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# RISK GOVERNANCE IN INTEGRATED REPORTING BY SOUTH AFRICAN LISTED BANKING ENTITIES

by

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#### **Abstract**

Sufficient integrated reporting on risk governance is dependent on the actual risk governance strategies employed by South African-listed banking entities. Proper risk governance strategies are based on a clear understanding of the risk governance universe which influences such strategies.

The elements of such a risk governance universe should incorporate aspects of risk management, information security management, Information Technology governance and management, Business Continuity Management and crisis management. In addressing these elements, a clear understanding is necessary of the principles of good corporate governance, as stipulated in the King Report on Governance for South Africa. This can then be supported with international best practice guidelines on all the subcomponents of the risk governance universe.

These elements thus form the reference against which risk governance practices can be deployed to control risk factors. This involves the identification, measurement and mitigation of unwanted risk exposure, which is, in turn, dependent on the manner in which risk management plans have been applied throughout the different levels of employment in South African-listed banks.

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**Keywords:** Integrated report; risk governance; King III; Enterprise Risk Management (ERM); Information Technology (IT); Information System (IS); Business Continuity Management (BCM); ISO 17799; ISO 27002; ISO 22313; ISO 27001; ISO 31000; FTSE JSE Banks Index (J835); COBIT.

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#### **Abbreviations**

Barclays Africa Barclays Africa Limited

BCM Business Continuity Management

BCP Business Continuity Planning

Capitec Bank Holdings Limited

CEO Chief Executive Officer

COBIT Control Objectives for Information and Related Technology

COSO Committee of Sponsoring Organisations of the Treadway

Commission

ERM Enterprise Risk Management

FirstRand FirstRand Limited

FSB Financial Stability Board

ICBC Industrial and Commercial Bank of China

IoDSA Institute of Directors in Southern Africa

IRM Institute of Risk Management

IS Information System

ISACA Information System Audit and Control Association

ISO International Organization for Standardization

ISO 17799 Information Technology – Security techniques – Information

Security management systems – Requirements

ISO 22313 Societal security - Business Continuity Management systems

ISO 27001 Information Technology – Security techniques – Information

Security management systems – Requirements

ISO 31000 Risk management – Principles and guidelines

IT Information Technology

J835 FTSE JSE Banks Index

JSE Johannesburg Securities Exchange

King III King Report on Governance for South Africa 2009

LCR Liquidity Coverage Ratio

Nedbank Group Limited

NSFR Net Stable Funding Ratio

OECD Organisation for Economic Cooperation and Development

RMB Holdings Limited

Standard Bank Group Limited



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#### Chapter 1

# Introduction and study layout

#### 1. Introduction

# 1.1. Global financial crisis of 2008 and risk governance

The recent global financial crisis of 2008 was caused by bank failures which effectively halted credit markets and necessitated government intervention in financial institutions considered 'too big to fail'. Liquidity constraints were addressed, with extensive money supply from central banks to save the economy (National Bureau of Economic Research, 2008: 3-5). This supply of money spilled over into open markets and contaminated the global economy and living standards (Donath & Cismas, XII: 95).

Weaknesses in corporate governance arrangements can, to a certain extent, be held accountable for the financial crisis since they failed to safeguard banking enterprises. The split between the ownership and management of banking entities occurred as economies developed over time. Shareholders appointed directors to govern and manage the entity on their behalf. Directors should therefore be held accountable for governing and managing the company (Jackson & Stent, 2012: 4). The standards of directors' conduct, as per section 76 of the Companies Act no. 71 of 2008, emphasise that directors should exercise their powers in good faith, with a degree of care, skill and diligence.

A study conducted by the Organisation for Economic Cooperation and Development (hereafter OECD) states that remuneration systems of directors were not properly aligned with the strategy and risk appetite of companies and their long-term interests (Kirkpatrick, 2009: 1). Risks were not effectively linked to strategies and not all relevant stakeholders were taken into account (Anderson, n.d.: 14). The OECD study further argues that there should be disclosure in annual reports on foreseeable risk factors such as systems for monitoring and managing risk (Kirkpatrick, 2009: 25). In South Africa, the recent corporate governance code, namely the King Report on Governance for South Africa 2009 (hereafter King III), was developed by the Institute

of Directors in Southern Africa (hereafter IoDSA). King III also supports proper risk disclosure of unexpected risks and the effectiveness of risk management processes. Such disclosure is an essential element of risk governance, as stipulated in King III (IoDSA, 2012: 40).

The impact of the financial crisis of 2008 could have been reduced or even avoided through improved risk governance practices incorporating regulatory compliance risk. Such practices, together with proper reporting on the effectiveness of risk management strategies in the integrated reports of banks, confirms the quality of integrated risk management processes, thus ensuring sustainability for stakeholders.

# 1.2 Background to the research problem

# 1.2.1 Risk governance practices in the banking sector of South Africa

Risk governance practices in the South African banking sector are influenced by the King III (IoDSA, 2009) corporate governance requirements. King III addresses nine topics, of which topic four relates specifically to the governance of risk (IoDSA, 2009: 35). Risk governance is further supported by the Basel III requirements which are to be phased in over a number of years in this country and which aim to responsibly manage the riskiness of banking profiles (Nier & Baumann, 2006: 333).

King III became effective on 1 March 2010. This new code was introduced after the 2008 financial crisis and sought to align corporate governance practices in South Africa with the new Companies Act no. 71 of 2008. This Act, which became effective on 1 May 2011, is based on latest international corporate governance trends (IoDSA, 2009: 5).

The basis of King III is to "apply or explain"; thus directors are able to apply a King III recommendation in different ways yet still achieve fairness, accountability, responsibility and transparency. Explanations must always be provided on how such recommendations have been applied. Should recommendations not have been applied, reasons must be provided explaining why compliance was deemed unnecessary (IoDSA, 2012: 7).

Furthermore, the Johannesburg Securities Exchange (hereafter JSE) stipulates in its Listing Requirements that all listed enterprises on the Exchange must comply with King III. The IoDSA (2013) issued a practice note in January 2013 referring to Section 8.63 of the JSE's Listing Requirements, which states that enterprises must explain how the King III principles have been applied (JSE, 2012: 129). These requirements were developed after consultations between the IoDSA and the JSE on how enterprises were to report on their application of the King III recommendations. The practice note, "King III reporting in terms of the JSE Listing Requirements", issued in January 2013 by the IoDSA, details the outcome of the consultations with the JSE. The note states that the principles in Chapter 2 of King III should be incorporated in the intergrated reports of enterprises. This is because Chapter 2 is linked to all other chapters and principles of King III. The King III application register contains the applications and considerations of every one of the 75 principles in King III. The King III committee and the JSE recommend that enterprises publish this application register on the enterprises' websites (IoDSA, 2013: 4).

Marx, Van der Watt and Bourne (2011: 8) also state that strategy, risk, performance and sustainability are interdependent and that boards should integrate these concepts when applying corporate governance principles to enterprises. It is therefore clear that risk governance is a subcomponent of corporate governance and the disclosure of risk governance should demonstrate a clear integrated approach in addressing risk.

The strength of the South African economy depends on a sustainable and well-governed banking environment. King III refers to sustainability as "...the most important source of both opportunities and risks for businesses," (IoDSA, 2012: 10). All businesses involve taking risks and reaping the rewards for such risks. The banking environment should apply the principles of risk governance, as envisaged by King III. Sufficient disclosure of risk governance in the integrated reports of listed banks on the JSE in addressing risk governance strategies should be done to ensure value is added to all stakeholders.

This study focuses on the Banks Index because of the effect the financial crisis of 2008 had on banks and the global economy (The Economist, 2014), the critical role that banks play in the current market system (Baily & Elliott, 2013: 1) and indications that the United States stimulus programme could unwind (Board of Governors of the Federal Reserve System, 2014). This last factor could have an impact on emerging market economies (South African Reserve Bank, 2014a). Furthermore the global financial crisis resulted in more stringent regulations regarding bank capital, liquidity and corporate governance (Deloitte Touche Tohmatsu Limited, 2012: 1). Prolonged low interest rates, such as those experienced since the financial crisis of 2008 and up until the end of 2013, could increase the level of risk-taking by banks since low interest rates drive down margins (Delis & Kouretas, 2011: 840-855).

Enterprises that are part of the Banks Index (JSE code J835) are also of specific interest to investors. The FTSE JSE Banks Index (J835) constituents are Barclays Africa Limited (hereafter Barclays Africa), Capitec Bank Holdings Limited (hereafter Capitec), FirstRand Limited (hereafter FirstRand), Nedbank Group Limited (hereafter Nedbank), RMB Holdings Limited (hereafter RMB) and Standard Bank Group Limited (hereafter Standard Bank) (Johannesburg Securities Exchange, 2014).

On 31 December 2013 the Banks Index had a return of 13.57% per annum for the past five years. This represents the period just after the financial crisis of 2008 up until the end of 2013. The Banks Index underperformed against the All Share Index with a return of 16.55% for the same period ending 31 December 2013 (PSG Online, n.d.). The Banks Index enterprises typically have a market capitalisation of over R650 billion, suggesting that these types of shares are liquid from an investor perspective (Johannesburg Securities Exchange, 2014).

The impact of a rising repo rate cycle on banking securities is of concern to both investors and other stakeholders.

# 1.3 Research problem

The research problem is twofold:

- i) Firstly, to understand the current concepts and principles of risk governance and its subcomponents. This will be considered in Chapter 2.
- ii) Secondly, to establish whether the banking enterprises which constitute the FTSE JSE Banks Index (J835) on the JSE applied the principles of risk governance disclosure in their integrated reports of 2013. This will be considered in Chapter 3.

