institutions, and theoretical concepts of risk, the research will critically explore the effective approach of implementing risk governance. The review of literature will reveal the current gaps in the theory and practice and will indicate how these will be addressed by the planned research.

Enterprise Risk Management (ERM) had been widely discussed for over a decade given its potential benefits to academia, practitioners and policymakers (D'Arcy, 2001). ERM has been considered an acceptable way to implement risk governance (FSA, 2006; Kleffner et al., 2003). It provides a holistic view of the overall risk dealt by an organisation whilst taking into account the organisation's objective (Hoyt, 2003; Meulbroek, 2002; Miccolis et al., 2000; Nielson et al., 2005). There have been debates about the value of ERM (Hoyt & Liebenberg, 2008) over Traditional Risk Management (TRM) (see McShane et al., 2011). Unlike TRM, ERM allows for the interaction of the enterprise's risks rather than treating each risk separately. In TRM risks are treated in silos. Each unit managers or divisional head would report risks in

their own terminology from their own part of the business in long reports to Chief Finance Officer (CFO) of the company. The CFO in turn often finds these reports difficult to yield meaningful action.

Recent financial crises have raised further concerns for exigency to deal with risks in a holistic manner. The financial markets during crises have become more volatile, and companies need to prepare themselves to deal with such volatility and crisis situations. Adoption of the higher standard of risk governance using ERM practices may provide plausible assurance to companies from the downside of risks, yet implementation is not easy. After ten years of Committee of Sponsoring Organisations and Treadway Commission (COSO), Standard & Poor (S&P), Casualty Actuarial Society (CAS) well discussed ERM framework; ERM is still in its infancy. Many recent papers are still discussing ERM's meaning (Bromiley, McShane, Nair, & Rustambekov, 2014; Mikes & Kaplan, 2015), its value (Rittenberg & Martens, 2012) and its scope (Mikes, 2011; Power, 2004, 2009). Furthermore, the lack of understanding of the scope of ERM has resulted in claiming it as ERM multi-disciplinary, interdisciplinary and perhaps transdisciplinary by many academics (Choi & Pak, 2006). ERM is still considered as an administrative burden and a part of compliance due to lack of clarity about its value of ERM (Fraser & Simkins, 2007; McShane et al., 2011). A recent study (Choi, Ye, Zhao, & Luo, 2016) provided interesting insights that studies in ERM have decreased in last three years. Bromiley et al. (2014) highlighted the need to study ERM from management perspective and issues are raised in understanding its strategic value (Beasley, Branson, & Pagach, 2015). There have been many studies of ERM in a business environment rather than what kind of issues management face in the actual implementation of ERM in practice to achieve higher level risk governance (Huse, Hoskisson, Zattoni, & Viganò, 2011).

There is almost negligible research in developing ERM strategies even though almost all definitions of regulatory and advisory bodies link ERM with the strategic risk management (Beasley, Frigo, Fraser, & Simkins, 2010). Clearly, there is a great need to understand mature ERM practices providing a linear progressive way for corporates, regulators and policy makers to achieve maturity. This needs to be done

in both developing markets such as India and developed markets such as the UK, to allow greater insights.

By adopting the theoretical lens of Institutional Theory, the research will provide comparative highlights on the distinct aspects of ERM necessary to understand risk governance. Unfortunately, there is wide ambiguity in the understanding of ERM. Corporates are struggling in defining what ERM is, its goals and scope. Some definitions have been proposed and there is no standardisation. Hence corporates are not able to find appropriate strategies to deal with risk and uncertainty to ameliorate risk governance.

1.2 Motivation of the research and research questions

My academic, professional studies and experience have been based on a sound training in finance, insurance and risk management. In my research, I have been exploring how ERM is different in theory and practice. ERM aims to deal with all risk in a holistic manner balancing the downside risk and exploiting opportunities for upside risk. Previous literature has focused on the downside of risk, but there is a dearth of literature focusing on opportunities arising from risk and uncertainty. Companies and to some degree policy makers are unclear about how to implement ERM to achieve good risk governance, and there needs to be more qualitative research to understand mature practices and leading strategies. Therefore, my research will take a qualitative standpoint based on interviews with leading managers in UK and India. My thesis extends knowledge emerging ERM strategies leading to good risk governance. This is a major topic of interest for the many conferences and publications recently.

My long term goal is to be a leading researcher in the fascinating area of management science and corporate governance in risk related matters. The aim is to understand practice in Risk Governance within enterprises, especially within insurance companies and understand strategies for implementation. I believe research on ERM is needed in order to provide insight into the higher level of Corporate Governance. This would be a benefit to society and aid sustainable development. The

research would be relevant for policy makers, financial institutions, regulators and academics. This will help the companies by providing an overview of current state of ERM practices and clarifying the practices in implementation.

The aim of my thesis is to understand Risk Governance within Enterprises, especially within Insurance Companies and explore the implementation. The primary research questions to tackle this aim are:

Q1: Who is adopting appropriate ERM practices and how well is the company able to implement ERM?

Q2: What are the issues in the implementation of ERM practices?

Q3: How are ERM practices different between India and UK?

1.3 Choice of research instruments and data collection

The ERM concept is evolving and perceived as one ERM framework does not fit in all situations (Mikes & Kaplan, 2015). ERM operates in a dynamic and complex environment (Klinke & Renn, 2002) where standardisation can impede innovation (Frigo & Anderson, 2014). There are no prescribed standards, which companies can follow, and this results in inconsistencies in practice. Also, practices and business environments vary across disciplines (Miller, 2013) leading to complexity in implementation when exploring mature practices. This requires an in-depth understanding of inconsistency of ERM implementation by examining behaviour within organisations and the differences in practice. Therefore, it would be more appropriate initially to use qualitative approaches to gain the necessary insights to current state of ERM implementation. A qualitative methodology has been employed using mixed research methods such as surveys; interviews of CRO and senior officials and case studies involved two large insurance companies in a developed and developing country.

The sample data has been taken from two countries: India and the UK. Insurance companies have a risk-oriented approach due to their business model; they need to manage the risk of a large number of individuals, corporates and associations. Thus, understanding the business of risk management and mature practices in insurance companies can provide exemplars for other sectors. Further, there have been few studies highlighting a need to have research in insurance in a heavily regulated environment (Beasley et al., 2015; Paape & Speklè, 2012; Zattoni & Cuomo, 2008).

There have been studies in Germany, UK, Canada and USA (Altuntas, Berry-Stölzle, & Hoyt, 2011; Deighton & Dix, 2009; Dowd et al., 2007; Tonello, 2007) on insurance markets but there are few studies comparing ERM practices in developing and developed markets. There are a large number of Indian insurance firms, which have joint venture partners from the UK. This provides an advantageous position to compare and contrast ERM practices between the two. Also, it will highlight emerging ERM strategies evolving distinct ERM practices among companies in India and UK.

1.4 Contribution and structure of thesis

This thesis contributes to Corporate Governance especially in the area of Risk Governance and Strategic Risk Management using the qualitative approach. The thesis identified different styles of adoption of ERM, generic and country specific issues in the implementation of ERM. It adds to a theoretical understanding of identifying four emerging strategies: ‘rudimentary’, ‘anticipatory’, ‘resilient’, and ‘transformational’ strategies. The Indian insurance market is emerging and has recently been opened up for enhanced foreign investments. This is the first study, which provides insights to improve risk governance in Indian insurance companies by implementing mature ERM strategies. This may encourage the transparency and credibility of the company to raise more capital from the foreign market, which creates more sustainability. This study is the first cross-comparative study between nascent and mature insurance markets (as far as author’s knowledge). The study tested Institutional Theory from Sociology with a focus on ‘Isomorphism’ and ‘Strategic Change’ during practice. The research provides a fundamental and advance level understanding of ERM and its implementation to senior management,

regulators and policy makers. The research on ERM is evolving and exploratory in nature and has wide prospects for trans disciplinary future research.

This Introduction Chapter provides an overview of the focus and motivation of the research. The background of the thesis in Chapter 2 follows this. Chapter 3 provides a literature review and shows a mismatch of goals of ERM as described by international professional regulatory, advisory bodies' and corporate businesses. The literature highlights significant previous studies in the implementation of ERM and through the theoretical lens of Institutional Change alternative approaches are discussed. Chapter 4 discusses how the researcher has used qualitative research methodology involving mixed research methods: surveys, interviews and case studies. The middle section of the thesis (Chapter 5, 6 and 7) highlights empirical results and findings from surveys, interviews and case studies respectively. Chapter 7 provides a detailed comparative analysis between the two cases in India and UK respectively. Also, it explores ERM definitions, objectives and four emerging ERM strategies. Chapter 8 discusses the overall findings using the mixed research methods. This is followed by the conclusion, limitation of research and future research in Chapter 9.

The thesis consists of five papers targeted for International publications (attached in appendices). Paper one 'Strategic Change in Enterprise Risk Management (ERM)' has been published in Journal of Strategic Change (ABS 2*) in July 2016. Paper two 'A Multiple perspective view to rampant fraudulent culture in Indian insurance industry' is accepted for publication in International Journal of Indian Culture and Business Management (ABS 1*) in March, 2017. Paper three 'Multi-layered blended risk governance in regulated industry' is under review in 'Regulation and Governance' (ABS 3*) and paper four 'Early adopters of institutional creativity in Integrated Risk Reporting (IRR)' is under review in Journal of Accounting and Public Policy (ABS 3*) and fifth paper is a working paper 'Enterprise Risk Management in normal, volatile and crisis situations'. Papers are also presented in 10 international peer reviewed conferences.

Chapter 2 Background of the research

2.0 Introduction

In current business environment, corporates faced volatility, ambiguity and uncertainty. Understanding risk and uncertainty pose several challenges, and a clear distinction between risk and uncertainty is not evident. The Knightenian (Knight 1921) view separates risk and uncertainty based on measurability and immeasurability. Runde (1998) partially agrees with Knight but highlighted the influence of individual characteristics of the situation in determining probability. Bernstein (1996) attached importance to conditions of uncertainty where both rationality and measurement are essential to decision making.

In fact, insurance business started with the concept of risk and uncertainty and based on law of large numbers. Keynes (also cited in Keynes, 2004) focus on 'a law of large numbers', emphasising the importance of relative perception and judgement in determining probabilities. Nobel Prize winner Arrow et al. (1972) imagined a perfect world in which every uncertainty is 'insurable', the world where a law of large numbers works without fail. Nobel Prize laureate Kehnemnan (1979) and Fraser and Simkins (2009, p 24) emphasises that human nature can be perversely irrational in the face of risk and the fear of loss often given undue importance over the hope of gain. Literature has provided more emphasis on a downside of risk and uncertainty than upside. Huerta de Soto (2009, p75) argued: "if there is a sector in which the difference between risk (insurable) and uncertainty (uninsurable) should always be very clear, it is the insurance sector".

ERM as a concept has emerged in last two decades to tackle the issue of multiple reporting of same risks so that overlapping risks can be identified and dealt strategically. The aim of this chapter is to provide the background of association of ERM with Risk Governance. The two parts of the chapter provides background of what ERM is, its related terminologies, components and key concepts of ERM and the last part relates it to Risk Governance.

2.1 Background of Enterprise risk management

Enterprise Risk Management (ERM) at present has been studied from many different perspectives including microscopic and macroscopic view which lead to the emergence of many terminologies. Understanding of ERM does not involve only its specific definition rather it is associated with a number of other terms such as risk appetite, use of models, risk culture and size and capacity of the organisation.

2.1.1 Emergence of ERM as a concept

Long comprehensive reports with multiple reporting of overlapping risks from each department/unit within the organisation, have become a strong topic of discussion among academicians and practitioners (D' Arcy, 2001) and led to the impetus of Enterprise Risk Management (ERM). ERM manages overall risks of the organisation in holistic manner which were previously dealt with independently (in silos) in Traditional Risk Management (TRM) (Cumming & Hirtle, 2001; Hoyt, 2003; Meulbroek, 2002; Miccolis et al., 2000). ERM developed as a concept not just to control, minimise or eliminate risk rather it views risk as a profitable opportunity with a shift of responsibility for risk from risk manager to board of directors or chief executive officer see D' Arcy (2001) for details. Mikes (2005) mentioned ERM as an underspecified concept and lead to emergence of four themes – risk quantification, risk aggregation, risk based performance and non-quantification of risk under four building blocks 'Risk Silo Management', 'Integrated Risk Management', 'Risk Value Management' and 'Strategic Risk Management'.

ERM has been given significant recognition by international advisory and regulatory bodies such as (COSO, 2004; CAS, 2003) and within academic literature (Nielson et al., 2005; O'Donnell, 2005; Sutton, 2006). Initially, the attention is first given to the development of ERM, framework, components and communication then, a due significance is given to the evolution of the roles of Chief Risk Officer, Chief Executive Officers and accountants in providing the value of ERM. This became an

altogether a broader area of study in 'Risk Governance' see (Renn & Walker, 2008) for details.

2.1.2 Terminology used in ERM

The purpose of adoption of ERM is to reduce overlapping of reporting, setting risk management in line with organisational objectives so as to manage risk and exploit possible opportunities. Yet problems are seen with the companies exposed to multiple types of risks at any given time, and so there needs to be a range of responses which could conflict. Six terms have been used as synonyms for ERM; these are Enterprise-wide risk management (EWRM), Holistic risk management (HRM), Corporate risk management (CRM), Business risk management (BRM), Integrated risk management (IRM), and Strategic risk management (SRM).

Whilst a few authors hold the different view, most suggest that risk management can be divided into two categories: Traditional Risk Management (TRM) and Enterprise Risk Management (ERM) (Arena, Arnaboldi, & Azzone, 2010; McShane et al., 2011). They support the view that the individual risk categories are separately managed in risk silos under Traditional Risk Management (TRM) while some authors further elaborate the terms and have shown little differentiation from Enterprise Risk Management (ERM) (Meulbroek, 2002; Mikes, 2005; D'Arcy, 2001).

2.1.3 Definition of ERM

Commission of Sponsoring Organisation of Tread way (COSO) is formed as a joint effort of five international private sector organisations[1]. COSO ERM definition is one of the most widely cited definitions among the academic researchers (Boatright, 2011; Deighton & Dix, 2009; Manab et al., 2012; O'Donnell, 2005; Shenkir & Walker, 2011; Thomson, 2007). According to COSO (2004), ERM is defined as:

"Enterprise risk management is a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the

---

[1] Five private sector organisations are the American Accounting Association (AAA), the American Institute of Certified Public Accountant (AICPA), Financial Executives International (FEI), the Institute of Internal Auditors (IIA) and the Institute of Management Accountants (IMA).

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) framework emphasises linking ERM objective with organisational objective and introduced new concepts such as 'risk appetite', 'risk reporting' and 'strategic risk management'. Within a few years, ERM has been defined by other regulatory and advisory bodies such as International Association of Insurance Supervisors (IAIS, 2013), Casualty Actuary Society (CAS, 2003), and ISO 31000:2009 (Purdy, 2010). Credit rating agencies such as Standards and Poor (S&P, 2013) have included the credit score of implementing ERM, especially for the insurance companies.

Other regulatory frameworks have evolved reflecting some of the tenets of ERM, for example, the Solvency II guidelines (Eling, Martin; Schmeiser, Hato: Schmit, 2007). In ERM, Pillar I focus on identification and quantification of all risk given as per the balance sheet, Pillar II emphasises good risk management practices and Pillar III works on disciplinary actions and its linkage with other stakeholders (Deighton & Dix, 2009). Pillar II focuses on ORSA (Own Risk and Solvency Assessment) which lead to the development of ERM framework.

There have been other definitions of ERM. According to the Casualty Actuarial Society (C.Report, 2003). Enterprise Risk Management is defined as "*The process by which organizations across all industries assess, control, exploit, finance and monitor risk s from all sources. It supports an increase in the organization's short and long term value to its stakeholders.*" According to Standard & Poor (2005), ERM is a *"highly tailored analytic process which recognizes each insurer's unique structure, products, mix of business, potential earnings streams, cash flows, and investment strategy"*. It emphasises that ERM can bring benefits from a diversified base of products and investments as well as risks, and geographic spread of risk (the benefits of uncorrelated or partially correlated risks).

2.1.4 Components of ERM

Commission of Sponsoring Organisation and Tread way Commission (COSO, 2004) has given significance to a mixture of factors such as entity size, complexity, industry, culture and management style along with eight components of ERM framework (see Table 2.1) for implementing it effectively and efficiently.

COSO introduced numerous terms and discussed a comprehensive ERM framework and presents difficulty in understanding. For evaluation, Standard & Poor looked at company's processes in five areas: risk management culture, risk control (risk appetite and governance), extreme-event management (uncertainty), risk and capital models (use of models and size and capacity of firms), and strategic risk management (S&P, 2013). To simplify the terms, Table 2.1 depicts broad terms most often used throughout the thesis and highlights a broad understanding of four terms: risk appetite, use of models, risk culture, size and capacity of the firms, when grouped together called 'related terms' for ERM implementation.

Lundqvist (2014) discussed four pillars of ERM in which first two pillars are related to internal environment and internal controls, and other two are pertaining to risk management activities and attributes of ERM. First two pillars are considered as requisites to establish ERM and fall under risk governance. This implies that risk governance is essential for organisation and ERM is considered as a way to implement risk governance. Attributes of ERM signifies the formal written ERM policy, Risk appetite statements and framework. Risk management activities provide the details of the management of different types of risks where actually the implementation of ERM works.

Key Components of COSO
Internal Environment Risk management philosophy, risk appetite, board of directors, integrity and ethical values, commitment to competence, organisational structure, assignment of authority and responsibility, Human resource standards
Objective Setting Strategic objective, related objective, selective objectives, risk appetite, and risk tolerances
Event Identification Events, influencing factors, event identification techniques, event interdependencies, event categories, distinguishing risks and opportunities
Risk Assessment Inherent and residual risk , Establishing likelihood and impact, data sources, assessment techniques, and event relationship
Risk Response Evaluating possible responses, selected responses, and portfolio view
Control Activities Integration with Risk Response, types of control activities, policies and procedures, control over information system, and entity specific
Monitoring Ongoing monitoring activities, separate evaluation, and reporting deficiencies
Information and communication

Table 2.1: Eight Key components of COSO framework and their interpretation

Kaplan and Mikes (2012) have provided qualitative distinction amongst the different types of risks existing in the organisation and defined three type of risks: preventable risk, strategic risk and external risk. The preventable risk is controllable and it should be eliminated or avoided such as illegal conduct, tolerance of errors. Strategic risk a company accepts based on its philosophies to generate superior returns such as risky ventures. The external risk is usually beyond companies influence or control. Miller (2013) elaborated the external risk or uncertainties into three categories: general environment, industry and firm specific variable. General environmental uncertainties are related to change in political, governmental, social, natural and macroeconomic environment. Industry related uncertainty refers to change in input market conditions, product market conditions and competitive market conditions though, the firm specific uncertainties are operating, liability, R&D, credit and behavioural. Though, COSO (2004) provided ERM framework a decade ago the understanding of ERM framework is not understood fully.

2.1.5 Role of CRO

To co-ordinate risk related matters, a specialised executive, Chief Risk Officer (CRO) is designated. The key role of a CRO is to align governance with the management and implement ERM in the company (Saeidi, Parvaneh; Sofian, Saudah; Rashid, Sitit, Saeid, 2012). A CRO is often equipped with the small or large team based on company's size and capacity and the regulation.

James Lam in the year 1993 at GE Capital introduced the title of 'Chief Risk Officer' (CRO) to describe as a function to manage 'all aspects of risk'. Porter (1985) defines risk as a "function of how poorly a strategy will perform if the 'wrong' scenario occurs". Mikes (2007) further provided information on role of CRO in practice of banking industry. Fraser et al. (2005) and Mikes (2008) made an impact with a case study on Hydro one in this direction by highlighting that risk management is everyone's responsibility, from the board of directors to individual employees. Hydro One had introduced a three-phase ERM program with focus on a series of workshops in first phase, one-to-one interviews were taken by CRO with senior managers to review the corporate profile in the second phase and in phase, the

company allocated resources to prioritised investment project proposals based on the risks identified.

Few discussions in literature such a Gallangher (1956) who stated that ‘Professional insurance manager should be a risk manager’ have given importance to the association of insurance industry with risk and uncertainty. Decision making in risk and uncertainty conditions are therefore based partially on the use of models and subjective knowledge but does not present the current state of its adoption among corporates. However, there is an emphasis on ownership and delegation of the responsibilities under conditions of risk and uncertainty and the outcomes of not managing risk and uncertainty appropriately.

2.2 Key Concepts of ERM

Key concepts highlight important factors impact understanding, adoption and implementation of ERM. Size and capacity of organisations, risk appetite and risk culture are three important factors affecting ERM in establishing good risk governance. These concepts are in some fashion interrelated such as size and capacity of the organisation influence the risk appetite of the company and determine the culture. Risk culture will deal with behavioural aspects. Calculative, risk intelligent and creative risk cultures often determine decision-making.

2.2.1 Size and capacity of Organisations

The size and capacity of a firm is important in determining its performance. Beasley, Clune and Hermanson (2005) highlighted the reasons of “why some organizations are responding to changing risk profiles by embracing ERM and others are not”. This study sets a foundation for further studies in ERM and indicated that the stage of ERM implementation is positively related to the presence of a Chief Risk Officer, board independence, Chief Executive Officer and Chief Finance Officer apparent

support for ERM, the presence of a Big Four auditor, entity size, and entities in the banking, education, and insurance industries. Paté-Cornell and Deleris (2009) suggested insurance companies could improve their risk profile in such situations. They also highlight firms should not adopt 'One size fit for all strategy'; rather they should adopt global strategies with the customised approach.

Gordon, Loeb and Tseng (2009) highlighted that ERM and firm performance is dependent upon environmental uncertainty, industry competition, firm size, firm complexity, and board of directors' monitoring of the firm which is almost similar to 'Other factors affecting ERM framework' suggested by COSO (2004) (see Table 2.1 for details). Insurance companies need to control their underwriting activity because it determines their payment load of claims while the strategic decision of a firm determines company's ability to pay. It provides an understanding beyond statistics which only reflects firms' position and sometimes socio-economic climate (Paté-Cornell & Deleris, 2009).

On the contrary, Taleb (2012, 2013) has argued that small firms are more efficient than large firms. It raises a common concern over size and capacity of organisation and its effect on the decision-making. Ghobadian and Gallear (1997) have shown slower adoption of TQM (Total Quality Management) in small and medium-sized enterprises (SMEs) than large firms. The reason is perhaps SMEs prioritise survival in the highly competitive market than producing higher quality outputs. It shows industry represents a mix of 'too large', large, medium and small companies, and the effect of size and capacity on robust risk management practices of a firm is still debatable.

Institutions are usually large, established and show the recurring pattern in their behaviours. Insolvency of institutions pose a high concern for the country and detrimental for public confidence, therefore, they are expected to demonstrate greater transparency and commitment.

2.2.2 Risk Appetite

Ballou and Heitger (2005) have given priority to setting up the risk appetite in practical ERM framework and suggested that firms should focus on understanding and aligning the common risk appetites of all key stakeholders. Risk appetite is reflected in 'tone from the top' along with risk consciousness, risk philosophy and board oversight, overall set the internal environment of the company (Ballou et al., 2012).

COSO directors (Rittenberg & Martens, 2012) defined Risk Appetite as " the amount of risk, on board level, an organization is willing to accept in pursuit of value.". However, Aven (2013) discussed a set of definitions given by academicians, professional bodies and consultancy companies and found the definition inconclusive.

2.2.3 Risk Culture

Establishing a good risk culture is one of the goals of ERM program especially a risk culture that reflects sound decision-making. Lloyds Risk Management Toolkit (2008) explained that risk culture is important for embedding risk management into the minds, behaviours and activities of all staff. This signifies a need of change in mind-set of people, behaviours along with the change in policies, procedures of risk management. A shift from Traditional Risk Management to Enterprise Risk Management fundamentally requires a major change. Change can be in behaviours where people consider risk naturally without being told (Weick, Sutcliffe, & Obstfeld, 2008) and also where people are free to talk about risk without creating blame (Power, 2009) and risk is acknowledged as part of everyone daily activity.

Hofstede (1983) highlighted that national cultures are different and dependent upon four different criteria such as Individualism versus Collectivism; large or small Power Distance; strong or weak Uncertainty Avoidance; and Masculinity versus

Femininity. Mikes (2009) found the existence of calculative risk cultures due to systematic variation in ERM practices of two large banking organisations. Given the difference in the cultures of countries and boundaries, ERM practices may differ in developing and developing countries and also in nascent and mature companies. Acharyya and Johnson (2006) found in a study of European insurance companies that level and understanding of ERM vary significantly among companies and also in different departments of the same organisation, though, Drira and Rahid (2012) emphasised the need to have more studies on implementation of ERM in developing countries.

2.3 ERM as a part of Risk Governance

ERM is a part of GRC which is an umbrella term consists of 'Corporate Governance', 'Enterprise Risk Management' and 'Corporate Compliance' (Frigo & Anderson, 2009). Through compliance, it ensures the stated requirements are implemented. GRC implementation in companies encourages embedding rules, processes and control. It also provides better transparency, efficiency and accuracy in day to day working.

Understanding of risk governance should be a desirable state for all the companies. Risk governance is not the best and universal governance rather a mature, rational and optimal risk governance at given point of time (Van Asselt & Renn, 2011; Zattoni & Cuomo, 2008). For every organisation, the definition of 'good risk governance' may vary over a period. Risk Governance is the ability to facilitate decision making about risks within modern society and developed through gaining maturity in dealing with risks, having established the procedures, ensuring everyone understands the approaches through training, effective implementation of the approaches aligned to the strategic objective of the organization (Andreeva, Ansell, & Harrison, 2014). Van Asselt and Renn (2011) defined risk governance term as it "involves the translation of the substance and core principles of governance to the context of risk and risk-related decision-making" (p 432). ERM is considered a way to establish risk governance (Brown, Steen, & Foreman, 2009; Frigo & Anderson, 2009).

Simply put eight elements of COSO (see Table 2.1), Risk Governance can be compartmentalised into four major pillars: policy formulation and structure setting (Pillar I) alignment of governance and management (Pillar II), implementing ERM (Pillar III) and control, monitoring and response (Pillar IV). The first pillar is must and pre-requisite to implement ERM and consists of setting up internal environment (first key components of COSO). Development of Risk Governance is a multi-year continuous learning process (Chapman & Ward, 1996; Lam, 2014; Renn & Walker, 2008). Governance and mangement are intertwined in risk related matters. This requires alignment of governance with management and implementation of effective ERM practices (Bhimani, 2009). At second pillar, board develops an understanding of ERM (Bromiley et al., 2014) and governance mechanism based on local and international context. The aim is to decide a progressive linear strategy of how ERM should be adopted (Frigo & Anderson, 2014) and implemented in the institutional business environment (Beasley, Branson, & Pagach, 2015). COSO second component 'objective setting' discussed strategic aspects to some extent. At this pillar, ERM is considered as a way to establish risk governance.

Third pillar cosinders actual implementation of ERM and the performance expectations are set. This includes Traditional Risk Management (TRM) and Integrated Risk Mangement (IRM) (Mikes, 2005). The risk is identified, assessed and responded by the unit head as a part of TRM and then decisions on integration of risk, reponse and type of control are taken under IRM. COSO third, fourth, fifth and partly sixth component (see Table 2.1) falls under this pillar. Risk monitoring is one of the important parts of risk governance where a few the governance failures are evident (Doherty & Lamm Tennant, 2009).

'Control, monitoring and response' represent the fourth pillar of risk governance. Institutions follow multiple monitoring and control mechanism. Some are used for internal purposes such as risk management committee, audit committee and board risk committee and other for externals such as audit and compliance, credit rating companies, and international certifications/norms/standards.

Integrated Risk Reporting (IRR) is one of the major components of risk control, monitoring and response (Pillar IV) and operate under the guidance of CRO (see

paper three in Appendix for details)(Linsley & Shrives, 2006). IRR creates awareness among board about the happening of events and risk and opportunities. Risk reporting is subject to audit and important for company's reputation (Bebbington, Larrinaga, & Moneva, 2008) as disclosures are made in annual reports (Abraham & Shrives, 2014). Based on risk response, risk-based decisions are taken, and ERM policies, procedures and systems are reviewed regularly often annually, half-yearly and very rarely quarterly. Board also consists a board risk committee chairman and interdisciplinary experience guides for improvement in risk governance. Compliance with local and international regulations is one of the challenging and crucial parts of risk governance and take care at all pillars (Frigo & Anderson, 2009).

2.4 Summary of the chapter

This chapter throws light upon the background of ERM and discusses how ERM as a concept has emerged from 'separatist' view to 'holistic' view. ERM is evolving in nature and there have been several terminologies used in ERM literature. ERM is essentially a part of Governance, Risk and Compliance (GRC) and good risk governance. ERM definitions and controversies have been explained. Commonly cited ERM eight components of ERM are discussed in relevance to four pillars of risk governance. Key concepts related to ERM have been explained. The relationship between governance and ERM has been discussed in terms of four pillars of ERM(Lundqvist, 2014) and good governance (Van Asselt & Renn, 2011; Zattoni & Cuomo, 2008). This chapter provides the foundation for the understanding the gaps between theory and practices of ERM discussed in Chapter 3.

Chapter 3 Literature Review

3.0 Introduction

Enterprise Risk Management (ERM) is an important part of governance, risk and compliance (GRC). GRC is an umbrella term that covers organisational approach across three closely related areas to share common goals (Frigo & Anderson, 2009). The ultimate goal of GRC is the creation and preservation of stakeholder value to recognise the unique role of each function and hence, promote effectiveness and efficiency.

The previous chapter explained the definition of good Risk Governance and four major pillars of Risk Governance based on COSO eight components: policy formulation and structure setting (Pillar I), alignment of governance and management (Pillar II), implementation of ERM (Pillar III) and control, monitoring and response (Ppillar IV). The focus of thesis narrows down to the establishment of good risk governance by the adoption of mature ERM practices and their implementation (majorly Pillar II and III). Blended multi-layered risk governance and Integrated Risk Reporting (majorly Pillar I and IV) are dealt in depth in paper two and three in detail (see Appendix).

The chapter is divided into five major parts: First two parts discuss risk management and uncertainty and scope of ERM. The second part brings attention to major issues in the implementation of ERM. Issues in the understanding of ERM and risk governance, the difference in writing and practice are discussed but scattered across various disciplines. Four evolving ERM strategies have been highlighted though, only partly mentioned in the literature. This is followed by the detailed discourse of theoretical debates. Chapter summary is presented at the end of the chapter.

3.1 Risk Management and Uncertainty

Risk covers many activities where there are possibilities of making predictions, whereas uncertainty covers areas where prediction is implausible (Knight, 1921). Companies find difficulties in adopting ERM due to the existence of volatility and variability in the current business environment, thus leading to inconsistent ERM practices (Renn, Klinke, & van Asselt, 2011). This is also reflected in a company's different approach to deal with situations during normal, volatile and crisis situations and this leads to changes in strategies under different circumstances (see paper five attached in the Appendix for details).

Rumsfeld (2002) categorized the corporate knowledge of situations in 'known knowns', 'known unknowns' and 'unknown unknowns' in regard of the existence of risk and uncertainty. Simply put, there are certain situations companies are well aware of based on their experience and knowledge, some situations of which they are aware that they are volatile and inconsistent in nature, and few are rare events which no one has clue about. Stulz (2008) has highlighted significant dangers of ignoring 'unknown knowns' risks. This is due to the fact that 'unknown knowns' risks are either excluded from the central risk modelling process, not adequately captured by system or not monitored. On the contrary, Taleb (2007, 2013) has elaborated the aftereffects of ignorance of 'unknown unknowns' risk and tail events. Weick (1988) defined crisis as a situation characterized by low probability/high consequence events that threaten the most fundamental organisational objective.

According to Renn, Klinke and van Asselt (2011) risk governance translate the core principles of governance in the context of risk-related policy making. It guides or restrains the activities to cope with uncertain, complex and ambiguous risks. Andreeva, Ansell and Harrison (2014) defined risk governance as an ability to facilitate decision making about risk within modern society. The insurance industry is the set of premier risk-bearing businesses, whose whole existence is to deal with other peoples, and their own, risks.

ERM has gained importance as a new paradigm to address increased risks arising from cyber-crimes, terrorist attacks, failure of companies, and the routine risk companies' might face. It is usually considered that the adoption of an appropriate

risk regime will provide some security against these prevalent risks. Previous research has agreed that the ERM approach is capable of providing protection from both foreseen and unforeseen circumstances due to the presence of risk and uncertainty in the internal and external environment. Frigo and Anderson (2014), though, have pointed out ignorance of the corporates of the opportunities that arise from ERM and advocated "Management and boards need to adapt rather than rigidly adopt a specific framework and develop a clear strategy for risk management that fits the needs of the organization". The current research focus is to explore the differences in the adoption and implementation of ERM to provide an overall new strategy in the establishment of good risk governance.

3.2 Scope of ERM

ERM deals with a wide variety of risks and has been criticised over its scope. Power (2004) has highlighted that risk management deals with the risks of everything exist in the organisation, therefore, dealing with a large variety of risk. The ambiguity over the lack of clarity of the scope of risk management is reflected in the term 'management of nothing' (Power, 2009). Kaplan and Mikes (2012) has provided a new classification of ERM risk under three broad categories – preventable risk, strategy risk and external risk covering broadly market risk, operational risk, financial risk, strategic risk, reputational risk, conduct risk and technology risk.

Crockford (1980) argued that risk management is multidisciplinary in nature. Mikes (2011) highlighted calculative boundaries of ERM and Power (2009) emphasised boundaryless ERM, however, Acharyya and Johnson (2006) mentioned the requirement of the interdisciplinary team for it to be effective. In some senses, though, ERM can be described as transdisciplinary since it requires the integration of numerous disciplines such as management, business, finance, accounting, economics and operations, and shares common goals and frameworks to address risk related issues. The differences between multidisciplinary, interdisciplinary and transdisciplinary are addressed by Choi and Pak (2006). Table 3.1 depicts multiple disciplines in which most of the important papers of ERM are cited. Further, Choi et

al. (2016) highlighted the recent publications of papers in ERM across various disciplines.

Disciplines	Total Number of papers cited	Year of Publication
Entrepreneurship	12	1956 -2013
Finance and Accounting	16	1998-2014
Management Science	7	1972 – 2014
Multidisciplinary	6	2005 -2012
Operations	4	1992-2006
Organisational Behaviour	14	1947 – 2011
Professional and Advisory Bodies	14	2003-2013
Risk and Insurance	24	2001 -2013
Others	6	2003- 2014
Strategic Management	3	2008-2014
Total	106	1947-2014

Table 3.1 Disciplines of ERM publications

Most often in risk and insurance journals, perspective is taken economics and constructive dialogue between industry, economic and social partners rather than pragmatic and institutional. Attention to ERM strategies have been provided very recently less than a decade, and rarely papers are published from the strategic perspective.