The stated research problem is supported by the following quotations from literature:

"Bank failures are part of everyday business but due to the importance of the bank system to a country and potential of systemic risk, it is important that they are limited as much as possible," (Makhubela, 2006: 114).

"Banks should establish formal operational risk management structures. Such structures will ensure the physical establishment of operational risk management in banks and the enhancement of formal risk management processes," (Young, 2001: 360).

"It is important that the process of risk management and assessments about its effectiveness be appropriately disclosed, although the report also notes that experience up till now with such disclosures has not been good," (Directorate for Financial and Enterprise Affairs OECD Steering Group on Corporate Governance, 2010: 4). This concern is also echoed by the Global Reporting Initiative (2013), Ernst & Young (n.d.), the UK Financial Reporting Council (2012), Germany Government Commission (2010), Black, Carvalho and Sampaio (2012).

# 1.4 Motivation, purpose and objectives of this study in addressing the research problem

The motivation for this study stems from Ernst & Young's (2012a) survey on excellence in integrated reporting from South Africa's Top 100 enterprises in 2011. The study is also motivated by the call since 2011 for more stringent regulations in addressing the risk of regulatory compliance for banks. This is supported by the IoDSA (2012: 8) which states that "The credit crunch, and the resulting crisis among leading financial institutions, is increasingly presented as a crisis of corporate governance" and "defects in the financial regulatory framework". From 2013 onwards, regulatory changes in the banking environment have progressively been phased in at both local and international level. These changes primarily affect regulated capital (The Bank for International Settlements, 2011) and regulated liquidity (The Bank for International Settlements, 2013).

It may therefore be asked to what extent do the 2013 annual integrated reports of Banks Index entities listed on the JSE comply with the risk governance principles and disclosures of King III. The year 2013 would constitute the third integrated reporting period for most enterprises given that King III came into effect on 1 March 2010.

The purpose of this study is to examine risk governance concepts and investigate whether the banking enterprises listed on the JSE representing the Banks Index (J835) do indeed comply with the JSE's corporate governance disclosure recommendations on risk governance. The investigation will establish whether the risk governance disclosure practices required by King III are incorporated in the integrated reports of these entities. King III states that "The board should appreciate that strategy, risk, performance and sustainability are inseparable". These aspects would therefore need to be addressed in the integrated reports of enterprises (IoDSA, 2009: 22).

The objectives of this study are twofold:

- (i) To provide background information on both the necessity and the historical development of risk governance in the current state of affairs;
- (ii) To consider the adequacy of banking enterprises' risk governance disclosures in their 2013 integrated reports, as required by King III.

The methodology used to address the first component of this study is a literature review, with findings presented in Chapter 2. The second component is addressed through content analysis, with findings presented in Chapter 3.

This study can add to the existing body of knowledge by establishing whether risk governance practices in South African banks are holistically approached, and therefore, whether adequate disclosure has been achieved. This may in turn suggest improved resilience of banks constituting the JSE's Banks Index.

# Stated research problem:

An investigation into the concepts and principles that need to be considered in a risk governance universe and consideration of the adequacy of risk governance concepts and principles applied and disclosed in the 2013 integrated reports of South African-listed banking entities.

# 1.5 **Study structure**

The structure of the study is outlined below.

# **Chapter 1: Introduction and study structure**

This chapter discusses the background to the study, the research problem and the objectives.

#### Chapter 2: Concepts and principles of risk governance

In Chapter 2 a literature review is conducted to provide background information on both the necessity and historical development of risk governance in the current state of affairs. The risk factors of banks are also examined in this section.

# Chapter 3: Empirical study and research findings

Chapter 3 justifies why qualitative content analysis has been chosen as the research methodology. The integrated reports of banking enterprises which constitute the FTSE JSE Banks Index (J835) on the JSE are used to collect the required data for analysis. The assumptions and limitations of the study are also addressed. Finally, the chapter presents the results of corporate governance disclosure requirements which were measured against a checklist.

# **Chapter 4: Conclusions**

Chapter 4 contextualises and explains the results of the study. The chapter concludes on the objective of the limited scope dissertation, provides a summary of how the primary and secondary objectives were met and links the findings to the initial research problem.

#### 1.6 **Conclusion**

Chapter 1 provides background information of the consequences of the financial crisis of 2008. The factors contributing to the crisis are also briefly considered; these can be summarised as a crisis in corporate governance coupled with the lack of improved regulatory requirements for banks. In South Africa, there is an established code, namely King III, which serves as a guide for proper corporate governance practices. It is furthermore required that the JSE listing requirements comply with the King III code for listed enterprises. This includes the disclosure of risk governance and risk management processes in the annual integrated reports of banks.

South African banks would need to integrate strategy, risk, performance and sustainability concepts in order to comply with the JSE listing requirements and King III principles. Risk governance is a subcomponent of corporate governance and an integrated approach to risk governance should be followed to balance opportunities and risks in all South African banks. This, together with recent regulatory changes (Basel III, which became effective in 2013), would need to be addressed by South African banks.

Banks therefore have the opportunity to use their integrated reports to confirm the quality of their integrated risk management processes, thus demonstrating their sustainability to all stakeholders. South African banks should have complied with the King III corporate risk governance disclosure requirements in their 2013 integrated reports. This would require a thorough understanding of risk governance concepts and principles applicable to South African banks.

The following chapter examines the background information on both the necessity and the historical development of risk governance in the current state of affairs.

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#### Chapter 2

# Concept and principles of risk governance

#### 2.1 Introduction

The Great Depression of the 1930s had global economic repercussions. During that time, Berle and Means (1933) conducted research into the impact of enterprises on both society and the economy. They claimed that enterprises in the 1930s had developed in such a way, that they had become concentrations of economic power which were able to influence smaller enterprises and members of the public (Berle & Means, 1933: 25-26). Furthermore, control of enterprises was separated from ownership as directors and managers took over control of enterprises (Berle & Means, 1933: 69). Berle and Means (1933: 202-322) go on to state that directors should not manipulate accounting records; instead, they should have a fiduciary duty towards the enterprise with regards to the truthfulness of information within the enterprise. They concluded by stating that the situation during the 1930s was "...calling for a decision whether social and legal pressure should be applied in an effort to ensure corporate operation primarily in the interest of the 'owners' or whether such pressure [should] be applied in the interests of some other wider group" (Berle & Means, 1933: 333).

Conflict of interest was according to di Florio (2012: 1-2) evident between corporate executives, the enterprise and its stakeholders since 1933 until now. During the past decades various examples exist of conflicts leading to crisis. Ethics and conflict of interest should therefore be tied, which in return should filter through into effective enterprises' risk management. These comments of di Florio necessitate a brief consideration into the historical development of risk management since 1933 to date which is done below.

Risk management after World War II took the form of market insurance to protect individuals and enterprises against adverse events or loss from accident. Other forms of risk management surfaced during the 1950s. It provides expanded protection against pure risk. During the 1960s contingent planning activities were developed. The use of derivatives to manage financial risk arose in the 1970s.

International risk was addressed by hedging against unanticipated risk and to reduce regulatory capital during the 1980s. Risk management has become a corporate affair during the 1990s. Enterprises now have an audit committee and appointed a chief risk officer. Risk governance was furthermore supported with the development of integrated risk management concepts. Adequate capital reserves became a major concern in the early 2000s, after the collapse of Enron and major defaults during the late 1990s (Dionne, 2013: 1-7).

From the above it is clear that the corporate environment needs guidance on corporate governance which can assist in addressing the sustainability and related risks of an enterprise. This was done during the 1990s where corporate governance guidelines such as the Cadbury Code of 1992 and the King Code of 1994 were issued, which recognised financial risks (Marx, 2008: 85). The enterprises' sustainability issues have become more of a concern in the early 2000s. This was the period to address financial scandals such as Enron and World Com. This led to the issuance of King II in South Africa in 2002 to update developments, locally and internationally. The Sarbanes Oxley Act in the United States of America in response to the scandals was also passed into law in 2002 (Jackson & Stent, 2008: 3). The United Kingdom followed with their Combined Code on corporate governance in 2003 (Marx, 2008: 86). The Sarbanes Oxley Act placed additional liability on corporate executives to that they need to comply (Cohen, Dey, & Lys, 2004: 2). The Combined Code of the United Kingdom called for risk management as one of the audit committee's responsibilities (Marx, 2008: 86). King II called for integrated sustainability reporting to all stakeholders, where the enterprise is expects to report on its commitments in social and environmental areas (Jackson & Stent, 2008: 4.17).

All these developments still fail to prevent the financial crisis of 2008. It may be argued that the same concerns raised by Berle and Means over corporate governance in the 1930s continue to this day. Since the global credit squeeze and the recession that began in the last quarter of 2008, there was a call for a more intense risk management approach in all aspects affecting a country's economy. Many enterprises simply fail to understand the risks they are taking (Financial Stability Board, 2013: 1). Not only does South Africa's financial sector directly affect the economic growth and development of the country, it also plays a role as an

intermediary in all other sectors of the national economy. Spill-over effects, such as a decline in external demand in major export commodity prices, cause South Africa's economy to contract (Financial Stability Board, 2013: 28). During this period corporate governance guidelines continue to develop and King III was released in 2010 in South Africa. This was done to incorporate the Companies Act of 2008 and further developments internationally (Jackson & Stent, 2012: 4.4). International developments such as the Global Reporting Initiative guidelines provide parameters on what and how to report information. This initiative is steered by the International Integrated Reporting Council. These guidelines provide a number of important innovations since the 2002 guidelines referred to in King II (Jackson & Stent, 2012: 4.38). King II gave guidance on triple bottom line reporting, incorporating economic, social and environmental issues (Jackson & Stent, 2008: 4.22), but sustainability reporting was in addition to financial reporting (Muwandi, 2010: 18).

King III emphasised that integrated reporting should be integrated with financial reporting to address matters which are not accounted for in the financial statements (IoDSA, 2009: 10). According to Mervyn King the enterprise must first integrate their corporate and social responsibility with their business activities before integrated reporting can be done (Muwandi, 2010: 18). The International Integrated Reporting Council was established in 2010. This was done in order to develop an integrated reporting framework which should set a global standard for measuring and reporting. This international based integrated reporting framework has the following objectives: (i) to support information needs for long-term investors; (ii) to reflect the link between environmental, social, governance and financial factors that reflect an impact on sustainability and economic value; (iii) to provide guidance on what to take into account systematically in reporting and decision making; (iv) to rebalance performance away from only short-term performance over longer time horizons and (v) to align reporting with information used by management to run the enterprise on a day-to-day basis (Muwandi, 2010: 19).

The South African authorities also have reflected on policy lessons they have learned and subsequently implemented a stronger regulatory framework with more effective governance and crisis resolution frameworks (Financial Stability Board, 2013: 28-29). At an enterprise level, the International Organization for

Standardization (hereafter ISO) issued the ISO 31000 standard which suggests that risk management processes should be integrated with business processes. However, the objectives of an enterprise must also consider external and internal risk factors which may affect it (ISO, 2009: 3).

In order to achieve integration, a thorough understanding of the risk governance universe is necessary. A risk governance universe is graphically represented in the figure below.

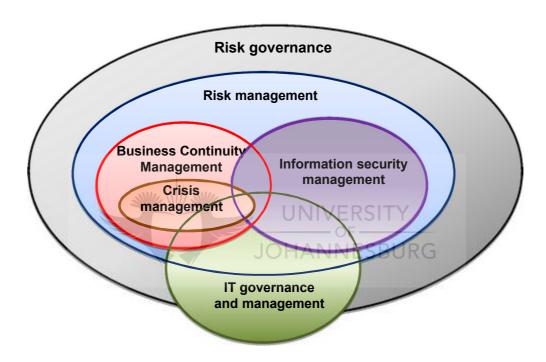


Figure 1: Risk governance universe (ISO, 2012c Adapted)

Crisis management, Business Continuity Management, information security management and Information Technology governance and management are all subsets of one another. This group is also a subset of risk management, which in turn, is a subset of risk governance. For the purposes of this study, risk governance is therefore the universal set. These various components which affect the risk governance universe as shown in Figure 1, are discussed below in the following order: (2.2.1) Risk governance considerations; (2.2.2) Risk management considerations; (2.2.3) IT governance and management and information security management considerations; (2.2.4) Business Continuity Management (hereafter BCM) considerations; and (2.2.5) Crisis management considerations.

# 2.2 Risk governance universe

# 2.2.1 Risk governance considerations

Any business involves the taking of risks in order to generate profit. King III states that the duty of a board is to govern the entity's risk management processes (IoDSA, 2009: 62).

King III (IoDSA, 2009: 62-69) contains ten principles which provide guidance for South African enterprises on risk governance. These principles highlight that the board at governance level should set risk tolerance and appetite levels. In order to do this, a risk framework needs to be established to take into account risks in various categories, for example, strategic risks, operating risks, financial risks, information risks and compliance risks. Frameworks also need to be established to increase probability and to better anticipate unpredictable risk. The responsibility for designing, implementing and monitoring risk management plans can be delegated to management. A risk or audit committee should assist the board in this process. The audit committee should oversee the accuracy of risk governance reporting in the integrated reports of enterprises.

# Critical links to empirical research (Chapter 3):

From the analysis above, it is clear that the guidance offered by King III on risk governance should be tested against the 2013 integrated reports of banks for risk governance compliance. The following points need to be considered:

- 1) Do the integrated reports contain evidence that banks have developed risk frameworks against which risk management can be conducted?
- 2) Do the integrated reports explain the role of the risk committee established by the banks?
- 3) Do the integrated reports contain evidence that the audit committee has overseen the risk management process?
- 4) Does the audit committee oversee the integrity of the integrated reports?

# 2.2.2 Risk management considerations

According to Dickinson (2001: 360-365), risk management is traceable to the late 1940s and early 1950s. During this period, enterprises began considering the management of insurance and financial risks. Some of these insurable risks could have been prevented or their impact reduced. For example, the impact of natural catastrophes and credit risk could be reduced. Financial risk management started in the 1970s at the same time as the development of financial derivative products. A more holistic approach regarding risk management has arisen since then, with general management incorporating contingency planning. The purpose of contingency planning was to identify any adverse events and implement systems to deal with any such events. Thereafter, overall enterprise risk became an integral part of corporate strategy. These risks were managed through the choice of the corporate strategy itself. In recent years, the call for improved corporate governance practices globally has encouraged boards to develop more clearly defined risk management practices and to enhance accountability to shareholders and stakeholders by ensuring sustainability. This requires a clear understanding of the exact meaning of risk management.

The Institute of Risk Management (2002: 3) (hereafter IRM) defines risk management as "...a central part of any organization's strategic management. It is the process whereby organizations methodically address the risks attached to their activities with the goal of achieving sustained benefit within each activity and across the portfolio of all activities".

The Casualty Actuarial Society defines Enterprise Risk Management (hereafter ERM) as "the discipline by which an organization in any industry assesses, controls, exploits, finances and monitors risks from all sources for the purpose of increasing the organization's short- and long-term value to its stakeholders," (Enterprise Risk Management Task Force of the Actuarial Standards Board, 2012: iv).

The Committee of Sponsoring Organisations of the Treadway Commission (hereafter COSO) defines ERM as "a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives" (COSO, 2004: 2).

ISO issued a standard on risk management in 2009, namely ISO 31000. This standard states that enterprises face internal and external factors which make it uncertain whether the enterprise will achieve its objectives. This uncertainty is referred to in ISO 31000 as 'risk' (ISO, 2009: v).

In order to apply these defined concepts of risk management, a clear understanding is needed of the various factors required for effective risk management. Guidance is provided in ISO 31000 (2009: vii) which states that risk management should create and protect value by remaining an integral part of processes and decision-making within an enterprise. Risk management should be responsive to change and facilitate the continious improvement of strategies. It should also explicitly address uncertainty. These principles can be achieved by applying a risk management framework to deploy appropriate risk management processes. The components of such a framework must first be determined. These components should incorporate the mandate and commitment from management. A risk management policy which integrates the processes of the enterprise also needs to be established. Finally, internal and external communications and reporting mechanisms need to be established (ISO, 2009: 8-13).

The actual risk management can then be conducted based on the risk management framework by implementing risk management processes. Monitoring and reviewing needs to occur on a continuous basis to improve the framework and processes. Standard ISO 31000 (2009:13-21) further advises that risk management processes should be an integral part of management and part of the culture and practices of the enterprise. They should be integrated with the business processes of the enterprise when considering communication and consultation with internal and external stakeholders and when establishing objectives and context in managing risk. These

objectives need to take into consideration external factors such as the political, economic or regulatory environment or internal factors relating to the business processes of the enterprise. Goals could then be defined, responsibilities assigned to individuals and specific activities set down in order to establish the risk criteria. A list of risks that might hinder objectives could then be developed. The significance of the risk could then be determined during the risk identification, analysis and evaluation stages by considering factors such as: (i) nature and types of causes; (ii) likelihood of occurrence; (iii) timeframe of the likelihood; (iv) level at which the risk needs treatment; and (v) level at which the risk is tolerable. Risk treatment options to modify the risk to the appropriate tolerance levels can then be considered. Such options could include: (i) avoiding the risk; (ii) using the risk as an opportunity; (iii) removing the risk; (iv) altering the likelihood of the risk occurring; (v) changing the risk consequences (for example, by sharing the risk through insurance); or (vi) retaining the risk based on an official decision.

Risk treatment plans could then be developed by incorporating ISO 31000 into COSO's integrated framework of ERM. According to Ting, Kwok, and Tsang (2009: 25), ERM focuses mainly on enterprise risks. Ting *et al.* (2009: 26) further state that ERM is a systematic approach with clearly defined components providing clear direction regarding the: (i) strategy; (ii) operations; (iii) reporting; and (iv) compliance aspects of an enterprise's residual risk responses and monitoring. Risk treatment plans as per COSO (2004: 1) could include: (i) aligning risk appetite and strategy; (ii) enhancing risk response decisions; (iii) reducing operational surprises and losses; (iv) identifying and managing multiple and cross-enterprise risks; and (v) considering seizing opportunities and improving deployment of capital.

The risk management strategy needs to be further tailored to address business risks relevant to the financial reporting objectives. Sutton (2006: 100) quoted Ernst & Young who state that "enterprises can outsource the processes, but they cannot outsource the risks associated with work stoppages and supply chain disruptions – nor can they outsource the responsibility for controls over the information flowing across these supply chains into the financial statements." Insufficient financial reporting can be considered as a significant deficiency of internal control (International Auditing and Assurance Standards Board, 2012: 270). The Financial

Stability Board (hereafter FSB) states that a key element of sound risk governance is effective internal control systems (Financial Stability Board, 2013: 29).

The ERM process should therefore be linked to the guidance provided by COSO on the five interrelated control components of internal control to address specific accountancy-related control risk issues. It is the board's responsibility to reduce control risk by designing and implementing internal control that would prevent, detect and correct misstatements. This can be done by applying COSO's five interrelated control components which include the control environment, the risk assessment process, information system and communication, control activities and monitoring of controls (Puttick & van Esch, 2007: 388).

A holistic risk management approach incorporating the fundamental theory of ISO 31000 with COSO's guidance on ERM and the interrelated control components of internal control should provide a more integrated approach to managing the risks of banks. This management approach can be further strengthened through King III's requirement that the board should receive assurance regarding the effectiveness of the risk management process (IoDSA, 2009: 68).