3.3 Issues in ERM

A detailed study of the literature reveals that there is a lack of clarity in understanding the concepts of ERM, its need and the objectives behind its adoption.

3.3.1 Understanding the concept of ERM

A wide disagreement among regulatory bodies, international advisory bodies and practitioners have shown discrepancy on what ERM is, what it constitutes and its benefits (Aven, 2012; Bromiley, McShane, Nair, & Rustambekov, 2014; Fraser & Simkins, 2007). Most of them agree that ERM is an approach beyond silo risk management and considers integration of risks to create value for the organisation (Adams, Lin, & Zou, 2011; Beasley et al., 2005; Boatright, 2011; Hoyt & Liebenberg, 2011; R. Hoyt & Liebenberg, 2008; Nielson et al., 2005; Rudolph, Cera, & Rhu, 2009; Stulz, 2008). The integration of risks helps in understanding the existence of correlation among some of the extant risks (Altuntas et al., 2011; Hoyt & Liebenberg, 2011; Hoyt & Liebenberg, 2008; Liebenberg, & Hoyt, 2003) and lead to diversification benefits (Rudolph et al., 2009).

Bromiley et al. (2014) argue that ERM is not fully understood and requires management scholar's attention in understanding its conceptual roots and issues. Surprisingly, contrary to their own published research McShane, Nair, & Rustasmbekov (2011) marginalised the value created by ERM over Traditional Risk Management (TRM). Lundqvist (2014) used an exploratory study to provide four pillars of ERM and highlighted pillar one and two can be implemented through strong governance in place and need not be related to risk management whereas third pillars focus upon the management of different risk within the firm. The fourth one deals with ERM characteristics. In this case, risk governance is confused for whether ERM is a part of risk governance, risk governance is a part of ERM or ERM is a way to establish risk governance. Though, setting up ERM infrastructure does not ensure good understanding and implementation to derive benefits, yet, it is a prerequisite. The interrelatedness between TRM and ERM from Mikes and Kaplan, (2013a) and

Power (2004) has not been addressed by McShane et al., (2011) though, interrelatedness of ERM and risk governance not fully reflected in Lundqvist (2014) research. This reflects the lack of clarity at ERM inception given the many scholarly definitions of ERM, which possibly created the ambiguity in understanding. Therefore, this research explores the major elements of ERM definitions and objective as a summation of definitions suggested by regulatory and advisory bodies (see details in paper two).

Risk and uncertainty in an organisation result from everything to nothing (Power, 2004, 2009) such as falling an object to earthquake, typhoon, or hurricane. It could be a man-made or natural catastrophe, low or high in impact with varied frequencies. Covering every risk is impossible for an organisation, however, doing nothing does not justify following good governance. To deal with this, organisations set limits of coverage of risk, for example, a health insurance company would like to cover only health related policies than insuring a building risk. In this case coverage of the type of risk is limited. Further, insurance companies impose a maximum limit of exposure per risk and total exposure limits. These limits are set based on the capacity of the organisations and experience. ERM is evolving and setting standards at such early stage can hamper innovation (Mikes & Kaplan, 2015). ERM is promoted through creative and calculative risk culture (Mikes, 2009). The relevance of risk appetite (setting limits) concept and capacity of firms in ERM implementation makes understanding more complex. There is a lack of consensus over ERM fundamental principles, which distract organisations, and consequently, companies face numerous problems in the implementation of ERM.

ERM objectives are linked with organisational objective (COSO, 2004). There are no prescribed standards which companies can follow, though; there is existence of pressure from regulators and credit rating agencies to adopt good practices. Companies may be clueless on how to compare ERM practices to allow development of good practices, or even the state-of-the-art. There is a dearth of literature discussing real life case studies and comparative analysis that can provide a guide for companies to ERM implementation and providing knowledge for the practical difficulties they are likely to encounter. Arena, Arnaboldi and Azzone, (2010)

highlighted ERM dynamics depend upon characteristics of individual companies and sector specific characteristics. Frigo and Anderson (2014) compared COSO and ISO 31000 framework and identified that decision of adoption of a framework is dependent upon an individualistic characteristic of the company. This clearly presents a requirement to provide in-depth case studies highlighting current state of ERM implementation and approaches adopted to overcome the issues faced by corporates in its implementation. Few studies have been reported about developed countries (Altuntas et al., 2011; Hoyt & Liebenberg, 2008; Mikes, 2008) but there is lack of empirical studies providing comparative insights on ERM practices followed in developing and developed countries.

3.3.2 Writing and practice

Current research presents difficulty in understanding the way ERM has been written and practised. Research on ERM is fractioned, disjointed and segregated in multiple disciplines. The gap between the writing of ERM and practice can be divided into four sections – Section 1 deals with the clarity of purpose of ERM, Section 2 shows the use of risk models and compliance, Section 3 highlights measurement and reporting of risk and Section 4 provides supervision and risk culture related issues.

Very little research has been done to explore good risk management practices (Cormican, 2014; Klinke & Renn, 2002) so as to get the competitive advantage by employing ERM strategies (Frigo & Anderson, 2009). There tends to be a lack of theoretical frameworks of institutional theory, strategic change and Antifragility to explore good practices.

Sections	Discussions in literature
Section 1: Clarity of Purpose	- Does current risk governance help organisation in achieving its objective (Andreeva et al., 2014; M. L. Frigo & Anderson, 2011)? - Does ERM embed according to the strategic direction of right risk governance (Power, 2004 & 2009)? - Does ERM definition, objective understood? Does issues in implementation recognised (Bromiley et al., 2014)?
Section 2: Clarity in use of related concepts	- Does quality and sufficient data identified for using risk models?((Paté-Cornell & Dillon, 2006) - What is considered to be a risk, how should it be reported, what are the outcomes, etc.(Paté-Cornell, 2012; Stulz, 2008)? - Does reputation and compliance risk is the major concern for the organisation(Power, 2004)?
Section 3: Coverage of Risk	- How much are known errors taken into account and reported (Stulz, 2008)? - How relevant is the risk metrics to portfolio of risk and the correctness of method of measurement(Fraser, & Simkins, 2005)?
Section 4: Role of culture and size of organisation	- Does lack of supervision and existence of a large number of risks make large organisations more prone to failures and create systemic risk for the economy (Taleb, 2013)? - What is the role of culture in managing risk (Hofstede, 1983; Mikes, 2009)?

Table 3.2: Difference in writing and practice

3.3.3 Understanding risk governance

Risk governance deals with governance of risk related matters. Risk governance though, suggests policy formulation, strategic objective setting, aligning governance with management, implementation of ERM and control, monitoring and response yet, an impact of ERM on strategic decision-making has not yet been fully explored.

Some authors argue that ERM benefits firms in reducing external capital costs, increasing capital efficiency and creating synergies by promoting risk awareness and support in enhanced strategic decision making (Beasley et al., 2005; Cumming & Hirtle, 2001; R. Hoyt & Liebenberg, 2008; Lam, 2014; Miccolis & Shah, 2000). More commonly, it can be interpreted that ERM supports the consideration of the interaction of risks they face to provide overall value to the organisation rather simply adding up the value created from each department/unit. For example, a change in underwriting terms and condition might be able to reduce policy risk but can increase the risk of default by the policyholders in paying the premium, which may impact reinsurance contracts and overall credit rating.

There is an undue significance given to role of Chief Risk Officer (CRO) (Adams et al., 2011; Mikes, 2005; Saeidi et al.,2012), the role of Chief Executive Officer (CEO) (Acharyya & Johnson, 2006; Damodaran, 2010) and role of accountants (Shenkir & Walker, 2011) in the implementation of ERM and limited importance is given to board understanding of ERM (Altuntas et al., 2011). Rarely do papers discuss the confusion in establishing risk governance (Deighton et al., 2009; WEF, 2013) and its influence on implementation of ERM in an organisation (Kleffner et al., 2003), though, many of them found that no single form of the risk governance fit for all (Arena et al., 2010; Beasley et al., 2005; Deighton et al., 2009; Tonello, 2007). This will lead to obvious inconsistency in the practice and perhaps the reason is lack of consensus among the board members about what an ERM means and how it will be beneficial for the organisation.

3.3.4 Risk Appetite, risk models and behavioral aspects of ERM

ERM is an evolving (Frigo & Anderson, 2014) and multidisciplinary in apporach (Acharyya & Johnson, 2006). ERM approaches can not be standardized due to different objectives of the organisation, however, there is scope to study the trend in adoption and implementation of ERM in nascent and mature organisation.

Aven (2013) defined "risk appetite as willingness to take on risky activities in pursuit of values". Aven (2013) and Leitch (2010) consider the lack of clarity of the risk appetite concept and it being more related to 'risk limits' and willingness to take the risk. Pate-Cornell (2009) provided different perspective on failure in insurance companies and found that managerial decisions in selecting choice of portfolio and the size of the firm are two significant factors affect firm's failure. In addition to this, Drira and Rashid (2013) found that limit on size of large organisation can not necessarily lower insolvency risk, though, Higgins (2010) highlighted the impact of motivational incentives on behaviours can cause failure. These decisions are reflected in company different attitude under normal circumstances, volatile markets and crisis situations and are partially based on available capital and solvency cushion at the time. This could depend on the size of the enterprise since larger firms may be able to call on more capital.

Whilst a few classical papers emphasised the importance of quantification, roles or risk manager and risk learning (Arrow, 1972; Gallagher, 1956; Keynes, 2004), there was subsequently a dearth of such more recently The Knightenian (1921) view separates risk and uncertainty while, Berstein (1996) again highlighted the problems related to over-reliance on quantification. Taleb (2007) stated that "World is dominated by extreme, unknown and very improbable….while we spent our time on small talk, known and repeated". Porter (1985) rather gave different view of risk definition and defines it as a function of how poorly a strategy will perform if the 'wrong' scenario occurs. Due to few incidents in the economic downturn and

financial crisis, the companies need to think out of box and change their behaviour towards risks.

3.5 Theoretical Framework

ERM literature has been surrounded with agency theory, resource base view, contingency theory, institutional theory, organisational change theory, and Antifragility. In first section, many alternative theories have been explored in context of research problem and then institutional theory is discussed in detail.

3.5.1 Key Main theories

Recently, ERM has emerged as a new corporate paradigm to manage risks in holistic manner with an aim to improve Corporate Governance (Ballou et al., 2012; MS Beasley et al., 2005). Agency theory is widely cited and used in Corporate Governance discipline with a purpose to tackle issues/problems between principal and agent (Huse, 2003). The principals are defined as shareholders and agents are defined as management and executives (Eisenhardt, 1989). Cohen et al (2008) highlighted the overuse of agency theory in the discipline and suggested to use alternative theories. Agency theory has been criticised for more focus on monitoring, and so neglecting the importance of roles of the board, management and executives in establishing effective risk governance structure (Cohen et al., 2008).

Resource base view of firm has emerged as a dominant perspective in strategic management discipline. It addresses some of the questions such as ‘why some firm performs better than others’? Resource base view is majorly based on creating and sustaining competitive advantage in the market (Barney & Clark, 2007). ERM is still evolving, and strategic risk is not yet widely accepted (Frigo & Anderson, 2011). ERM is discussed as a concept (Bromiley et al., 2014; Mikes, 2005; Mikes & Kaplan, 2015) and there are many issues in its implementation (Frigo & Anderson, 2014). A resource based view is more applicable for mature stages of ERM implementation than initial stage.

Organisations operate as open systems that require a balance between internal needs and the extent of adaptation to environmental circumstances (Morgan, Gregory, &

Roach, 1997). A range of approaches to tackle management needs can be employed to perform different tasks within the same organisation. Good practices are those who are the best fit for the organisation but 'one size does not fit for all' is an applicable concept from Contingency Theory (Mikes & Kaplan, 2015). Gordon et al. (2009) concluded that ERM firm performance relation is contingent upon a proper match between ERM and five variables such as environmental uncertainty, industry competition, firm size, firm's complexity and monitoring by the board of governors.

Neo-Institutional Theory provides an alternative theoretical framework. Institutional Theory provides focus on 'Inter-organisational processes and behaviours', organisational culture emphasises 'intra-organisational processes and behaviours' and both Institutional Theory and organisation culture literature promotes 'creating collective meaningful structures through social processes' (Greenwood & Hinings, 1996; Kondra & Hurst, 2009; Powell & DiMaggio, 2012). The thesis will explore the shared and specific issues in the implementation of ERM and strategies to overcome them. Therefore, the institutional theory is selected as a theoretical framework based on research questions. Further, Beasley, Branson, and Pagach (2015) noticed that institutional theory is more effective in providing theoretical insights of corporate behaviours in heavily regulated industry and agency theory in less regulated industries. The insurance industry is considered to be a heavily regulated industry with existing several regulations such as Solvency I (in the UK), Solvency II (in the UK), EUROPA (in Europe), SOX (in the US), IRDA (in India) and much more.

Implementation of ERM within an organisation requires a change in infrastructure, process, governance policies to deal with current and emerging risk and uncertainty. Organisational Change itself poses many questions such what needs to be changed, how a change will take place and who will benefit from the change. There is often wide resistance within companies to adopt change program partially due to perceived high failure rate. Balogun and Hailey, (2008) highlighted 70% failure of management initiated change programs though, Burnes (2009) provided a failure rate between 60% to 90%. Additionally, cultural initiatives have greater failure rates (Senturia, Flees, & Maceda, 2008). The effects of not changing to tackle issues, though, can be

disastrous and may result in ‘slowdown’ organisation progress and loss of competitive advantage.

Change may occur at internal, external or both, and at the strategic level (see Table 3.3). Moran and Brightman (2000) advocated that a change required time and resources for its effective operations and stated “cynicism occurs when coaching programs are grafted on to conditions of high change and work load” and suggested that there is a need for change in risk management to develop strategies and to meet challenges. One of the research question of my thesis is to explore the issues in the implementation of ERM. Therefore Strategic Change has been emphasised to deal with issue and challenges in dealing with ERM implementation (Frigo & Anderson, 2014; Ward & Grundy, 1996). ERM emphasises those risks which are more inclined towards fulfilment of organizational objectives or barriers to their fulfilment and may differ among companies within the same industry. To explore good practices, it would be worthy to look at other existing approaches and their merits and demerits such Antifragility.

Risk can have an upside and a downside resulting in gains or losses respectively. The previous literature, however, has given significant attention to downside of risk in last two decades while upside of risk is rather neglected in the literature and practice. Taleb (2013) explains that Black Swan events can be high profile, hard-to-predict rare events which are non-computable by using scientific methods, psychological biases and unawareness (blind spots) to uncertainty. He further criticised statistician for inadequate use of results of risk models and contemplating improper scenarios. It is argued by Taleb (2013) that changing scenarios are helpful for the organisation and organisation can even gain from its exploitation. Taleb (2013) suggested an alternative approach to robust risk management known as ‘Antifragility’ which has no downside risk and gains from randomness at the time of uncertainty. ‘Antifragility’, though, may be considered ill-defined and can be regarded as inapplicable in the insurance industry. Antifragility provides insights to manage risk from downside and upside, and have the potential to suggest approaches to promote good ERM practices.

Type of change	Focus on the Change Management literature
Internal Change	Single loop learning and double loop learning (Argyris, 1993)
	Importance of internal communication in change program (Harkness, 2000)
	Impact of work behaviours on change (Moran & Brightman, 2000)
	Benefits of change and impact on organisational performance (Rieley & Clarkson, 2001)
	Aftereffects of change and role of change managers or leaders (Elrod II & Tippett, 2002)
	Dilemmas in change process and aftereffects on organisational culture (Trompenaars & Woolliams, 2002)
	Internal triggers of change(Senior & Fleming, 2006)
	Power and politics of change (Burnes, 2009)
	Challenges in implementation of change and sustainability (Senge, 2014)
Both Internal and External Change	Context specific change (Balogun & Hailey, 2008)
	Understanding of complexity of issues (Bamford & Forrester, 2003)
	See change as an opportunity not a threat (Luecke, 2003)
	Worked on change dilemmas faced by real managers (Kanter, 2003) Role of leader to promote innovation, professionalism and transparency (Kanter, 2007)
	Understanding the theory and practice of change management (Todnem, 2005)
Strategic Change	Concepts and controversies of managing change (Wilson, 1992)
	Diversity of change strategies in practice (Dunphy & Stace, 1993)
	- Unleveraged Financial performance (Grundy, 1993, 1995) - Linking Strategic Change with finance(Ward & Grundy, 1996) - Linking strategy with cost management(Grundy, 1996) - Linking strategy with HR (Grundy, 1997)
	Provided PLOT (Plan, Lead, Operate and Track) strategy(Senturia et al., 2008)

Table 3.3 Focus of Change Management Literature

3.5.2 Institutional Theory

An organisation becomes an institution when it adopts a special character, a distinctive competence and perhaps trained in developing capacity. Leaders such as the board of directors have prominent roles in developing, nurturing and monitoring institutions and play an important role in governance. The role of governance is to monitor the progress of cost and benefits through "understanding the traces of forms, processes, strategies, outlooks and competence as they emerge from patterns of organisational interaction and adaptation" (Selznick, 1996, p 271). Moreover, the board of directors infuse values in institutions beyond technical aspects. Selznick, (1996) criticised institutions as becoming a prey of 'legalization' simply following rules and procedures without understanding purpose and effects. In this process, some social problems affecting institutions at large remain untraceable. The tensions between law and organisational reality are revealed only when there is a persistence of unresolved issues in modern organisations. Institutions can become similar over time. After recognition persistence of the unresolved issues, institutions are forced to change for survival or to adopt continuous change proactively by promoting good practices. Therefore, institutions pass through both phases of becoming 'similar' and 'dissimilar' throughout their lifecycle and encompass features of 'going concern'.

Institutions theory is used as a first step forward to integrate some theoretical threads as it is one of the most robust sociological perspectives in the organisational theory (Meyer & Rowan, 1977). Powell and DiMaggio (2012) provided a difference between old institutions and new institutions. The former is more focused towards issues of influence, coalition and competing values with power and informal structures whereas latter emphasised organisational legitimacy, embeddedness, the centrality of classification, routine, script and schema (Greenwood & Hinings, 1996). The multiple themes joining together old and new institutionalism is called as 'Neo-Institutionalism' (Greenwood & Hinings, 1996). Institutionalization and deinstitutionalization of institution theory have been discussed in some previous literature (Kondra & Hurst, 2009; Oliver, 1991; Tolbert & Zucker, 1999).

3.5.2.1 Stages of Institutions

Tolbert and Zucker (1999) revealed three stages of Institutionalization 'Pre-institutional stage', 'semi-institutional stage' and 'full institutional stage'. These stages are based on process, characteristics of adopters, the impetus for diffusion, variance in implementation and structure failure rate. Institutions move from a state of 'habitualization' (stage 1), 'objectification' (stage 2) and 'sedimentation' (stage 3) with a proportional increase of the higher level of stability for organisational structures. Innovation and survival of institutions are rather promoted by technological changes, market forces and legislation (Tolbert & Zucker, 1999; Wright, Sturdy, & Wylie, 2012). Based on this behaviour, Table 3.4 classifies institutions into three stages: nascent, intermediary and mature stages (see Table 3.4).

Institutional Theory declares that regularised behaviour is the product of ideas, values and beliefs originated from institutional context and therefore focuses on inter-organisational processes (Greenwood & Hinings, 1996; Kondra & Hurst, 2009). Greenwood and Hinings (1996:1025) further explained: "to survive, organizations must accommodate institutional expectations, even though these expectations have a little to do with technical notions of performance accomplishment". Organisation behaviour is dependent upon both market pressures as well as institutional pressures such as regulatory pressure, professional standards, social pressures and actions of leading organisations.

	Stage 1 'Novice'	Stage 2 'Intermediary'	Stage 3 'Mature'
Idea	Innovative idea	Expansion and scalability of idea	Mature ideas with little changes
Organisational structure and procedure	Set up new structures and procedures	Diffusion of structures and procedures. Setting values	Stabilised structures and standard procedures
Legislation	Follow strict guidelines/rule for survival	Adaptability to changes in legislations and new legislations	Good reputation and behaviours. Setting normative practices
Market forces	Known	Adaptability to new market forces	Distinguish between known and unknown market forces

Table 3.4: Stages of institutions

Previous literature on Neo-Institutional Theory has highlighted how organisations can create collective meaningful structures (Greenwood & Hinings, 1996; Kondra & Hurst, 2009; Pedersen & Dobbin, 2006) but are silent on how organisations can deal with industry and country specific issues discussed in old institutional theory. In the race of becoming similar, some issues remain unresolved and then demand 'transformatory change' not only for specific companies but rather for an industry as a whole. Less attention has been provided to link institutional change with Strategic Change to deal with issues in implementation (Rajagopalan & Spreitzer, 1997).

3.5.2.2 Strategic and Institutional Legitimacy

Suchman (1995) brought attention to the word 'legitimacy'. Legitimacy is widely used for interpretations while combining both strategic and institutional approaches. He defined Legitimacy as "a generalised perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions", (Suchman,1995, p574). An organisation may occasionally or dramatically diverge from societal norms and yet still be called legitimate due to its divergence not being recognised. The main reason for achieving legitimacy is to pursue gaining credibility and support from the society. Legitimacy provides flexibility to adopt Strategic Change which is generally acceptable to a larger audience in the institutional environment (Oliver, 1991; Suchman, 1995).

3.5.2.3 Isomorphism and Strategic Change

Isomorphism has been widely discussed in Institutional Theory literature and refers to the similarity of the processes or structure of one organisation to another (Deephouse, 1996; Greenwood & Hinings, 1996; Kondra & Hurst, 2009; Pedersen & Dobbin, 2006; Powell & DiMaggio, 2012; Tolbert & Zucker, 1999)**.** Isomorphism can be coercive, mimetic and normative (Cohen et al., 2008; Kondra & Hurst, 2009). A coercive isomorphism is observed in government imposed regulatory environment (government or professional regulation) with an informal and formal pressures ,however, a mimetic isomorphism is usually undertaken to deal with uncertainty (DiMaggio & Powell, 1983). Normative isomorphism is rather created and developed through professionalization such as professional education or professional network (Kondra & Hurst, 2009).

Deephouse (1996) provided attention to Strategic isomorphism and highlighted that older organisation are able to develop the strong relationship, power hierarchy, endorsed by powerful social actors and inevitable presence in the society. He explained, "Strategic isomorphism was measured using strategic conformity, the extent to which an organization's strategies resembled the conventional, normal strategies in an industry" (p 1029). Some research has shown and supported that

there is a positive relation in strategic isomorphism and multiple measures of legitimacy such as age, size and performance are included, see Deephouse (1996).

To reduce or control risks and uncertainty, institutions are more inclined towards mimetic isomorphism in financial reporting and accounting studies (Abraham & Shrives, 2014; de Villiers & Alexander, 2014). On the other hand, it is true that it does not suit to the approach of ‘leading company’ as it involves following the leader’s approach without evaluating what is right or wrong. Surprisingly, less attention is provided on how leader moves from coercive isomorphism to normative isomorphism, leaders are trendsetters, so strategic isomorphism also does not apply to them. Leaders in the industry require Strategic Change to conform to either coercive isomorphism and normative isomorphism or both. They may perhaps mimic the best international example or follow international standards or certification.

3.5.2.4 Strategic Change in normal, volatile and crisis situation

Igor Ansoff, known as a father of strategy, declared that focus of the corporate strategy is to deal with strategic problems/issues of the firm. Some issues can be dealt with by a change in market penetration, product development, new market development or through diversification but other issues/problems require ‘Strategic Change’ (Hussey, 1999; Rajagopalan & Spreitzer, 1997). All companies are expected to show good governance in normal, volatile and crisis situation (see Table 3.5).

Market Conditions	**Ansoff Five degree of Market Turbulence**	**Details of five levels in organisational context (Hussey, 1999)**
Normal Market Conditions	Repetitive	Stable and Predictable
	Expanding	Slowly and incrementally
Volatile Market Conditions	Changing	Rapidly but still incrementally
Crisis Market Conditions	Discontinuous	Some aspects discontinuous and others predictable
	Surpriseful	Discontinuous and unpredictable

Table 3.5: Ansoff Five degree of Market Turbulence in differing market conditions

Source: (Agarwal and Ansell, 2016)

Strategic Change at intra-industry level is a function of both structural parameters and top manager’s responses based on their perception of environment whereas Strategic Change at the corporate and collective level are at the discretion of the board and senior management (Fombrun & Zajac, 1987). Strategic Change within an organisation can be observed at different levels such as business level changes are made to improve competitiveness, corporate level changes emphasize the diversity of business under corporate umbrella, however, collective level changes extend the relationship with stakeholders and rivals (Rajagopalan & Spreitzer, 1997). A few academics support in incremental continuous changes in strategy which promote

flexibility in implementation rather than planned and discontinuous Strategic Change (Quinn, 1980; Senge, 2014).

3.5.2.5 Multiple lens perspective of Strategic Change

Rajagopalan and Spreitzer (1997) have provided three different perspectives of theoretical lenses of Strategic Change: Rational lens perspective, Learning lens perspective and Cognitive lens perspectives. Rational lens perspective draws attention to sequential, well defined, planned search of a well-defined problem to achieve organisational objectives by establishing a fit between firm and its environment. Learning lens perspective rather encourages in making changes through small and iterative steps, though, it may result in major and minor changes in firms' strategy. Cognitive lens perspective primary considers the role of 'managerial cognition' and emphasizes interpretive process through which managers enact the environmental/ organizational context are emphasised. Moreover, one of the major arguments highlighted from Cognitive lens perspective is difference between 'evolutionary change' and 'transformatory change'.

"When Strategic Change does not involve a shift in underlying knowledge, structures, it is viewed as evolutionary; when Strategic Change is accompanied by major shift in organisational ideologies and cause maps, it is viewed as transformational" (Rajagopalan & Spreitzer, 1997, p 62). When Strategic Change is not explicit and occurs due to management action and cognition, it is referred to as Cognitive Strategic Change.

The aim of my thesis is to identify similarities and dissimilarities in the adoption of ERM and issues in the implementation. It further provides a comparative study between ERM practices in India and UK with an aim to understand risk governance. The Institutional theory provides insights upon why some organisation adopt certain ERM practices at insurance industry and country level. It extends to identify the the major issues in implementation due to legitimacy, power and pressure. A perspective of Strategic Change supports in analysing what motivates companies to change their strategies to adopt and implement ERM so as to promote good risk governance.

The first premise of good risk governance relies upon "the structural components of a system must be integrated in order for the system to survive since the components are interrelated parts of the whole. A corollary derived that change in one structural component necessitates changes in other components" (Tolbert & Zucker, 1999:176). Mature ERM practices are expected to align organisational processes with ERM framework. This requires dealing with the long-standing issues persistent within the industry. It has certainly long term value and high cost but does not have short term value such as IT efficiencies.

3.6 Chapter Summary

Enterprise Risk Management (ERM) is an importance part of GRC, an umbrella term, and sharing common goals among governance, risk and compliance in an enterprise. The research focus narrows down to understanding of risk governance by the adoption of a higher standard of ERM practices. The role of risk governance is to deal with ambiguity and complexity in managing downside and upside of risk and uncertainty in normal, volatile and crisis situations (Knight, 1921; Renn et al., 2011; Rumsfeld, 2002; Weick, 1988).

The literature reveals that there is a lack of clarity in ERM definition provided by regulatory and advisory bodies. There is no wide consensus over scope of ERM and it ranges from management of risk of everything to nothing (Power, 2004, 2009). The common goals of ERM are not well understood and lead to ambiguity in implementation of ERM. Though there has been considerable research on thevalue of ERM on the quantitative side, the perceived benefits are not understood fully in practice and have resulted in an inconsistency in the perception of the value of ERM. ERM is dynamic and multidisciplinary in nature. ERM requires its attention to evolving ERM strategies from practice. Not only this, to understand ERM fully, there is a need to understand debates over risk appetite, use of models, size and capacity of an organisation and often the role of risk culture.

There has been little recent research on the definition of ERM (Bromiley et al., 2014; Frigo & Anderson, 2014) comparing definitions given by advisory bodies such as COSO and standards such as ISO 31000. Kaplan & Mikes (2012) and Miller (2013)

have provided a very simple classification of risk and uncertainty into three broad categories, though; it is still debatable what falls under risk and uncertainty. The literature does not seem to reflect practice. There is a lack of research on strategies of ERM and real life case studies providing practical insights. The opportunistic side of ERM is rarely in the literature (Frigo & Anderson, 2014). Various theoretical threads connected to ERM have been explored. ERM is explored from an institutional perspective in the heavily regulated industry such as insurance. Further, it needs to explore good risk management practices by comparing it with alternative approaches and practices of developing and developed countries.

Chapter 4 Research Methodology

4.1 Introduction

The research methodological foundation is based on the underpinning philosophy of the researcher own beliefs on the nature of the social world (ontology) and how knowledge can be acquired (epistemology) and based on his/her values, interests, and purpose of the research (Slevitch, 2011). Mackenzie and Knipe (2006) emphasised upon the influence of theoretical framework on the exact nature of the definition of research "to establish relationships between or among constructs that describe or explain a phenomenon by going beyond the local event and trying to connect it with similar events". Therefore, theoretical underpinning provides a direction to study and interpret the knowledge with intent, and expectation of the research (Cohen, Manion, & Morrison, 2004; Mackenzie & Knipe, 2006).

The first part of the Chapter follows the key questions about how research has been carried out. The later half of the Chapter discusses the data collection, ethics, organisation and analysis of data, however, an emphasis is given to using multiple research methods to provide reliability and validity of data. This also ensures consideration of problems in access to data and time management.

4.2 Theoretical Underpinning

Mackenzie and Knipe (2006) illustrated the existence of four major broad theoretical paradigms such as positivist, interpretivist, pragmatic and transformative. Gray (2014) argued that there is no wide consensus among academicians on notions and disciplines and therefore more new disciplines are emerging such as feminist and post modernist. The research theoretical framework is based on Institutional Theory and strategic change. The choice for theoretical underpinning is made based on an evaluation of existing phenomenon discussed in Table 4.1 (adopted from Gray, 2014).

Theoretical paradigms	Important Elements
Positivism	It believes in world is objective and external and observer is independent
	It believes in sharing common goals based on facts not values
	It involves scientific investigation, therefore deduce law (Nomothetic)
Interpretivism or Antipositivism	It believes in deriving interpretation of social-life world based on values
	It is closely linked to constructivism
	It deals with actions of individuals (Ideographic)
Pragmatism	It believes the concepts to be relevant only if they support actions
	It believes many ways of interpreting world and undertaking research
	It involves multiple realities

Table 4.1: Positivism vs. Interpretivism

Neo-institutional theoretical framework has been adopted with a basic premise to provide an understanding of how institutions behave in the same set of situations and different situations (DiMaggio & Powell, 1983; Greenwood & Hinings, 1996). What kind of issues they face and how they achieve maturity in tackling those issues? Considering several understandings of ERM by corporates which is reflected in implementation, the researcher adopted pragmatism view point.

4.3 Research Context

There is ambiguity in understanding the numerous definitions of ERM used by many regulators and companies. This leads to obvious inconsistency in the practices. Within the companies, there may be ambiguity among the board members about how ERM as a concept is understood and how it will be beneficial for the organisations. This can lead to confusion over risk governance.

Rather than following recent research approaches which takes quantitative methods of assessing the implementation such as whether there is a Chief Risk Officer (Adams et al., 2011; Mikes, 2005; Saeidi, Parvaneh; Sofian, Saudah; Rashid, Sitit, Saeid, 2012) or an index of ERM such as S & P (2013), the qualitative approaches have been taken to understand the inconsistency in practices. This will allow judgement to be made of the quality of implementation especially in the area of risk. The research explores issues in the implementation of ERM practices and choice of appropriate ERM for achievement of good risk governance.

There have been many studies in developed insurance markets such as Germany, UK, Canada and USA (Altuntas, Berry-Stölzle, & Hoyt, 2011; Deighton & Dix, 2009; Dowd et al., 2007; Tonello, 2007) but there are rarely any study comparing ERM practices of developing and developed markets. This also brings a need for comparative analysis between developing and developed country practices in the implementation of ERM.

Arena, Arnaboldi, and Azzone (2010) raised concern for generalization of ERM results and stated it is rather more sector specific and dependent upon organisational own characteristics and objectives. So, results from other countries cannot be generalised for large geographic area.

There are many previous studies also reflect the inconsistency in adoption of ERM framework and its implementation across countries and highlighted that " one size fit for all" strategy will not work (Altuntas, Berry-Stölzle, & Wende, 2014; Kaplan & Mikes, 2012).

Table 4.2 demonstrates that there is clearly lack of research in ERM in developing countries such as India. ERM practices have shown more inconsistency in practices in the UK insurance market than other developed market. So, it would be worthy to have a survey to understand current state of ERM in India and UK insurance market.

Developed Countries	Author	Research instrument	Major Discussion	Support
German Insurance companies	Altuntas, Berry-Stölzle, & Hoyt, (2011)	A detailed Survey	How risk is handled and addressed within companies	Inconsistency in following ERM practices
Canadian Risk and Insurance Management Society members	Kleffner, Lee, & Mcgannon, (2003)	Survey and telephonic interview	What influences companies to adopt ERM	Inconsistency in following ERM practices
UK insurance companies	Deighton, Dix, Graham, & Skinner, (2009)	Not a original research or technical paper	Current state of governance and implementation of ERM	Strongly Agree to Inconsistency in following ERM practices
UK insurance companies	Dowd, et al., (2007)	Covers four surveys in UK insurance market	Current state of ERM practices	Strongly Agree to inconsistency in following ERM practices
Online Survey	Beasley, Branson, & Hancock, (2015)	Members of AICPA	Current state of ERM	Inconsistency in following ERM practices
Developing Countries	**Author**	**Research instrument**	**Major Discussion**	**Support**
Indian Companies	Gupta (2011)	Structured questionnaire and interviews	Current state of ERM	Strongly agree to inconsistency in adoption and implementation of ERM

Table 4.2 Inconsistency in ERM practices

4.4 Study Design

The study design includes the choice of research methods, strategy and overall methodology chosen to explore the research questions.

4.4.1 Data Triangulation

According to Denzin (1970), Triangulation has been defined as the combination of two or more theories, data sources, and methods of investigation of study into a single phenomenon though, the interpretation of word 'combination' has a variety of meaning to different researchers (Kimchi, Polivka, & Stevenson, 1991). Denzin (1970) suggested the researchers for combining theories and methods carefully and purposefully so as to provide enough depth and breadth rather than simply addressing the truth (see Flick, 2004 for details).

The research uses data triangulation for different research methods to provide enough depth and breadth of the research. ERM requires a deeper understanding of its definition, goals and how practices are followed. Therefore, there is a need for qualitative research with sufficient depth within companies. ERM cannot be understood fully without understanding its key concepts such as risk appetite, risk culture and size and capacity of organisation. Also, the context is important, ERM practices are unique and inconsistent, so there is a requirement to understand current state of ERM practices followed in the phenomenon.