# **Critical links to empirical research (Chapter 3):**

The literature discussed above reveals that risk management processes should be treated holistically. Based on these fundamental concepts, the risk management strategies of banks will be tested against the integrated reports. The following questions will be considered:

- 5) Is there evidence that risk(s) have been identified?
- 6) Is there evidence that risk(s) have been monitored?
- 7) Is there evidence of risk treatment plan(s) for undesired risk exposure?
- 8) Is there evidence of assurance regarding the risk management process?

Before proceeding any further, due to the extensive application of Information Technology (hereafter IT) in the South African banking environment, further consideration needs to be given to the fundamentals of IT governance and management, as well as information security management as a component of the risk governance universe. This will be discussed in the following section.

# 2.2.3 Information Technology governance and management and information security management considerations

The King III Report (IoDSA, 2009: 70-75) on corporate governance in South Africa provides guidance on IT governance. It states that the board should ensure that IT governance is aligned with the performance and sustainability objectives of the enterprise. IT should be integrated into overall risk management strategies. This would require the implementation of an IT governance framework which the board could delegate to management for design and implementation.

King III does not, however, specify how these principles should be applied. For example, the implementation of an IT governance framework is a requirement by King III but no details are given on how this can be achieved.

The Control Objectives for Information and Related Technology (hereafter COBIT) is a framework developed by the Information System Audit and Control Association (hereafter ISACA). This framework can be used as the basis from which to develop a specific IT governance framework. COBIT 5 is a process capability model and covers the full spectrum of activities required for good IT governance and management. It uses two main process domains, namely, governance and management of enterprise IT (ISACA, 2012: 24).

However, although the COBIT guidelines are helpful in developing proper IT governance structures, they do not specifically address information security. Information security is, however, specifically addressed in ISO 17799. The COBIT guidelines provide a more integrated platform and can therefore be used in conjunction with ISO 17799 (von Solms, 2005: 101).

The standard ISO 17799 refers to key areas of Information System (hereafter IS) security and defines categories and subcategories of security issues within each key area. IS security in these key areas can be achieved by applying proper general controls (ISO, 2005b). General controls address risks relating to the overall computerised environment whereas application controls address risks relating to application software (Jackson & Stent, 2012: 8/7).

The objectives and specific control consideration within each of the key areas of ISO 17799 are broad and need to be tailored to the IS risk profile of each enterprise. This is done through general and application controls related to the objectives of each enterprise (ISO, 2005b: 6). ISO 17799 was renamed to ISO 27002 to allow for a common naming structure for all information standards. These information standards now all form part of the ISO 27000 series (Information Security Community Portal, n.d.).

IS security threats, their sources and the resultant vulnerability need to be identified for each enterprise. This should be graded on a likelihood scale of high, moderate or low through a determination matrix. The impact of these likelihoods should then be categorised into IS confidentiality, IS integrity or IS availability. These categories should be linked to the potential impact of the threat on the enterprise's mission capability and financial consequences. Risk management strategies should then be developed to mitigate, transfer, accept or avoid these risks. The strategies should be balanced against cost considerations, impact and likelihood (SANS Institute, 2006). Decision-makers are therefore faced with trade-off decisions affecting system security, which should be carefully managed to strengthen IS security (Bayuk, 2013: 174).

Ting *et al.* (2009: 25) cite Cha, Juo, Luiand Chen who suggest that integrated risk management methods may improve the kind of information-gathering used to make risk management decisions.

# Critical links to empirical research (Chapter 3):

From the analysis above, it is clear that IT poses unique governance and management questions. This necessitates the integrated reporting consideration below:

9) Do the integrated reports contain evidence that IT has been considered and has this been incorporated into the overall risk management strategy of the bank?

The financial crisis of 2008 and the resultant bank failures (refer to paragraph 1.1 above) necessitate consideration of BCM and crisis management. These two factors form part of the risk governance universe and are discussed below.

# 2.2.4 Business Continuity Management considerations

Constantinides (2013: 1657) describe BCM as "...the systematic attempt to identify and detect possible crises and to take actions and measures to prevent them, contain their effects or disruption, and finally recover".

Business Continuity Planning (herafter BCP) lists the steps an enterprise needs to take in order to resume its business as soon as possible. With BCP in place, an enterprise can continue to provide limited services in any eventuality. Interim strategies and procedures to resume, recover and restore critical functions should therefore be clearly established (Ting, *et al.*, 2009: 26).

BCP ensures that concepts such as reliability, resilience and learning are purposely encoded into the strategy of an enterprise. The enterprise's governance system should be actively involved in setting the goals during the planning stage of the design of its crisis management plan (Constantinides, 2013: 1657).

The ISO 22313 standard helps with the implementation of business continuity policy. It provides guidance on the business impact analysis by considering: (i) which activities should be prioritised and protected; (ii) how to mitigate the impact and duration of the incident; (iii) how to establish the business continuity of suppliers; (iv) what resources are needed to deal with the incident, taking into consideration the location of the management team, the communication procedure and safety and welfare procedures; (v) what is the recovery point objective which specifies the maximum tolerable period in which data may be lost from the IT service due to a major incident; and (vi) what is the recovery time objective to restore business processes back to normal (ISO, 2012b).

The ISO 27001 (2005a) identifies incidents and responses which should be incorporated into business continuity plans. It stresses that the enterprise should perform proper risk assessment and treatment preparations. This ensures that whatever action is taken will fall in line with the enterprise's strategic objectives. Likely incidents can be identified involving all departments at all levels of employment. The likelihood of an event and its potential impact should then be identified and rated and a suitable risk treatment plan established. Considerations related to avoiding the risk, reducing its likelihood, transferring or accepting it can then be established.

An incident response plan can be developed detailing what needs to be done immediately after a disaster. The plan should address aspects such as: (i) reducing the effect of the incident; (ii) communicating with emergency services; (iii) evacuating the building; and (iv) gathering at assembly points. Recovery plans are usually developed for each critical activity but could also include aspects such as: (i) when and how to communicate with stakeholders; (ii) how to assemble the required team; (iii) how to recover infrastructure; (iv) how to check whether applications are functioning; (v) how to recover lost or corrupted data; and (vi) how to determine when recovery is completed so that normal operations can resume (ISO, 2012a).

In essence, sound BCM systems rely on sufficient information which is effectively shared by all officials at governance, management and operational level. The

internet may assist in obtaining such information on a timely and effective basis (Yang, Yang & Plotnick, 2013: 1854-1856).

In relation to information security, BCM is important in enterprises that rely on IT to generate revenue. Information security failure can limit the entity's capacity to function and generate revenue. It is therefore essential to have a clear understanding of the entity's critical business processes and of the impact of possible non-functional areas. This information could then be considered in relation to the BCP cycle (Lam, 2002: 19).

The Reserve Bank of South Africa supports BCM, which means that consideration must be given to the Basel III regulatory requirements.

The global financial crisis resulted in more stringent regulations regarding bank capital, liquidity and corporate governance (Deloitte Touche Tohmatsu Limited, 2012: 1). The Basel III requirements are aimed at developing business continuity capability for banks, which is dependent on well-designed information systems (Benaroch, Chernobai, & Goldstein, 2012: 376). Basel III has thus established internationally harmonised capital and liquidity requirements for banks (de Haan & van den End, 2013: 3933). This was done to improve the resilience of banks internationally and may be termed "The banks' BCM by means of Basel III compliance".

The Basel III Capital requirements (The Bank for International Settlements, 2011) and Basel III Liquidity requirements (The Bank for International Settlements, 2013) became effective in 2013 and were developed to prevent another banking crisis such as the one of 2008. The South African Reserve Bank (Mathebula, 2012) did indicate in a press release that it remained committed to the timelines for phasing in the requirements, as suggested by Basel III, for all South African banks. Basel III increased the capitalisation requirements and also gave some guidance on improving credit policies (Deloitte Touche Tohmatsu Limited, 2012: 2). This can be achieved by assessing banks' exposure to liquidity and solvency risk and by addressing such risk through a successful capital strategy (KPMG, 2013: 13). A well-designed IS which ensures data quality can measure the riskiness of a position in

terms of size and likelihood of loss against a given confidence level. The expected shortfall is based on econometric and statistical internal bank modelling and measurement. This approach assists in determining standardised capital requirements for banks (Ernst & Young, 2012b: 4). The stress points identified using this approach and the projected impact are used to define the new liquidity and profitability rules (KPMG, 2013: 13). The liquidity risk exposures can then be assigned to one of five horizon categories of ten days, one month, three months, six months and one year, to ensure that there are no maturity mismatches (Ernst & Young, 2012b: 5). However, stress-testing models can often lack a more realistic link to actual bank behaviour (van den End & Tabbae, 2012: 108).

# **Critical links to empirical research (Chapter 3):**

From the analysis above, it is clear that banks should ensure resilience of their operations. This can be termed as "The banks' BCM by means of Basel III compliance".

The following questions will be examined to determine the level of compliance with the phased in Basel III requirements:

- 10) Do the integrated reports contain evidence that econometric modelling has been subjected to high-level scrutiny to address modelling risk?
- 11) Do the integrated reports contain evidence that banks have complied with the phased-in Basel III capital requirements applicable for 2013?
- 12) Do the integrated reports contain evidence of any future-looking reporting of constraints not being able to comply with future Basel III capital requirements?
- 13) Do the integrated reports contain evidence of any future-looking reporting of constraints not being able to comply with the levels of phased-in liquidity requirements in the years to come?
- 14) Do the integrated reports contain evidence of risk management of any large exposures?

Uncontrolled credit risk or unexpected withdrawals can result in banking crises such as the recent financial crisis of 2008. This calls for generic considerations of crisis management which are discussed below.

## 2.2.5 Crisis management considerations

According to Dorasamy, Ramanand and Kaliannan (2013: 1834), emergencies cannot be prevented but they can be managed better. Ryan (2013: 1726) describes a crisis as an incident that does not fit in with an enterprise's history or procedures; if it did, it would not be a crisis.

Chaung and King (2013: 57) state that "...a crisis response involves an action to be taken in an interactive environment" to achieve a desired outcome. There should therefore be a sense-making stage at which a solution is developed to achieve the desired outcome. During the process of sense-making and solution development, both human intervention and technology play a supportive role in responding to the crisis. Such a process may enhance organisational preparedness to foresee and effectively address adverse incidents. Chou and Zahedi (2013: 83-84) emphasise the effectiveness of a post-recovery stage in which business is brought back to normality. This stage should be followed by a learning stage to improve preparedness for the next disaster.

The research of van Wyk, Dahmer and Custy (2004: 260) focuses on the longer-term nature of various risks and their impact on the business environment in South Africa. They state that it is essential to understand the impact of politics and other non-market forces on business decision-making. Country-specific political risks, economic risks, operational risks and financial risks are all considered. Conflict of interest in government procurement contracts and insufficient capacity to enforce ethical governance indicates that there is slackness in the enforcement environment which could increase the cost of legitimate business. The high unemployment rate and poverty levels are long-term threats to political stability and neo-liberal economic policies. The HIV/AIDS pandemic has added another aspect to the long-term risk landscape. The depletion of human capital and the concomitant depletion of the stock of experience, skills and education will adversely affect the economy in the

long term. The Rand has been historically very volatile, even when compared with other emerging market currencies. It is vital that enterprises consider these risks and maintain sound intelligence in anticipating risk-generating events and behaviour of key stakeholders (van Wyk, et al., 2004: 260-270).

Expansion into other emerging economies also needs to be carefully considered. According to Peng, Wang and Jiang (2008: 920), strategy for emerging economies can be based on three pillars: (i) the industry-based view; (ii) the resource-based view; and (iii) international business.

The conditions within an industry may determine the enterprise's strategy and performance (Chamber of Mines of South Africa, 2013).

The specific differences in resources within an enterprise, when compared to those of similar enterprises, may determine the strategy and performance of the enterprise (Peng, *et al.*, 2008: 920). The alignment of the enterprise's strategy, people, technology and knowledge can be done in terms of the enterprise's resource-based view. For example, expectations of operational efficiency necessitate the alignment of the enterprise's business strategy and IT (Martin, 2007: 96-98).

The third pillar of international business requires careful consideration of the political risks, legal aspects and economic variables prevailing in the international regions where the enterprise conducts its business. These aspects may affect the stability of markets in the international arena and, according to Peng *et al.* (2008: 920-922), they are specifically relevant for emerging economies. Peng *et al.* (2008: 924) emphasised that it is important to know "How to play the game, when the rules of the game are changing and not completely known?"

A bank in crisis might find itself exposed to resolution plans that include central bank intervention for liquidity support or even capital support from the ministries of finance (Avgouleas, Goodhart & Schoenmaker, 2013: 211). Furthermore, in situations where local banks are operating as multinationals, interventions by authorities may use taxpayers' money from one country to bail out financial institutions in another. This is politically unacceptable and calls for inter-company agreements between the holding

and subsidiary regarding the nature and extent of inter-company support in the event of a crisis (Avgouleas, *et al.*, 2013: 213).

#### **Critical links to empirical research (Chapter 3):**

Crisis management in situations such as those analysed above can open up undesirable forces in the international arena. Special consideration should be given to South African banks with inherent country-specific and/or international risk exposure. The integrated reporting considerations are:

- 15) Do banks with international affiliations have any policies or formal agreements in place with the international banking 'partner' or holding company from where support can be expected in times of crisis?
- 16) Do the integrated reports contain evidence of specific risk disclosure that might limit future banking prospects?
- 17) Do the integrated reports contain evidence of disclosure of any countryspecific risks in expanding South Africa's banking activities across national borders?

In conclusion, proper risk governance necessitates holistic consideration of the fundamentals of risk management, IT governance and management, IS security, BCM and crisis management. These fundamental elements need to be applied to each enterprise's specific business activities and processes.

This study focuses on banking enterprises which constitute the Banks Index of the JSE. The following section examines the specific critical risk factors of banks that must be governed.

#### 2.3 Risk factors of banks

## 2.3.1 Classification of banking risk into general themes

Meyer, Roodt and Robbins (2011: 2) quote Zulu, who states that the word 'risk' stems from the Italian word *riscare*, which means 'to dare'.

Banking risk can be classified into systemic and specific enterprise-unique (unsystemic) risk. The systemic risk can also be referred to as market risk. The unique risk of an enterprise can be described as the variance of the random error term, as compared to the total market, which is independent of the systemic risk of the total market of all enterprises (Danthine & Donaldson, 2005: 123-124). Ranong and Phuenngam (2009: 5) describe this systemic risk as the risk inherent in the entire system or market. The unique risk is that associated with an individual asset, which is the residual risk of the asset, as compared to that of the total market (Ranong & Phuenngam, 2009: 5).

## 2.3.2 Market risk (systemic risk)

A study conducted by Kupiec and Ramirez (2013: 304) on the cost of the systemic risk which resulted in bank failures between 1900 and 1930 indicates a negative effect on economic growth.

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The loss of public confidence in banks can trigger an increased demand for currency. This would reduce the effect of the money multiplier and money supply which could, in turn, increase the cost of such a systemic risk (Kupiec & Ramirez, 2013: 287).

Macroeconomic imbalances and policy failures, together with regulatory failures, contributed to the 2008 financial crisis (Masciandaro, Pansini & Quintyn, 2013: 580). Larger banks are more exposed to systemic risk but revenue diversification can reduce their overall banking risk (Haq, Faff, Seth & Mohanty, 2014: 42).

#### <u>Critical links to empirical research (Chapter 3):</u>

From the analysis above, is it clear that economic growth and macroeconomic conditions do have an impact on banks' activities and resilience.

18) Do the integrated reports explain the impact of adverse macroeconomic conditions on banking activities?

## 2.3.3 Capital flight and bank failures

Capital flight and international competition for deposits are common banking risks in emerging economies (Bourgain, Pieretti & Zanaj, 2012: 284). A preventative measure could be a higher liquidity ratio coupled with proper profitability, solvability and volatility measures, which could assist banks in capital flights operating in emerging economies. A higher liquidity ratio, or the ratio between liquid assets and total assets, assists the bank in maintaining sufficient funds during times of unexpected withdrawal (Bourgain, et al., 2012: 291). Careful consideration should be given to the management of capital flight situations by all parties to avoid triggering a potential wholesale bank run. Such a situation would have a negative effect on the national financial system (Avgouleas, et al., 2013: 212). Alternatively, governments could facilitate the process of 'lifeboats', where other banks come to the aid of the distressed bank, or allow further time for a buyer of such a distressed bank. Liquidation may not be the preferred option because of a potential roll-over effect on the country's wider financial system (Harrison, Anderson & Twaddle, 2007: 324 and 326).

Regulatory requirements and proper supervision should therefore encourage banks to develop their own recovery plans (Avgouleas, *et al.*, 2013: 211). Consequences of excessive bank risk-taking can be severe. Prevention of such a situation is the better option, and could be ensured through improved regulation and supervision such as that proposed by Basel III. An alternative option would be to take over the bank before the actual failure. The least desirable outcome would be the central bank and/or the ministries of finance intervening with liquidity or capital support. This could

occur in situations where a bank is 'too big to fail' and would disrupt the payment system of the country (Vollmer & Wiese, 2013: 487). Nonetheless, such intervention would imply that public funds are used to protect some of the banks' stakeholders; this is undesirable in situations where poor risk management is evident (Harrison, *et al.*, 2007: 325). If this intervention is not carefully considered against the likelihood of severe financial disruption on a timely basis, the intervention may even be perceived by outsiders as corporate bankruptcy protection for banks (DeYoung, Kowalik & Reidhill, 2013: 616 and 624).

Banks default reasons are primarily due to bad macroeconomic conditions, low capitalisation and excessive loan defaults (Imbierowicz & Rauch, 2014: 244). A more detailed consideration of these reasons and other risk categories is provided below.

#### 2.3.4 Capital requirements

Capital buffers limit the risk of banking default. The holding of capital should match the bank's risk profile to reduce insolvency risk. Larger banks do have more scope between business lines and regions to diversify their risk. Larger banks can raise capital more easily from the market (Nier & Baumann, 2006: 332-340). Increased competition between banks increases the bank's risk-taking, but by the same token, it reduces the bank's charter value (Fiordelisi, Marques-Ibanez & Molyneux, 2011: 1315).

Regulatory capital requirements become important where shareholders have more control over bank managers (Nier & Baumann, 2006: 341). The effectiveness of regulatory reform depends on how well regulators implement the reform (DeYoung, *et al.*, 2013: 624). Stable growth is directly related to certainty, which implies managing this relationship of risk-taking, which depends on the regulation itself (Masciandaro, *et al.*, 2013: 579). Regulatory supervision should therefore be more proactive and risk-based (Masciandaro, *et al.*, 2013: 591).

The Basel III requirements are based on the riskiness of banking profiles and provide guidance on sufficient capital thresholds to match such riskiness (Nier & Baumann, 2006: 333).

#### <u>Critical links to empirical research (Chapter 3):</u>

The analysis above emphasises responsible lending and diversification of risks. Basel III's capital requirements promote responsible lending by limiting the capital available for risky activities.

- 19) In conjunction with critical link numbers 11 and 12 above, do the integrated reports contain evidence of comparative disclosure of capital levels required for compliance with Basel III versus actual capital levels held?
- 20) Do the integrated reports explain the diversification of banking activities and associated risk?