4.4.2 Choice of research method

There are many in-depth qualitative studies based on survey (Beasley, Branson, & Hancock, 2014; Beasley, Clune, & Hermanson, 2005), a few on banking industry (Mikes, 2009; Mikes & Kaplan, 2013b) but there are few in-depth research in insurance industry (Acharyya & Johnson, 2006) especially comparative study

between developed and developing countries to understand trends and strategy in the implementation. A study design is chosen based on research questions.

The aim is to understand Risk Governance within Enterprises, especially within Insurance Companies and explore the higher standards of implementation. The research questions are:

Q1: What are the issues in the implementation of ERM practices?

Q2: Who is adopting the appropriate ERM practices and how well the company is able to implement it?

Q3: How ERM practices are different between India and UK?

So, research method has been chosen based on the research questions.

4.4.2.1 Evaluation of Alternative Research Methodology to Explore Research Questions

My Research Questions involve 'what' 'who' and 'how' questions. My focus is on contemporary events, therefore, it would be appropriate to evaluate existing alternatives: experiment, survey, archival analysis, history method and case study.

Experiment Method is helpful in answering the questions related to 'why' and 'how' however, more suitable where control of behavioural events and focus on contemporary issues are required (Yin, 2008). It is a possible option, but I do not require control on behavioural events, therefore not an appropriate choice.

Survey Method is helpful in answering the questions related to 'who', 'what', 'where', 'how many' and 'how much'. This method is suggested where the control of behavioural events are not required and focus required on contemporary issues (Yin, 2008). Both criteria match with the research questions, therefore, this method is considered appropriate to investigate research questions.

Archival Analysis Method is also helpful in answering the questions related to 'Who', 'What', 'where', 'How many' and 'How much' (Yin, 2008). This method does not require control on behavioural events, however, focus on contemporary

issues can be required or not. Both criteria match with the research questions nevertheless there is no prior published literature exist, therefore this method is considered inappropriate to investigate current research questions, however it can be used in one of future research. History method is not focused on contemporary issues (Yin, 2008), therefore it is not appropriate to explore my current research questions.

Case Study method is more focused to understand ‘why’ and ‘how’ questions (Yin, 2008). This method is more suitable where there is focus on contemporary issues and no control required for behavioural events. This method is considered appropriate to investigate my current research questions related to ‘how’ and will be used during the research.

The inquiry was limited to participation of a few local and global companies. A qualitative approach, acknowledging the in-depth view of the senior managers, was needed. It is, therefore, sensible to involve the approach needed to fit the question driving the inquiry (Miller & Crabtree, 1992). Miller and Crabtree (1992) suggested the multi-method approach of enquiry is more suitable in such cases. Therefore, a possible research design can involve surveys and case studies in both markets. The rationale for the comparative study was to disentangle local regulation from ERM implementation.

4.4.2.2 Survey

The definitions of ERM are needed to understand the issues in the implementation of ERM in both countries. Issues are most often important topic or problem for debate and highlighted by showing the mismatch between desired and current practices in risk management. Surveys are carried out to understand the current state of implementation of ERM and issues.

There have been many issues identified in general in the implementation of ERM (Beasley et al., 2015; Boatright, 2011; Tonello, 2007). A few of them have emphasised particular issues such as Mikes (2005) highlighted operational issues, Mikes and Kaplan (2013) emphasised upon external issues though, Frigo and Anderson (2009, 2011) rather focused on strategic issues in the implementation of

ERM. The survey was carefully designed to address both depth and breadth of issues in the implementation of ERM with the aim of establishing good governance.

In total, two surveys were carried out: Survey I in India and UK market before interviews and case studies and Survey II at the latter stage. In the Survey, I, the researcher asked 20 questions: the initial two questions were related to company detail, next two questions discussed the current state of ERM policy, what it covers and how often it is reviewed and a further few questions ask about risk appetite statement, attitude and authorities. The last few questions deal with the factors affecting ERM, issues in implementation and how risk is managed in the future. The survey I is circulated in the most of insurance companies in India by visiting their office or through emails while in the UK market using a software tool Qualtrics. The details of Survey II is distributed as a part of case studies including interviews.

4.4.2.3 Extension of Research Design

The response from the survey in both the market was not as good as it was expected. Therefore, a trial is made to have initial six interviews of CRO and senior management in both the market. The responses of interviews were better than expected. The senior management had shown great interest in the topic and wished to discuss the topic in "conversational mode" (Yin, 2010, p 134). Therefore, a research design has been modified to have qualitative interviews of senior management of Insurance companies in both markets to provide the overview of current state of implementation of ERM.

Fifteen interview questions were asked in general considering the interview interest. The questions were related to how ERM has been adopted, issues in the implementation and the level of maturity. A first few questions discussed about from how many years the company is implementing ERM and how far it has achieved the maturity in implementation of ERM. Size of risk team and factor influencing the ERM practices are also discussed. Components of ERM are discussed such as risk appetite, risk reporting, size and capacity of the company and risk culture. Further questions were related to positives and negatives of ERM, issues in implementation

and strategies to deal with the risk. Within first six interviews, a few issues in implementation of ERM were identified. Specific questions were asked to explore how companies are dealing with those issues in the implementation of ERM. Recommendations to improve ERM have been discussed in the last part of interview.

Based on results of interviews, the common practices and unique practices can be differentiated and two companies from each market, having unique ERM strategies, will be chosen for a comparative case study to provide in-depth insights into the research problem.

Also, Kohn (1997, p 3) highlighted the scenarios where use of case studies is more appropriate: "researchers can use case study methodology for many purposes: 1) to explore new areas and issues where little theory is available or measurement is unclear; 2) to describe a process or the effects of an event or an intervention, especially when such events affect many different parties; and 3) to explain a complex phenomenon". So, the revised research design consists of mixed research methods: two surveys, interviews and a comparative case study in India and UK insurance markets.

The surveys are a mixture of quantitative and qualitative approaches while the interviews were semi-structured. Obviously, in interviews there was a degree of dynamism given the interviewee's experience and knowledge of the subject (Morse, 1991). For case studies, 10 semi-structured interviews in each case study have carried out which is followed by a survey. Survey II for case studies has been circulated by the senior executive of the company.

Survey II 'ERM and Risk Culture Survey' has 22 questions in total divided into two sections: Section I ERM and Section II Risk Culture. Section I consists of questions related to important part of ERM, its uses, benefits and how far it is able to deal with the current issues and support learning. Further questions deal with the implementation of ERM within a change program, its link to compensation, strategic decision making, communication, and strategic decision making. Risk reporting, risk attitude, training and development and responsibilities are focus of the last part of the Section I. Section II specifically ask about questions related to risk culture, its current

state of development, definition, motivations, benefits and employee empowerment and participation in the development of risk culture.

4.5 Data Collection

Data collection process requires an understanding of population from which a sample is drawn of appropriate size. Qualitative research has often been criticised by many academicians on the grounds of lack of representation of sample with an inappropriate choice of informants and their details (Kitson et al., 1982; Morse, 1991). To consider this, interviewees profile was first studied as published on online websites or requested from the company before taking interviews. Others have highlighted the problems in the description and assumptions taken for qualitative research (Baker, Wuest, & Stern, 1992; Becker, 1993; Knafl & Howard, 1984). A few have also raised concerned with inappropriate mixing of methods and muddling of theoretical perspectives (Baker et al., 1992; Becker, 1993; Stern, 1994) and existence of ambiguity in understanding the use of 'selective', 'purposeful' and 'theoretical' sampling used interchangeably (Coyne, 1997). Therefore, samples have been chosen with adequate care to consider concerns highlighted in the academic literature.

4.5.1 Choice of sampling technique

There are two major types of sampling – Probabilistic and non-probabilistic. Probabilistic sampling is also called scientific sampling, random sampling and quantitative sampling. Non-probabilistic sampling is also known as purposeful sampling and qualitative sampling (Teddlie & Yu, 2007). There is no wide agreement over types of sampling such as Strauss and Corbin (1990) has defined three types of sampling: open, relational and vibrational sampling. Further, Patton, (1990) highlighted fifteen kinds of sampling. Teddlie and Yu (2007) have clearly shown the difference between probabilistic and non-probabilistic sampling

techniques usage and suggested mixed methods (MM) researcher to use 'information rich' sampling technique, which is based on expert judgement.

The researcher has chosen non-probabilistic sampling and judgemental sampling based on following factors: 1) ERM as a concept is evolving and operates in complex and dynamic environment and therefore, limited number of people in the organisation have sufficient knowledge about the subject; 2) The research aims to understand ERM practices by establishing good risk governance which is more concentrated in senior management; 3) Within senior management in the organisation, there are limited number of executives have interest in the subject. More importantly, to discuss interview questions in conversational mode, the researcher needs to have sufficient knowledge and professional background to carry out interviews with the senior management. Given the circumstances, the researcher has sufficient knowledge and experience of insurance and risk management such as two professional internationally recognized professional degrees in insurance and ten years of experience. Hence a non-probabilistic sampling and judgemental sampling seems to be the best option in current research.

4.5.2 Size of samples

The size of the sample varies for each research method. The Survey I has been carried out in Indian Insurance market. There are 27 non-life insurance companies operating in the Indian insurance market. A sample was drawn from 54 insurance companies (27 non-life, 26 life insurance, and one reinsurance companies) and responses were received from 13 Indian non-life insurance companies. The Survey I explored the details of risk management policy, the degree of involvement of risk management in the organization, details about risk appetite and attitude, the management structure of risk management decision making and major risk issues faced by them in ERM implementation.

There are more than 1000 non-life insurance companies and more than 300 life insurance companies registered in the UK market. Due to the good response from initial interviews, in total 40 interviews were carried out in both markets (see Table 4.3). The interviews have been chosen to cover a range of insurance companies and

ERM consultancy companies in Indian and UK market. Some companies are recent entrants as joint ventures to the Indian insurance market while others have been longer established**.**

Company Name	**Details of Insurance Company**	**Joint Venture**	**Details of Interviewee**	**No. Of Interviews**	**Male/Female**
Company A	Public Sector	No	Chairman of the company	1	Male
Company B	Private Sector India	Yes	Chief Risk Officer (CRO) and Vice President	2	Male (2)
Company **C**	Private Sector India	Yes	Chief Financial Officer (CFO) and Chief Actuary	2	Male and Female
Company D	Private Sector India	Yes	CFO and Head of Risk	2	Male (2)
Company E	Private Sector India	Yes	CRO	1	Male
Company F	Private Sector India	Yes	CRO and Head of Risk	2	Male
Company G	Insurance Company Association	-	Secretary General	1	Male
Company H	Public Sector	No	Chairman and CRO	2	Male and Female
Company I	Public Sector	No	General Manager and Chief Actuary	2	Male (2)
Company J	Private Sector	No	Chief Actuary and Head of Risk	2	Male (2)
Company K	Private Sector	Yes	CRO	1	Male
Company L	Largest Private Sector (non-life)	Yes	CRO, Head Risk, Vice-President Risk and CEO	4	Male (4)
Company M	Largest Private Sector (life)	Yes	CRO, Chief Actuary, Head Investments, Head Corporate Business, Head HR	5	Male (5)
Company N	Private Sector UK	No	Group Risk Director	1	Male
Company O	Private Sector UK	No	CRO	1	Male
Company P	Private Sector UK	No	Group Risk Director	1	Male
Company Q	Private Sector UK	Yes	Group Risk Director, Group CRO, Head Risk, CRO – China, CRO and Head Operational Risk	6	Male (6)
Company R	ERM Consulting Firm UK	No	Head ERM	1	Male
Company S	Actuarial Consulting Firm, UK	NO	Head ERM Actuary and Head Risk	2	Male (2)
Company J	Professional Association, UK	No	Head Risk and Consultant	2	Male

Table 4.3: List of companies and Interviewees

Almost 50% of the private insurance companies in Indian non–life market have a joint venture with European companies. The Indian non-life insurance market is in a nascent state whereas the UK market represents a mature insurance business environment. In comparison, the UK has more than 1000 non-life insurance companies and is ranked third largest in the world (ABI, 2012). Indian market is ranked 15 which accounts for less than 0.7% market share of the world market but is one of the emerging and the fastest growing markets in the world with a growth rate of 13.5% while the industry average is mere 1.9% (Sigma, 2012). So, it would be worthwhile to have a comparative case study to have an in-depth view to study the difference in understanding, practices and strategies in adoption and implementation of ERM and ways of risk governance in novice and mature market.

Based on the results of interviews, a careful analysis was made of the responding companies. The aim was to select two companies with mature ERM practices as a basis for case studies. Rihoux (2006) highlighted the difficulties in finding genuinely comparable cases. Based on four emerging strategies, four companies have been found in the mature stage of implementing ERM, two companies in each market (nascent and mature) were shortlisted based on mature ERM practices (Lam, 2014).

Similar and unique practices in the implementation of ERM were identified to determine the companies that have adopted or implemented unique strategies compared to their local competitors. Two companies were chosen one from each market. The comparative case study involved over ten interviews in each company A and B (see Table 4.4 for details). An ERM and Risk Culture Survey followed it. The researcher suggested the lists of interviewees after studying the background of the interviewees so that there were sufficient breadth and depth for case studies. An online ERM and Risk survey was distributed to all middle manager and senior manager in both companies. Same research methods were replicated in company A and B.

SNO	Details of Case Study A			Details of Case Study B		
	Title	Number of Interviews	M/F	Title	Number of Interviews	M/F
1	CEO and MD	1	M	Senior Actuary and Head ERM	3	M
2	Head of Legal	1	M	Group Risk Director	1	M
3	Senior Risk Manager	3	M	Group CRO	1	M
4	Chief Risk Officer	2	M	Actuary	1	M
5	AVP Risk	3	M	Head Pension	1	M
6	Senior AVP Risk	2	M	CRO – ASIA	1	M
7	Head Investments	1	M	Head Operations	1	M
8	Head Underwriting and Claims	1	M	CRO – UK	1	M
9	Head of Corporate Underwriting and Reinsurance	1	M	Head Operations	1	M
10	Head Frauds	1	M	Group Head Fraud and compliance	1	M

Table 4.4: Details of Comparative Case Study

4.5.3 Timelines

This research involves data collection from multi-method and results of one method determined the choice of next method. The Survey I, Survey II and initial six interviews in India were carried out in the first year of the study. In the second year, remaining interviews were carried out. Two case study in company A (Indian market) and company B (UK market) were carried out in the latter part of the second year which is followed by an ERM and Risk Culture Survey to check the validity of data in both companies.

4.5.4 Data Collection Tools

There were no common forums where insurance companies can be contacted in India; this is perhaps the reason for a lack of research in developing markets. So, data collection in India was done through personal visits to the companies, only a few surveys were returned through email. The survey was first discussed with the companies; only one person from senior management such as CRO or CFO or Chairman of each company agreed to participate in the survey.

On the contrary, there were many forums in existence in the UK market. Most of them were associated with some professional forums such as Chartered Insurance Institute (CII), Global Association of Risk Professionals (GARP), Institute of Risk Management (IRM) and many others some of which required professional membership. The researcher has chosen the group based on its relevance to research questions. Therefore, the researcher has contacted 'Institute of Risk Management (IRM)' special interest group (SIG) on risk management where more than 600 CRO's of insurance companies were professional members and receive regular updates and attend quarterly meetings in London. The chairman of the SIG had happily agreed to distribute the online survey. So, an online survey was designed using 'Qualtrics' platform.

Almost all the interviews were carried out by making personal visits to the company except in the few cases, where CRO or senior management is not available and are on the long business trip, Skype calls were made. In India, there is no online platform or Chief Risk Officer Forum (CRO). All of the relevant executives are not available on any online platform. Most of the senior executives and senior management have shown the possibility of meeting at their Head Office. At least half of the companies considered for interviews have Head Offices in Mumbai, a major metro city in India. Similarly, in the UK, insurance companies chosen are majorly fallen in two cities either London or Edinburgh. To manage time, interviews appointments are taken two months in advance so that at least few appointments in one particular city can be fixed as per interviewees' convenience. Most of the interviewees acknowledged the researcher's effort for travel and considered appointment in a week time (i.e.

Monday- Friday) slot provided and accordingly, the researcher made the visit. Interviews on average were half an hour to one hour long. In some cases, the interviews were also followed by general discussions. For case studies, also same interview approach was adopted.

4.5.5 Trial of data collection and anticipated problems

The survey I in Indian insurance market had been discussed before it was filled by senior management of Insurance companies. Few of them had taken sufficient time to understand the objective of the research and asked for an explanation of a few terms such as 'Risk Appetite' for their own understanding. So, the survey in the UK market was updated asking for more opinions than direct questions. A pilot of survey was run, and the survey was also checked for repetition, grammar, structure and especially how it was interpreted by different people.

Interview questions were quite comprehensive and a few questions changed based on the interviewee background so that the questions were discussed in the conversational mode. The researcher faced significant problems in discussing the issues in the implementation of ERM, as senior executives were initially reluctant to discuss the problems, though, happily discussed the good part of the implementation. Obviously responses to the research questions from a chairman of an insurance company may not be the same as to head of operational risk. So, research questions were changed based on the response of first 6 interviews in each market to get more information on issues in ERM implementation and the company's strategies.

A similar technique was used for case studies. The first five interviews were carried out in company A and B and based on the analysis of these interviews, the next five interviews were carried out. This was often followed by a number of interactions with staff including communication with the CRO and head of ERM of both the companies. A pilot of ERM and Risk Culture survey was made in both companies before distribution. The Head of ERM in company B (in UK insurance market)

suggested many changes in the language of survey, which seems more in line with the company culture (see Appendix 6 for survey).

4.6 Data Ethics

Ethics in the research is very important for every researcher. An ethical behaviour consists of a set of moral principles, rules governing a person or related to his/her profession (Sage, 2002).

Adequate care has been taken to provide privacy and anonymity to the respondents. The confidentiality of the data was one of the major concerns among the interviewee and companies due to involvement of reputation risk. A qualitative research study abides by the principle of informed consent of the respondents by following the ethical code of conduct. This needs to ensure by providing appropriate information to the respondents and should not result in over-informing and under-informing (Carvalho & White, 1997; Orb et al., 2001). The research considers the ethics followed within qualitative research as respondents can exercise their rights as autonomous persons to voluntarily accept or refuse to participate in the study. The researcher has obtained consent as a negotiation of trust, and it requires continuous renegotiation (Hutchinson, Wilson, & Wilson, 1994; Morse & Field, 1996; Munhall, 1988).

Therefore, the researcher provided written consent forms to all of the potential respondents. For all the surveys, interviews and case studies, the researcher has sufficiently informed individuals about how the data will be used and purpose of the study and taken informed consent from the respondents and interviewees. Although, the researcher worked in insurance and risk management domain for the last 10 years and acquired two professional degrees in India and UK insurance market, yet, she did not have any contact prior to the research with any participant and respondents. All the interview appointments were planned well in advance to ensure they were convenient for the respondents. All interviews and surveys were held on the premise of the corporate body.

Most of the companies were very reluctant to share the written data; therefore, the researcher did not acquire such data. The researcher has only used the information

available on company's public website. Also, extraordinary care had been taken so as no employee of a company has been contacted without seeking formal permission from the company. A few executives and senior officials shared presentations, definitions, and Power Point presentation within interviews and afterwards voluntarily for referring information.

4.7 Organisation of data

This research involves mixed research method and collection of data using from three major research methods – surveys, interviews and case studies. Also, it involved the collection of data from different cities within two countries that required extensive travel, resource and time. This was not possible if research planning was not done well in advance. Moreover, getting an appointment from senior executives was also a difficult task. The response time of the request for the meeting was also high in some cases. The appointment for survey in India market was taken in the initial phase of the research and first interview was taken in the city where researcher presented a conference paper. Then, further interviews were carried out by sending request through LinkedIn (a professional online network). LinkedIn profile of senior management provided information on their entire academic and professional background along with their specific interest. This helped researcher to prepare itinerary based on initial response and geographic location of their offices. Both of the case studies require a formal letter clearly stating the purpose of study, required time and the involvement of the corporate executives. Companies also asked brief details about researcher and study, which is distributed to a set of senior management working in the area of risk within company.

Given consent and willingness to participate in interviews from senior management of specific company, a written permission was obtained from the HR department and code of ethics was stated. The meetings were usually organised by the secretary or junior managers in the company by booking a meeting room on specified date in company's official premises. Most of the interviews were recorded and full transcriptions were prepared, only in few cases interviewees did not give permission to record and in these cases notes were taken.

4.8 Analysis of data

Starks and Trinidad (2007) have discussed three major qualitative approaches for analysis of data 1) Phenomenology; 2) Discourse Analysis; 3) Grounded theory and highlighted their comparative merits and demerits. So, selection of an analytical approach is made on their merits and demerits as highlighted by Starks and Trinidad (2007). Phenomenology seems appropriate due to importance given to context and experience, though; grounded theory may be more suitable for highlighting comparative merits and demerits. On the contrary, phenomenology may not be more appropriate for large data sets from use of multiple research methods and grounded theory is not appropriate for disciplines such as ERM considered to be boundary-less (Power, 2004, 2009).

Given the situation, researcher follows the view of Guest, MacQueen and Namey (2012) of Applied Thematic Analysis (ATA). According to Guest, MacQueen and Namey (2012), ATA "comprises of bit of everything – grounded theory, positivism, interpretivism and phenomenology – synthesized into methodological framework".

Balogun and Johnson (2005) have emphasised for use of first order and second order coding to understand the findings of "how and why the many interlinked change consequences arose", most importantly in the cases where second order findings are dependent upon first order findings. This looks appropriate for the current research methodology followed; therefore, Applied Thematic Analysis (ATA) was used as a technique for coding of the data.

According to Fereday and Muir-Cochrane (2006), " The first order is the process by which people make sense of or interpret the phenomena of the everyday world. The second order of understanding involves generating "ideal types" through which to interpret and describe the phenomenon under investigation". Therefore, at first level (including survey and interviews), broad themes would be analysed such as understanding of ERM, adoption and implementation of ERM, strategies adopted and ways to establish risk governance. However, at the second level, themes would be further categorised in many sub-themes to create ideal types such as examples essentials of good risk governance and good ERM strategies.

4.9 Reliability and Validity of data

The researcher has adopted the concept of reliability and validity to improve credibility and usefulness while conducting qualitative research. No matter whichever research method is chosen as 'qualitative' or 'quantitative', Silverman, (2011) highlighted the use of credibility is essential. Guba and Lincoln (1994; Guba, (1981) provided constructs correspond to the criteria for truthfulness to investigator: a) Credibility (in preference to internal validity); b) Transferability (in preference to external validity/generalizability); c) Dependability (in preference to reliability) and d) Conformability (in preference to objectivity).

Morse et al. (2008) highlighted the ambiguity in defining numerous terms for verification of data under different labels by distinct authors. A partial consensus is found in (Guba, 1981; Sandelowski, 1986; Whittemore, Chase, & Mandle, 2001) criteria for primary and secondary validity. Whittemore et al. (2001) mentioned a distinction between primary and secondary validity criteria in qualitative research in which primary validity is equipped with credibility, authenticity and criticality while secondary validity is associated with explicitness, vividness, creativity, thoroughness, congruence, and sensitivity. Further, other variety of verification terms can be seen in Creswell and Miller (2000).

The researcher has adopted validity strategy suggested by Morse et al. (2008) and follows five steps to ensure validity: 1) Methodological coherence: Researcher ensures that research questions match with research methods, data and analytic procedures; 2) Appropriate sampling: Researcher has chosen participants who best represent or have knowledge of the research topic; 3) Concurrent collection and analysis of data: The researcher has formulated a mutual interaction between what is known (desired ERM) and need to be known (actual ERM implementation); 4) Theoretical thinking: Researcher focused on macro-micro perspectives and involved constant checking/rechecking of data by employing mixed research methods; 5) Theory development: An effort has been made by researcher to view micro perspective of the data to macro conceptual/theoretical understanding.

4.10 Summary of the Chapter

The existence of conflicting ideologies and different epistemological stances such as positivism and interpretivism led the researcher to evaluate the alternatives. A selection of pragmatist approach with interpretivism view point is followed by a selection of multiple research methods to provide enough breadth and depth in the research (Denzin, 1970; Flick, 2004). The research methods are chosen based on the evaluation of alternatives such as experiments, surveys, archival analysis, history and case studies. The research methodology revolves around research questions by providing reasons for choice of methods, strategy adopted, design and choice of particular techniques in the presence of various alternative techniques.

A research methodology was designed by employing mixed research methods consisting of surveys, interviews and case studies in India and UK insurance market. The surveys were using both qualitative and quantitative approaches. A careful decision was made to select non-probabilistic and judgemental sampling after considering required time, convenience of respondents, error and bias. The Survey I and II were distributed respectively in India and UK insurance companies. Based on the response of survey, semi-structured interviews of senior management such as Chairman, CRO, CFO, Actuaries were carried out. This was followed by a detailed comparative case study involving over 20 interviews and two ERM and Risk Culture survey across two large insurance companies in India and UK insurance market.

The researcher has followed an ethical approach with the due consents of respondents and in a reasonable timescale. The researcher followed Applied Thematic Analysis (ATA) for coding after evaluating merits and demerits of existing approaches and adopted first order and second order coding to interpret the phenomena and generate ideal types respectively. Validity and reliability of data are essential in the research process, therefore, the researcher had followed five step process suggested by Morse et al. (2008): methodological coherence, appropriate sampling, concurrent collection and analysis of data, theoretical thinking and theory development.

Chapter 5 Surveys

5.1 Introduction

ERM has been considered an acceptable way to establish good governance (Deighton et al., 2009; Kleffner et al., 2003), however, there is confusion over its benefits compared to Traditional risk management (TRM) approaches and with Corporate Governance (McShane, Nair, & Rustambekov, 2011, Lundqvist, 2014). Additionally, the scope of ERM and key concepts in the domain of risk is also contested (Power, 2004, 2009).

To address the research questions, there is a need to explore issues in ERM implementation, the reasons for inconsistencies in ERM practices which overall requires a broader understanding of the current state of ERM practices followed in India and the UK markets. There are very few prior studies in Indian insurance market focusing on current state of ERM. Additionally, most of the surveys previously carried in the UK market emphasised higher degree of inconsistencies in the implementation of ERM (see Table 4.1: Inconsistency in ERM practices for details) but lacks in providing details of inconsistencies. So, it would be worthy to carry out two independent surveys to provide the insights of the difference in practices in developed country such as UK and developing country such as India.

The Chapter is divided among three major sections. Section I highlights the findings from Survey 1 which is carried out in Indian insurance market with an aim to how ERM has been adopted, perceived, implemented and leading to governance practices. Section II provides more in-depth view on understanding ERM definition, objectives and its adoption and implementation as a way to establish risk governance. Section III provides comparative highlights between both surveys and presents Chapter summary.

5.2 Findings from Survey I

The Survey I was circulated to senior management of all non-life insurance companies in India. The first part of the survey provides details of insurance companies such as name, public/private/joint venture partner details/year of incorporation and details of risk and ERM policy. The second part of the survey highlights the degree of involvement of risk management policy in the organisation and shows details of risk appetite and risk attitude within the companies. The third part of the survey provides insights into Risk Governance and its function. The fourth part of the survey discusses effects of external factors on risk management/ERM policy such as a change in IRDA regulation, international regulations with an overall ranking of issues faced by companies. The fifth and last part of the survey supports an understanding how companies are planning to prevent/reduce foreseen risk issues and future/emerging risk issues respondents.

To interpret the meaning out of data, first order coding is used and researcher divided among five sections: 1) Profile of companies; 2) Adoption of ERM/risk management; 3) Understanding of risk and ERM; 4) Issues in the implementation of ERM and 5) Ways of risk governance.

5.2.1 Profile of Companies

At present, there are 24 life insurance companies, 21 non–life insurance companies, five pure health insurance companies, two specialised institutions and one reinsurance Company. The non–life insurance companies are also allowed to do health insurance, though, health insurance companies and specialised institutions are not allowed to operate outside the periphery of a specific industry. There are four non–life public sector companies, one large public sector life insurance company, and Life India Corporation (LIC). GIC Re is the one and only Reinsurance Company, operating in India. The survey was distributed in all of 21 non-life Insurance Company and one Reinsurance Company and the researcher received the response from 13 insurance companies.

The responses were received from all four public sector insurance companies, the Reinsurance Company and eight private sector insurance companies. All the public sector insurance companies are not engaged in joint venture however, seven out of eight private sector insurance companies, which participated in the survey, are the joint venture, with a company from outside India, these include USA (two), France, Germany (two), Italy and Australia. All of the respondents were carefully selected by the company itself so that they could provide relevant company information on the subject such as CRO, CFO and most of them had been involved risk committee and policy decision making on risk in their work.

5.2.2 Adoption of ERM

The responses were collected under nine categories to know the current state of adoption of risk management and ERM. The nine categories were: 1) There is no written risk management policy in the company; 2) Risk management is in development phase; 3) Existence of Risk management policy; 4) Risk Management policy follows IRDA (Indian regulator) guidelines; 5) There is no written ERM policy; 6) Planning to implement ERM; 7) ERM policy has been implemented; 8) Implementing combination of ERM and risk management policy; 9) Planning to implement other risk initiatives.

Most of the companies have chosen hybrid approach (highlighting mix of 2-3 options) except one public sector Company that confidently claimed to have ‘implementation of ERM’. On the contrary, two other public sector companies have indicated non-existence of a risk management policy, hence a lack of consistency in the adoption of ERM policy. The majority of them have chosen options ‘Risk management policy following IRDA guidelines’ and ‘ERM policy has been implemented’. This shows company adoption of ERM policy follows IRDA guidelines. Most of the companies review their risk management or ERM policy annually except only two. These two companies were the same who had selected that they did not have any risk management policy.

5.2.3 Understanding of Risk and ERM

Whilst adoption or selection of a hybrid or unique risk management/ERM framework is important, it is clearly significant how risk is understood and perceived within the chosen method. All of the respondents have indicated that they had a 'risk management committee' which is obvious because it was mandated by IRDA Corporate Guidelines (2009). However, risk communication, use of risk registers and involvement of various unique risk initiatives were highlighted by slightly less than ten companies. Surprisingly, the biggest public sector company who claimed to have implemented ERM confidently has opted for not using 'Risk Register' for recording of the risks. The other important innovative techniques highlighted by companies are: Top risk assessment, Solvency Stress test, Collection of Operational Losses, new risk control and collection procedures.

Over half of all respondents strongly agree that risk appetite has been properly defined in company's ERM or risk management policy and over 10 of them agree that board takes decision whereas few others highlighted the risk appetite had been decided by CRO and director along with the board. For those who stated the company had defined risk appetite, almost all of them said it was reviewed periodically. Literature highlighted the definition of risk appetite and its use is quite debatable as is the risk attitude of the company. The risk attitude was classified under four broad categories – 1) Risk Averse; 2) Risk Seeking; Risk Tolerant and 4) Risk Neutral. Though insurance companies are in the business of accepting risk as per their underwriting criteria, yet results indicated that more than half of them are risk tolerant, a few are risk averse or neutral, but rarely (2) firms are risk seeker.

5.2.4 Issues in implementation of ERM

Change in local insurance regulation is considered the most significant factor affecting ERM policy highlighted by all of the insurance companies. However, change in international regulation affects almost all of the insurance companies.

To explore what kind of issues companies are facing, respondents have been given a list of issues for rating. A few (less than half) of the respondents faced problems in the implementation of IRDAI guidelines and establishing a link of risk management with the existing processes. The results of setting risk appetite statement and following IRDA guidelines were mostly contested and observed extreme views – some found it very easy and other finds it very difficult.

Some other commonly highlighted issues were 1) Effective utilisation of risk measurement tools and resources; 2) Implementing effective risk reporting and communication; 3) Delegating responsibilities of risk management function; 4) Integrating company's risk management policy with joint venture insurance companies; 5) Risk management for foreign sites where different set of law operates; 6) Resistance from employees to implement risk management; 7) Clearly define the roles and responsibilities of each player involved in the process; 8) Implementing the risk management policy effectively across the organisation; 9) Implementation of multi-regulations like SOX, Solvency II and IRDA altogether.

5.2.5 Ways of Risk Governance

Formulation of policy, implementation and review are all part of current risk governance, and detailed guidelines were provided by IRDA in Corporate Governance Guidelines (IRDA, 2009). ERM is a way to establish risk governance, so this section focuses on company's strategies to handle foreseen and emerging risks. The opinion of a companies' ability to handle foreseen risks was highly contested. Though, a very few agree fully with the way company is planning to reduce/mitigate foreseen risk issues yet, more than half only slightly agreed. Also less than one

fourth of all respondents agreed that their company have fully set deadlines, budget, and allocated responsibilities to handle such emerging risk and to review periodically, though, almost all of them agree with companies' willingness to find such risk. Perhaps the reason is companies' lack of awareness of techniques/tools to find these risks. Furthermore, there is no consensus among companies regarding who has responsibilities of identifying future risks. Almost all of the respondents have selected options from CRO, risk manager, Board of directors, risk committee but a few stated they couldn't say.

5.3 Finding from Survey II

Unlike India insurance market, there were many previous surveys carried out in the UK market by the regulator, academics and professional associations. Financial Service Authority (FSA), the regulatory body in the UK, performed various surveys in the year 2003, 2006, 2008 to explore the issues with ERM implementation in the UK and then came up with Solvency II guidelines (FSA, 2006). The major issues they found were: 1) Insufficient knowledge and experience within the committee structures (e.g. audit committee and risk committee) in handling risk; 2) lack of clarity in understanding the risk appetite statements; 3) Existence of a gap between the definition of risk appetite and its application in operational risk; 4) Lack of consistency in adoption of risk management approach and 5) Lack of information dissemination across the departments in insurance companies creates problems for management in priority setting.

These issues could be addressed by analysing the risk trends and understanding the requirement for risk-based capital (FSA, 2006) but this may require an industry-based solution rather than an individual company approach. FSA (2008) further explored how robust ERM in insurance companies could respond to changing scenarios and changes in internal or external factors and their potential impacts on existing systems. The Financial Services Act, 2012, established the successors of FSA in the UK, the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA) in April 2013.

Dowd, Bartlett, Chaplin, Brien and Brien (2007) concluded “great heterogeneity of risk management in the UK insurance industry” and found risk management comparatively more robust in life insurance companies than non-life ones.

5.3.1 Profile of companies

The Survey II was distributed in the Special group consisting of over 600 CRO’s in Institute of Risk Management (IRM), London. According to Association of British Insurers (ABI, 2012), there are more than 1000 non-life insurance companies and more than 350 life insurance companies registered in the UK insurance market. An online survey was distributed.The response were received from 21 respondents, mainly from non-life insurance companies, life insurance, brokerage and companies in multiple insurance businesses. Most of the joint=venture companies were headquartered in the UK, and a few were from USA, France, Germany, UAE and India. Over ten companies participated in the survey did not have any joint venture partner, and a few indicated a partner from France, Germany, UK, India and China.