#### 2.3.5 Credit risk

Credit risk relates to the level of non-performing loans to the total loans, and as such, can be termed a backward-looking indicator rather than a forward-looking one. This may even spill over into reputational problems (Fiordelisi, *et al.*, 2011: 1317).

Poorly-managed credit risk is evident where there is a greater proportion of non-performing loans to total loans. This, in turn, leads to increased costs which can affect the cost and profit efficiency of bank operations. Improved capitalisation levels may even be required if the operating efficiency does not have the desired effect when dealing with near-term loan losses (Fiordelisi, *et al.*, 2011: 1316).

Risks evolve over time; they can, however, be controlled if they are measured. The measurement of macroeconomic variables such as credit growth can give an early indication that a business environment is changing (van den End & Tabbae, 2012: 107).

Growing shareholders' wealth prior to 2008 led to boards of banks entering into situations which subsequently turned out to be huge credit risks (Aebi, Sabato & Schmid, 2012: 3215).

## <u>Critical links to empirical research (Chapter 3):</u>

The analysis above emphasises that banking operations should be structured in such a way as to mitigate the risk of loss arising from the failure of counterparties to meet their financial or contractual obligations.

- 21) Do the integrated reports disclose credit risk management by addressing key aspects such as:
  - (i) Non-performing loans to total loans and risk appetite?
  - (ii) Unsecured loans growth trends and links to risk appetite?
- 22) Do the integrated reports contain evidence of specific disclosure to limit or expand credit growth from specific sectors, based on economic conditions or planned changes in the bank's credit risk profile?

## 2.3.6 Liquidity risk and regulation

Banks utilise short-term debt by investing in long-term assets. If this process is not properly managed, it could result in liquidity risk (Ratnovski, 2013: 422). Market liquidity is the ability to convert assets into cash at a given price at short notice (van den End & Tabbae, 2012: 107). Poorly-managed liquidity risk may have a ripple effect on other risks, such as solvability or counter-party risk, which may, in turn, affect the interbank market and repo transactions (van den End & Tabbae, 2012: 109). Basel III does address liquidity risk, with specific liquidity requirement guidelines to ensure the accumulation of a precautionary buffer of easily tradeable assets (Ratnovski, 2013: 423). These guidelines are based on the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR), where the latter aims to address the maturity mismatch limits of available liquidity funding (Ratnovski, 2013: 423). Liquidity constraints can arise due to mismatches between liquid assets such as deposits and illiquid assets such as long-term loans. This can result in a

shortage of actual cash to fund current operations (de Haan & van den End, 2013: 3931). Banks with more capital are less exposed to demand deposit run-offs, and therefore, liquidity constraints (de Haan & van den End, 2013: 3942).

These Basel III liquidity requirements will only become effective with a phased-in approach after 2013.

## <u>Critical links to empirical research (Chapter 3):</u>

From the analysis above, is it clear that a bank may not be able to maintain or generate sufficient cash resources to meet its payment obligations. Did the banks disclose their current liquidity governance and management practices in explaining details such as:

23) Do the integrated reports disclose the maturity breakdown or liquidity position details?

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#### 2.3.7 Interest rate risk

Interest rate risk is dependent on the central bank's mandate of addressing inflation, inflation expectations, and perhaps indirectly, growth considerations. This is, in turn, dependent on changing macroeconomic conditions and international capital flows which have already been discussed in this study. The interest rate cycle bottomed out towards the end of 2013 but has been trending upwards since the beginning of 2014 (refer to paragraph 1.2.1).

## <u>Critical links to empirical research (Chapter 3):</u>

From the analysis above, is it clear that banks should have systems in place to address interest rate risk stemming from the different reprising characteristics of banking assets and liabilities. This could be the result of, for example, the monetary policy of the Reserve Bank.

24) Do the integrated reports incorporate the effect of rising interest rate expectations?

#### 2.3.8 Information system security risks

Proper risk governance is dependent on reliable information. Effective risk measurement and management can only be done within an effective IS. Reliable information and reporting are dependent on effective internal control. A lack of internal control may therefore result in improper risk governance (Jin, Kanagaretnam, Lobo & Mathieu, 2013: 614-616). It should be borne in mind that accounting errors and financial misstatements are in many instances the result of weak IT controls. This has a negative impact on the forecast reliability of management (Benaroch, *et al.*, 2012: 358 and 375).

IS security crisis management, cost considerations and policy violations become critical for enterprises with business processes relying on IT to reduce cost and enhance productivity. Internet-based business processes may be more exposed to security breaches. Denial of service, website defacement, theft of customer information and theft of credit card information are all incidents that can affect the sustainability of an enterprise (Garg, Curtis & Halper, 2003: 76).

Any IS security investment must be balanced against the return on investment by protecting the right things in considering the immediate, short- and long-term economic impact of security breaches. The economic consequences should be considered against the frequency of security breaches. The cost of such security breaches must be weighed up against the investment expense to secure mechanisms (Tsiakis & Stephanides, 2005: 106-107).

Furthermore, IT security breaches bear an impact on the confidentiality, integrity and availability of information (Benaroch, *et al.*, 2012: 358 - 360). The openness of reporting on financial losses from materialising security threats remains questionable in banks (Abu-Musa, 2006: 192).

#### Critical links to empirical research (Chapter 3):

As can be seen from the analysis above, IS security violations are a concern in a rising cyber-crime environment.

- 25) Do the integrated reports contain evidence of IT governance and/or any director or employee training relating to IT risks?
- 26) Do the integrated reports contain information on IT risk management and/or security violations and remedies?

#### 2.3.9 **Operational risk**

The increased use of IT in banks has a changing impact on operational risks. IS failures can substantially increase operational risk (Sturm, 2013: 191-192). Sufficient operational risk disclosure can assist in improving the efficiency of banks (Barakat & Hussainey, 2013: 255).

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Highly efficient banks tend to build up a higher capital base (Fiordelisi, *et al.*, 2011: 1324). Banks with low levels of efficiency, on the other hand, may have ineffective control over operating expenses and inadequate credit monitoring (Fiordelisi, *et al.*, 2011: 1317).

#### **Critical links to empirical research (Chapter 3):**

Operational risks cover a wide spectrum and include reputational risk, which is interlinked with the risks discussed above. The aim of this study is to determine whether banks have established their risk universe to thus manage any additional risks or specific concerns.

27) Do the integrated reports contain evidence of a bank-specific 'risk universe' consideration?

#### 2.3.10 Chief Executive Officer compensation

The Chief Executive Officer's (hereafter CEO) remuneration can form the basis of excessive risk-taking and call for regulatory intervention because "...shareholders are inherently biased toward excessive risk-taking, so they will set CEO incentives correspondingly" (Chaigneau, 2013: 778).

Remuneration systems of directors should be aligned with the strategy and risk appetite of the bank and its long-term interests (Kirkpatrick, 2009: 1).

#### Critical links to empirical research (Chapter 3):

From the analysis above, it is evident that sound compensation practices should prevail for material risk-takers because their actions may have a material impact on the risk profile of banks.

28) Do the integrated reports disclose CEO remuneration levels, and is it fair but also guarding against excessive risk-taking?

A balanced perspective should be adopted when dealing with the disclosure practices of banks. Stakeholders may exploit banks which disclose their risk mitigation strategies or unresolved risk exposure. Considerations which may influence decisions on striking the right balance are discussed below.

#### 2.4 Risk disclosure and transparency

Banks can choose the level of transparency they wish to convey to outsiders by determining the amount of information made available. Regulation cannot enforce levels of transparency because transparency is not verifiable but stronger corporate governance can lead to improved transparency. However, higher transparency can reduces managers' private benefits of control. Against that, liquidity risk can be better managed through liquidity buffers, together with improved information on solvency and bank asset values to outsiders, as an integral part of the bank's risk

management approach. Creditable communication channels can also reduce market failure due to informational frictions (Ratnovski, 2013: 423-433).

Improved risk disclosure may attract depositors but it also informs competitors and, as a result, may reduce profitability (Bourgain, *et al.*, 2012: 285). Increased competition between banks may thus lead to increased risk-taking (Fiordelisi, *et al.*, 2011: 1315).

Banking operations in emerging markets are affected by changing global interest rates. The international capital flows that follow on from such changing rates may lead to problems in emerging markets, especially when portfolio discipline is relaxed at times of extensive capital inflows (Eichengreen & Rose, 1998: 6). This would call for financial openness to ensure sufficient transparency in the risk management strategies of emerging market banks (Bourgain, *et al.*, 2012: 285). Comprehensive disclosure and transparency are essential to the soundness of the financial sector (Masciandaro, *et al.*, 2013: 580).

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Many bank stakeholders do have an interest in bank risk-taking because it affects economic fragility, economic growth and business cycle fluctuations (Leaven & Levine, 2009: 273). However, there can be conflict between bank management, owners of risk and bank regulators as to the level of risk-taking due to differing goals and points of reference (Leaven & Levine, 2009: 273).

This study also considers whether the risk governance philosophy of banks is linked to any quantitative measure of overall riskiness against which risk appetite and risk management procedures can be measured. This is done by linking the charter value of banks to the effectiveness of risk governance.

## 2.5 Charter value of banks (riskiness versus soundness)

The international accepted approach to measuring bank riskiness is by means of a z-score which incorporates profitability, solvability and volatility. A high z-score represents higher profitability and capitalisation levels, which implies lower risk-taking. The z-score decreases with higher return volatility (Bourgain, *et al.*, 2012: 292). The z-score can be calculated as follows:

$$Z_{i} = \frac{ROA_{i} + E / TA_{i}}{\sigma ROA_{i}}$$

 $ROA_i$  is the period-average return on assets for bank i.

*E / TA*<sub>i</sub> stands for the period-average equity to total assets.