5.3.2 Adoption of ERM

The responses were collected under nine categories exactly same as Survey I. More than half of the participants in the survey highlighted that they are implementing a combination of ERM and their own risk management policy except for two with different views who stated that there are not following any risk management policy. However, over 10 respondents selected the option that ERM framework is communicated to all employees online. Almost half of the companies reviewed their risk management and ERM policy annually, and others review it less than a year – monthly, quarterly and half-yearly except one.

5.3.3 Understanding of ERM

Fundamental understanding of ERM not only requires its basic definition but also a broader understanding of various related terms and how it is connected with them for example: how risk is perceived (risk attitude), risk culture, risk appetite, etc. (see Chapter2 Background for details).

More than half of companies follow ERM definition given by Solvency II, and only less than 5 follow the COSO ERM definition, though, Huerta de Soto (2009) argued that following unclear risk and uncertainty definitions provided in Solvency II can be a fatal error for insurance companies for their long-term sustainability.

The survey provided the options to highlight the factors affecting understanding of ERM in the organisation and respondents major preference were as follows: 1) Poor understanding of ERM or risk management objectives (over 10); 2) Poor understanding of ERM or risk management definitions (slight less than 10) and 3) Lack of clarity in defining triggers and scenarios for catastrophic risk (slight less than 10) though, other less preferred choices were: 1) ERM implemented by non-risk professionals; 2) Lack of knowledge about risk appetite statements and 3) Insufficient knowledge within committees.

Table 5.1 depicts the respondents preference of ERM objectives which shows their understanding of why ERM was implemented. Most supported the view that ERM increases the performance of the company by providing a grassroot understanding of how failure arises and possible causes. This indicates that companies focus is inclined towards the downside of risk and uncertainty than the upside of risk and uncertainty.

Almost all of the respondents stated that their company had written risk appetite statements. In regard to risk attitude of the companies, most (more than half) of the companies highlighted that the companies are risk neutral, however, a very few mentioned they were ‘risk averse’ or even ‘risk seeking’.

Risk culture has a significant importance in the development of ERM program as the majority of the respondents prefer to develop the strong risk culture through a comprehensive ERM program. Risk culture was seen as more top down driven and very rarely a development of risk culture focussed on developing expertise at lower level of the organisation.

Preference of Respondents	**ERM objectives**
Mostly preferred (More than Half)	To increase the performance of the company
Moderately Preferred (Slight lesser than half)	To reduce failure in the business To increase the understanding the sources of failure and ways to overcome them To comply with the regulatory guidelines To increase the understanding of the reason of failure of companies
Less Preferred (lesser than seven)	To increase profits
Least Preferred (lesser than five)	To get better credit rating To make performance more predictable To bring consistency in returns

Table 5.1 Preferred ERM objectives by respondents

5.3.4 Issues in implementation of ERM

Surprisingly, the view on risk reporting is strongly contested with six of the respondents choosing the option 'Every employee is involved in risk reporting' whereas eight of other respondents have indicated that every business head and managers are involved in risk reporting. The concerning issue is how risk reporting actually takes place: Is the risk managers identify the risks, discuss within the team and report it to senior management or each employee identify, assess and understand the risk and report it.

Similar results were seen in the case of delegated authority. Over ten companies indicated that authority to take decisions in implementing ERM or risk management framework has been given to board of directors and business heads, though, less than 10 respondents opted for ‘Every employee in the organisation is considered as risk manager’. This shows the existence of four ambiguities – 1) Ambiguity over the scope of ERM; 2) Inadequate reporting from employees at grass-root level because development of risk culture is more top down driven; 3) Unclear structure of ERM; 4) Problems in risk governance due to unclear authorities. Table 5.2 shows the list of problems indicated by respondents. The results were not definite and very scattered among different options.

Preference of Respondents	**ERM objectives**
Less than five	ERM or risk management is seen as a compliance function
Three	ERM or risk management not embedded Lack of consistency Changes in internal and external environment Processes and systems have inconsistent controls
Only one	Application in Risk Appetite statements Too many people involved in ERM implementation such as CRO, CEO

Table 5.2: List of problems indicated by the respondents

5.3.5 Way of Risk Governance

Most of the respondents stated that following the divergent interested actors are involved in the implementation of risk management and ERM framework: 1)

CEO/COO/CFO; 2) Board of Directors; 3) CRO; 4) Risk Committee members; 5) Head of units; 6) Compliance officers/ auditors; 7) Risk management team/ operational managers; 8) Support Staff though, a few stated involvements of actuaries and audit committees. Risk governance to a great extent is influenced by actions of local regulatory authority as almost half of the respondents have indicated that companies evaluate their ERM/risk management based on regulatory standards.

5.4 Comparative Highlights of the Survey I and II

The Survey I was distributed in Indian insurance market majorly in non-life insurance companies, though, Survey II (online survey) was circulated within a forum consisting of more than 600 CRO's in the UK market. Indian insurance market is rather nascent and has in total 53 companies in contrast to UK insurance market, which is mature and has over 1000 companies. Indian insurance market has public and private sector companies where there is a foreign direct investment (FDI) in private companies from major European companies. On the contrary, UK insurance market does not have many joint ventures. The insurance companies in Indian insurance market are relatively new (less than 15 years old) except few public-sector companies whereas companies in the UK insurance market are relatively old and in some cases, the companies are more than 150 years old.

Table 5.3 highlights the main differences between India and the UK. These covers the adoption of ERM, understanding of Risk and ERM, issues in the implementation of ERM and risk governance. The Survey I have shown that IRDA Corporate Governance Guidelines (2009) were issued by insurance regulator which directly impacted the ERM and risk governance of companies in Indian insurance market and ERM is developed on the top of that. Some of them implemented ERM at the same time while combining compliance with good international practices in ERM. In the UK market, Risk Governance has been already introduced such as Turnbull report (2001) and Solvency I. Current risk governance using ERM is an extension of TRM and other governance practices. Risk appetite defines limits and control on risk that is helpful in risk governance. Obviously, since UK market has better experience in implementing the risk governance and reflected in improved understanding of risk appetite statements. There are divergent issues faced across both markets and

inconclusive in nature and require further study. Risk governance is rather more formalised in the UK market than Indian insurance market.

Comparative Highlights		
	Survey I	Survey II
Adoption of ERM	- Majority implement ERM along with IRDA guidelines and review annually - Inconsistency as two large insurance companies did not have risk management policy	- Majority implement ERM and risk management policy - Inconsistency as two large insurance companies did not have risk management policy
Understanding of Risk and ERM	- All of participants have risk committee and almost half use risk appetite statements - More than half of them are Risk Tolerant and very rare are Risk Seeker	- Risk Appetite is better understood as 90% of them have written statements - More than half of them are Risk Neutral and very rare are Risk Seeker
Issues in implementation of ERM	- All of participants strongly supported that local regulatory change effect ERM policy or risk management policy, and most of them also supported effects of change in international regulations - Linking risk management with existing processes - Setting risk appetite statements - Effective utilisation of risk management tools and resources	- Risk has been seen as a compliance function - Ambiguity over allocation of responsibilities and scope of ERM - ERM or risk management not embedded - Lack of consistency - Changes in internal and external environment - Unclear Controls in Processes and systems
Risk Governance	- No adequate existing formal structure of risk governance with clear set of guidelines to find emerging risks and setting roles and responsibilities	- Risk governance influenced by local regulatory authority - Too many people for ERM implementation - Unclear risk reporting

Table 5.3 Comparative highlights of Survey I and Survey II

5.5 Chapter Summary

The Chapter intends to enumerate how ERM as a concept is adopted and understood in the insurance industry and involves analysis of the results of two independent surveys carried out in India and UK. Additionally, both the surveys explored issues

faced by corporates in the implementation of ERM within a broader spectrum of risk governance. The overall aim is to highlight the inconsistency in ERM practices followed in nascent and mature markets.

Results indicated that adoption and implementation of ERM in Indian insurance market had been influenced by regulatory mandate in the year 2009, therefore change in local regulation was the most significant factor highlighted by all the participants of the survey I. The UK market is more international in nature therefore, affected by international regulations and currently, implementing combination of ERM and risk management. The research supports inconsistency in ERM implementation in both the markets highlighted in the previous literature. The concept of risk appetite is contested in Indian insurance market, though, it is claimed to be well understood within UK insurance market.

Both surveys strongly supported that risk has been understood as a compliance function rather than adopted as a need to balance risk and exploit opportunities. The survey II highly supported that aim and definition of ERM is not well understood and there is the existence of ambiguities over scope, allocation of responsibilities and authorities. Development of risk governance is at the nascent stage in Indian insurance market, though, risk governance in the UK market is comparatively mature but struggling with inefficiencies.

The responses from the surveys cannot be taken as definitive on which to make conclusions. They lead to evolving questions such as the form of risk management the companies are following is it a combination of risk management and ERM, and do they differentiate between the two. Understanding of ERM is linked with many related topics that require further study. These are an exploration of risk appetite concept, the role of models, the development of risk culture and whether the size of the organisation has an effect. The issues in the implementation of ERM in the Indian market are different than the UK market but understanding the reasons for the difference requires further investigation. The concept of risk governance needs an in-depth study to understand link of ERM with the strategy and what kind of new initiative has been taken within companies to establish good practice. To explore the

answers to these questions, the researcher decided to carry out semi-structured interviews in both the markets and these will be discussed in Chapter 6.

Chapter 6 Interviews

6.1 Introduction

ERM has been seen as a construct to overcome the limitations of TRM. The previous Chapter indicated blending of two approaches by many of corporates in India to establish effective risk management, contrary to McShane, Nair and Rustambekov (2011) view. In the previous Chapter, it is found out that implementation of ERM is inconsistent across the insurance companies in nascent and mature markets. ERM concept is interlinked with many other related concepts that create difficulties in understanding and required further study. Therefore, 40 semi-structured interviews of senior management were carried in Indian and UK insurance market to understand ERM, its adoption and issues in implementation to establish overall risk governance. The interviews provided a variety of reasons and motivation in adoption and implementation of ERM so do the difficulties in implementation. This will obviously highlight the different approach to risk governance.

The overall aim of the Chapter is to explore the variety of ways the ERM has been understood, adopted, implemented, and to find a pattern to establish good risk governance. The Chapter is divided into five sections. The first four sections are based on similar themes as Chapter 5 and Section V discusses emerging ERM strategies using second order coding. Some of the sections discuss the results of few specific interviews providing more valuable information whereas some other sections rather focus on the generic information provided in all interviews.

Section 1 provides the understanding of ERM among corporates. Based on the interview results the organisational focus can be divided into four categories: understanding of RM/ERM, communication, perceived benefit of ERM and strategy in implementation. Section II discusses how ERM has been adopted and the kind of issues faced by six of Indian and six of UK insurance companies. This will provide insights upon the kind of inconsistencies in implementation of ERM.

Section III provides a comparison of most common issues in the implementation of ERM in India and UK that is followed by broad examples of how risk governance is implemented in both countries in Section IV. A list of issues was prepared by analysing all the transcripts of semi-structured interviews carried out in Indian and the UK market and then a comparison is formed by considering the similarities and dissimilarities across Indian and the UK insurance market. The risk governance structure and its methods have been discussed within some specific interviews.

Section V is based on the interpretation of results of interviews from section I to IV and discusses four emerging ERM strategies: Rudimentary ERM strategy, Anticipatory ERM strategy, Resilient ERM Strategy and Transformatory ERM strategy. This is followed by a short conclusion.

6.2 Understanding of ERM

Chapter 5 demonstrates a lack of understanding of ERM as a concept among corporates but does not highlight how they differentiate risk management and ERM. Previous literature drew attention to boundary-less ERM (Mikes, 2011; Power, 2004, 2009) and studied from multiple perspectives. Lam (2014) defined learning of ERM is a multi-year process. So, it is assumed with the pragmatic viewpoint that corporates can devote limited time, money and resources to sufficiently understanding ERM and its scope.

6.2.1 Risk and objectives

Understanding of risk is as important as its implementation. As such a senior official of a very large insurance company in the UK highlights the difficulty in risk management, "without understanding the risk, risk management becomes mere compliance". So, without understanding the risk and perceived benefits of its implementation, the entire exercise of ERM program in the organisation becomes redundant.

During the interviews, it was found that there is a particular emphasis on different aspects of ERM objectives by each and every insurance company and institution (see

Table 6.1). This can be divided into four parts: understanding of RM/ERM, communication, perceived benefit of ERM and strategy in implementation. At initial level of implementation of ERM, the preliminary level of understanding of ERM is developed so that it can be linked with organisational objectives, how operational risks will be tackled such as fraud. Understanding the value of ERM not only at corporate level rather than business and individual enhances the embeddedness of ERM in the entire organisation. Some organisations consider ERM improves cost effectiveness, a few find it as prevention technique from fine and penalties, and some others find it as a continuous learning program (see Table 6.1).

Understanding of ERM	Communication of ERM	Perceived benefits
Understanding the need of risk management and ERM and linking it with organisational objective	Embedding ERM across enterprise	Cost effectiveness in the process is considered beneficial
Understanding operational risk	Setting the ERM objective in line with growth rate, availability of reinsurance and capital	Risk learning from fines, penalties and exposures are considered major benefit
Understanding the benefits of ERM and building risk appetite statements	Focus on risk –vendor risk, IT risk, reputation risk and Top Risk Assessment	Training and risk certification to improve awareness. Risk monitoring frequently and regularly
Strategy in implementation		
Implementing regulatory guidelines to meet with stakeholder's expectations and international benchmark		
Extensive use of IT software		
Implementing joint venture partner ERM effectively		
Appropriate loss data collection and corrective measures		
Effective use of Risk-Adjusted Returns, Dynamic Financial Analysis and Risk Dashboard		
Back up plans and prepare for 'What if' questions		
Building strong risk culture and consistent platform		
Risk surveys, road shows and use of quarterly Risk Magazine to build strong risk culture		
High use of risk register, building strong risk culture to provide excellent customer service. 'ERM is something Intuitive, simple and easy to use'.		

Table 6.1: Focus on ERM objectives during practice

6.2.2 Scope of ERM

The scope of the ERM is highlighted by a senior official in the UK market as "In the ideal world, the best risk managers are the people, who are the first line who do day to day work. In the ideal world, you should shrink the size of risk function as much as possible. We will have failed in this risk function, if we don't get smaller". He provided the reasons that role of ERM team is not to manage the risk rather "to make

sure that all the elements of the framework is in place and first line has all tools and techniques to enable them to manage". Additionally, CRO of a UK based very large insurance company highlighted "It makes sense as ERM progress, it should get smaller and smaller, but it is not seen anywhere till now".

Group Risk Director of another company in the UK rather emphasised, implementation of ERM should be like building a house "I don't need electricians, plumbers all the times. I need just their numbers. I generally work in the organization like I build up framework and process in 3-4 years' time and then diminish the numbers. That makes me move on". On the contrary, CRO of a very large insurance company in Indian insurance market associated scope of ERM with anything affecting mission, vision statements of the company should come under the periphery of ERM.

6.2.3 Understanding of related terms

Understanding of ERM requires a fundamental understanding of few related terms, though, the list used not comprehensive. The terms are: 1) Risk Appetite; 2) Use of models; 3) Size and capacity of organisations and 4) Risk Culture.

The survey indicated that risk appetite term is better understood in the UK insurance industry than the Indian insurance industry. The Chief Actuary of an insurance company in the UK stated that risk appetite may not be relevant for some business such as investment where a fee is collected in advance to provide the advice, though, another official from the same company stated "Once company know exposure, skill and experience required to mitigate those impact, it becomes risk seeker for specific type of risk and for particular purpose". Many of the Indian companies did not discuss risk appetite. Some are working on preparing risk appetite statements while a few indicated that limiting the maximum amount of the risk is very important in considering the risk appetite.

Simply put, risk appetite concept is understood similar to the appetite of human body – it varies with size and weight. Some may have preference for particular food may like to have more of it and vice a versa. Similarly, risk appetite varies according to

organisation size, capacity and the preference. It cannot be unlimited, though, it can have the upper limit and lower limit. The upper limit refers to maximum amount of risk and lower limit refers to the minimum risk and organisation has to bear to generate revenues to survive in the current business environment. These limits are not fixed and vary with changing the internal and external environment.

There is no evidence found in the surveys showing larger organisations have more robust ERM than a relative smaller organisation. Group Risk Director of the UK based insurance company highlighted that size of the company does not matter rather the profile of the risk matters. This is evidenced by historical losses where both large and small firms failed due to bad management of risks. Another company in the Indian insurance market emphasised on "kind of risk exposure" rather than capital and size of the organisation. The Head Reinsurance division of this company further asserted "The main problem in India would be the probability of catastrophic occurrence".

Use of risk and capital models are relatively high in the UK insurance companies compared with Indian insurance companies, this is also reflected in the size of team and cost involved in following Solvency regulation in the UK. Most of the UK insurance companies interviewed have large risk management team size such as 50, on the other hand, the most of the Indian insurance companies; it ranges from 5-10 except in one company. Insurance companies in India have one or two actuaries, however, insurance companies in the UK have many.

Other than, the size of risk teams and involvement of actuaries, another major difference between the two markets is related to regulation. Indian insurance companies often follow the IRDA guidelines and very rarely follow some other guidelines. However, in UK insurance companies, companies follow many local and international guidelines.

A few companies in the Indian and the UK insurance markets have indicated that goal of ERM program is to develop strong risk culture. Though, most of them agree that it is difficult to define risk culture, but the core expectation of management from the risk culture should be reflected in their job roles and responsibilities. CRO of a very large public sector insurance company in the Indian insurance market, which

has claimed to implement sound ERM, highlighted that aim of development of risk culture is to “You try to inculcate the culture where the risk you are taking, you have adequate capital against it. So, now we are doing it in more aware and structured fashion”. This company used software for converting issues into action points by sending automated two or three reminders so that it becomes habits. In this way, the company developed a risk culture where employees need not bank on memory to remember. CRO of the company further elaborated “Analysing the risk, taking the risk, putting it on the record, bringing it to the attention of your manger – it is really imbibing the risk awareness culture in the management”. For this company tone from top comes from CMD (Chairman and Managing Director). This company agreed that change in culture takes time and company faced initially a lot of resistance to change. The company found that they are able overcome with resistance to change by providing small and achievable targets which employees found helpful.

Almost all of the interviewees agreed that risk culture of the organisation is dependent upon tone from the top. There arises an ambiguity in understanding what ‘tone from the top’ actually means – is it the CEO, the CRO, the Board or the owner who affect risk culture? In few large insurance companies, it was observed that CEO or in some cases where CEO is not there, Chairman of the insurance company is treated as the ultimate risk manager. Risk Culture is different across countries and based on mental models (Hofstede, 1983), perhaps, this is the reason why CEO background, experience affects ERM implementation.

Development of risk culture is at the initial stage in India as well as in the UK insurance market and may be understood differently by the top, middle and junior management. The Head of Pension of a very large insurance company in the UK asserted that inclusion of right balance of risk and reward in risk management could bring motivation, though, unreasonable regulatory intervention may be detrimental to organisation success. Additionally, CRO of an insurance company in India stated that anything over and above the management expectation set out in role and responsibilities should be rewarded. To align risk and reward more proficiently, the responsibilities of defining roles and responsibilities of management fall under the purview of ERM department in this company. Some companies in the UK market

highlighted issues with risk culture “where CEO comes from the sales background and has not been associated with the organisation from a long time”. A very large insurance company in the UK Insurance market has focused entirely on aligning the risk and reward adequately to develop sound risk culture. The company developed risk culture bottom up than top down. Building upon the interview results, key features important for the understanding of ERM are discussed below (See Table 6.2):

Key features of ERM	
Compliance vs. value	Poor understanding of ERM makes it simply a part of compliance while greater understanding of ERM supports in deriving value
Inconsistency and undefined scope	Inconsistency in the implementation of ERM is due to the divergent focus of ERM program in multi-year implementation. In the ideal world, ERM should become smaller over time but not true in practice. Emerging risks and increasing compliance in the dynamic business environment have made ERM bigger and increased inconsistencies. ERM though, supposed to deal with all risks including operational risks, however, strategic focus is provided to only those risks that affect company's mission and vision statements. This shows aligning ERM with organisational objectives.
Importance of related terms of ERM	Understanding of terms 'risk appetite' and 'risk culture' are important for the understanding of ERM. - Risk Appetite: It defines companies' willingness to accept risk based on its experience and skills and vary across companies according to size, capacity and preferences. It usually has lower and upper limits. Lower limits are linked to company's survival however; upper limits are linked to company's capacity and experience. - Acceptance of 'kind of risk exposures' by an organisation essentially be considered in reference to its experience and capacity to bear the risk i.e. earth quake risk - Risk Culture: Development of risk culture has two parts: structured learning and unstructured learning. Structured learning is related to tone from the top where expectations are set by the board and communicated through circulars to existing employees and improved roles and responsibilities of new employees. The tone from the top is also related to background, abilities and experience of CEO. Risk-aware culture is often created by training, reminders using software, discussions, interviews, workshops and education.
Time and cost involved in ERM	Evidence shows that larger and leading companies are usually able to implement better ERM practices.

Table 6.2: Key features of ERM

6.3 ERM Adoption and implementation

This section will provide insights of different practices adopted in ERM practices in the Indian and UK insurance markets. The interviews were first carried out in six insurance companies in Indian market and then six in the UK insurance market to understand the trend how ERM has been adopted and issues in implementation.

6.3.1 Indian Insurance Companies

The details of the companies interviewed are presented in Table 6.3. It was found that the companies with almost the same structure and joint venture partner covering similar regions have a very different influence on risk governance in ERM implementation. This may be partially explained by the companies having different business objectives. When considering the companies individually the following observations are made.

Company A

The company A reported that it has no formal implementation of ERM/risk management in the company and follows the rules and procedures set by risk management committee and senior management. Employees are not even aware of risk management policies. However, there is the strict adherence to the guidelines, and the company is risk averse in nature, and by doing this the company achieved its objectives. Chairman of the company mentioned that ERM is same across all companies from the application point of view but varies as with the objectives of the organisation and asserted "Each and every insurance company have the different set of objectives which will lead to their different strategy. In Indian Insurance context, the companies are not driven by objectives rather driven by growth momentum."

Company Name	Public/ Private sector	Existence in India	Joint Venture Partner Country	Degree of influence of joint venture partner in Risk Governance
A	Public sector	More than 50 years	No joint venture	No influence
B	Private sector	More than 5 years	Joint venture partner from Europe	Not influenced by the joint venture partner
C	Private sector	Less than 5 years	Joint venture partner not from Europe	100% influenced by the joint venture partner
D	Private sector	Less than 5 years	Joint venture partner from Europe	Not influenced by the joint venture partner
E	Private sector	More than 5 years	Joint venture partner from Europe	Influenced by joint venture partner before Corporate Guidelines of IRDA (2009)
F	Private sector	More than 5 years	Joint venture partner from Europe	Highly influenced by the joint venture partner

Table 6.3: Companies Interviewed in India

Company B

The Company B is very cautious regarding ERM practices of joint venture due to bad results arising from the recent financial crisis. This company emphasises risk culture and embeddedness of ERM practices from top management to shop floor and was more focused for the higher standards of ERM implementation. The company faced major problems in the implementation of ERM regarding how risk was understood by top management but communicated to the rest of the employees. So the employees did not understand risk management they only followed the guidelines set by management. CRO of the company stated that company “promotes training to build up risk management culture and reviews the changes in the internal and external environment every month”, though, the head of claims stated ERM in the company is still more top down driven than bottom up.

Company C

The Company C emphasised that it has no expertise in risk governance. It also states that risk management and ERM implementation is dictated totally by its joint venture partner. The CFO asserted “They provide an online platform to issue policy, claim settlement, training, even all policies of joint venture partner (name removed) are followed by the company without modification”. Unfair premiums, poor underwriting, lack of knowledge of the consumer and risk management are the major problem faced by the company.

Company D

The Company D is recently started non-life insurance business in India and has implemented the risk management policy and planning to implement the ERM policy. This company emphasised the frequent risk monitoring as a way of achieving risk governance. The CFO of the company asserted "Risk Monitoring at the frequent interval is the better way to control the risk. Monitoring Risk Register and weekly review help the company in risk monitoring to understand the origin of risk and the ways to handle it."

Company E

The Company E is one of the leading non-life insurance companies in India, and the company emphasised the role of the board in providing guidance and review of risk. This company has some influence from its joint venture partner in implementation of ERM. The CRO of the company asserted “Regulatory risk and compliance risk are the major risk faced by the company and highlighted during the Top Risk Assessment”. ERM in the company deals with various aspects such as frauds, mitigating controls and validations, revision/modification of standard operating processes, investment guidelines and claimed to implement quite effective risk management.

Company F

Company F risk governance is highly influenced by its joint venture partner. It follows the ERM policies of joint venture partner with little modification. CRO of the company asserted "Our CEO has very high concern for risk management implementation and implements reviews every month". The upper limits of claim sanctioning powers have been clearly defined and strictly followed, though, the company still face problems in ERM implementation such as frauds committed by the employees, mis-selling done by agents to earn high commission, third party liability claims and regulatory changes done by IRDA.

6.3.2 Adoption in the UK insurance companies

Companies interviewed in the UK insurance market are insurance companies (N, O, P and Q), ERM consulting firm (R) and actuarial consulting firm (S) are more experienced and international in nature (see Table 6.4 for details). It is found that there is a high level of inconsistency in the adoption of ERM and the way, ERM is implemented. The insurance companies have adopted ERM due to history of losses arising out of the bad management of risk and majorly as a part of following Solvency II. Additionally, some of the companies adopted ERM to meet the expectation of stakeholders, to get consistency and reliability in performance and for better risk management.

Name of the Company	Type of Business	Joint Venture partner in India	Existence in the UK
Company N	Insurance Company	Yes	Over 50 years old firm
Company O	Lloyd Market Insurance Company	No	Over 100 years old firm
Company P	Insurance Company	Yes	Over 10 years old (original company over 300 years old)
Company Q	Insurance and Investment Company	Yes (and interviewed)	Over 150years old
Company R	ERM Consulting Firm	No	Over 10years old
Company S	Actuarial Consulting Firm	No	Over 75years old

Table 6.4: Company interviewed in the UK

Company N

The company N is a leading life insurance company in the UK market. This company adopted ERM when it booked a loss of a quarter of million pounds due to bad risk management and after the regulatory intervention. The company first implemented risk management in a small unit 'customer care' and based on this experience ERM is implemented throughout the organisation. The company build up risk framework from a practical standpoint. The Group Risk director of the company asserted "We have 100's of risk in our organization and which vary in levels and degrees. Producing 100's of KRI's is meaningless. That will be too much. Besides all things,

they should work together". Key Risk Indicators are the criteria used by companies how they map their risks.

The company emphasised on integrating the risk rather than on the number of risks addressed.

Company O

The company O is a leading insurance company at Lloyd's syndicate in London market and known for its risk management expertise worldwide. This company has risk assessment mechanisms in place since 2001, though, the CRO mentioned that real ERM implementation started in the company in 2009. The company has adopted a decentralised approach to implementign ERM, and the CRO asserted "We have spent a lot of time working on risk culture. A big feature of our approach is training and communication". The company emphasised the meeting the demands of various stakeholders by adhering to standards given by Lloyds, Solvency II, COSO ERM, ISO 31000, British Standard 31100, Swiss requirements FINMA circular 8/32, Standard & Poor and A M Best. This shows adherence to multi-level and multi-actor risk governance.

Company P

The Company P is a very large and leading insurance company in the UK insurance market. This company has challenged the existing practices after going through Solvency framework from 2010-12 and realised that local ownership is not the best for risk management. Consistency and reliability in company's performance are the aims of ERM program, Group Risk Director of the company highlighted "Other than 'consistency' what I see other thing as the major problem is 'Enterprise Risk Program' – declaring victory to a valley. I mean it is a common project risk that is not unique to ERM program but institutions are impatient, and they want to make things faster. Therefore, the risk is not embedded, organisations are in tensions of incentives, tying it to something else so you could easily move to risk management".

The company changed the way self-control assessment works and prepared common risk landscape to understand ERM and realised that digesting the idea of ERM within

the company requires many years. Involvement of first level employees in defining their own risks increased their local understanding but also it was not possible to aggregate risk. The Company has seen the financial crisis as a learning opportunity So, the company creating awareness to provide warning indicators and allocating responsibilities and authorities. Group Risk Director of the company stated "If you plan better in advance and thought about improving 'resilience in the organisation', could handle better. But every single risk brings an opportunity to see what lessons learnt on – whether it is an instance of miss-selling in one market, to look that whether it is replicated in another market".

Company Q

The company Q is a well-established insurance company in the UK market and known for its strategic investments. This company has adopted ERM to establish better risk management and due to regulatory pressure for adoption of Solvency II developments. Overall, adoption of ERM is not simply understood as a technique rather Group Risk, and Capital Head asserted that it requires "improvements to the information you got, techniques, and understanding of factors which affect things. Overall, Solvency II made a big impact on most of the companies".

The company faced lots of issues in the implementation of ERM such as issues with computing power, validation of models, and flow of information and operation risk. A specific problem was highlighted in the economic capital calculation such as how to assess risk in case of unavailability of data, how to handle small errors and allocate capital for small errors. Not only this, but company also highlighted problems of customer complaints, system failure, problems with documentation, legal disputes and quality of information and its reliability so that adequate capital is allocated.

Company R

Company R is an ERM consulting firm and provides consulting of ERM to insurance companies in the UK and Africa. Director of the company highlighted "Using ERM tool are helpful, on the positive side. It improves performance, reduces failure, linked to appetite, objective and strategy, it fulfils compliance based regulations". While on the negative side, ERM implementation is still more on paper and not happening in reality and being embedded. The company highlighted the problems in implementation are in order of from top to bottom (see Figure 6.1 for details):

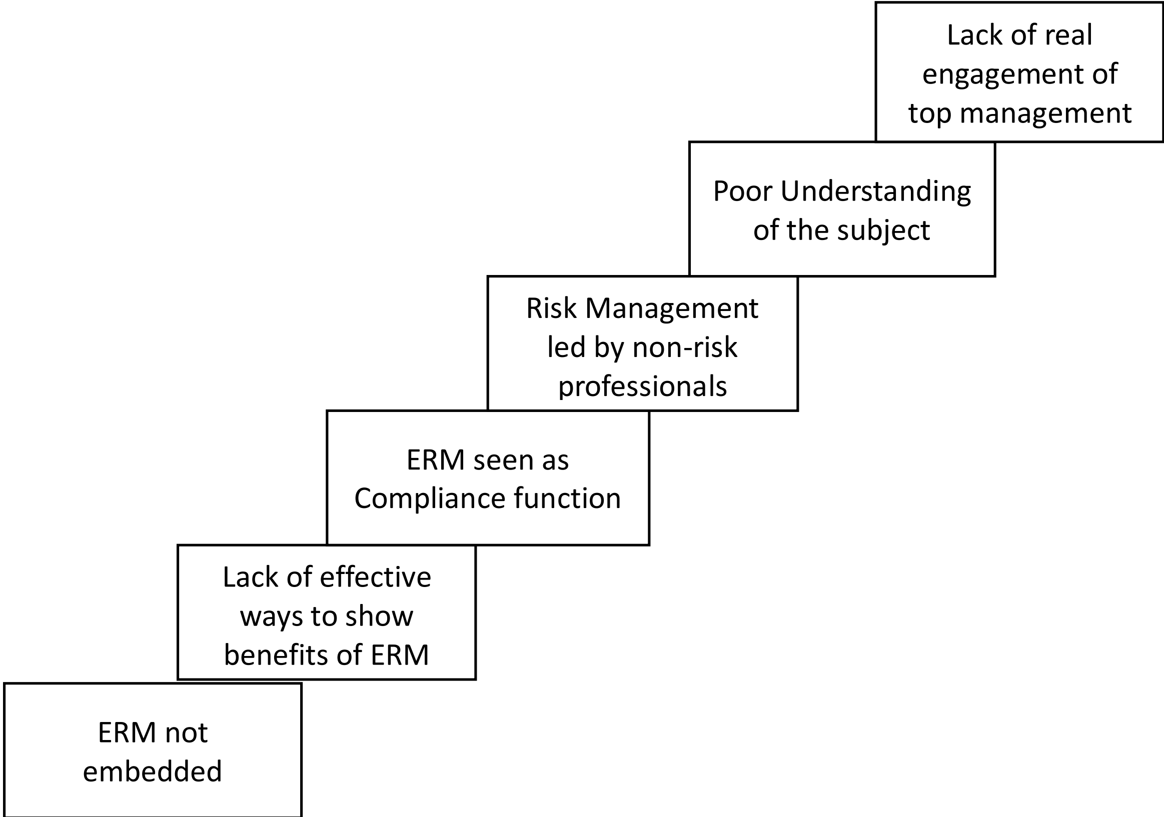


Figure 6.1: Problems in Implementation of ERM

Company S

The company S is a prominent actuarial firm in the UK that provides ERM consulting to insurance companies in the UK and a few other countries. The Head of

ERM highlighted that most of the insurance companies are a little bit behind the curve in case of implementation of ERM and have learned from their mistakes. Most importantly, companies focus on interaction among different risks is still missing rather company's attention is diverted to credit or market risk. The most popular discussion regarding ERM revolves around risk appetite, risk reporting, model validation, conduct risk, operational risk and stress testing. The major concerns are with risk reporting where all of the scenarios are reported. Additionally, the Head of ERM asserted "Level of details is inappropriate to the level of hierarchy – quality of measures, governance, understanding of limitation of the model, having the good understanding of the approach to the qualitative and quantitative side of risk".

6.4 Issues in implementation of ERM

The Survey I in Indian insurance market highlighted that there is inconsistency in the implementation of ERM across insurance companies. Chairman of one of the biggest Indian Public sector insurance company supported: "for the insurance industry, all this (ERM) started when the regulator has mandated it for all the companies to follow. And then various companies in India are at various stage of its implementation". CRO of an Indian Insurance company, on the other hand, elaborated the current state of ERM implementation requires considerable time and cost "From day 1, or so it becomes an accepted practice. The even before IRDA mandated requirement of ERM, we are anyways looking at risk holistically. Even regulation does not seem to benefit us". He further discussed insurance environment in India "If you see Indian market, it is still a well-regulated market and the regulator has put itself a lot of limits on investment, reinsurance and underwriting. Quoting rates are allowed, but still, regulator does not allow companies to change terms and conditions".

It is found in the survey that practices in the UK insurance market is also inconsistent and lacks in fundamental understanding of ERM. The results of the interviews also supported, and the implementation of ERM has been done from a different perspective in insurance companies, though, every company need to follow Solvency

II. However, interviews reveal that understanding of ERM is good at senior level but is lacking at the middle and junior level in Indian insurance companies.

Group Risk Director of one of the insurance company in the UK insurance market stated that when we joined the company, the management was clueless how to deal with problems persistent in risk management. This lead company to realise the value of ERM and Group Risk Director asserted "We have the problems known, spotted early, deal with early and you should know the courses to manage things". Additionally, the CRO of a UK based very large insurance company criticized regulations for the adoption of defensive routines and asserted "Compliance is the biggest tension for the CRO".

Though there is a great difference between the experience, size and capacity of Indian insurance companies and UK insurance companies, interestingly, the use of models activates a new debate. It is observed that Indian insurance companies are first working on building knowledge and understanding of ERM and then would like to use models for benchmarking. Though, use of risk and capital model is enforced by the regulator in the UK for large companies yet, resulted in companies using models first and they check the results of models based on their knowledge and experience. CRO of a very large insurance company in the UK stated "If you think about modelling side – risk and capital models. Everybody has spent million and millions of pounds on Solvency II. Has all of that spent really worthwhile? Not sure of that. Will there be problems with those models – I can see with 100% certainty, there will be". He further criticised models "By any definition, any model is a model, not the real world. Sometimes, you are too much rapped up that it is fantastic, but this is just a model – take a step back, think about the model. Think about what it is genuinely telling you. I think, as an industry making sure that people have the right balance, yes this is what model tells us, let apply some common sense".

There are distinct differences in the Indian and UK ERM implementation, see Table 6.5. The nascent Indian market is facing initial obstacles such as developing the appropriate infrastructure, the lack of suitably qualified people able to make informed decisions with respect to ERM implementation. In contrast, UK market is mature with more detailed implementation. For example, Indian insurance companies

are facing problems in operational risk, underwriting, third party claims, fraud risk, getting accurate and sufficient information about its clients, while the UK insurance companies are struggling with customer complaints, fines and in their view inappropriate regulations.

Problems in ERM Implementation	
Indian general insurance market	**UK general insurance market**
Insufficient information of client profile	Insufficient understanding of ERM
Lack of clarity in risk appetite	Difficulty in application of risk appetite
Inadequate reporting of risk	Over Risk Reporting
Unfair underwriting, Unhealthy competition	Shortcuts taken for commercial benefits
Lack of capital	Inefficient utilisation of capital
High fraud risk	Low fraud risk but not zero
Lack of regulatory guidelines	Lack of clarity in regulation
Source: Primary data collected during interviews	

Table 6.5: Problems in ERM Implementation

Table 6.4 highlights the different problems in the implementation of ERM in both the countries. There are few common problems such as lack of knowledge of perceived benefits of ERM, handling operational risks and ERM has been still seen as a compliance function.

6.5 Ways of Risk Governance

Establishment of risk governance among Indian and UK insurance companies are divided into two broad categories: 1) Nascent organisations that are the initial phase of implementation of ERM and 2) Mature organisations who have well developed ERM in place and passing through its maturity.

Colquitt, Hoyt, & Lee (1999) specified the shift of risk managers from the pure risk of the firm such as operational risk or hazard risk to the management of non-operation and financial risk. Under Traditional Risk Management (TRM), the non-operational risks have been either avoided passively retained, or managed by a specific unit within the firm. The companies in the survey in Indian insurance market highlighted an approach using mix of a TRM and ERM. The initial interview questions were framed to understand how risk management and ERM is combined to gain advantage from good practices.

CRO of one of the largest insurance companies in India has highlighted that they have adopted a combination of ERM and risk management following IRDA guidelines. The company followed combined approach through establishing two committees: risk management committee and board risk committee.

The risk management committee role is to provide risk report and Top Risk Assessment list to the board committee. The company adopted a structured approach by following steps to prepare document and list:

Step1: The Company's all departmental heads/functional heads discuss the internal and external threats affecting company's solvency on a quarterly basis in risk committee meetings. The examples of internal threats include frauds, losses and external factors include regulatory, changes happening in the business environment, change in competitor strategies.

Step 2: With all discussion with internal functional heads, the committee presents "a Top Risk Assessment List which is faced by the company for particular quarter" stated by CRO.

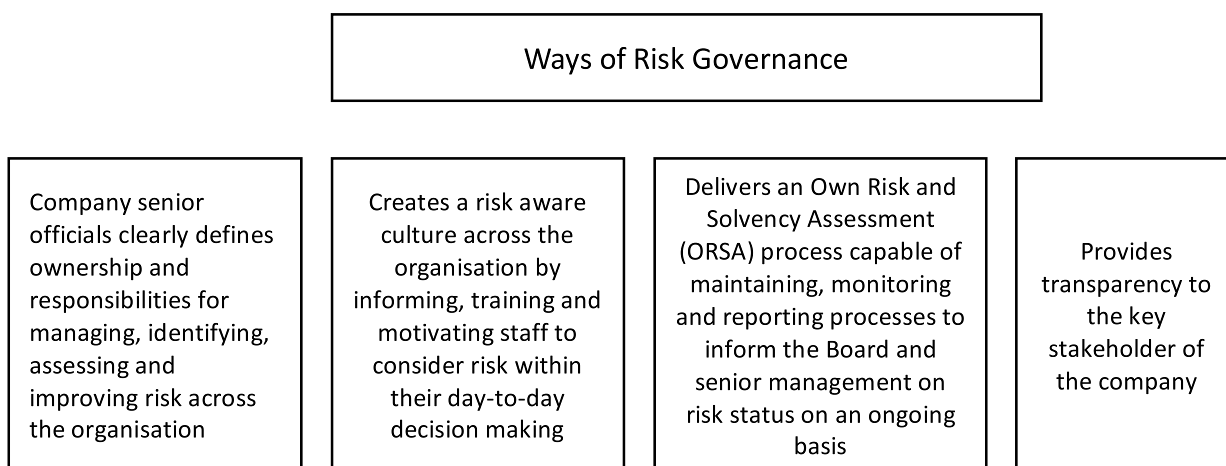
Step 3: Then, the different frequency and impact of losses are calculated and based on the data the committee suggests mitigating factors and assess the residual risk. The residual risk is decided on the basis of whether it falls within the scope of the risk appetite of the company, company's willingness to bear the risk and disproportionate risks.

Step 4: Based on this, the duties, responsibilities are allocated to the functional heads with deadlines, dates for corrective measures.

Step 5: The report based on above action plans are further reviewed in next Risk committee meeting for concrete risk mitigation plans and actions.

The role of board risk committee is to understand high-level risk which is not considered by internal risk committee and risks of previous quarters of the financial year. CRO of the company highlighted that board committed majorly deals with "various aspects like frauds, mitigating controls and validations, revision/modification of standard operating processes and various actions in terms of investment guidelines. So, with the guidance of the board and detailed deliberation, we are able to implement quite effective risk management".

On the contrary, a London based Insurance company have a different kind of structure (see Figure 6.2). This London based company has shown concern for its operation in the environment of uncertainty and ERM supported "the sustainability of the Group and enduring shareholder value comes from actively seeking and accepting opportunities, whilst managing threats within acceptable bounds". The overall aim of employing ERM program is to provide transparency to stakeholders and to maintain sustainability by especially focusing on risk strategy and required infrastructure. CRO of the company provided four major ways how risk governance is followed within the company (see figure 6.2 for details).



(Source: Shared by CRO of the company as an example)

Figure 6.2: Risk Governance in a Lloyds syndicate company

6.6 Emerging ERM strategies literature and practice

Based on interview results, second order coding is used to derive a pattern in an adoption of ERM strategies. This led to the development of four emerging ERM strategies: rudimentary, anticipatory, resilient and transformatory strategy. The first section highlights literature and practices of rudimentary and anticipatory strategies while the second section explores the findings of resilient and transformatory strategies.

6.6.1 Rudimentary and Anticipatory strategy

Previous literature has intermittently highlighted two emerging strategies: rudimentary, and anticipatory under different names and with different concepts. At preliminary level, a Rudimentary ERM strategy emerged. Mikes (2011) found in an empirical study on multiple banks that at the initial level, ERM has been given formal status. Its visibility is created through the appointment of Chief Risk Officer (CRO) (Beasley et al., 2005). Risks arithmetic comes from risk registers, but it has tended to lead to calculative risk cultures (Mikes, 2009). Lundqvist (2014) further discussed the categorisation of risks as one of the pillars of ERM where actually the implementation of ERM works. Kaplan and Mikes (2012) provided this categorisation of risk into internal, external and strategic risk.

Mikes further identified that CROs had initiated the discussion of expanded boundaries of risk, that is beyond modelling. This started people thinking out of the box with envisioning subjective risk and uncertainty. “CROs sought to anticipate emerging risks and unmeasureable uncertainties in order to guide discretionary strategic decisions, for which they were ready to take responsibility" (Mikes, 2011, p 242). This, of course, expands their personal empire. For this expansion, they most often think about emerging risks under various scenarios. Pezzulo, Butz and Castelfranchi (2008) explained the term ‘anticipatory’ as systems used for their predictive capabilities to optimize risk behaviour and learning from the best of

available knowledge. This lead initial discussion of anticipatory strategies at stage 2 in empirical results. FurtherLam (2014), widely known as first CRO, argued in his recent book *Enterprise Risk Management: From Incentive to Controls* (Lam, 2014) that early stage development of ERM involves definition and planning of ERM, the development continues until the companies achieve standardisation of practices. Mikes(2009)research on calculative risk culture has not been further developed to achieve good risk governance.

Frigo and Anderson (2009) highlighted that identification of strategic risk starts with the risks that have the most impact on an organisation's ability to execute its strategy, achieve its business objectives, and build and protect value. Following Top 5 or Top 10 Risk Assessment of strategic risk was found to be one of the most used strategies among all interviews. Almost all the companies in India follow the corporate governance rules of a local regulator (IRDA, 2009) and have a risk management committee and risk registers in India though, in the UK almost all the companies interviewed were following 'Three lines of Defence' model at the initial stage.

Frigo and Anderson (2009) explained a seven step model following ERM strategy at an initial level. The first two steps focused on developing and translating strategy into maps, third and fourth steps discussed aligning ERM strategy with organisational objective and plan the operations and last three steps dealt with establishing controls and learning from feedback by testing existing risks and adopting emerging risks followed by communication and execution. These seven steps were evaluated during interviews for forming 'Rudimentary risk strategies'. A few of the companies in the Indian and the UK markets have shown that they are following 'Rudimentarty Risk Strategy' but their understanding of ERM varies. Interview data is first analysed based on four themes – understanding of ERM, adoption of ERM practices, issues in implementation, ERM strategy. There is high level of inconsistency across India and the UK and also within in the markets. Different interpretation of ERM in situation where there is a lack of a standardized approach. Added to there is the fear of regulatory penalty if not implemented successfully. This leads to inconsistency in ERM practices. This is also found Mikes (2015) as " no one size fit for all".

Once the company had data for risks for few years and established fundamental process and controls to establish risk governance, risk models are used to anticipate the future losses (stage 2). This required establishing procedures in anticipation of future losses. The practical objective of risk based capital models are to provide early warning signals for financial trouble so that regulatory intervention can be facilitated in a timely manner to prevent insolvency or overall to reduce the insolvencies (Grace, Harrington, & Klein, 1998).

During interviews, it was found that Indian insurance companies were using fewer models to anticipate future losses, though, UK insurance companies were very active in using models. The reason for this is perhaps stringent Solvency II directives in the UK, though, Indian insurance companies enjoying more flexibility and planning to follow Solvency II and models. A CRO in the UK questioned the value derived from spending enormous money and time on these solvency models actually in practice. He suggested that what ultimately matters is how these model fitted into organisation context and asserted "we spent many million and pounds around Solvency II in developing our own economic models. Now, everybody in the industry uses some common technologies. The way you design that these are the correlations, that is important for the business and here is the data, we have to support". Insurance companies in the UK have spent a great amount of time, money and resources in following Solvency II and risk based capital models; there are many other possible efficient alternatives such as Finacial Analysis Tracking System (FAST) (Grace et al., 1998).

There are two large insurance companies in both the markets that have not yet adopted a formalised risk management policy. The possible reason may be at an initial stage, these companies may develop a high growth strategy to establish a visibility within the market, acquiring significant market share, and thus might promote a 'Rudimentary' risk management (stage one) framework. The other possible reason is a company's extreme risk averse nature. These companies need to establish initial risk management policies, procedures and systems of reporting of risks.

At second level, an 'anticipatory strategy' may be developed where predicted losses lead to some management action in anticipation of future losses (Pezzulo, Butz, & Castelfranchi, 2008). Without achieving the first stage, the second stage cannot be realised because to anticipate future losses, a good quality data is essential. UK insurance companies are comparatively more capable of using risk and capital models than Indian insurance companies. The reason is perhaps the companies are more experienced, and the insurance market is relatively mature in the UK. Insurance companies in India are relatively new (less than 10 years old) other than four public sectors and one reinsurance company. Almost all the companies participated in the interviews except two are using models and standard procedures to anticipate the future risk and uncertainties.

6.6.2 Resilient ERM Strategies

Lam (2014) highlighted advance stages of ERM is related to business integration and business optimisation. Kehnemnan (1979) and Fraser & Simkins (2009) highlighted the behavioural aspect of human nature during uncertainty. There is no set criteria or model given by the regulators or by the literature which companies can easily adopt to implement ERM. Rather regulators have started giving the flexibility to optimise the approach according to organisation appetite, capital and objectives. This raises the issues of appropriate approaches to risk such as 'resilient approaches'. Pezzulo et al. (2008) argued that companies operate in a dynamic business environment and may have developed resilient strategies to deal with volatility. Martin (2004) defined resilience as the capacity of a system to undergo disturbance and maintain its functions and controls. Resilient strategies are adopted to improve sustainability of the firm and provide systems with inherent resilience to take advantage of diversification, efficiency, adaptability and cohesion (Fiksel, 2003). In current market situations, ERM is used as a way to deal with uncertainty, complexity and ambiguity. Senior management makes the realisation to adopt ERM as a part of risk governance to deal with risk and uncertainty and to cope with variety of context such

as normal, volatile and crisis situations (Klinke & Renn, 2002; Renn & Walker, 2008; Renn, Klinke, & van Asselt, 2011).

The results of survey (Chapter 5) and interviews both reflect that there is a greater need to understand interrelatedness of risks present within organisation which is highlighted by definition of ERM (see COSO, 2004; Power, 2009; D' Arcy, 2001 for details) especially the difference between 'integrated risks' and 'interrelatedness of risks' or 'interconnectivity of risks'. Integrated risk is sometimes misunderstood as a sum of risks whereas interrelatedness or interconnectivity of risks highlights the underlying causes of the risks and exploring the root cause of the risks to reach the possible alternatives as a solution. It may present a better opportunity to reduce the number of risks present in the organisation.

In the absence of any standard approach, a strategy may be adopted to deal with risk and uncertainty present in the current business environment. This may lead to the adoption of resilient strategy (stage 3) with an aim to create enough elasticity within the system to bear disturbances under volatile and crisis situations without losing controls (Martin, 2004). Karwański (2009) suggested a possible good strategy may be a combination of backward-looking at historical losses and forward-looking at experts' scenarios. Fiksel (2003) highlighted characteristics of resilient system as: 1) diversity (multiple-product configurations and extension and encouragement to diverse business strategy); 2) efficiency (value based on cost of ownership and focus on efficiency); 3) Adaptability (flexibility for change, organisational learning) and 4) Cohesion (Distinctive corporate culture, strong partnership and strong national identity). Rarely has there been any empirical research in the literature showing the evidence of the development of resilient ERM strategies (stage 3). Hence, there is a great potential to employ a resilient ERM strategy to deal with small scale changes.

Having built the experience, knowledge and capabilities of risks, the third possible strategy could be 'Resilient strategy' (stage 3). There were only two companies in each country who have shown the greatest progress in following a resilient strategies. A senior official of an insurance company in the UK stated; "ERM as a concept is quite straight forward, but each company defines and distills it how it relates to

them". The Figure 6.3 highlights how companies make a choice in accepting/rejecting the risk which is based on their understanding of risk.

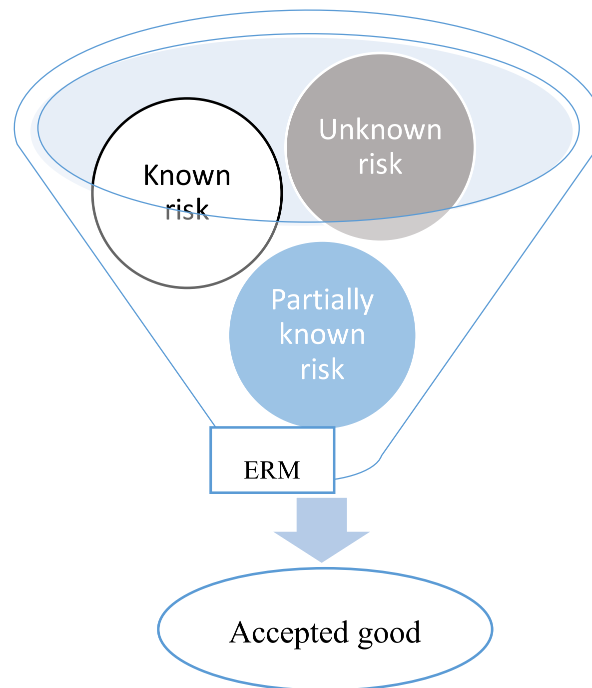


Figure 6.3 segregation of Good and bad risk

Group Risk Director of the same company in the UK explained what a good risk and bad risk for an insurance company means "A bad risk exposure is the one you didn't know you had. So, you will take the risk inevitably some of them may go wrong. But if you knew, you took the risk, and you understood the range of outcomes then any outcome happens that should not be surprised." The outcomes of bad risks are not predictable, and companies are often unprepared to bear the outcomes. He suggested that one can survive to overcome the outcomes of bad risks only by luck or having enough capital. Contrary to this, Paté-Cornell (2012) argues that outcome of bad risk can be covered by good risk management. A risk can be good for one company but may not be true for other. It is also partly dependent upon what kind of information of risk is given, how it is seen and relates to the current business environment of the organisation which overall forms a broad understanding of risk based on certain set of assumptions.

6.6.3 Transformatory ERM Strategies

Resilient strategy deal with small scale change (as discussed in previous section 6.6.2), however, how companies will deal with large scale change, though, discussed but yet not explored (Senge, 2014). Systems in bureaucratic institutions are often age old and are not designed to adopt and implement ERM in a robust manner. Effective implementation of ERM requires a large scale change to align risk and reward, and to deal with long-standing issues of systems so that processes can be aligned (Kaplan & Norton, 2001; Lam, 2014). Strategic transformation ideally involves a significant change in 'tone from the top' (Schwartz, Dunfee, & Kline, 2005) to implement changed organisational ideologies (Rajagopalan, Nandini; Gretchen, 1996; Senge, 2014). Emerging transformatory strategies (stage 4) have been reported in two companies partially across Indian and UK market. Both companies are in the process of adoption or implementation of transformatory strategies and not much discussed the results of this in empirical research.

Senge (2014, p103) strongly recommend that for sustainability of a change effort, there is a need to have quality coaching, guidance, otherwise, it might be seen as "the blind leading blind". So, after understanding the risks, an ERM Transformatory strategy (stage 4) recognises the gaps between how ERM is planned and implemented promoting the right balance between risk and reward (see Senge, 2014 for details).

The elasticity of system has a limit to sustain change, and therefore, Resilient organisations can deal with small change but not able to deal with large-scale organisational change. ERM fundamentally requires a large scale change (Kaplan & Norton, 2001; Lam, 2014) to affect the behaviour of all people. For example: how employees can be motivated to adequately report risk (not over reporting in the UK industry or not under reporting in Indian industry).

Balogun and Johnson (2005) highlighted that there are intended and unintended consequence of change and accepted based on sense making behaviours of managers. Change may also be conceived differently in the variety of business environment that companies exist within such the UK and Indian insurance market. Regarding ERM,

managers intend to exploit opportunities to gain competitive advantage having experience, knowledge and capabilities to manage risk (upside of risk) along with balancing the downside risk.

The company M in Indian insurance market and company Q in the UK insurance market satisfy the above the characteristics (see Table 4.2 in Chapter 4 for details). Therefore, further interviews were carried out in these two companies to understand the existing ERM strategies. It is found that company M and Q had made the greatest progress in the implementation of ERM in the companies interviewed. Both of the companies have linked their ERM strategies with forward-looking expert scenarios and backwards examination of historical losses.

Surveys and results of interviews in the earlier section of this Chapter often support companies do not understand ERM sufficiently, especially its goals and benefits to all stakeholders. This leads to numerous issues in the implementation of ERM that undermines their ability to take forward their risk management strategy. This is perhaps the reason why companies seek support from either further regulations, consultants or professional bodies.

Most of the companies interviewed have highlighted that they have taken support from independent, prominent ERM consulting firms, credit rating agencies, professional bodies, institutions such as GARP and IRM. A few have benefited from joint venture partner expertise, software companies, joined conferences, seminars and developed partnerships with educational institutions to explore good ERM practices to resolve their existing issues.

The CRO of renowned and the largest public sector Reinsurance Company in India indicated "the actual implementation was creating tremendous issues – 1. Because of hierarchy 'there is a breach of hierarchy because CMD wants CRO to directly report him', his ideas were good but got initial problems, and I could feel that 'I am a tiger without teeth'". The issue is the CRO rank far below (at least 3 ranks below) from Chairman and the seniors do not like to receive instructions from their juniors. This certainly requires a change in structure, authorities and responsibilities of the CRO; otherwise ERM will only exist only paper. This company has taken following initiatives to achieve the transformatory strategy.

Indian Reinsurance Company

The company has improved the rank of CRO to Deputy General Manager (DGM) level (only two ranks lower than Chairman) for effective implementation of ERM. ERM is implemented in the company by Chairman's initiative of proactive risk management before corporate guidelines issued by IRDA. At first step, the company has established "our mission, vision statements". The reason is to draw a boundary work of ERM (Mikes, 2011). This is what the company has learnt from its experience of implementing ERM. Further, the company established inter-related of risks and got benefited during the crisis. Being in reinsurance business and old public sector company, company has enormous surplus funds. This company has understood strong capacity and experience for reinsuring aviation business using ERM and have potential to develop competitive advantage in this domain. During financial crisis 2007-08, when other companies were busy in furnishing additional regulatory compliance, this company exploited opportunities by capturing almost all of the targeted aviation reinsurance business in the world market.

To improve further, this company has employed IBM to installing a comprehensive ERM software "OPEN PAGE" for 'control and checks' and consultants from big four consulting. The software is still on trial, so its effectiveness cannot be evaluated, however, the role of consultants has been found only partially useful. The company CRO stated "Consultant team helped us to put in the paper the blueprint for the ERM department. A lot of other things happened other than establishing risk register, such as business continuity plans. Apart from having an angle of business risk, they also give an angle to physical risk". The consultants do not have business knowledge of reinsurance where the company has to spend time. Hiring consultants were not effective as the company pay them heavy consulting fees, share knowledge, and then those consultants are offered good salary outside and left the project in the middle, which makes the company helpless. To deal with this, company worked on aligning Human Resource (HR) policies with ERM. Now when every employee is recruited, roles, responsibilities and rewards for managing risks are discussed.

British Insurance Company

Another Company in the UK, has set up ERM within comprehensive risk governance framework. Group Risk Director of the company aligned "committees, policies, standards, escalations processes, the delegation of authorities including risk appetites, internal models for economic capital, the identification of management and reporting associated with the main risk types, credit liquidity, operational and insurance risk".

The company has taken several initiatives: 1) They "included the process for tolerate the risk limits for risk types and top down risk assessment process, CRO reporting template review required in the business"; 2) Executed "a large scale educational program"; 3) Established the program to develop "better business decision process": "it's a 3-day residential course for group of 30-40 in the business school. Senior management and executives join this and this course is run for 15- 20 times a year. Top 450 organisation member took this course" and 4) Different 'tone from the top' is set with the changed expectation of the board: "Risk management framework is put as the first line contact. In three lines of defence, first line of defence understood as taking full responsibility for risk management and then it goes to the second and the third line of defence and challenge".

The Company has linked risk and reward while implementing Change Management program and ERM. To implement Change Management, company formed feedback group and risk learning team, improved in product design process, Asset liability management, Complaint handling and initiated Project commercial transformation. A cause and effect relationship has been observed under ERM program. Five step process was followed to execute this:

STEP 1: Identify risk themes from flagged points or management concern areas

STEP 2: Check details of themes, how they performed who is involved, and also rationalising. The aim is to identify

a) Why did that happened?
b) Why did that failing?
c) Why did that gap existed?

STEP 3: Relating themes to identify the causes?

a) Is it Risk Culture?

b) Is it capability? (Right skill in place and training)
c) Is it the capacity? (Is it we trying too much)

STEP 4: Regular quality assurance reviews are made to evaluate the performance of initiatives under change management and ERM program

STEP 5: Issues were identified in risk quality assurance reviews. This lead to amendment of risk management objectives and the larger proportion of remuneration

The company has derived following key values from implementing ERM transformatory strategies:

- Each business unit is allocated a bonus point based on their financial performance (That is adjusted according to performance and risk objectives of the business units that assessment is majorly done by the risk team.)
- Business Self-Assessment survey CEO/ CRO/ CFO/ Chief audit officer/ Chair and board of risk committee all set the criteria to various level
- Then the company has implemented desk based review and on site interviews.
- Company used another type of data like reward points, embedded risk index that gives some attitude towards risk indeed in the business unit.
    a) 1st level the common risk objective affect
    b) 2nd level is the risk behaviour for example if it is bad, it is calculated as ‘zero’ risk bonus.
    c) Finally, each individual has common risk objective which falls around 1-6

Simply put, the company believes in providing training and align incentives based on performance and ability to learn. “From the top, we emphasise the importance of risk management and that is very generic things” emphasised the Group Risk Director. The company faced issues in maintaining consistency and in changing policies and processes due to its legacy business existing from long-time. Another issue is employees read the instructions but they do not remember or refer later. Therefore, developing “local practices and knowledge in the market” has been a key issue in risk transformation.

6.6.3 Discussion

Four of the companies, two in each country have adopted resilient and transformation strategies. Two of them (one in India and one in the UK) have shown adoption of the rudimentary strategy, anticipatory strategy, and resilient strategy taking small initiatives to bring change. On the other hand, other two companies have adopted risk transformation strategy. The objective of risk transformation strategy is to develop sound risk culture and also to promote adequate risk and rewards but the way the change is being implemented very different from each other. The reason is perhaps they are dealing with different issues in the implementation of ERM.

The four companies (two in the Indian market and two in the UK market) have shown that they have exploited opportunities during the crisis situations. Also, the policies, procedures, systems are aligned with people motivation and awareness level, the companies developed enough capabilities, knowledge and experience to utilise their strength to exploit opportunities not only in normal and volatile situations but also in a crisis situation.

Pragmatically, first two strategies (Rudimentary and Anticipatory) supported in managing the downside of risk (Lam, 2014, p 271), a resilient strategy developed enough elasticity within the system to bear small shocks and integrate risks. The Transformation strategy not only deals with change in process, system and way of governance but also deal with change in mind-sets or mental models of people (Hofstede, 1983; Senge, 2014).

6.7 Chapter Summary

The Chapter presents a variety of views on how ERM is differently understood among corporates so do its implementation. It is found that companies ERM programs have different objectives based on their different understanding, communication, perceived benefits and strategy and overall results in adoption and implementation of unique practices. The Chapter elaborates the understanding of risk and related terms of ERM such as risk appetite, the size of the firm, risk culture and use of models.

In an ideal world, it is expected the more the mature ERM practices, the size of the risk team should be less. However, the results are opposite in practice. Perhaps, the reason is compliance and following numerous guidelines by the companies. Additionally, the scope of ERM has not defined. The repercussion can be seen in dissatisfaction to corporates for not knowing benchmarks and achievement of desired objectives through ERM program. Therefore, essentially, there is a need to define scope of ERM, such as anything impacting the mission, and vision statement of the company comes under ERM.

Understanding of risk appetitexsxs not only varies among companies based on the type of profession but also within companies and importance is given to defining maximum amount of risk, companies are willing to accept. It is well understood within both markets that size of the company is an irrelevant consideration for ERM practices but kind of risks companies have been exposed represent significant importance. It is observed that use of risk and capital models are higher in the UK insurance companies than Indian insurance companies due to Solvency II regulations, though, companies still question the reliability, validity and use of such models. Development of risk culture has a great impact on companies overall ERM implementation and in some cases imbibing the adequate risk awareness culture is ultimate aim both in the UK and Indian insurance companies through development of small and consistent (achievable) change.

Unexpectedly, Indian insurance companies with the same joint venture partner from the same region and similar experience have taken alternative direction in ERM implementation. Some of them used top down approach; a few have used bottom up

approach and others a combination of both. Adoption of ERM practices varies significantly among Indian and UK corporates – some adopted ERM after a loss, a few due to have been influenced by joint venture partner and/or credit rating agencies and others have adopted due to a regulatory mandate. The Chapter provides a comparative analysis of similar and dissimilar issues faced in implementation of ERM in both the markets. Overall, risk governance is less structured and provides more flexibility to Indian insurance companies than UK insurance companies. There is an emphasis on the understanding of 'interrelatedness of risks' and learning from own and others mistakes so that the mistakes are not replicated in other markets.

The last part of Chapter contributed to four emerging strategies 'Rudimentary strategy', 'Anticipatory strategy', 'Resilient strategy' and 'Transformatory strategy' with the focus on development of ERM framework, structure and policies (stage 1), forecasting future losses by using models (stage 2), developing resilient within the system without losing controls (stage 3) and to transform addressing long standing issues (stage 4).

Chapter 7 Comparative Case Study

7.1 Introduction

Increasing complexity, uncertainty and ambiguity in current dynamic markets (Frigo & Anderson, 2011; Klinke & Renn, 2002) have raised concerns among corporates. Previous chapters have shown that ERM has been adopted as an acceptable practice to deal with such situations. ERM provides a framework for corporates to balance downside risks and exploit the opportunities (upside risks) in a holistic manner in the organisation to achieve an organisational objective. Interaction among different risks is one of the major focus of impetus of ERM (COSO, 2004; D' Arcy, 2001).

In the absence of standard approach (Frigo & Anderson, 2014; Purdy, 2010), companies need to think 'out of the box' either to customise available existing framework or devise new approaches according to their own organisational objectives. The concept of ERM is evolving so is its understanding (Bromiley, McShane, Nair, & Rustambekov, 2014; Frigo & Anderson, 2014). Rarely research has been done to explore good risk management practices (Cormican, 2014; Klinke & Renn, 2002) or to obtain the competitive advantage by employing appropriate ERM strategies (Frigo & Anderson, 2009). The previous Chapter highlighted that there are some similarities and dissimilarities in the implementation of ERM between nascent and mature countries insurance companies and presented four emerging strategies from theory and practice. Overall, the data collection from Surveys (Chapter 5) and Interviews (Chapter 6) showed the breadth of ERM the implementation and the focus of this Chapter is on an in-depth analysis of the implementation of ERM within two insurance companies.

There have been previous studies in developed insurance markets such as Germany, UK, Canada and USA (Altuntas, Berry-Stölzle, & Hoyt, 2011; Deighton & Dix, 2009; Dowd et al., 2007; Tonello, 2007) but there is rarely any study that compares ERM practices of developing and developed markets. Having presented a picture of

state of ERM implementation in the previous Chapters, the goal of this Chapter is to explore a comparative study of two insurance companies: one from the UK and one from India. These companies were chosen because they were the two organisations in both countries that have made the greatest progress in ERM implementation. The case study would follow Yin (2008) method for comparative study and collection of data have been carried out from multiple sources. The two case studies involved over 20 interviews of Chief Executive Officer (CEO), Chief Risk Officer (CRO) and senior management of the insurance companies. The data published on company websites and data shared by company officials were used as secondary data. This was followed by ERM and Risk Culture survey in both the companies.

This Chapter will be structured in the following manner: Part one of the Chapter provides the details of aim and objective of case studies and summary of Four Component Integration model. Part two of the Chapter enumerates the details of case study A and Part three provides the insights of Case Study B. Both of the case studies follow exactly the same structure and discuss four themes and ERM strategies. The last part of the case study set forth the comparative analysis and Chapter summary.

7.2 Aims of the Case Studies

The comparative case study provides an in-depth analysis of how two companies have adopted different approaches and reached the same stage of implementation of ERM. The case studies reflect the different risk cultures within India and UK and provide comparative insights of the risk governance and strategy.

Company A highlights the problems of inadequate data, insufficient capital and reporting of risk. This company has developed its own definition of ERM and adopted an ERM strategy which is emerging from practice. However, the case of company B presents how a company with legacy business utilise its strength to gain opportunities, though, it suffers from the conflicting behaviours of different stakeholders and complexity of the business.

This comparative case study aims to address how ERM definition and objectives are understood within company A and B. The different insurance socio-economic environment affects the risk culture present in India and UK market and lead to the

adoption of different behaviour, attitude, appetite and way of handling risk by individuals and corporates. The case study presents how two leading companies (A& B) are nascent and mature and operating in developing and developed market respectively, have adopted different approaches in the implementation of ERM. In the later part of the case studies, it has been observed how the two cases confirm with the four emerging ERM strategies.

7.3 Case Study I

When other companies were floundering, and struggling to increase growth in the difficult time of financial crisis, Company A continuously remained market leader (by revenue) in Indian insurance market. The interviews with senior management of the company revealed its success story, how the company overcame hurdles during these difficult times and whilst facing stiff market competition grew steadily.

Company A is one of the oldest private insurance companies in India with an asset base of approximately 100 billion USD, IRDA (2015). The company is known for its credibility and highest customer satisfaction within the industry and has a joint venture partner with a prominent insurance company from a developed country. The customer base of the company is also among the highest within the industry as it has issued more than 11,000 policies and more than 10,000 employees working in the branches, divisions and head offices

This case study provides an in-depth analysis of how company A developed its own ERM definition, linked it to organisation objectives by the development of 3 P (Product, Protection, Profits) approach. SWOT (Strength, Weakness, Opportunity and Threat) analysis presents a true picture of current state of ERM practices adopted in the company and the industry. The last and most significant contribution of the case study highlights the different stages of development of ERM strategy. For the purpose, ten senior management of the company have been interviewed which was followed by an ERM and Risk culture survey of staff. Some of the officials of the company have also shared Power Point Presentations (PPT), reports and data sheets during discussion and annual reports were studied to crosscheck the data.

The first part of the case discusses the understanding of ERM that is followed by how ERM has been adopted and implemented in the company (part two). The third part highlighted the issues faced in the implementation of ERM and the initiatives taken by the company to overcome them. The fourth and last part of the case study provided insights into the risk governance and the ERM strategy of the company.

7.3.1 Understanding of ERM

Results of interviews indicate that company A explored the definition of ERM from practical and applied perspective. The company's approach is more inclined towards understanding benefits of ERM. Head of Finance of the company explained the benefits of ERM "*ERM is all about interrelatedness. Risk has a domino effect and highlights different types of existing risks such as high risk, low risk, manageable, non-manageable, some internally manageable*". However, CFO of the company highlighted ERM as organisational culture and relate to the technology and stated: "*ERM is considered as a culture for the organisation and considers all risks which an organisation exposed to under one single umbrella 'Risk dashboard'*". Shenkir and Walker (2011) defined ERM dashboard as a technology that integrates key quantitative risk metrics and qualitative risk assessments.