 $\sigma ROA_i$  represents the standard deviation of ROA that captures the volatility of returns.

Larger values for the z-score imply lower risk-taking and thus, greater bank soundness.

This z-score can measure whether risk governance has achieved its goals by matching risk appetite with business opportunities within approved parameters.

## Critical links to empirical research (Chapter 3):

The z-score can be a retrospective measure of overall bank soundness or riskiness against which the successful implementation of the total risk governance environment strategies can be measured. This backward-looking tool may give an indication to the board as to whether risk governance strategies have been successful.

- 29) Is there any comparison between the set level of risk appetite and the exposures of actual risk taken?
- 30) Is this comparison quantitatively linked to the overall riskiness of the bank (for example, against the z-score) and is this reflected in the integrated report?
- 31) Are there any future-looking risk governance priorities?

#### 3. Conclusion

Corporate governance considerations come to the fore at times of major global financial crisis. Concerns over improving corporate governance are evident in research by Berle and Means as early as the 1930s at the time of the Great Depression. The second largest financial crisis since the depression of the 1930s occurred in 2008. A study of the FSB in 2013 indicates that a more intense risk management approach is needed to prevent this from recurring. The crisis of 2008 originated in the banking sector. Research on possible causes argues that the lack of proper corporate governance and risk management practices was responsible. Along with the rest of the world, the South African authorities embarked on a more effective governance programme. It should be noted that King III advocates the holistic consideration of strategy, risk, performance and sustainability.

This study has so far examined the various elements affecting the total risk governance universe. This was done to establish what needed to be considered and implemented to properly address the King III risk governance principles (paragraph 2.2.1). These risk governance elements include: (i) risk management (paragraph 2.2.2); (ii) IT governance and management and information security management (paragraph 2.2.3); (iii) BCM (paragraph 2.2.4); and (iv) crisis management (paragraph 2.2.5).

In addition to these fundamental elements of risk governance, consideration has been given to specific risk factors of banks. These include: (v) market risk (systemic risk) (paragraph 2.3.2); (vi) capital requirements (paragraph 2.3.4); (vii) credit risk (paragraph 2.3.5); (viii) liquidity risk and regulation (paragraph 2.3.6); (ix) interest rate risk (paragraph 2.3.7); (x) IS security risk (paragraph 2.3.8); (xi) operational risk (paragraph 2.3.9); (xii) CEO compensation (paragraph 2.3.10); and (xiii) charter value of banks (riskiness versus soundness) (paragraph 2.5).

All these elements were considered with emphasis on identifying critical links (the test criteria) against which the reporting of risk governance in South African-listed banking entities could be tested.

Banks constituting the Bank Index on the JSE should participate in improved risk governance strategies, as argued throughout this chapter. Chapter 3 evaluates the integrated reports of banks constituting the Bank Index on the JSE against critical links identified in this chapter.



#### Chapter 3

## **Empirical study and research findings**

#### 3.1 **Introduction**

The objective of this study is to investigate whether risk governance is appropriately applied and reported in the integrated reports of South African-listed banking enterprises (as discussed in Chapter 1). This chapter will determine whether risk governance principles are appropriately applied and reported.

A literature study was conducted to achieve this objective and to establish the concepts and principles of risk governance. Chapter 2 discusses the literature study (or theory) on which risk governance for banks should be based. The theory can be defined as "A set of systematically interrelated concepts, definitions and propositions that are advanced to explain and predict phenomena (facts)" (Emory, 1976: 34). Chapter 2 also identifies critical links against which the risk governance integrated reporting aspects can be evaluated. These factors form the basis of the research discussed in this chapter.

Research can be described as "Any organised inquiry designed and carried out to provide information for solving a problem" (Emory, 1976: 8). Saunders, Lewis and Thornhill (2012: 5) define research as "Something that people undertake in order to find out things in a systematic way, thereby increasing their knowledge". Saunders *et al.* (2012: 8), quoting Transfield and Starkey, who state that "Research should complete a virtuous circle of theory and practice".

A pragmatic research methodology is adopted in this chapter. Observable phenomena and subjective meanings have been used to provide acceptable information to determine whether risk governance principles are properly implemented and managed by banks (Saunders, *et al.*, 2012: 140).

The adopted research methodology and findings are discussed below.

#### 3.2 Approach to the empirical study

#### 3.2.1 Research method

The research method adopted in this project is based on Saunders *et al.* (2012: 48) who argue that there are two approaches: a deductive approach and an inductive one. A deductive approach is theory-driven and is tested by collecting data. An inductive approach is a theoretical explanation based on data-driven research. A deductive approach is followed in this study to test King III risk governance principles.

Content analysis is the chosen research method in this section. Finne (2000: 238) references March and Smith, who define method as: "A method is a set of steps (an algorithm or guideline) used to perform a task". Content analysis is defined by Krippendorff (2013: 24) as "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use". Barac and Moloi (2010) also use content analysis as an accepted method for the Top 40 listed enterprises on the JSE based on King II.

Drawing on Neuendorf's (2002) application of content analysis to address the research problem, the following is considered:

- (i) Decision on which documents to analyse.
  - ➤ The integrated reports of all banks constituting the FTSE JSE Bank Index (J835) have been selected for analysis.

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- (ii) Decision on the means of measuring to be used.
  - A score of 'one' will be given if a given research indicator has been addressed favourably and a score of 'zero' if it has not been favourably addressed.
- (iii) Decision on a checklist instrument.
  - > This was done in Chapter 2 by specifying the critical links to empirical research.

This study is cross-sectional. The integrated reports of banking enterprises constituting the FTSE JSE Bank Index (J835) are considered for the 2013 reporting

period. Data is obtained from bank websites. Krippendorff (2013: 24) acknowledges that IT makes content analysis an attractive method for understanding social phenomena. Content analysis permits contributions made by analysts which can be regarded as content (Krippendorff, 2013: 37). The internet is considered as an appropriate source because it provides an efficient means for enterprises to communicate with stakeholders. It also addresses concerns among stakeholders in a globalised financial environment and rebuilds confidence in capital markets (Hamid, 2005: 12-13).

#### 3.2.2 Population and sample

Only banking enterprises which form part of the Banks Index (J835) on the JSE are considered in this study. These enterprises include Barclays Africa Limited (Barclays Africa Group Limited, 2013), Capitec Bank Holdings Limited (Capitec Bank Holdings Limited, 2013), FirstRand Limited (FirstRand, 2013), Nedbank Group Limited (Nedbank Group Limited, 2013), RMB Holdings Limited (Rand Merchant Bank Holdings, 2013) and Standard Bank Group Limited (Standard Bank Group, 2013). This excludes African Bank Investments Limited, Grindrod Limited and UBank Limited. These last three enterprises are locally controlled, registered banks of South Africa (South African Reserve Bank, 2014b). African Bank is listed under the consumer finance sector of the JSE and specialises in consumer finance through microlending (African Bank, 2013). Grindrod Limited is listed under the marine transportation sector of the JSE and specialises in freight logistics and shipping services. Grindrod acquired a 100% share of Marriott Corporate Property Bank Limited and changed its name to Grindrod Bank in 2005. Grindrod Bank is a niche bank with a particularly strong reputation in property finance (Grindrod Limited, 2012). UBank Limited is an unlisted bank. "In June 2000, Ubank (then Teba Bank), was granted a banking license, although its ownership remained in the form of a trust managed by trustees elected by the National Union of Mineworkers and the South African Chamber of Mines. The beneficiaries of the trust are the bank's customers. Ubank is a well-established financial services provider that has grown over the years and managed to entrench itself primarily within the gold and platinum mining communities" (UBank limited, 2014). It should be noted that RMB Holdings Limited is not individually registered as a locally controlled bank at the South African Reserve

Bank. Only FirstRand Limited is registered as a locally controlled bank (South African Reserve Bank, 2014b). Lastly, Barclays Africa Limited is the holding enterprise for ABSA Bank Limited and ABSA Bank Limited is registered with the South African Reserve Bank as a foreign controlled bank. RMB Holdings Limited and Barclays Africa Limited are part of the Banks Index (J835) of the JSE (Johannesburg Securities Exchange, 2014).

The sample and the population are, in this instance, both the same. All banks that comprise the Banks Index (J835) will be included and evaluated. In this study a 100% response rate is achieved. The bank names will not be disclosed in the findings due to ethical considerations and sensitivity of information.

## 3.3 Limitations of this study

There is no external verification requirement by auditors in terms of integrity and completeness of financial and corporate governance information posted on the banks' websites (Kelton & Yang, 2008: 84). This constitutes a limitation of the study.

Content analysis is limited because it may not necessarily portray a full picture of the enterprise's business (Unerman, 2000: 678). Dawkins and Ngunjiri (2008: 291-295), however, do recognise content analysis as an accepted research instrument. Limitations inherent in content analysis such as inter-coder reliability will always prevail. Inter-coder reliability is potentially of concern because inter-judge reliability refers to the extent of agreement of two independent coders on the coding of the content, which may not always be the case.

The research results obtained in this section cannot be generalised to other enterprises listed on the JSE. They relate exclusively to the banks constituting the FTSE JSE Bank Index (J835) and their specific 2013 reporting period.

## 3.4 Research findings

The following section discusses the objectives and findings of questions posed in the critical links in Chapter 2.

## 3.4.1 Risk governance considerations

## i) Objective of questions

The objective of these questions is to determine whether banks adhere to the risk governance guidelines of King III.