Rather than using the existing complex definition of COSO (2004), Solvency II (Eling, Schmeiser, & Schmit, 2007), ISO 31000:2009 (Purdy, 2010) and CAS (Report, 2003), the company devised a very simple and easy to understand the definition of ERM. "*ERM provides you to look at the risk microscopically and macroscopically and provides flexibility to manage risk based on your own abilities*" stated by Head of the Legal department of the company. Though the standard definition of ERM is not commonly understood across all the function; it is interesting to find that every one of interviewee has highlighted some new aspects. Table 7.1 depicts the views of senior management discussed during interviews regarding ERM definition having three major aspects – visibility, clarity and ability.

Important elements of definition of risk		
VISIBILITY	CLARITY	ABILITY
- Encompass top 10 risks - Risk showed and discussed with the help of Dashboard - Risk classified into 5 categories - Involves top down approach	- Building up risk culture - Following organisation ethos and philosophy - Acceptance of risk in decision making - Involves Bottom up approach	- Organisation ability is the understanding of risk profile, experience and learning with a focus on adhering to risk appetite - Accept risk profile based on company's ability not capability

Source: Interview data in company A

Table 7.1: Important elements of definition of Risk

Top 10 risks represent visible high impact and can have a significant impact on solvency and the capital of the company. Identifying top 10 risks is the minimum requirement to satisfy regulator and justify that adequate care of company's risk management is taken care of to satisfy stakeholders. The company has linked its ability to manage risk with its organisation objective and would like to accept risks based on its abilities. The company is though, working on 'clarity' of risk, yet, the progress is very slow. For example, the CRO of the company highlighted that risk culture of the company in previous two years was 'very low' and now it is assessed as 'low'. Company A has given preference to 'value investing' and follow the same investment policy of its joint venture partner, one of the largest international insurance company with an emphasise upon constantly evaluating the ability to take risks. The company follows Solvency I model of international regulation. Company A is risk seeker, and it believes in investing in innovative new lines of business that can provide a sustainable return in the long run.

The Company's understanding of local market is visible in terms of numerous customised products and using different risk appetites for its range of customers. Therefore, company is well the aware of the kind of exposure it may have from different sources. In another way, the company has a well-diversified portfolio. Head of Finance of the company has indicated existence of multiple types of customer with varying expectations for example: There are three types of customers in Indian

insurance market: 1) Individual customer below poverty line; 2) Individual customer above poverty line who lack risk awareness yet demands high services and 3) Corporate customers who are more aware of extreme risk exposures and wish to buy insurance.

To understand tone from the top, chairman message provided in the annual report is compared with organisational objective discussed during interviews. It is found that tone from the top reflected in annual reports is consistent with interviews. The clear tone from the top is demonstrated to achieve the organisational objective. The 2012-13 books of accounts show the company's objective is to '*identify profitable business opportunities and adopt a risk-focused business model to drive sustainable growth to be market leader*". CRO of the company elaborated company objective further that the company has a value investing philosophy. It is a multi-product market leading company. The company is risk solution provider and obtained its market leadership through profitable growth as asserted by CRO "*We continuously invest in the products which we believe will sustain in the long run*.

The company has linked its ERM Objective with organisational objective by 3 Ps approach. Head of Finance of the company stated the 3 Ps as Product, Protection, and Profits. Profits are dependent upon how well the risk is understood in regard to the company's product/services. Many senior officials of the company stated that insurance business environment in India is based on three pillars: investments, underwriting and reinsurance. CRO of the company, though, mentioned underwriting is the product, reinsurance is a protection and investment is a source of profits for the company.

Unlike, most of the product based company where the product is judged just after the purchase, insurance companies have the intangible products and their claim services are utilised after a long time after the purchase of insurance policy. Also, most of the product based companies generate revenues based on the profit margins of the products, surprisingly, for insurance companies major source of income is not the insurance policy rather the investment made by utilising the policyholder money is the major contributor of the income. In this context, it acts as an asset management company. Protection to the insurance company comes from reinsurance. In extreme

cases where pay-outs on a policy exceed a specified amount then the insurance company will call on it reinsurer to cover the amount outstanding. Reinsurance is more commonly understood as insurance of insurance companies.

'Profitable business opportunities' and 'long term stability' are the common and consistent expression used with emphasis within the company. For example: Head of Investments defined objectives: *"Meeting client's obligation is the first objective which is supported by investments. Capital is required for continuity of the business, so the company cannot speculate on this. Rest of things are in the markets. There are no returns without any risk*."

7.3.2 ERM adoption and implementation

The need of adoption of ERM framework arises in the company when risk has been given importance to manage complexity in a volatile and uncertain world (Renn et al., 2011). After 2008 crisis when company A had some significant exposures, the company officials realised that ERM should not be treated merely as compliance. The CRO of the company stated, "*For us, ERM is the learning and regulation comes last*". The whole purpose behind the implementation of ERM program is that company does not want any surprises or capital shocks that can endanger its solvency. Most importantly, being a risk seeking and market leading company, it was a tough challenge for the management of the company. A generic example of this could be controlling a car at the speed of 150 miles per hour is more difficult than controlling it at 50 miles per hour.

Additionally, Head of Underwriting and Reinsurance highlighted the major aim of implementing ERM and asserted "companies *which are following a robust ERM model, capital should not be a problem till they can demonstrate that they can manage the capital well".* One of the reasons for implementing ERM in the company is to establish good risk governance while satisfying investors to maintain trust and confidence in the companies' abilities in managing capital.

A Strength Weakness Opportunity and Threat (SWOT)[2] analysis has been considered to underpin the complexity of ERM framework existing in company A. Table 7.2 depicts how company A has demonstrated its strength to obtain profitable business opportunities. The company has adopted 'root cause analysis' approach and integrating issues among various departments and succeeded in converting weakness of its systems related to 'flaws in rules of accounting' and 'legacy problems' to its strength. Over a period of time, the company A has shown a significant decrease in law suits and even able to recover money from reinsurance in many deals. The Company would like to improve the risk culture, however since it is facing a number of challenge and has shown very slow growth. The Company is proactive in nature rather than simply being reactive.

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[2] The SWOT Analysis has been first prepared for each interview in the company. A summation of SWOT analysis of all interviews conducted in company A is highlighted in Table 7.2 based on most important and common factors.

Strength	Weakness
Strong Group Local Presence: Strong group presence and experienced senior management, customised approach, understanding of local markets, regulations and customers	**Slow development of Risk Culture:** Development of risk culture is at 'low' from 'very low' status two years back due to not realising the benefits of ERM
Linked ERM and objectives: ERM is clearly fit into company's objectives as defined 3 P's of Risk – Product, protection and profits	**Resistance to change**: People hesitate in reporting risk and do not want to take responsibility, so struggling with resistance to change
Linked ERM in strategic decisions: Involvement of ERM in strategic decision making helped in understanding organisational capabilities and selecting risk profile accordingly	**Lack of knowledge of new risk awareness initiatives:** Implementation of risk initiative without understanding the ground level culture such as development of compulsory risk modules
Root cause Analysis: Understanding of its own processes and flaws in the system helped company in reducing frauds, law suits and gain in reinsurance deals	**Emphasis on more coverage of risk**: High level importance is given to breadth of risk (Example: more than 200 risk registers are used) than the depth of understanding
Diverse approach to risk: Different risk attitude and risk appetite for different stakeholders	**No technical risk training:** Risk Management function is still more to act than the guide. For example: Lack of training to develop skills of top management, risk managers and CRO

Threat	Opportunity
High risk: Credit risk, pricing risk, investment and reputation risk are considered major risk. Process risk is considered the biggest risk	**Changing risk perception:** Incorporating risk management as an organisational mind-set
Lack of clarity: Lack of clarity of definitions throughout industry eg: definitions of grievances, customer complaints, frauds	**Prompt risk reporting:** Appropriate software providing automated platform can be helpful in immediate reporting of loss
Inappropriate measurement: Current measurement system is not able to reflect real problems.	**Capital efficiency:** Exploiting opportunities to free capital by identifying procedural flaws and regulatory risk eg: liability insurance
Unavailability of software: Lack of available appropriate and customised ERM software in the industry	**Benchmarking possibilities:** Capturing appropriate data and regulatory guidance can be helpful for benchmarking
Unclear laws and mispricing: Unclear regulations and uncompetitive price war,	**Less Litigant Indian insurance market**: Indian insurance market is less litigant and can provide added advantage in terms of flexibility comparatively from US
Illiteracy: Lack of insurance education and financial illiteracy	

Table 7.2: SWOT analysis

7.3.3 Issues in implementation of ERM

Head of Investments asserted the true picture of the competitive environment in Indian insurance sector and stated "*due to the privatisation, the competition is such that private insurance companies are slowly building up their market share. The Public Sector Units (PSUs') are trying to defend, and there Is a price driven war going on*". Head of Investment highlighted the current state of PSU by asserting "*If you see PSU on their underwriting, there are risk seeking now and on the investment side, there are sitting on family jewellery. Each of the companies is having 7000 to 16000 crores of unrealised gains on equities"*. He further highlighted how these gains were utilised since the year 1972. Head of underwriting and reinsurance has explained "If *you grow at that rate you need - capital and very significant level of reinsurance. Both of them are not easily available whether you do property line or high-risk line like liability, aviation, marine, offshore, energy"*.

Embedding an ethical and proactive risk culture at the bottom of the pyramid has been reflected in the tone from the top though, company issues in establishing these two major aims. CEO of the company highlighted problems of embedding of risk in bottom of pyramid and especially when there is a need to understand the concept of 'what profitable opportunities mean' to sales people and underwriting staff. Whilst the Indian insurance regulations provide the minimum requirement, and he asserted "*Today, we have done far beyond what the regulations are"*. Company A senior officials highlighted how applying risk based capital the company is forced to grow in today's cut throat competitive environment.

CRO, AVP and senior VP Risk supported the existence of four risks which can make or break the sustainability of the company in the long run such as credit risk, pricing risk, investment related risks and reputation risk. Though, CEO and MD of the company highlighted some issues emerged from unclear regulations: unclear definition of customer complaints, unrealistic combined ratio of the industry and

volatility of reserving practice of the company (explained below). He (CEO) also provided examples of unclear regulations "*If you have paid a claim of 500 crores but the reinsurer has paid the claim of 495 crores, your liability is 5 crores. India is a funny country where the liability is still not extinguished, as reinsurer paid 500 crores, you pay 5 crores*". Moreover, the regulator required company to reserve some capital for that claim for three years despite the fact reinsurance has paid the claim.

CRO of the company highlighted "Key risk is the Process risk". Embedding ERM and integrating risk management into ERM are among top issues stated by VP and AVP risk. They further asserted, "Our company systems are not built to cater the requirement of ERM. To improve the systems, manual intervention and training are required. To do so, we face the major challenge in buy in time to reap and realise its benefits". Another issue highlighted by few of the senior officials is the "challenge in ERM implementation throughout the world is – they say so far everything goes fine, we don't see anything happening wrong. This is the major challenge".

7.3.4 Ways of Risk Governance

Company A is using a risk governance structure different from other established companies. More importantly, it is distinct from 'Three defence model' that is very popular throughout the world. This company has developed its own definition of ERM and has been able to adopt ERM strategy based on emergent practices. The broad structure of the ERM framework is as follows (see Figure 7.1):

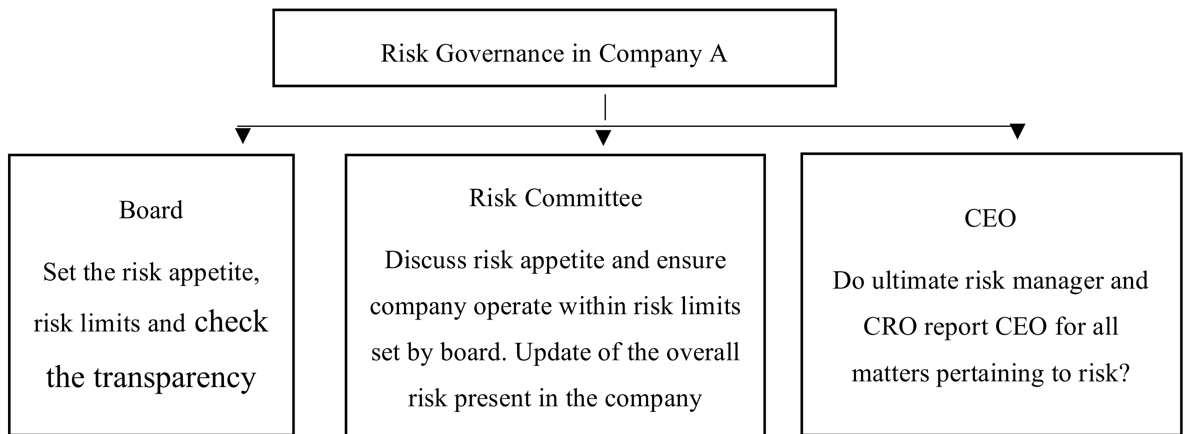

Figure 7.1: Risk Governance structure of company A

The board sets the risk appetite which defines the level of risk the company is willing to accept and also discusses the escalation of risk issues and reviews the framework. The risk committee discusses the risk appetite and checks that company operate within the risk limits set down by the board. In company A, CEO works as the risk manager of the company who is equally responsible running the company in risk effective manner and CRO reports to him for all matter pertaining to risk management. There is 12 board of directors in the company which consists of 3 Executive directors, 4 directors from its Indian venture, 2 directors from foreign joint venture and 3 independent directors. The company has identified enterprise wide risks which are categorised into five broad categories: Credit, Market, Underwriting, Operational and Strategic. Most of the updates and communication about these risks are reported every quarter to the CRO.

7.3.5 ERM strategy

Development of ERM strategy happened at three levels within the company: rudimentary strategy, anticipatory strategy and resilient strategies.

7.3.5.1 Rudimentary strategy

Company A has adopted ERM practices at a very early stage in the year 2003-05. The company A believes that 2008 crisis happened only because of the illusion of assurance given by numbers. Head Reinsurance of the company highlighted that initially company witnessed high growth and asserted "*nobody really bothered about anything and they were focused on piling revenues, the growth rate was very robust. At some stage, there were some defaults there were due to poor reinsurance deals*".

The CEO of the company has bifurcated ERM strategy of the company linking it to various stages of organisational objectives, and ERM is considered as a process of continuous learning and building capabilities within the organisation. The following are the stated levels of Rudimentary risk management strategy: "*At 1st Level, Organisation needs flexibility for growth, at 2nd Level – Build certain processes and controls to check the reliability of outcomes and at 3rd level – Make risk management an organisation wide process*". Every financial decision has some financial impact, and there has to be some gain from learning about the consequences of results in subsequent outcomes.

CEO, CRO and Head of Underwriting and Reinsurance of Company A have indicated that company has passed 'stage 1' some time ago as it is a market leader and was established 13 years ago. CRO of the company stated that this has led to the adoption of a robust risk management framework from a rudimentary risk management approach. A major challenge in front of the company's management was its risk attitude. Initially, ERM was considered as risk reduction techniques in Company A. The company established ERM framework, formulated ERM policy, categorised major risks and established controls and procedures. VP Risk and CRO

of the company defined the ERM risk five broad categories as: "*Credit risk, market risk, underwriting risk, operational risk and strategic risk*". He explained the structure of ERM framework consists of risk identification, assessment and mitigation process, however, risk governance includes risk management, oversight structure, risk monitoring and reporting mechanism.

7.3.5.2 Anticipatory strategies

The company is a leading company in developing the market. Company's initial strategy was high growth that necessarily requires to put 'limit' to growth and setting the risk appetite of the company. Risk Appetite statement has a significant importance for the company. CRO indicated that Company had to set its risk appetite and "*the whole aspect is to put a limit on risk taking*".

In the case of adoption of the strategy, the company believes in slow, pervasive approach. It used its experience to hold the capital from the parent company and utilise it for right opportunities based on its investment philosophies. The company does not follow a momentum strategy, and Head of Investments highlighted "*We generally buy and hold and sell only when we realize it is a mistake or there is a better opportunity than holding the stock. We remain in our comfort zone and keep a cushion for solvency. The company believes in consistent performance than beating the market in the short term.*"

The company has taken very positives steps in analysing the current situation by using root-cause analysis, identifying the areas that are the reasons for major losses for the company. The Legal Head of company stated that *"investment climate was good, leakage came from claims, underwriting and reinsurance. Fraud is also another source of the problem"*. Concentration risk is also identified with its banking company. It has been identified that approximately 50% of company's insurance business is sold through its single, parent banking partner who presents a high concentration risk for the company.

7.3.5.3 Resilient strategies

ERM is supposed to achieve good risk governance by taking the holistic view of risk within the organisation both of losses (downside) and gains (upside). Hence the company's senior executives need to employ decision making to deal with losses and profitable opportunities in the dynamic business environment.

The company followed five steps to develop Resilient ERM within the system:

STEP 1: Maintain diversity and reducing concentration risk

The reason for developing diversity is to take the advantage of portfolio risk analysis. First and foremost, the effort is to identify and reduce risk concentration and diversify the existing portfolio of risks among many risks so that company does not get affected by occurrence or happening of single risk. The company has identified reliance on a single agency for distribution of marketing products and risk concentration of single risk in business risk portfolio. To tackle this, a company has initiated different channels of marketing of business in different areas that lead an advantage of killing two birds with one stone. The company developed its business in a new business segment 'crop insurance' where none of its competitors has entered, and the government has supported this initiative. Also, a new business has been encouraged in the area of large group health government schemes. In both these two new niches, traditional marketing channel is not required and simultaneously, it created competitive advantage. The Company then identifies redundant risk (risks no longer in use or irrelevant in current business context) but mentioned in risk registers from a long time. This will certainly support in reducing a number of risks.

CRO of the company put forward the advantage of experienced senior management and their involvement with the company for a long time. Having understood the capabilities through building up knowledge and experience at individual, team and organisational level helped the organisation to reduce concentration risk and cost efficiency. This year the company is able to select the risk which they wish to accept based on their capability, risk appetite and objective of the organisation. CRO of the company provided its future move to choose risk to fulfil objectives of the company

"*Initially, we would like to target the segments which are under the tariff, our focus on more corporates at initial periods, our composition have been (80:20) in terms of corporate and retail"*. He further highlighted *"As the market evolved, obviously, we want to make sure our presence as 'multiproduct company'. Our objective is not to look at one; we want to keep our presence all across the lines so, focus incrementally also keep tapping 'Niche lines'"*. These niche lines such as weather insurance, aviation, credit and liability require innovation. The company started building its experience in these lines from last 5 years to get experience, and now it is capable of diversifying the portfolio. Rather than reducing the risks which present the highest concentration, the company rather adopted a slow and persistent approach of investing in niche products. The company still feel that they are in early stages of implementation of ERM and its continuous learning process.

STEP 2: Establish interconnectivity or inter-relatedness of risks

The risk is reported and collected in risk repositories such as risk register or Control Self-Assessment tools, however, the interaction of risks is not effectively established. Senior management of the company understood the aim of ERM is to present integrated risks rather than aggregated risks that could happen in many ways. Having realised that concentration risk is an outcome of the interaction of two or more similar risk, Company identified a few different and opposite risk so that some risk can be eliminated from the overall portfolio.

The company have taken a new initiative by integrating few departments where possibilities of interaction of risks exist. At the senior level, a single person headed these inter-connected departments. This led the senior executive to analyse the issues with each department and think a common solution that led 'killing many birds with single stone'. This company is known for the high motor insurance business portfolio in the industry. Motor business in India is suffering from high third party liability claims that are compulsory to insure and involves high fraudulent claims, legal cost and damage/liability cost. Moreover, claims are often taken high settlement time in the court (i.e. one year to 20 years) and insurance companies are liable to pay damage claims with interest. To show a broad picture of how much this issue is

relevant for the company, Head of Legal department stated: "*Today our underwriting decisions are influenced by our concentration risk, business decisions are influenced by (at worst) 75% with legal risk, 100% are with compliance risk.*"

Identifying the risk such as frauds and its root cause analysis and experience helped the company in employing 'Fraud Investigation cells' which drastically reduce company's legal cost. Not only this, it helped in changing risk attitude of the client and employees. Head Investments emphasise upon building capabilities "*Regulator provided guidelines and investment philosophy is also mentioned in investment policy so the only thing which is variable is 'change in our capabilities' impacts our investments.*"

The company further explored the reasons for 'how company's balance sheet is vulnerable to any exposure beyond certain point' from holistic point of view. This is thinking beyond the 'accumulation of risk' and reinsurance support. The Head Underwriter of the company provided an example: "If *we have 5000 crore risk which we say we can commit to 75% of that (Rs 3500 crore of that) of course we limit our risk to these limits. Actually, lots of companies are not limiting themselves and accepting risk on a gross basis. We look at solvency risk, claim risk and investment risk altogether while taking limits.*"

The majority of the senior official of the company involved in identifying system weakness eg: problems in accounting and legacy business. This helped company in provide more efficient use of capital. CEO, CRO and many of other interviewees highlighted that company have to learn from the understanding of own decisions exposure to different kinds of risk and its quantification to understand the current state of total exposure and portfolio, understanding of the local environment of the country and from past crisis and failures.

There are numerous problems identified during this stage as Head of Legal stated that understanding of risk starts with generation of curiosity of inquiring it, and "*The best way to understand it……number of business calls you take in the organisation. Today, it is hardly any*." Problems related to multiple risks are overlapping and interrelated, and it is indicated that its solutions are also interrelated. A few solutions can address most of the problems.

STEP 3: Unrecognised emerging risk in the system

The company identified unrecognised emerging risk in the system related to the industry. Lack of regulations has resulted in ambiguity in defining some terms such as customer complaints, insurance frauds and maintenance of adequacy of solvency margin. The company developed its own Fraud management framework (see Table 7.3) and provided clarity in the definition of customer complaints /grievances, however; some issues are still unresolved. Company is maintaining reserves less than the regulatory minimum due to its increased understanding. CEO realised that it is protecting the same risk by reserving the capital due to regulatory guidelines while it is protected through reinsurance. Therefore, a part of capital is further utilised.

Fraud Management Framework (FMF)		
Investigation Policy	Whistle Blower Policy	Code of Conduct
• What to investigate • Quantum of investigation • Triggers • Cost/benefit analysis • Regular revision of policy • Dashboard • Data correlation and publication	• Whistle Blower guideline • Education/dissemination • Disciplinary committee • Confidentially/Anonymity	• Do's and don't • Anti-bribery policy • Safety policy

Table 7.3: Fraud Management Framework (FMF)

STEP 4: Foster continuous, adaptive learning and integrated thinking

Company A's CEO highlighted the kind of difficulty they are facing in development of risk culture within company and stated "*When we did start the operations, people did more focus on growth. And obviously, at that time of point, everyone grows the business. Hence, the challenge is ….while the top management understood what the combined ratio is?"* He further explained the problems *"The key was how the large percentage of the pyramid, is able to understand what we mean by combined ratios. It was not easy task – for marketing or sales person to really understand, it's not only to drive sales, but it is equally important to drive sales with profitable opportunities."*

The company has subdivided the ERM framework as per the customised need of units and branches. The reason is perhaps the variety of risk profiles and demand of customization. As mentioned earlier, insurance customer demands vary from basic assurance products to high-quality service based products; some require standardisation while other requires more capacity to handle the risks. The risk is aggregated across all units, and understood at the enterprise level and then broken down according to demands of specific units and stakeholders. This is an attempt to

make ERM as a workable model as possible and ensure it is more embedded within the company.

Continuous learning and integrated thinking are the major achievements of Company A. The company believes in promoting creativity and learn by doing things. The experience of new efforts by creative teams is discussed with the group and rewarded for their achievements. Further, these experiences build over a period, have been used for integrated risk thinking. The company has recently recognised the barriers in cognitive change and introduced a self-prepared risk management course to improve the cognition level of its employees and introduced a quarterly risk magazine to create awareness. These actions reflect resilience to deal with the change and to adopt in response to the change.

STEP 5: Aligning management with governance

Involving a combination of interdisciplinary and experts at both management and governance level supported the company to build resilience by improving legitimacy, expanding the in-depth diversity of knowledge and helping in detecting and interpreting perturbation. Clear roles and responsibilities along with systems and structures are established. CEO of the company highlighted that roles and responsibilities of CRO have been clearly defined so that CRO can act as a link between governance and management as an 'advisor' and 'implementer' however, decision making authority in risk related matters is provided to CEO and board risk committee. The culture of integrated risk based thinking is embedded in the system in order "to pass on the responsibility of considering risk in the business decisions from a perspective of profits" asserted by CEO. There is always a limit to innovation for an institution following normative, mimetic and coercive behaviours. CEO mentioned "Every risk based decision making has some financial impact and there is some learning out of it. Capital efficiency is possible by understanding processes. We wish to take the risk for innovation and profitability but till it does not blow my balance sheet".

A deep understanding of ERM, local environment and strong group support helped Company's A in developing abilities to filter the profitable business opportunities. Understanding of ERM definition and objective helped the company to develop

anticipatory and resilient strategies. The company is proficient in the use of innovation to reduce risk concentration, understanding of flaws in the system to gain from cost efficiency, there is still room for motivating risk inquiries and adoption of risk based capital. The research suggests that ERM is embedded in top management but not able to reach the root of the company that is reflected in risk culture. The company also needs to envisage risk initiatives to improve risk culture that requires the increase in knowledge and expertise of top management.

7.3.5.4 Evolving strategies

Alignment of organisation existing processes with risk governance and ERM was challenging. The company has foreseen a requirement of transformation to derive efficiency, reduce redundancy and to link risk and reward effectively. The company has a positive outlook for risk and can foresee future possibilities of development of a liability market in India and possibilities for favourable regulation, though, it is aware of major risks, the existence of grass root problems related to definitions, measurement, software, illiteracy and unclear laws. The company is able to establish the relationship between investment, reinsurance and capital, but it is not able to establish the link with roles and responsibilities and HR policies. There is a requirement of a major change in the company based on the gaps identified which will support the company in motivating its employees by taking due care of risk and rewards. Risk still needs to be seen as an asset for the company which will support exploitation of opportunities internationally. This obviously needs the company to take its next level step to build an understanding of international markets, which would include training such as certification for fraud examiner qualifications or international compliance association qualifications.

Ideally, institutions may develop polycentric risk governance with the development of ‘nested institutions’ (norms and rules governing human interactions). The aim is to connect institutions with the highest maturity through a set of rules that interact across hierarchies so problems can be addressed right people at the right time. These nested institutions can enable the creation of social engagement of risk governance

rules and collective actions that can fit the problem they are meant to address. This system has a potential to enhance resilience in ecosystem in five ways: 1) It provides opportunity for learning and experimentation; 2) It enables a broader level of participation by institutions; 3) It improves structure, system and policies in cost effective manner; 4) It gathers feedback and improves errors in governance and 5) Local context of risk governance can be dealt in much efficient manner while creating scientific knowledge. Institutions use both normative and unique risk governance. Therefore, this polycentric risk governance during implementation may turn into polymorphic risk governance when some institutions become more creative.

In India, Company A has become an active participant with General Insurance Council (GIC), an industry body of the general insurer in India to deal with industry specific issues and regularly discussing with the regulator to deal with industry related issues. One of the major achievements in this direction is to develop a common database to deal with 'multiple insurance policies for the same risk', fraud risk definition and following international medical insurance norms for Schengen VISA.

7.4 Case Study II

There is no surprise if a company, listed in Fortune 500 Global companies (by revenue), follows a mature and established risk governance structure despite the existence of complex and changing business environment (Klinke & Renn, 2002). This company operates in more than 50 international domains and attracts significant capital, and builds a good reputation throughout the world by maintaining good relationships with its all stakeholders. Company B was registered more than 150 years ago in the UK market. It has established strong controls, systems and procedures and operates in multiple international locations. More importantly, this company has used ERM to gain from downside and upside of risk. Company B uses competitive advantage in some instances to exploit opportunities in the local and international market by gaining from ERM (upside of risk) and using diversification to reduce/mitigate risk (the downside of risk). This company has taken numerous risk initiatives to improve engagement and risk culture within the organisation and setting

things right for a forthcoming change. This company is a pioneer in the industry for its application of risk and capital models.

The company established principles of risk governance along with the Corporate Governance with fairly large risk team of over 90. The company risk governance follows industry established and regulator's recommended 'Three lines of defence model' (FSA, 2011; Deighton, Dix, Graham, & Skinner, 2009; Dowd, Bartlett, Chaplin, Brien, & Brien, 2007; Lam, 2014). The company follows five components models given by S &P: Risk culture, Risk Control Processes, Strategic Risk Management, Risk and capital models and emerging risks.

This case study provides an in-depth analysis of how company B is able to implement risk governance, controls and make happy all its stakeholders. Strength, Weakness, Opportunity and Threat (SWOT) analysis presents a true picture of current state of ERM practices adopted in the company and the industry in the UK. The company focus is initially compliance driven, the company has realised its problems and working towards implementing numerous risk initiatives to correct its legacy issues. This, not the only benefit the company has in current strategy, but in some cases, it is helpful in exploiting opportunities. Ten senior management of the company has been interviewed which is followed by an ERM and Risk culture survey (see Table 7.9 in Appendix for details of senior management). The data from secondary source was also used to retrieve annual accounts and many documents shared by senior executives during interviews.

7.4.1 Understanding of ERM

International Risk Governance Council (IRGC, 2010) emphasised the importance of understanding and the assessment of the various risks associated with a complex organisational system, before setting risk governance policies. De Lacy (2005) and Mackay and Sweeting (2000) highlighted the significance of understanding ERM than following regulations in implementation of Corporate Governance (see Paper 1 attached in Appendix for details). The interrelatedness or interconnectivity of risks

must be taken into account in the implementation of ERM (COSO, 2004; D' Arcy, 2001).

ERM has been defined in the company's annual reports, and risk reports as "*Enterprise Risk Management framework provides integrated robust Corporate Governance systems to allow the company's risk to be identified, assessed, monitored and controlled*".

Similarly, in almost half of the interviews and the annual report, it was emphasised that ERM follows five component model provided by S&P: Risk culture, Risk Control Processes, Strategic Risk Management, Risk and Capital Models, and Emerging Risks (not in specific order) to provide a holistic view. It provides the information that risk reporting from each department is integrated and presented to top management but does not reflect interconnectivity or interrelatedness of risks.

Company B has uneven diffusion of understanding of ERM. Head Operations of the company highlighted the complexity of understanding the terms of risk management by business people as it requires understanding of a risk language "*The key thing is trying not to talk in risk language because when you use risk language and acronym, business people try to get turned off".* In fact, ERM is adding no value to company and a senior official surprisingly asserted "*The reality is if you did not have any ERM framework, if you are running a business, you want to understand what your processes are end to end and work with the things which go wrong. If you did not have an ERM, you would do it anyway".*

ERM practices are highly influenced by stakeholders' demand and especially the regulator. As CRO of the company stated, "*Most important objective is to keep me out of jail*". Compliance is the utmost priority when following ERM practices. Another official asserted ERM use for administrative purpose "*it is adding an administrative value, and in our world, we are highly regulated part of the world*."

The company's official indicated that tone from the top drives 'common risk culture' and risk reporting is defined as 'what executive and board want to know'. In such scenario, it is likely that only what senior executive would like to hear will be reported in terms of risk. The danger is that this may be far from what ought to be reported. This poor reporting of risk is also reinforced by the statement as "*Core*

from the risk function is to understand the tone from senior management what they like to know and translate and simplify the information". The group risk report (2013) of the company also discusses updates from all regional CRO and risk and capital models. It divided the risks majorly into categories – operational risk, external risk, capital position and financial risk, emerging risk and root cause analysis of customer complaints, unfortunately; it also fails to discuss the 'interrelatedness of risks' present in the organisation.

Moreover, Company believes in 3 F's approach: Friendly focused and forward looking. The company has developed a good relationship with its stakeholders such as customers, regulators, shareholders, employees and participants among the industry. The company is focused on retaining its core and existing business model which is fee based investments while diversifying the risk where it has the concentration of risk.

7.4.2 Adoption and implementation of ERM

Head of Risk and Capital of Company B provided the UK industry overview. In last 10-15 years, ERM has introduced as a new concept, and insurance companies in the UK do not have experience of implementing ERM. So, this raised several questions such as what kind of information is required, how this information can regularly have accessed, what kind of skills are required for this task, how we will get risk expertise for ERM implementation. Losses and mistakes within the industry allied with regulator requirement to implement Solvency II led the company and others to ERM implementation. Obviously understanding ERM and being able to implement it in an appropriate fashion is a necessity.

The risk management discipline further evolved due to the requirement to improve information, techniques and understanding of factors influencing risk. The company is still handling questions such as how the current structure of companies can handle the requirement of Solvency II and overcome the problems related to overlapping roles among different layers of the organisation due to three lines of defence model

implementation. The external environment is also changing very fast. Prior to 2013, Financial Service Authority was the single regulator for all providers of financial services in the UK. Since 1st April 2013, it is splitted into two regulators Financial Conduct Authority (FCA) and Prudential Regulation Authority (PRA). The company is not yet able to suffice the requirement of Solvency II, splitting the regulator has raised new demands.

Company B has complex business operations. Therefore, a SWOT Analysis will be helpful in exploring various aspects the company is struggling to deal with. It also highlights the strength and opportunities it can exploit. Company B strategy involves an aspect of using its strength to exploit opportunities in global markets which makes it worthy to explore SWOT in the current business situation. Table 7.4 depicts company's SWOT analysis and shows how the company is able to utilise its strength in international markets. The Company's experience and knowledge in developing a good risk profile with the diversification of risk has helped in defining its strategies. On the other side, the company is not yet focused on the understanding of risk especially the 'interconnectivity of risk'. Operating in a highly regulated market as a complex business demands investment in IT and requires change within the company. The company has now realized the problem related to embedding risk. Therefore, numerous risk initiatives have been started to change the perception about risk, see Table 7.6 for details. As Group Risk Director of the company emphasised thinking beyond 'ERM as constraining activity'.

Strength	Weakness
Strong Group International Presence: Strong group presence and experienced senior management, good relationship with all stakeholders	**Operational risk and development of Risk Culture:** Development of risk culture is reported 'good' in survey but does not lead to adequate risk reporting and lacks 'engagement'
Excellence in managing financial risk and establishing controls: Implementation of latest risk initiatives and financial tools with clear guidelines for risk governance and controls	**Legacy business and operational risk:** Unknown risk arising from business booked in past and 'small errors and mistakes' made during manual processes are problematic
Linked ERM in strategic decisions: Clarity in using experience, knowledge, skills and organisational capabilities to exploit opportunities	**Interconnection of risks:** Risk still remain in silos (eg: Control Self-Assessment)
Diversification of risk and selection of risk profile: Company continuously diversify risk within company, within international boundaries and very cautiously select good risk and sell off the projects with bad risk profile based on its capabilities and policy	**Emphasis on more coverage of risk and complex processes**: High level importance given to breadth of risk than depth of understanding. Very complex processes and problems with end to end process governance
Low fraud risk: The company face extremely low fraud risk due to its policy of maintaining good profile of risk	**Defensive ERM and problems with its embeddedness:** ERM more seen as compliance function and a method to improve credit rating
Threat	**Opportunity**
High risk: Operational risk, conduct risk, reputational risk, legacy risk, IT risk and process risk are considered major risk.	**Changing risk perception:** Incorporating risk management as an organisational mind-set and focus on embedded of risk
Regulator erratic behaviour: Unpredictable regulator behaviour is one of the biggest challenges in the UK insurance industry	**Prompt risk reporting:** Appropriate software providing automated platform can be helpful in immediate reporting of loss which will expedite the information process, reduce manual process, complexity and small mistakes
Lacks innovation and change: Resistance to change & innovate due to old systems, employees and long term products with too many controls	**Exploiting opportunities:** Exploiting opportunities due to competitive advantage
Lack of investment in IT: Company is learning from same mistakes by other peer companies in the UK and booked losses due to lack of investment in IT over a period of time	**Risk and reward:** Linking risk and reward will be helpful in evaluating opportunities
Unknown culture and background: Unknown risk culture in international markets and only sales background of new CEO and its impact on culture present difficulties	**Availability of risk experts**: Insurance market is mature and have available risk experts

Table 7.4 SWOT Analysis of Company B

The senior officials of the company highlighted that company believes in "*forward looking in the knowledge of capabilities of taking actions*". Surprisingly, this company has shown that there is no benefit from defining risk appetite due to its

business models. Use of active portfolio management, employee engagement and reverse scenario testing are a few of the major tools that not only help the company in improving the risk profile of the company and providing capital efficiency but also provided motivation to exploit opportunities to a certain degree.

7.4.3 Issues in implementation

Head of Pension of company B highlighted that PRA focus on balance sheet side of the companies while FCA focuses on culture and behaviour of companies and the impact on customers. This has created two new competing objectives from regulatory perspectives – assurance of meeting financial risk and assurance to provide good risk culture. Risk and Capital Head of the company highlighted that "*financial risk is all about calculations and making it understandable over time*". Risk culture of the organisation, though, is dependent upon several factors such as 'what you want to be', 'how you communicate with your limited resources', 'what kind of culture I expect people to do' and 'what kind of risk culture I want' and is not easy to implement. Fortunately, UK has a better culture of reporting risk than other countries. Risk culture in the organisation is dependent on tone from the top and consists of board and chief executive perception about risk. This is part also dependent upon risk and reward relationship that can be seen in latest media and regulator discussion[3]. Most of the senior management highlighted that the demand of risk end-to-end customised software is also increasing as this will increase the speed of access, ease of recording, the possibility of inter-relating information and dissemination.

The company is suffering from a series of problems due to legacy business, which may present unknown risks and could be considered as a 'black box'. Over a period, the company established lots of controls through introducing numerous policies

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[3] Strengthening the alignment of risk and reward: new remuneration rules – CP15/14 See link: http://www.bankofengland.co.uk/pra/Pages/publications/cp/2014/cp1514.aspx , http://www.fca.org.uk/static/documents/consultation-papers/cp14-14.pdf

which have led to complex business practices. Lack of investment in IT increased manual hours of supporting these operational and control functions. Following Solvency II guidelines required a whole gamut of new policies and controls in addition to current ERM practices followed within the company. Being a listed company, the company is under pressure from its shareholder to provide profits while management requires investment in information technology to reduce chaos in the business. A similar crisis has been seen in Bank of Scotland where investment in IT was delayed due to undue significance given to shareholders' profits rather than long term stability of the company.

CRO (UK) provided details of the complexity of the present situation in the company. In this difficult time, it was not easy to handle chaos and pressures coming from all side. In 2014, the company executive divided total processes within the company in 14 large processes and identified weak links within the processes. By the time, the company is into a position to execute this; unexpected regulatory intervention changed processes and way of reporting. Now the company has become confused over its direction. CRO of the company asserted "*Regulatory impact is a strategic risk*" stated within the company because "*by the time you understand it, regulator change it*". He also highlighted "*But the major change in the focus particularly in the UK for the retail business like ours, a lot of focus is on 'conduct risk' actually"*.

7.4.4 Ways of Risk Governance

Risk governance has been given considerable attention to company B and employs the senior actuaries and Group CRO from the industry with a large team. Being a large company, there is a CEO, Risk Director and CRO for every region e.g: UK and Germany are considered a region, Asia is another region of its operation. All regional CEO, risk directors and CRO hierarchically report to their respective Group Heads of the company. The Group CEO and Group CRO report to the board on 'monitoring and understanding' of the risk of the company to ensure transparency. The audit committee and risk committee is attended by non-executive directors and board members while ERM committee is attended by all senior executives (Brown et al.,

2009). There are various sub-committees formed to look after specific tasks. Figure 7.2 highlighted the roles and responsibilities and interconnected of different parties in risk governance process.

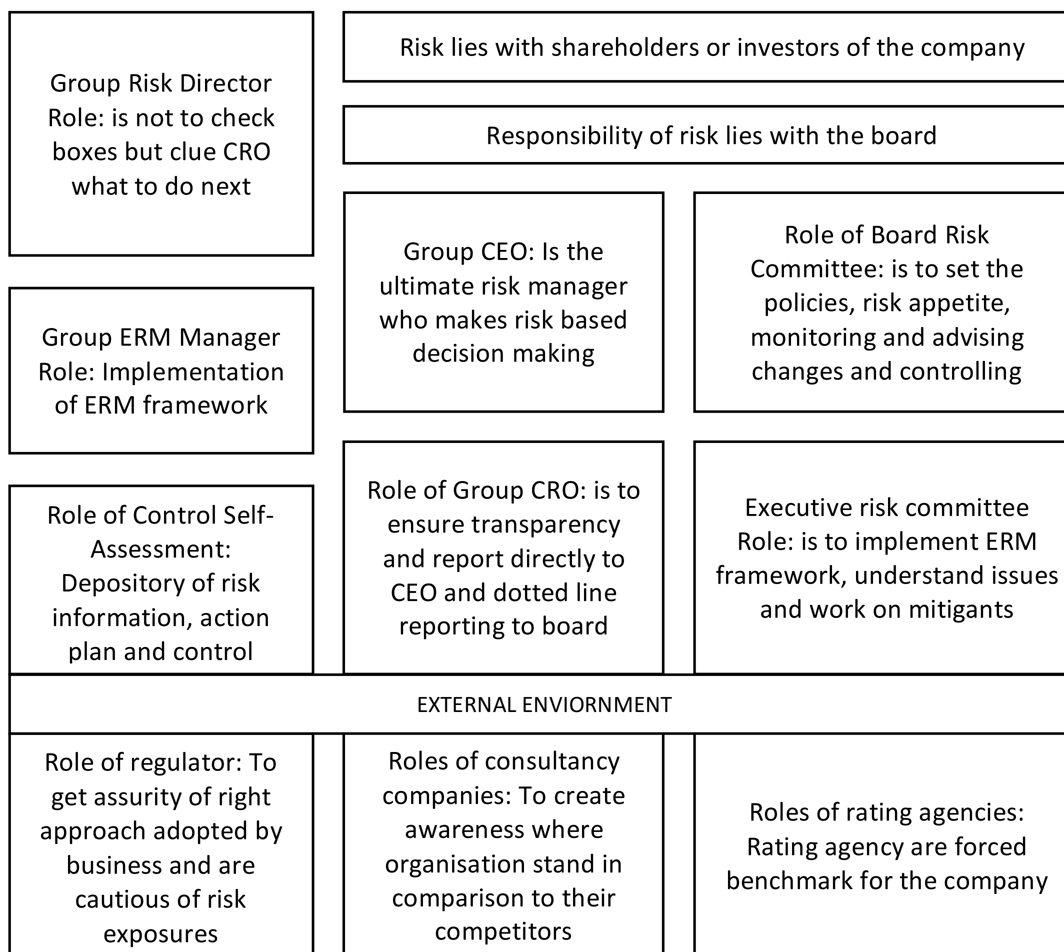

Figure 7.2: Group Risk Governance model of Company B

The company follow three lines of defence model. Table 7.5 explains the three lines of defence model described in books of accounts and also confirmed from the data shared by executives. A risk report to board contains summary view and update from all CRO's globally, views on risk environment (both internal and external), risk and capital profile, Active management and focus of each month risk initiatives and emerging risks. A risk report shared by Head ERM). The company is facing serious problems with inappropriate risk reporting at first line of defence.

Group CRO asserted "*People here are not afraid to report risk. People report everything*". A few others criticised the way risk reporting is implemented and highlighted the reason for this. Most of the interviewee agreed that risk reporting is done in a very comprehensive manner by taking into account almost all of the risks. The system produces information which is hard for the board and the executives to exploit to better manage the risk. Control Self-Assessment provided basic risk data but produces large volumes of data which is hard to both comprehended and analysed so to assess its important.

Group Operational Head "*You are right, we can go and ask – what is the people's overall understanding of the risk – even get an articulated picture of operational risk. They can tell me what is going wrong and know ways to fix it*". Moreover, CRO and Head Risk and Capital supported the idea that ERM has been significant importance in the organisation but "*I fail to see that depth of the understanding about the aggregation of the risk. The risk involved in the processes is not well understood. Operational risk is different from financial risk – it is much more subjective. But same issues apply – there is an issue of depth of understanding*".

Second lines of defence involved Board's Risk Committee, ERM Committee and Audit Committees supported by various sub-committees. There is a lack of clarity in roles of the first lines of defence and the second lines of defence as the Chief Actuary stated "*From the actuarial point of view, it is the first line of defence, or its second line. There is a little bit of blurring".* The second line acts as a risk filters between the third line and first line of defence and it decides on the importance of the risk. Head of Operational Risk highlighted the major problems with second lines of defence "*The importance of your processes which would go oversight from second line – they will challenge how you prioritise your risk, how you are evaluating that is correct, are you concentrating on the right level of things*".

Three lines of Defence model			
	First line of defence	Second line of defence	Third line of defence
Major role	Business and operating units	ERM function and Compliance function	Board of director and internal audit
Who is responsible	Individuals involved in day to day business operations	Risk Oversight is provided by the UK and Europe CRO (Involves various committees)	Board: sets the company's strategy and risk appetite CEO: responsible in managing board's business plan, strategy, risk appetite and reporting to board for monitoring of the risk
How it is done	Maintains risks in acceptable levels and responsible for identifying, assessing, managing/controlling, reporting and giving assurances over risk Control Self-Assessment is used to check and control risks	Supported by risk management committees, specialist management and compliance function to take day to day decision making and risk reporting	Risk Strategy has been broadly defined. Risk appetite consists of: - No appetite for unrewarded risk and inconsistent with strategic objective - Depends upon expected return exceeding cost of capital - Price charge for accepting risk must reflect risk/reward profile

Source: Data published in company' annual books of accounts and shared by executives

Table 7.5 Three lines of defence model

ERM has to be considered and given enough significance by the Board (O Renn & Walker, 2008). Group CRO asserted "*Board is very heavily involved in risk function. Then I have a reporting line as Chief Executive Officer as an Executive. My reporting line is to the CEO of the company*". Yet the problem of risk reporting at

first line of defence becomes an obstacle for the third line of defence in decision-making. Group CRO and Actuary both confirmed the importance of simplicity of information for Board *"Because all the people in the board are not the risk experts and the people are in risk committee not also experts. So, who can read 900 pages before the meeting, nobody does*." So, understanding of the risk: 'what to report and how much to report' is a problem for the first lines of defence, then at the second line of defence, filtering the enormous amount of data based on importance becomes challenging in existence of unclear roles. The board members are not risk experts so, overall they try to take the decision based on their diverse experience (highlighted by Group CRO) and the information presented to them.

Some initiatives taken by executives adds a feather to their cap. Head of Group Fraud and Head of Pension mentioned: *"I think if the risk is linked to some reward, appreciated by management can motivate people to report more appropriately"*.

7.4.5 ERM strategy

Company B is a very mature company having been established 150 years ago, the development of ERM only started a few years ago. There are many ERM strategies that have evolved during this period such as Rudimentary strategy, Anticipatory strategy, Resilient strategy, and Transformational strategy.

7.4.5.1 Rudimentary strategy

During the phase of high-growth, the company many policies were booked, and a few led to losses due to the implementation of Rudimentary risk management. A Senior Actuary of the company stated that development of ERM framework started within company in the year 2003-04. The Group CRO of company highlighted that risk governance in the company was established along with corporate governance.

7.4.5.2 Anticipatory Strategy

Company B has handled the 2007-08 crisis very well and did not book too many losses due to its proactive behaviour. The Group Risk Director of the company asserted that "*In 2009, we were in the process of limiting the growth which is totally*

aligned to our strategic objective. Assurance of safety of capital is the first priority during the investments. The company believes in constrained growth which is a constructive way to align from group strategy."

The company established good processes, controls to record existing risks and became a pioneer in the industry in establishing latest financial models. The Group Operational Head mentioned "*Interestingly, the risk framework, did not stop us these loss happening. It says –these are controls under which we are managing effectively. I think the question for me is 'how you can use this ERM framework to control future losses''*.

The Risk and Capital Head of the company highlighted that some instances where they booked the losses required a review of existing models in the year 2010 and stated "*the most significant risk is 'misstatement of our capital requirement'. This loss occurred due to an error in spreadsheet leading to an overstatement of capital assessment"*. He further highlighted many other problems *"Biggest potential exposure is considered in 'annuity book'. So, we have to reserve for annuities. Again there was an error in built and processes, we underestimated the annuity payments"*. This led the company to make changes in reserving practices such as reserves which have a capacity to bear the biggest single loss in last 5 years and losses such as 10's of millions. Another problem highlighted by most of the senior officials *"Prior to that, our biggest loss was one for which we were covering for, our operational loss due to the error in marketing literature*." During the same period, the introduction of Solvency II and increased regulatory pressure led to the adoption of ERM within the UK insurance industry "*Following strict principles of compliance' is the key to remain in business in the UK*."

7.4.5.3 Resilient strategy

Company B follows five steps to implement Resilient ERM in their organisation.

STEP 1: Maintaining diversity and reducing concentration risk

Diversification of risk and choice of risk profile is one of the strengths of the company and benefited the company in many instances to exploit opportunities to gain a competitive and a comparative advantage. One of the most common

advantages of being the very large global company is the geographical spread of risk across international boundaries.

The company's advantages are it has the diversified profile of risks such as longevity risk, credit risk, life insurance risk and mortality risk and reduced risk concentration of risk across one category and one geographical location helped the company in reducing overall risk. The disadvantage is the legacy business.

Company B has been in existence from a long time and booked business for the long term. ERM started a few years ago, it would be very challenging for the company to know which of the old business might present problems into the future. The files on the old business do not have enough data. Also, the data needs to be manually retrieved, the policies are based on different actuarial assumptions, policies were placed at remote locations and a set of problems associated with business booked before 2003 were called 'legacy business'. The company identified the areas where it has considerable risk concentration in legacy business, so it needs to increase mitigation for its own protection. The company identified for example, that the annuity business was profitable and presents concentration risk. The legacy business has been based on long term commitment so cannot be easily reduced, therefore, the company worked upon increasing reinsurance to protect its concentration risk.

STEP 2: Establish interconnectivity or inter-relatedness of risks

Very quickly the company has realised the value of ERM as the Group Risk Director of the company asserted that "*Good Risk Management is enabling business success, not a constraining activity though, ERM is quite prescriptive and constraining and take a long time to implement. On the other side, it has huge value because it stops doing things which can seriously harm to your success.*"

The Group Risk Director of the company believes that aim of ERM is "*forward looking in the knowledge of capabilities of taking actions*". The company invested a budget of over 6 million pounds on improving risk management initiatives each year; this also reflects how company serious is about risk. Use of active management, employee engagement and reverse scenario testing are few major tools not only help the company in improving the risk profile of the company and providing capital efficiency but also provided motivation to exploit opportunities to a certain degree.

The introduction of the concept of 'active zone' helped the company in getting greater capital efficiency and nullify the two different risks as the Group Risk Director of the company asserted "*We reduce our mortality risk to zero as against the capital requirement earlier and now we are using the same capital for new risks*". A senior official of the company also stated that company B's strategy is to maintain and strengthen its traditional books of accounts where it has abilities, knowledge, experience and comparative advantage. Company B does not believe in investing in new ventures such as variable annuities.

STEP 3: Unrecognised emerging risk in the system

The company has chosen its risk profile very carefully and has learnt from experience and knowledge. The company is vigilant and believes in understanding the risks and filters good and bad risk based on organisation objectives. In various instances, the company has sold its units where it realised it has bad risk exposures such as the presence of high fraud risk, the potential risk of damage to reputation and problems with risk culture. For example, it sold a bank and life health care unit due to high exposures to fraud risks and high operational risk. The very recently company has noted a large number of checks done by a regulator in one particular international location and also seen staged counterfeiting which resulted in 13% of the fraud incidences for that particular jurisdiction. This may provide the company's competitor with an advantage of being available locally. The company sold this unit at very high profits because of realising 'unavailable beneficial competitive scenarios'.

STEP 4: Foster continuous, adaptive learning and integrated thinking

A company official asserted "*Our strategy is tactical developments rather than strategically development*". The strategic planning process is rather defined as "*it is very tactical as every 6-12 month, permutation when we think what our strategies are*". The company's annual reports only partially support this, and it asserts group risk strategy as "*the risk function actively supports long term value creation by ensuring well informed risk reward decisions taken in pursuit of group plan objectives and to ensure capital is delivered to areas where most value can be created for the risks taken*".

In other scenarios, problems related to risk culture are faced. Whistle blower policy works well in its European business, but in Asian countries, it is sometimes used maliciously. In some European countries, there has been a problem when the 'the tone of top' by senior managers has led to bad practices. This may be due to poor selection of senior managers in these locations.

STEP 5: Aligning management with governance

To align governance and management, board and ERM department have taken a series of initiatives to improve ERM practice. The initiatives can be categorised into four broad categories (see Table 7.6).

The company identified its current problems of 'small mistakes' and learnt from their experience of their own losses and reasons for losses to peer companies operating in international markets. The CRO of the company redefined their objectives of ERM, "*ERM is to spread it to all key pockets of organisation".* He further emphasised the need of understanding of ERM and explained the use of models "*All Models tells the same story in the different language, but we see what is most appropriate for the organisation*". The company also emphasises the importance of the right tone from senior management and has learnt from its own mistakes. The company also noticed a few problems in selection of unsuitable employees which resulted in losses such as a business suffered from sales back ground of CEO. The CEO was not involved with the organisation for sufficient time and majorly from sales and marketing background, which led to set different expectation and behaviour in one of its European businesses and impacted on its risk culture. The company understands the problems associated with risk perception as CRO of the company stated: "*without understanding the risk, risk management becomes mere compliance*".

Key initiatives to improve ERM practices			
Initiative	Purpose	Problem identified	Example
Initiative I	To improve understanding of ERM	Too much emphasis given on models than understanding of own risk Complexity of risk	Attention paid to small mistakes committed by employees. Recruitment of CEO only with sales background and short term association has been given back seat
Initiative II	To improve understanding of ERM related terms	Allocation of capital risk appetite, Use of models	Active Zone provides departments with the ability to utilise money based on their capabilities, and now capital is provided at the group level and not to each department.
Initiative III	To improve risk awareness on foundational level, expert level and to upgrade knowledge and skills	To keep risk alive in the mind of employees	Risk Theme days Risk Champions Staff Survey Online training modules
Initiative IV	To improve risk decision-making skills	Develop engagement and split organisation entire components into 14 major processes	For this they have started one to one conversation with the managers to understand – 1. What are the key issues in the new processes? 2. What kind of new risk are you running? 3. What was the response from the audit?

Table 7.6: Key initiatives to improve ERM practices

A senior official of the company highlighted their way to manage operational risk by giving an example "*you test particular area to implement XYZ to see results and build experience*". The company is very positive in establishing engagement as it is one of the company strength 'building relationships'. The Head of Operational Risk also supported and emphasised on development engagement through 'discussions'. The objective of this conversation is to "*upscaling the people (increase risk awareness) engaging them in the business-like conversation with measure and articulate risk*".

Initially, the company set the maximum amount risk it was willing to face. A senior official of the company highlighted that the initial limits are set '400 million pounds' as the maximum limit in some instances. The Group Risk Director took an initiative

to use capital efficiently within the company and introduced the concept of 'Active Zone' within the company. So, if nobody utilised that level of capital for their department, the rest of the capital remain unutilised and if they go over £400 million, there is a breach. So, Active Zone provides departments with the ability to utilise money based on their capabilities and now capital is provided at the level and not to each department. It was helpful in better engagement with the business units to understand what the purpose of capital allocation is and expected yield.

The Introduction of Scenario testing program helps companies in thinking about different dimensions of risk especially those who can make business non-viable. Senior Actuary of the company asserted that scenario testing allows 'dry run' such as "*Literally, 8 o'clock Group Chief Executive get a phone call from someone saying that your name in the news and something happen, you actually play out in a live situation how you will handle such situation.*" The success of this program helped the company in understanding risk indicators before an event happens and this leads to extending this program to 'reverse back testing'. The company official mentioned this initiative gained wide acceptance due to its major benefit of providing insights of exposures.

The company has introduced regular theme days for a couple of years to create risk awareness and changing mind-set about the risk. It has also helped staff to understand the risks not only related to their department but the risks which are faced by other departments. Therefore, a variety of risks are presented, and everybody in the organisation tries to address them. The aim is to keep the concept of risk alive at the forefront of peoples' mind. This has been very successful according to company officials. On the organisational level, the company distributed a staff comprehensive survey in the year 2013 and 2014. There were a few questions on risk. For the last two surveys, the risk is coming out as a second most popular theme.

On the support side, to ensure cultural impact, the role of risk champion has been developed in individual division and Risk Director (role) to provide innovative solutions for management teams. Risk champions are not the risk people, but there have to partially act as a conduit with risk function while people with or without risk professional training can take the 'Risk Director's' role provided they understand the

problems of implementation. Online training modules have been created which are optional with the opportunity for international certification. These cover a wide variety of topics within a company for those who are interested in gaining knowledge and upgrading their skills. As such they enhance skills and honesty in reporting and are recognised in the performance evaluation of the employees.

7.4.5.4 Transformatory strategy

The Group CRO indicated the nature of the change in regulatory behaviour: "Risk *of operating, a lot of time spent on that. Our financial risk for this company has considerably evolved"*. The company is not concerned about financial risk as the company is using the latest models and are confident about them and they believe they have sufficient capital. The major concern for the company is *"about conduct risk and new risk coming up or may be past risk in your portfolio, you just don't know it, and you find it later on. Things the Financial Conduct Authority is changing – we have PRA which is from the bank, and we have Core regulatory body FCA which looking at conduct. You can fix your conduct today, but you don't know what is done in the past. So, things can always come up.*" The company has concerns about the legacy business. The company has realised what needs to be changed but have not made changes in policies, procedures and governance system, for example, the company existing systems such as Control self-assessment (CSA) requires change. CSA is used as a tool where the first line of defence can provide information. It is a simple online recording of information. It does not assess the risk. There may be instances where users are not able to put the risk in different categories or having difficulty in understanding risks.

Risk management policies and procedures at the Board level are not questioned such as three lines of defence model. The Group CRO stated that the company had undergone minor changes in the year 2010, subsequently, no significant changes have been made. This requires a change in thinking. There is a need to develop a system/procedure based on feedback and engagement from the bottom of the pyramid so the real issues in the implementation of ERM can be understood and reflected in the policies. It is usual practice to increase policies with the change in

regulations, but it is rare to reduce them. So, the companies need to simplify their policies along with the process of change.

The current regime implements punishment for bad practices, but there is no reward given for following good behaviour was stated by many of the senior officials of the company. Risk management is expected as a job responsibility, this resulted in a blame game for handling internal risks and reputation risk for external and strategy related risks (Power, 2009). They are told what management wants them to know.

7.5 Comparative Analysis

The outcome from the Table 7.7 highlights some unexpected results to the common perception that the understanding of ERM should be common across companies while their objectives may be different. The company A and B operate in different countries and have the different maturity, though, share similar organisational objectives and similar kind of involvement of senior management while understanding of risk is different.

Both of the companies have adopted extremely different approaches in strategies. Diversification has given benefit to both companies but differently. Company B has expanded its business in various countries that provide an automatic diversification. Company B believes in strengthening its core traditional business and does not invest in new business models, can be termed as 'consolidation strategy'. However, company A invests in a niche market to innovate on new products with an aim to diversify and reduce concentration risk that demonstrates a clear 'diversification strategy'. Company B struggles with the efficiency of capital while company A strives for more capital to grow. The reason for this is perhaps company B is good at financial modelling and able to showcase their abilities (see interviews mentioned in the case study) to manage capital well. However, company A needs to still work on developing risk and capital models, therefore need to gain trust in the eyes of stakeholders to get sufficient capital.

Both companies emphasised broader coverage of risks but end up giving priority given to deal 'top 10 risks' due to higher cost, time and expertise needed to deal with all of them and practically impossible. Obviously, there is a danger in this approach

of discounting which could lead to high operational risks. Company B is facing problems in dealing with ‘mistakes’ which may result in millions of pounds while company A is struggling with reporting of risks, fraud risks, operational errors, mispricing of products, etc. ERM is not embedded in the bottom of the pyramid, it is rather handled by few senior officials, therefore it becomes more ‘compliance’ oriented and an ‘administrative burden’.

Similarities	Company A	Company B
Organisational Objective	To have profitable business opportunities	To have constructive leverage opportunities
3 Factor model	Believes in 3 F model - Focus, Friendly and Forward Looking approach	Believes in 3 P model - Product, Protection and Profits
Importance of role and tone from top	CEO as an ultimate risk manager' and consider tone from the top extremely important	CEO as an ultimate risk manager' and consider tone from the top extremely important
Senior management involvement	Senior management understands interrelatedness and downside of risk well	Senior management partially understands interconnected, though, understand downside and upside of risks
Long term association of senior management	Provides advantage of 'awareness of interdisciplinary connections among different departments'	Provides advantage of 'awareness of interdisciplinary connections among different processes'
Dissimilarities	**Company A**	**Company B**
Interaction of risk	Considers among various departments e.g.: Investments and reinsurance.	Considers among various exposures example: mortality and annuity
Understanding of risks	Have good understanding of internal risks	Have good understanding of external risk
Use of benchmark and participation	Company A does not use any benchmark and not participate in international conferences	Company B uses many benchmarks and participate in international conferences
Inadequate solvency ratio	Maintains solvency ratio lesser than regulatory minimum capital requirement due excessive reinsurance and utilising surplus capital	Maintains higher solvency ratio than regulatory minimum capital requirement

Table 7.7 Comparative Analysis within companies

Company B has divided its core business into 14 broad processes while company A has localised its ERM model into small branch level models. This may be explained by different branch sizes and behaviours in the markets. The company A is in an

advantageous position as Indian regulations are not as stringent and dynamic as the Insurance laws in the UK. Therefore, company B works towards the establishment of controls to operate in a dynamic environment while company A is learning based organisation operating in a rather evolving market. Compliance is considered as the biggest threat to company B whilst compliance is considered both the biggest threat but also an opportunity for company A. Company vision, philosophy promotes excellent practices in promoting fraud risk within UK business, though, the target is not yet set to 'zero fraud risk tolerance' level. Fraud risk is one of the biggest challenges for company A and even from Asia, while risk culture related to fraud is very supportive in the UK. Risk reporting is inadequate in both companies. There is insufficient reporting of risks in company A while there is over reporting of risk in company B. Company A is able to use ERM to manage internal risk well within the organisation and using it for diversification of risk while company B has used 'ERM' more proficiently to manage external risk and strategic risk. Risk initiatives taken in company A have resulted in very slow progress due to lack of awareness of risk culture and need to have more engagement, while company B has progressed substantially.

7.6 Validation of the results of case studies from Survey

A risk culture survey on current ERM practices is distributed across both companies by using Qualtrics software. The survey is distributed to 100 middle and senior managers in each company. The response rate in company A (over 20) is relative higher than company B (less than 20).

ERM definition supports 'interrelatedness of risks'. Results of the survey reveal that in both companies, the definition of ERM is not understood among middle and senior managers as only two in both companies have highlighted an appropriate definition. Not only this 'ERM is still understood as risk reduction technique' as 13 of them in company A and 8 of them in company B supported this. This demonstrates a clear need to understand 'ERM' definition before it is seen as an effective implementation. On the other hand, company management has a clarity on 'aims and objectives of

ERM' as most of them support one view, on the contrary, company B responses support two different views.

Both of the company have shown that the company's senior management is very vigilant and proactive to change. Company A reflects that it is using more top down approach and moving towards a combined approach (combination of top down and bottom up) while company B strongly reflected its combined approach in the implementation of ERM. However, company B also highlighted a need to work on risk reward relationship as less than half of respondents in company B do not agree with the option ''*organisation's incentive and remuneration structure genuinely motivates people to do the right thing from a risk perspective*".

Almost all of the respondents in company A stated that ERM is compartmentalised into risk categories and implementation of ERM framework is done throughout the organisation. In company B, the opinion is rather scattered as most of the respondents have chosen different options about how ERM is implemented within the organisation and what their priorities are. Similar results are found in the choice of method of reporting of risks. To understand the scope of risk, there is a need to a number of risk considered within a company. Risk register defines a particular risk history so if a company considers 20 risks, it usually has 20 risk registers. The results of interviews are then compared to survey findings. This highlights ERM in practice. Company A has highlighted in interviews that use of more than 200 risk registers for effective risk reporting, though, results of survey are conflicting. Survey findings highlighted that employees prefer 'direct informing my seniors' for risk reporting instead of mentioning in risk registers. On the other hand, in company B, there was again a scattered choice of options and risk registers are not preferred at all.

Company A has given preference to definition of risk culture as "*Development of open and transparent culture where everyone is free to talk about risk honestly and Risk is acknowledged as part of daily activities and business decisions*", while company B strongly supports objective of risk culture is "*Risk is acknowledged as part of daily activities and business decisions*".

7.7 Chapter Summary

The case studies present four emerging strategies based on the different state of development and maturity of companies – 'Rudimentary risk management', 'Anticipatory', 'Resilient' and 'Transformatory'. The comparative analysis between company A and B provides insights of how two companies different in size, capacity, operating in the different socio-economic environment across geographical boundaries shares common organisation objectives despite of having the different understanding of ERM terminology. Both companies have different sets of problems associated with the internal environments such as risk reporting, capital, risk appetite, solvency ratio and different exposures and external environment. A change in 'understanding of ERM', risk culture and socio-economic environment affect the implementation of ERM.

Company A and B have adopted extremely different approaches to adopt 'resilient' strategies for implementation of ERM though, followed five same steps: 1) Maintain diversity and reducing concentration risk; 2) establish inter-connectivity or inter-relatedness of risk; 3) identifying unrecognised emerging risk in the system; 4) foster continuous, adaptive learning and integrated thinking and 5) aligning management with governance. Company B, a very large company in the UK insurance market, would like to increase its strength in its core business by pruning its niche business where it does not have a competitive edge. On the other side, company A, a large company in Indian insurance market, has adapted to maintain its core business by adding new niche in the market. Partly it is due to different level of maturity. Company B and company A are passing through consolidation and expansion phase due to the dynamism in their socio-economic environment. In the UK the insurance industry is facing high pressure from its regulators to implement Solvency II.

The development of risk culture, the embeddedness of risk, operational risks, lack of investment in software can be seen as a few common areas of weakness. Understanding end to end processes is also a problem highlighted by CRO of both companies. Company A may learn from company B in understanding risk initiatives to development engagement and develop risk culture within the company and

reduced fraud risks. Company B is also able to exploit opportunities by using its strength in some instances which shows its strength in aligning ERM with strategy and leads to 'strategic gain for the organisation'. Use of active management, reverse back testing, and scenario analysis also has helped the company in overcoming the hurdles of effective ERM implementation to deal with possible future scenarios and having mitigation in place. Company B can improve upon in its understanding of ERM concepts. Company B has strength in financial modelling, but the company lacks its focus on the qualitative side of ERM implementation. Understanding of senior management of realities at ground level may be helpful in revising the policies, pruning redundant procedures and helpful in reducing complexities. Some of the examples are given such as the three lines of defence model and Control Self-Assessment. The company can also work on establishing the right balance between risk and reward relationship. Company B can also learn from company A in an understanding of 'interrelatedness of risk'.

Company A's senior officials highlighted how applying risk based capital is the forced choice for the company to grow in today's cut throat competitive environment in India. Though, company B has passed through 'phase of development of risk and capital models', it is facing a different set of problems. Both companies are vigilant and proactive in their approach and have local and international knowledge of markets, therefore continuously attempting to work beyond current regulatory, mandatory requirements such as 'maintaining adequate solvency ratio'. The company A and B are working towards changing risk perception within the company and setting things right for the forthcoming change in future.

Chapter 8 Findings and discussion

8.1 Introduction

The aim of the thesis is to explore clarity on good Risk Governance especially within insurance companies. ERM has been considered an acceptable way to implement Risk Governance, but a multiplicity of definitions given by different international regulatory and professional bodies have made its understanding complex. There exists a gap between the writing and practice of ERM. Therefore, the focus of thesis has been to understand issues in the implementation of ERM practices, the adoption of appropriate practices and the extent of implementation. Comparisons have been made to understand the difference in ERM practices between India and UK using multiple research methods.

A methodological triangulation of surveys, interviews and case studies are used to answer the research questions to explore good ERM practices Denzin (1970, 1973). The surveys highlight the current state of ERM practices and interviews provide the details of issues faced in implementation. This leads to the development of a pattern of similar and dissimilar issues in the implementation of ERM and emerging ERM strategies. Further, a comparative case study between nascent and mature market demonstrates how two companies across different market adopted the similar 'Resilient Risk Strategies'. The pattern observed during surveys and interviews are further confirmed by the case studies that provide further reliability and credibility of the results. In previous chapter 3, a theoretical perspective of Institutional Theory with a focus on Strategic Change and isomorphism has been used to understand how companies have dealt longstanding issues is the implementation of ERM practices.

The structure of the Chapter is as follows: The first part of the Chapter presents the findings from surveys, interviews and comparative case study methods in the light of research questions. The second part of the Chapter provided an overview of Indian

and UK insurance market and highlighted the industry specific and country specific issues unaddressed in both the market in the light of theoretical perspective of Institutional Theory and Strategic Change. This is followed by a Chapter summary in the last part of the chapter.

8.2 Findings

The findings from surveys, interviews and case studies are synthesised with an aim to answer the research questions.

8.2.1 Adoption of ERM framework

In both nascent and mature market, ERM has been implemented partially except in two companies in each market that have not adopted ERM. Results of the research revealed the different ways of adoption of ERM that can be divided among three categories: 'mimetic adoption', 'coercive adoption' and 'pragmatic adoption'. The reason for the adoption of ERM practices supports value creation.

8.2.1.1 Mimetic adoption

This is one of the most significant and prominent styles of adoption of ERM. De Villiers & Alexander (2014) also found a similar pattern in benchmarking practices. Due to lack of standardisation and condition of uncertainty, companies have adopted ERM practices of their parent companies, credit rating agencies and/or joint venture foreign partner but surprisingly, no company has followed ERM practices of their competitors.

Company A (in the case study) in Indian insurance market has adopted ERM framework from its well-established banking institution after facing high exposure during the financial crisis. On the contrary, Company B has fully adopted ERM framework suggested by Credit Rating Agency 'S&P' in absence of any knowledge and experience to answer questions such as what kind of information is required, how this information can regularly be accessed, what kind of skills are required for this task, and how the company will get risk expertise for ERM implementation.

Both companies have adopted ERM well before the regulatory requirements due to their high exposures in financial markets.

It has been found that the adoption of ERM in Indian companies has been influenced by their joint venture partner whereas there is no similar pattern observed in adoption of ERM in the UK insurance companies.

Companies with similar experience and joint venture partner from similar countries operating under same institutional pressure in India have adopted their distinct approaches to implementation of ERM. Some of them are not at all influenced by their foreign joint venture partner, others are partly influenced and however, there are those completely influenced. This is partly also dependent upon company's own maturity based on length of time in the market and experience in financial markets. Typically, those which have operated for over 25 years and had their working risk management framework in banking institutions, have developed their own model in India. However, for companies, which have recently entered into the insurance business or are over reliant on joint venture partners will tend to follow their joint venture partners model. In the UK market, companies have adopted and implemented ERM on their own terms. As for Risk Governance in India, there has been no particular structure, whereas almost all of the UK companies, who participated in interviews, follow the three lines of defence model of risk governance.

8.2.1.2 Coercive adoption

Following regulation for insurance companies is an attempt to ensure compliance for survival. So, there is a coercive element to the adoption of methods for Risk Governance. The surveys in India and UK market revealed that ERM had been adopted within India by combining it with regulatory guidelines, however, in the UK it has usually been by extending Traditional Risk Management in the legitimate environment with pressure from the regulator. The purpose of former is to comply with new regulatory controls in volatile environments (Sutton, 2006) and latter is to enhance better governance in the legitimate business environment. Surveys, interviews and case studies across nascent and mature markets have clearly revealed the importance of regulation in shaping the risk governance. Case studies

demonstrated that Indian company follows simple risk governance while satisfying to single regulator i.e. IRDAI. UK insurance company rather satisfied multi-level regulations such as FSA, PFA, EUROPA and Solvency II, therefore follow complex risk governance.

8.2.1.3 Pragmatic adoption

A few companies in both India and UK have adopted 'development of sound risk culture' as a major aim of ERM framework with an aim to improve mindful risk reporting, risk based capability and decision making. The benefits are more visible in the long term rather than in the short term. Adoption and integration of ERM within organisation process requires full customization according to organisational objectives and ways of doing business. Only two companies one in each market has stated that they are in the process of adopting full ERM framework by linking it with organisation processes. The two case studies also highlight 'linking ERM with organisational processes' as the biggest challenge. It can be interpreted that to fully adopt ERM, companies need to link ERM with the organisational processes. It is also observed that all these four organisations are leading organisation by sales, have large capital base and experience in financial markets which extends the findings of (Paape & Speklè, 2012).

8.2.2 Reasons for partial implementation of ERM

Two surveys in the Indian and the UK insurance markets, and two surveys carried out within case studies A and B, all of them have revealed that there is ambiguity in understanding of ERM amongst senior management. To claim the understanding of ERM companies ought to understand ERM at two levels: understanding of ERM as a concept (Bromiley et al., 2014) and of ERM and its related terms such as understand 'risk appetite', 'use of models', 'size and capacity of organisation' and 'risk culture'.

To have a greater understanding of ERM, companies require knowledge of four major elements: definition, aims, scope and perceived benefits (value). There is no standard definition of ERM accepted, though, it is observed in surveys that the understanding of the interrelatedness of risks and upside of risk were significant foci.

Interviews revealed multiple aims for implementing ERM such as the following compliance, to reduce risk exposures and customer complaints. The scope of ERM is quite unclear across in both countries. Ideally, the size of risk teams should get smaller over a period and ERM scope should be linked to mission and vision statement of the company. The value of ERM is not clearly established, companies which have derived some value using ERM tend to have implemented ERM proactively, however, and others generally have reactive approach often as compliance with regulatory requirement. It has been found that only four companies have derived significant value from ERM which is in contrast to the findings of McShane et al., (2011).

Results revealed that to implement ERM effectively, the organisations need to understand the concepts 'risk appetite' 'use of models', 'size and capacity of organisation' and 'risk culture'. All of the companies who participated in the survey in Indian insurance market have risk committees, however, in the UK insurance market risk committees are well established from few years. The issue in UK market is not to have risk committees rather time involved in risk committees. To use time effectively, sub-committees are formed i.e. an committee for fraud, compliance and operational risk.

Risk appetite is better understood in the UK insurance market as almost all of the companies participated in the UK survey have written risk appetite statements while in India it is almost half (in the survey). In the case studies risk appetite has a a significant value for Company A to provide a cap on maximum limit of risk exposures, whereas for Company B risk appetite has no meaning. These findings on risk appetite extend the findings of Aven (2013) by providing empirical insights.

Both cases revealed that size of the organisation does not matter rather the capacity of organisation to handle risk is what matters. In contrast, it is found that only leading and experienced companies have taken initiatives to implement mature ERM practices. It implies that emerging companies have not yet found value from ERM, and are rather simply following compliance. With varied understanding, companies have adopted mimetic and coercive isomorphism in implementing ERM in a regulatory driven insurance business environment full of risk and uncertainty (Powell

& DiMaggio, 2012). Development of an organisational risk culture is one of the consistent foci of almost all the organisations in both markets partly influenced by the tone from the top.

8.2.3 Issues in Implementation of ERM

Seventeen issues were found in the implementation of ERM across India and UK insurance market. These can be classified into: Generic issues which are common across countries, country specific issues and contrasting country specific issues.

<table>
<tr><td colspan="2">Issues in the implementation of ERM</td></tr>
<tr><td>Generic Issues</td><td>Country Specific Issues</td></tr>
<tr><td>Five major generic issues:
Insufficient understanding of ERM
Change in local and international regulation
Process risk
Reputation and conduct risk
Operational risk</td><td>Four unique issues in Indian insurance market
Insufficient data quality
Lack of financial literacy
Financial risk such as credit risk, investment risk
Unfair competitive policies
Two unique issues in UK Insurance market
Legacy businesses
Ambiguity due to different expectations from regulators (e.g PRA and FCA)</td></tr>
<tr><td colspan="2">Six Country specific unusual issues</td></tr>
<tr><td>Indian Insurance market</td><td>UK Insurance market</td></tr>
<tr><td>Under-reporting of risks
Lack of regulation
Lack of structure of risk governance
Under provisioning than expected regulatory capital
Lack of capital
Higher insurance frauds.</td><td>Over-reporting of risk
Lack of clarity in regulations
More established structure of risk governance
Over provisioning than regulatory expected capital
Lack of efficient use of capital
Low insurance frauds are reported</td></tr>
</table>

Table 8.1 Issues in implementation of ERM

8.2.3.1 Generic issues

Table 8.1 depicts five generic issues found using mixed research methods. Surveys, interviews and case studies revealed that there is wide ambiguity in understanding ERM, its aims and purpose and its related terms in general. In a regulated market, companies have to follow local and possibly some international regulations to survive, or even exist, within the market. In two surveys and interviews, regulatory risk is mentioned as the biggest risk as it can endanger the solvency of the company. Furthermore, understanding end-to-end processes and embedding ERM in complex processes of the organisation is one of the prominent issues highlighted by companies. Understanding regulations such as Solvency II and linking it with the processes in a short period is challenging.

Reputational risk and conduct risk are most common risks for both companies in case studies. However, these risks were not mentioned during interviews and surveys. Perhaps these risks are more concerning for leading companies trying to maintain their status in the market. Managing operational risk is an issue in both countries and highlighted in both the case studies. Though investing in an end-to-end software is a possible solution, but till now no company has implemented such software to reduce operational risk.

8.2.3.2 Country specific issues

Companies faced 11 country specific issues in both markets, however, there is an unusual trend observed. Only four issues ‘insufficient data quality’, ‘lack of financial literacy’, ‘financial risk such as credit risk, investment risk’ and ‘unfair competitive policies’ are specific to Indian insurance market which are not prominent in the UK market whereas two issues ‘legacy businesses’ and ‘contrasting risk culture creating ambiguity’ are more specific to the UK market than Indian insurance market. Six issues have been identified across both markets but there are on different extremes. In Indian market faced the issues of under-reporting of risks, lack of regulation, lack of structure of risk governance, under provisioning than expected regulatory expected capital, lack of capital and higher insurance frauds. However, in the UK

insurance market, the issues of over reporting of risk, lack of clarity in regulations, the more established structure of risk governance, over provisioning than regulatory expected capital, lack of efficient use of capital and low insurance frauds are reported.

8.2.4 Maturity of ERM practices

The strategic level within the companies demonstrates the maturity of ERM practices. Four emerging ERM strategies from theory and empirical data are developed which are: 1) Rudimentary, 2) Anticipatory, 3) Resilient and 4) Transformatory. It has been found that most of the companies interviewed are at stage 1 and stage 2, 'Rudimentary and Anticipatory Risk Strategies'. Four companies in both the markets are at stage 3 'Resilient strategies' and two companies in both markets are at stage 4 'Transformation strategies'.

'Rudimentary' risk strategy is based on establishing system, structure and policies (Frigo & Anderson, 2009 b). 'Anticipatory' risk strategy develops when focus moves to taking action to deal with prediction of future losses by using models to prevent or protect from insolvency (Pezzulo, Butz, & Castelfranchi, 2008). In both the markets, identifying the top 5 and the top 10 risks are the most often used strategy in Rudimentary risk management. In Indian insurance market, maintaining risk registers and a risk committee in compliance to IRDA guidance are followed by almost all the companies, whereas in the UK, three lines of defence is the most often adopted risk governance model within a hierarchical structure, with defined roles, responsibilities and accountabilities for decision making.

Companies across the world are operating under situation of volatility and therefore require systems and process that can easily adopt and adjust to change in internal and business environment without losing control. It will also enhance the stability of system so it can bear disturbances by improving adaptability and sustainability (Fiksel, 2003; Martin, 2004). Two companies in both countries have made the greatest progress in following a resilient strategy.

To derive value from ERM for survival, cost efficiency and to derive strategic leverage, companies need to deal with both short-term issues and long standing issues in the implementation of ERM. With a resilient strategy, it is easier to deal

with short- term issues but to deal with long term issues, companies need to adopt transformation strategies. Two companies, one in each country, have adopted transformation strategy with a focus on developing risk culture and promoting risk and reward. Both companies are dealing with different issues therefore, the way companies transform could be significantly different.

8.2.5 Practicing ERM Strategy

The findings of research revealed that irrespective of a different interpretation of ERM and unique business objectives and way of implementing ERM, common goals of business such as customer satisfaction, complying with regulation would be same for mature and legitimate organisations (Powell & DiMaggio, 2012). Two leading companies (in case studies) in nascent and mature markets have adopted the same 'resilient' strategies, though, substantially different in size, experience and operating under differing institutional pressure. Both Companies are practising Resilient ERM strategies using same five common steps, but the way the strategy has been implemented is significantly different. The five steps are: 1) Maintain diversity and reducing concentration risk; 2) establish inter-connectivity or inter-relatedness of risk; 3) identifying unrecognised emerging risk in the system; 4) foster continuous, adaptive learning and integrated thinking and 5) aligning management with governance. Both companies required the strategic change to adopt transformation strategy to integrate risk management into ERM, align processes and to establish risk and reward relationship. The five common steps followed by companies present a way forward for other companies to adopt and implement resilient ERM strategies in the effective manner in nascent and mature markets.

8.3 Discussion

The findings of the surveys in both the countries brought attention to various consistencies and inconsistencies in the implementation of ERM practices. Insurance companies attitude were either risk tolerant (India) or risk neutral (UK) and very rarely companies were risk seeker. This perhaps shows a lack of confidence of insurance companies in their partial implementation of ERM. There are various generic and country specific issues companies need to address.

8.3.1 Legitimacy and Institutionalization in case study

Companies A and B are leading and known for their good reputation and behaviours. Companies have high credibility and are leading companies following socially constructed norms, values, beliefs and definitions (Suchman, 1995). The legitimacy of these companies provides behaviour and practices which are acceptable to the larger audience in the India and the UK market. These companies also follow to strategic isomorphism as they are able to develop strong relations, power hierarchies endorsed by powerful social actors and inevitable presence in society (Deephouse, 1996). Coercive isomorphism entails following strict regulatory guidelines but these companies can discuss with their regulators due to goodwill built up previously.

Both organisations in the case studies are able to create meaningful structures but struggling with longstanding industry and country specific issues (Greenwood & Hinings, 1996; Kondra & Hurst, 2009; Pedersen & Dobbin, 2006). Most of the issues highlighted by both insurance companies in the Indian and the UK market were country and industry specific issues rather than company specific.

Company A highlighted that perceived value of ERM across the world is still understood during bad times, investing in good times in ERM to better prepare for bad times is not the very common phenomenon. Company A faced majorly reputation risk and financial risks such as pricing of product (adequate underwriting), credit risk, and investment risk. The process is the key challenge that needs to be addressed. How to integrate ERM in current processes is still not fully understood (Lam, 2014).

Public sector companies in India are usually capital rich. Fortunately, it is possible for an insurance company to make a profit from investment income even when it makes an underwriting loss. To survive within market, public sector institutions in Indian insurance market have utilised higher return on underlying reserves. This has balanced their losses caused by losing market share to private insurance companies and makes their actual performance inconsequential (Greenwood & Hinings, 1996). This has impacted upon the true competition in Indian insurance market. Company A claimed that these defensive strategies used by public sector companies wouldl soon disappear once disparity ends, or regulatory intervention occurs. Private sector

insurance companies are seeking capital and reinsurance coverage for growth which is not available, therefore, the pace of growth is slow but progressing. Development of a risk culture is also slow as risk is not embedded at the bottom of pyramid of organisations. Effects of these efforts are usually not visible in the short term. There is no reward for taking such initiative as it involves cost, therefore has a low priority. Due to lack of capital, Indian companies have not developed large risk teams to inculcated sound risk culture. Less attention has been paid to deal with such implementation issues in ERM by industry.

Lack of risk regulations has also created inconsistency in the adoption of ERM and its implementation. There is no standard approach that companies can adopt. In such situation, companies have adopted a combined approach to Corporate Guidelines provided by IRDA in 2009 and their own interpretation of ERM based on company's objective. There are also various terms which are not addressed and demand reforms in regulations such as 'maintenance of adequate solvency capital', 'insurance fraud' and different categories of customer complaints and consequence for the companies. Lack of reporting of risk is also another cultural issue to be not addressed. The insurance industry is still in the process of integrating data in a common platform to reduce a major issue 'Fraud'. Now all of the insurance companies in India have CRO mandatorily but there is not the opportunity provided for knowledge enhancement through certification, attending conferences, CRO forums or professional education.

Company B major risk is risk arising from legacy business written a few years back without considering assumptions of long term impacts of complex products, variable market condition and regulatory changes. These risks are generally unknown and represent black boxes for the company. Process risk is a major challenge for the company. The company has been trying to address this risk for the last two years, once the company understood the process and interconnectivity, the regulator changed the way of the reporting requirement. Frequent regulatory interventions in the UK market have led to a repetition of the certain procedural task by corporates which made it frustrating and monotonous for them.

UK insurance market is suffering with lack of clarity on risk regulation provided by two regulators Prudential Regulation Authority (PRA) and Financial Conduct

Authority (FCA). These two regulators expect conflicting outcomes, for example, PRA desires to have sound balance sheet by reducing the expenses with sound reserves and capital, however, FCA expects firms to promote risk culture which requires employees' interaction, training and development cost. Huge investment in IT is needed for insurance companies in the UK, but frequent changing regulations and conflicting expectations from regulators pose several challenges and delaying the decisions. This has recently troubled Royal Bank of Scotland (RBS) and became a discussion in the boardroom.

Inculcating a good risk culture is a multi-year progressive journey that requires several initiatives with a considerable investment and its value is subjective in the long term. Human resource is an important feature for every insurance company, and therefore the conduct risk of individuals working in the company has drawn attention from regulator and companies. This requires ERM to be aligned with HR policies of the company and its risk reward policy. Over-reporting of risk and capital efficiency are few other challenges, discussed within case study.

8.3.2 Isomorphism and Strategic Change

Igor Ansoff, known as father of strategy, declared that focus of corporate strategy is to deal with strategic problems/issues of the firm where some issues requires small change such as change in market penetration, product development, new market development or through diversification, and other long standing issues/problems requires 'Strategic Change' (Hussey, 1999; Rajagopalan & Spreitzer, 1997). Rajagopalan and Spreitzer (1997) have highlighted three theoretical lens of strategic change: Rational lens, learning lens and cognitive lens (see Table 8.2).

Stages of organisation	Stage 1 'Nascent'	Stage 2 'Intermediary'	Stage 3 'Mature'
Organisational structure and procedure	Set up new structures and procedures	Diffusion of structures and procedures Setting values	Stabilized structures and standard procedures
Theoretical lens	Rational lens	Learning lens	Cognitive lens
Features	Sequential and planned change to achieve organisational objectives	Changes through small and iterative steps leading to minor or major changes in firms' strategy	Changes in managerial cognition and action of managers in environmental and organisational contexts are emphasised
Isomorphism	Coercive isomorphism	Mimetic Isomorphism	Normative Isomorphism
Features	Adhering to regulatory guidelines for survival	Following different benchmarking practices/structures i.e. Joint venture partner or S & P ERM structure	Requires professionalism, professional knowledge and professional
Market conditions	Stable and predictable	Rapidly and incrementally changing	Partially or fully discontinuous and unpredictable
ERM Emerging strategies	Rudimentary and Anticipatory strategy	Resilient strategy	Transformatory strategy

Table 8.2 ERM Emerging strategies, Isomorphism and Strategic Change

It is observed that both Companies A and B have developed mimetic isomorphism in the past five years and at this stage, they need to move forward from implementing mundane ERM practices. Both of the firms clearly adopted and implemented ERM strategies in rapidly and incrementally changing market conditions. Both companies are leading companies and early adopters of strategic change in implementing ERM.

To implement ERM effectively with an aim to achieve good risk governance, understanding of governance and risk management is a must. Company A has not yet provided a formal training to its risk management team, executive and board members to enhance cognition level of implementing ERM effectively. Similarly, situation is with Company B, however, Company B has rather hired highly experienced actuaries and Group CRO. Improving the cognition level of both companies' executives and management will provide new directions to analyse pitfalls in governance and management and strategies to overcome them. Both companies are required to adopt cognitive lens of Strategic Change by establishing normative isomorphism through professionalisation, enhancement of knowledge of managers to promote good risk governance (see Table 8.2).

8.4 Chapter Summary

This Chapter highlighted three 'coercive, mimetic and pragmatic' styles of adoption of ERM. There is no company across the Indian and the UK market which has shown the full implementation of ERM. ERM has been implemented partially due to ambiguity in understanding ERM by senior managers. The understanding of ERM is required both at basic and at an advanced level. The research further highlights the issues in the implementation of ERM and compares the issues in the nascent and mature market. There are in total 17 issues were identified categorised broadly into generic and country specific issues. The maturity of ERM practices has been demonstrated by four emerging strategies from theory and practice. These strategies are termed as 'Rudimentary', 'Anticipatory', 'Resilient' and 'Transformational' strategies. These strategies were tested when considering the two leading companies in nascent and mature markets. Results of comparative case study revealed that both companies had adopted similar 'Resilient' strategy though, the way it has been adopted it is significantly different from each other. It has been observed that companies are not able to deal with some longstanding issues which in the long term affects adversely impact the overall performance of the industry. To deal with such issues, companies require deinstitutalisation.

Strategic change and isomorphism have been discussed to analyse the results. It has been found that both companies in the case studies have been following mimetic isomorphism for a long time. Now there is a need to adopt a strategic change to become early adopters of institutional creativity to promote cognition level of executives and management to provide new direction in implementation. There is a need to promote professionalization and cognition level to senior managers by adopting 'cognitive' strategic change in partial and fully discontinuous market conditions.

Chapter 9 Conclusion and Recommendation

9.1 Introduction

The thesis is set to explore the implementation of Enterprise Risk Management (ERM) practices and the ways ERM has been adopted and implemented. The issues in implementation, emerging strategies for ERM implementation and comparison between India and UK practices have been explored. The aim of this Chapter is to answer three research questions:

Q1: Who is adopting the appropriate ERM practices and how well the company is able to implement it?

Q2: What are the issues in the implementation of ERM practices?

Q3: How ERM practices are different between India and UK?

Qualitative research has been carried out into the insurance industry that is one of the premier risk bearing businesses. The research involved several comparative studies both in the India and the UK insurance markets using two surveys, 40 interviews of senior management and CROs and an in-depth comparative case study between one large Indian and one large UK insurance company. A theoretical lens of Institutional Theory with emphasis on isomorphism and strategic change has been used to analyse the data and produce the findings.

The first part of the Chapter discusses answers to three research questions. The second part of Chapter brings attention to key empirical, theoretical, policy contributions and trans-disciplinary implications. The last and final part of the chapter highlights the limitations of the study and future recommendations.

9.2 Implementation of ERM practices

This section discusses the answers to the research question by discussing three styles of adoption of ERM, issues in implementation and maturity of ERM practices.

9.2.1 Adoption and partial implementation of ERM

The findings from multiple research methods clearly revealed that there has been 'partial implementation of ERM'. The findings confirm the previous findings of 'inconsistency' in adoption and implementation of ERM (Altuntas et al., 2015; Arena et al., 2010; Mikes & Kaplan, 2015). However, the results of research extend the existing literature by providing three styles of adoption of ERM and reasons for partial ERM implementation.

ERM has been adopted in three styles: coercive adoption, mimetic adoption and pragmatic adoption. Coercive adoption is one of the foundational and primary level adoptions of ERM to survive in the regulated market by blending compliance into existing risk framework. In the Indian market, it is visible by combining ERM with regulatory guidelines issued in the year 2009, whereas in the UK market, it is demonstrated by extending the Traditional Risk Management (TRM) to include ERM. Mimetic adoption is one of the most significant and prominent styles of adoption and confirms to the similar observation made by de Villiers and Alexander (2014) in benchmarking practices. The Companies have mimicked the behaviours of the other companies which they consider a good example of ERM implementation or define good standards. There are many ways in which companies have adopted ERM: some have adopted ERM of parent companies, credit rating agencies and joint venture foreign partner. Rarely any company mentioned that they are following the ERM practices of their competitors. Pragmatic adoption of ERM focuses upon the continuous and discontinuous development of ERM. The former is adopted with an aim to 'develop sound risk culture' while latter supports 'devising a strategy to link organisational processes with ERM'.

Understanding of ERM has been a consistent issue and discussed in various streams of literature such as strategy (Bromiley et al., 2014; Frigo & Anderson, 2014) and

accounting (Arena et al., 2010; Power, 2009) focusing on either definition or related terms. The results highlighted that understanding of ERM is required at two levels: basic and advance. At the basic level, the emphasis should be provided on the understanding of ERM as a concept and its related terms. At the advanced level, the pragmatic knowledge of ERM must include the ways to deal with the issues in the the implementation of ERM and a way forward from rudimentary ERM to mature practices. This is possible in a normative ecosystem consisting of a consensus among professional and regulatory bodies.

9.2.2 Issues in Implementation of ERM

This is the first study to my knowledge presenting the comparative issues in the implementation of ERM between a nascent and a mature market. The generic issues in the implementation of ERM such as ambiguity in understanding, risk reporting, operational risk and development of culture are scattered across the literature in different disciplines. The findings demonstrate 17 issues consisting of two types of major issues in the implementation of ERM: Generic issues (5) and Country specific issues (12). Generic issues are related to ERM as a concept and dealing with change in the business environment that are common across countries, however, country specific issues are specific in nature.

Generic issues include inadequate understanding of ERM as a concept (Bromiley et al., 2014) and linking it with existing organisational processes. Further, it deals with challenges of controlling operational risks, which are the internal risk, and frequent adaptation to local and international regulation, which are external risk, (Thomson, 2007). The risks, though, are not expected to be 'zero', but need to be minimised (Kaplan & Mikes, 2012). Developing a sound risk culture to manage organisation reputation and conduct risk of employees is also a persistent issue (Mikes, 2009).

This is the first study which highlights the country specific issues in the implementation of ERM in the insurance industry. However, there were other existing studies in the UK market highlighting issues in the implementation (Deighton et al., 2009). It has been found that the Indian insurance market faces four specific issues not existing in the UK market related to the inadequate quality of

client data, unfair competitive policies between public and private sector insurance companies, lower financial literacy and financial risk. However, UK companies are in general far more experienced, where there are approximately 10 times more companies than in India, as are its regulators. Companies in the UK are dealing with the uncertainty of legacy business written in the past for long term which could not consider today's business assumptions, therefore, may be considered as a black box. Also, there is difficulty of contrasting two risk cultures created by its regulators the PRA and the FCA. This again can lead to ambiguity.

Six issues have been identified across both markets where there are contrasting problems where further studies might be required to understand good practices. The Indian market faces the issues of under-reporting of risks, lack of regulation, lack of structure of risk governance, under provisioning of expected regulatory expected capital, lack of capital and comparatively higher insurance frauds. In the UK insurance market, the issues are of over reporting of risk, lack of clarity in regulations, the more established structure of risk governance, over provisioning of regulatory expected capital, lack of efficient use of capital and low insurance frauds. Lower insurance frauds are though, not causing a concern in the UK insurance market, yet, lack of attention may enhance this risk. There is a need to improve three lines of defence model, however, it is not utmost priority.

9.2.3 Maturity of ERM practices

The findings of the research extends how ERM maturity has been defined Lam (2014) by demonstrating four emerging ERM strategies from empirical data and the literature. Four emerging strategies are major contribution of thesis and are termed as 'Rudimentary strategies', 'Anticipatory strategies', 'Resilient Strategies' and 'Transformation strategies'. These strategies reflect a pattern in the ladder of maturity in legitimate organisations. To implement Resilient ERM strategies, case studies clearly demonstrated five common steps used by large and leading institutions in nascent and mature markets. This shows a common approach to implement resilient ERM across different markets. The research confirms the findings of Paape and Speklè (2012) that large and leading financial organisations demonstrate mature ERM practices as only the four leading and large companies are

able to reach to state 3 and 4 of maturity in implementation of ERM. These strategies are tested in the two case studies in the nascent and the mature market. It has been found that both companies have a mimetic style of adoption of ERM, though, following ERM framework from the parent company and a credit rating agency. The way ERM has been implemented across both companies is different as one has developed niche market while sustaining the existing market, whereas others have strengthened the existing market by eliminating inefficient risks such as fraud. Also, the way the companies have addressed long standing issues such as legacy business, risk concentration and fraud risk is also significantly different. However, both leading companies are operating under substantially different institutional pressure, though, following similar resilient strategies. This highlights that there are multiple ways of following similar strategies across significantly different markets.

9.3 Theoretical Implications

Previous literature has iteratively discussed inconsistency of ERM practices across nascent and mature markets. This research has not only confirmed the inconsistency in implementation of ERM but also developed a pattern for emerging ERM strategies which has been explored empirically. It is reflected in empirical data that companies have shown 'coercive and mimetic' isomorphism in the adoption of ERM. Insurance companies show higher legitimacy to survive in the market. To promote good risk governance and to overcome common and country specific issues in the implementation of ERM, strategic change is required (Hussey, 1999). The results of thesis advocate that leading companies adopt cognitive lens for strategic change by accepting a normative isomorphism (Deephouse, 1996; DiMaggio & Powell, 1983; Rajagopalan & Spreitzer, 1997). Insufficient understanding of ERM and interlinking of ERM with organisational processes are the major reasons of partial implementation of ERM. Increasing cognition of managers can lead to mature ERM implementation while promoting good risk governance. In the absence of standard approach, normative isomorphism can be encouraged through professionalization at local and international levels to overcome common and country specific issues in the implementation of ERM. To achieve good risk governance, longstanding issues in

the implementation of ERM in the industry as a whole need to be addressed, so that actions (implementation) can follow structure and processes in the organisations (Tolbert & Zucker, 1999).

9.4 Policy Implications

The research will be certainly beneficial to CRO, CEO and senior executives in the insurance industry in providing insights on adoption, implementation and issues associated with implementation of ERM. Foreign companies entering into the Indian market or Indian companies expanding abroad will get comparative insights into industry specific and country specific issues. The research has shown several insights for policy makers and regulators in a nascent and a mature market. It has been observed that both markets are facing numerous issues with regulation and investment in IT process impacting on the implementation of ERM. The issues from the industry are more specific in nature which requires action from 'Industry' as a whole rather from specific companies. Robust ERM policies are needed to address these issues at international and local level. Additionally, the research would be very beneficial for CRO and senior management of the company to understand what ERM is, its issues in implementation and emerging strategies to achieve good risk governance. The research certainly leads to the development of normative practices, with greater professionalization and discussion around risk governance. In India, the introduction of a ‘CRO Forum India’ with an aim to develop good risk governance would be a sound contribution. These normative practices can be extended to the development of the UK market and can be replicated in other nascent and mature markets.

9.5 Trans-disciplinary implications

This research provides cross country comparative knowledge of ERM implementation. The research findings are relevant for disciplines such as management science, risk management, business finance and accounting, economics

and management operations. Additionally, the comparative study of countries and industry can be relevant to international businesses and joint ventures. The emerging ERM strategy should promote a new series of research in strategic finance and organisational development.

It can be partially concluded that there is a way forward for ERM to become transdisciplinary (Choi & Pak, 2006) rather than currently claimed as interdisciplinary (Acharyya & Johnson, 2006), multidisciplinary (Crockford, 1980) or boundary-less (Mikes, 2011; Power, 2004, 2009) to share common goals and framework to address risk related problems. Four emerging strategies are an important contribution of the research which may assist corporates in implementing ERM within the business context. The clarity of the ERM definition and its aims will certainly enhance the way Risk Governance is being implemented within insurance companies. The inclusion of strategic change with Institutional Theory will certainly improve the risk governance from theoretical perspective.

9.5 Limitation of Research

Despite many benefits of mixed research methods for providing broader, deeper and useful information, there is no single method without its limitation. Different research methods can provide complementary information. Due to lack of a common platform to circulate Survey I in Indian insurance market, researcher has to spend a great amount of time and cost for each visit. However, this provided an opportunity for conversation with the senior executive and supported to explore their interest for the interview. Executives were more flexible in talking about risk rather than filling up survey. Another challenge, I found that executives in India receive so many mails that they keep an assistant to manage their email account and other work. These assistants do not provide value to a survey while meeting a researcher is considered as a way forward for mutual learning. It was easier to circulate Survey in the UK market, yet, the response rate was not high. Though, survey was able to highlight the current state of ERM yet, it had limitations.

To overcome these limitations, an interview method was chosen to understand ERM practices. Interviews were time consuming. Appointments for interviews were taken few months in advance, then interviews are transcribed and analysed which took researcher's considerable time. One of the limitation of interview was to generate interest for the research among interviewees. To do so, the researcher had to start the interview in the conversation mode and then the interviewee provided the data. Many of the times, they shared other data as well. Getting access for case study was a real challenge. Initially companies were not willing to provide access. A formal letter to the Head of ERM department of the company, followed by a few meetings were helpful. Companies provided the time for interviews as per their executive convenience. I was able to interview a limited number of senior management for case studies based on purposeful sampling. This is followed by Survey II. I found several limitations in Survey II than Survey I. The senior executives of case study expect a specific language for which they understand. For example: In India, senior management can easily understand what is meant by 'designation' while in the UK, 'job title' is better understood. For this, I tested the Survey II many times more than Survey I.

I was able to carry out limited number of interviews and possibly those who have rich information and willing for the interview. There is a possibility to interviews more senior managers in insurance industry as well as other industries such as banking, airlines, manufacturing and construction. Emerging ERM strategies can be tested in other case studies and in other industry. Current research methods are chosen in the order of the data needed to answer the research questions however, the possibilities may arise to use different order of methods. The study provided a comparative analysis between a developing country and a developed country which shows a possibility of extension at other countries.

There are certainly methodological limitations as the researcher has specifically chosen four themes, the industry (insurance) and the countries India and the UK. This is required perhaps due to nature of the study otherwise the thesis may have become boundary-less with ERM. Therefore, the scope and aims were pre-set to

study implementation of ERM. The study has been majorly carried out from management and governance perspective to explore ERM practices leading to risk governance. An auditing perspective has not been discussed in detail, though, it is a part of umbrella term GRC. The focus of the thesis is majorly to understand 'institutional' perspective in the implementation of ERM rather than organisational. Therefore, the companies for case studies were chosen considering their legitimacy.

It has been concluded that both companies in the case studies need to adopt strategic change moving from 'Resilient Strategies' to 'Transformatory Strategies' to deal with long standing issues in the implementation of ERM. Future research throwing light upon the transformation would be very beneficial in improving the maturity of ERM practices leading to achievement of good risk governance. Other leading companies that are implementing 'Transformatory ERM strategies' could be studied in future research.

9.5 Future Research

Obviously, future research extending the jurisdiction at local, industry and international level would be worthwhile. The understanding of ERM requires more case studies to understand the institutional change and its effect on strategies. There would be benefit from presenting an international comparative study comparing the ERM practices of joint venture partner and local partner between India and the UK. For this, the researcher has already collected the data.

Also, future research could explore attributes of ERM such as the development of different types of risk appetite within the organisation. In the UK, the use of models has been questioned, and so the models used to derive the value of ERM need to be considered. The scope of ERM has not yet completely explored which may have an immense potential for future research. Though development of a sound risk culture is an agenda of almost all participating companies, yet companies' lack of cognition in ways to develop it. There is a significant need to develop a mindful risk reporting system which does not only work as a risk repository rather it provides a platform to inter-relate the risks. There is a business opportunity to develop risk technologies,

which provide end-to-end software. This will certainly support integrating ERM with organisational processes and to deal with operational risks such as fraud using insurance analytics. In the Indian insurance market, a fair market policy is essential, which could follow the UK model. The research further can lead to the development of stages of integration of 'ERM with Organisational processes' and ways to develop strategic risk capability of senior managers.

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Appendices