## ii) Findings

**Table 1: Risk governance practices** 

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No.	Critical link	Bank A	/ERS Bauk INS	Bank C	G) Bank D	Bank E	Bank F
1	Do the integrated reports contain evidence that banks have developed risk frameworks against which risk management can be conducted?	1	1	1	1	1	1
2	Do the integrated reports explain the role of the risk committee established by the banks?	1	1	1	1	1	1
3	Do the integrated reports contain evidence that the audit committee has overseen the risk management process?	1	1	1	1	1	0
4	Does the audit committee oversee the integrity of the banks' integrated reports?	1	1	1	1	1	1

Source: Critical links of Chapter 2 (own evaluation)

The audit committees of all the banks in the sample did recommend the integrated reports to the board for approval (critical link 4). Reliance can thus be placed on the content of these reports.

Furthermore King III proposes that the risk governance and the accompanying risk management process be watched over by an independent audit committee. This has been done by all the banks except for Bank F (critical link 3). The reason for this non-compliance could be Bank F's bottom-up business approach utilising computerised systems in conjunction with Bank F's 'specific know-how' in selecting the desired client profile, 'eliminating' counterparty defaults relating mainly to the unsecured loan market.

All the banks have a chief risk officer and/or supporting risk committees, as proposed by King III, to advise the board on risk issues relating to its operations (critical link 2).

Certain principles should be in place at board level to ensure the proper governance of risk. This includes a risk framework against which risk tolerance and appetite levels for key risk drivers can be set. All the banks have followed this approach (critical link 1).

These findings emphasise that risk governance strategies should be filtered through to risk management practices in order to ensure a holistic approach to risk treatment. This point is discussed below.

#### 3.4.2 Risk management considerations

#### i) Objective of questions

King III does not provide guidelines on how to implement a risk framework but states that this role can be tasked (mandated) by the board for management to fulfil. This should apply to all banking processes. A risk management process which is based on approved policies should then form the basis of the actual risk management. This process should be comprehensive (refer to paragraph 2.2.2) and result in the

identification, monitoring, treatment and independent assurance of an effective risk management strategy.

#### ii) Findings

**Table 2: Risk management practices** 

No.	Critical link	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F
5	Is there evidence that risk(s) have been identified?	1	1	1	1	1	1
6	Is there evidence that risk(s) have been monitored?	1	1	1	1	1	1
7	Is there evidence of risk treatment plan(s) for undesired risk exposures?	uħı	/ERS	ITY	1	1	1
8	Is there evidence of assurance regarding the risk management process?	HAN	INES	BUR	G <sub>1</sub>	1	1

Source: Critical links of Chapter 2 (own evaluation)

The risk management mandate from all the banks' boards has been acted upon by the management of all the banks. Risks arising from business activities or external forces have been identified (critical link 5) and significant risks affecting the successful achievement of objectives are incorporated into the risk framework (critical link 1).

Monitoring by all the banks has been conducted, ensuring business activities stay within the set appetite levels (critical link 6).

Risk mitigation strategies, which also incorporate readjusting appetite levels and accommodating changing business conditions, have been implemented to ensure risk exposures are within risk tolerance levels (critical link 7).

Independent assurance has been obtained, primarily from internal audit departments (critical link 8).

It should be noted that the business processes of South African banks are extensively computerised. The section below gives specific consideration to IT-related risks.

# 3.4.3 Information Technology governance and management and information security management considerations

## i) Objective of question

Risks related to IT pose unique governance and management considerations. Therefore, although very technical (refer to paragraph 2.2.3) and perhaps not appropriate for detailed integrated reporting except for key concerns (critical links 25 and 26), consideration should nonetheless be given to whether IT has been incorporated into the overall risk management strategy.

#### ii) Findings

Table 3: Information Technology governance and management practices

No.	Critical link	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F
9	Do the integrated reports contain evidence that IT has been considered and has this been integrated into the overall risk management strategy of the bank?	1	1	1	1	1	1

Source: Critical link of Chapter 2 (own evaluation)

All the banks have incorporated IT into their overall risk management strategies. Issues of specific concern include: (i) cyclical ageing of IT infrastructure; (ii)

alignment of IT investment with the bank's strategy; (iii) IT as an integral part of the bank's risk management supporting process; (iv) availability of systems and considerations of confidentiality and integrity of information; (v) the use of digital and mobile technology; and (vi) IT-related operational risk management issues.

The financial crisis of 2008 (refer to paragraph 1.1) necessitated a global review of the resilience and BCM of banks. This resulted in the new Basel III regulations. Compliance with Basel III is examined below.

## 3.4.4 Business Continuity Management considerations

## i) Objective of question

The global financial crisis resulted in more stringent, step-by-step and phased-in regulatory requirements on capital and liquidity. Good corporate governance practices were also included in the new regulations. The background to these developments and the use of econometric and stress testing models is discussed in paragraph 2.2.4.

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#### ii) Findings

**Table 4: Business Continuity Management practices** 

No.	Critical link	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F
10	Do the integrated reports contain evidence that econometric modelling has been subjected to high-level scrutiny to address modelling risk?	1	1	1	1	1	1
11	Do the integrated reports contain evidence that banks have complied with the phased-in Basel III capital requirements applicable for 2013?	1	1	1	1	1	1

Source: Critical links of Chapter 2 (own evaluation)

**Table 4 (continued): Business Continuity Management practices** 

No.	Critical link	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F
12	Do the integrated reports contain evidence of any future-looking reporting of constraints not being able to comply with future Basel III capital requirements?	0	0	1	0	0	0
13	Do the integrated reports contain evidence of any future-looking reporting of constraints not being able to comply with the levels of phased-in liquidity requirements in the years to come?	1	0	1	1	0	0
14	Do the integrated reports contain evidence of the risk management of any large exposures?	1	1	1	1	1	1

Source: Critical links of Chapter 2 (own evaluation)

Modelling risk arises where independent variables are used in an equation or equilibrium defining the main conditions to express and drive an outcome of the dependable variable. When these independent variables are not the main drivers of the actual outcome, the model outcome deviates from the actual outcome. This, together with the wrong statistical or mathematical methods, could be referred to as modelling risk. Decision-making processes based on these fictitious results could prove to be useless. A well-designed model can be used to simulate 'what if' scenarios of the independent variables, expecting changes to stress-test the outcome of the model dependable variable. This approach is necessary to fully comply with the Basel III requirements (refer to paragraph 2.2.4). All banks have acknowledged this risk and utilise a high-level model review and/or approval committee (critical link 10).

Basel III capital requirements aim to improve the resilience of banks by limiting the capital available for other activities. These requirements are based on specifically designed criteria and formulas (see paragraph 2.2.4). All the banks under review did comply with the phased-in capital requirements, as stipulated in Basel III, for the 2013 period under review (critical link 11).

The Basel III capital requirements will be phased in with specific compliance criteria over a given number of years (paragraph 2.2.4). All the banks except for Bank C, have indicated that they did not foresee constraints over the stipulated capital requirements in the years to come (critical link 12). Bank C has indicated that it is bound by positions taken up in the market place, with instruments running over ten years from 2013. These will be 'grandfathered' in future years, causing Basel III non-compliance by 2019. This is in relation to the capital requirements of the bank (critical link 12).

The Basel III liquidity requirements only became effective after 2013. Banks B and F have indicated that they will be able to comply with these future liquidity requirements (critical link 13). Bank E did not mention any liquidity requirements (critical link 13). Bank A has expressed concerns and has indicated that it will have to raise extra funds to comply (critical link 13). Banks C and D have indicated that full compliance is inherently challenging due to structural constraints in the South African financial market (critical link 13).

Banks A, B, C, D and F all have large exposures committees (critical link 14).

Bank E operates mainly in the fields of investment banking and selected corporate portfolios. Therefore, the board itself reviews creditworthiness and interest rate exposures in the market rather than having a large exposure committee dedicated to this purpose (critical link 14).

It should be noted that Bank E is not individually registered as a locally controlled bank with the South African Reserve Bank, but is listed under the JSE Banks Index (refer to paragraph 3.2.2). Bank E is a main shareholder in Bank C and in 2013, held more than a third of its share capital. Both Bank E and Bank C are active in international markets. This is also the situation for Banks A, B and D.

International exposure and crisis management pose specific considerations which are examined in the following section.

## 3.4.5 Crisis management considerations

## i) Objective of question

Global macroeconomic health, politics and other non-market forces can influence business decision-making. This is of particular importance where international exposure is steered towards emerging markets.

A bank in crisis may find itself subjected to resolution plans which cross international borders; this may expose it to public outcry should the taxpayers of one country need to bail out a financial institution in another. A more detailed examination of these types of forces can be found in paragraph 2.2.5. The outcome of the testing criteria is considered below.

## ii) Findings

Table 5: Crisis management practices UNIVERSITY

No.	Critical link	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F
15	Do banks with international affiliations have any policies or formal agreements in place with international banking 'partners' or holding companies form where support can be expected in times of a crisis?	0	0	0	0	0	0
16	Do the integrated reports contain evidence of specific risk disclosure that might limit future banking prospects?	1	1	1	1	1	1

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Source: Critical links of Chapter 2 (own evaluation)

Table 5 (continued): Crisis management practices

No.	Critical link	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F
17	Do the integrated reports contain evidence of disclosure of any country-specific risks in expanding South Africa's banking activities across national borders?	1	1	1	1	1	0

Source: Critical link of Chapter 2 (own evaluation)

Bank A has an 'international partner'. This partner is one of the largest banks in the world and holds share capital of Bank A. This partnership is beneficial to both banks: (i) it reduces Bank A's liquidity and capital pressure; and (ii) it helps the international partner to obtain better access into Africa as well as increased exposure to first world markets, for example, in the United Kingdom. Unfortunately there are no formal procedures or policies disclosed in Bank A's integrated report of 2013 in terms of support that can be expected from the international partner during times of crisis (critical link 15). This is also the situation with Bank B's international partner, who holds a substantial amount of its share capital (critical link 15). No formal procedures or policies are disclosed in Bank D's integrated report of 2013 regarding any agreements with its international partner. The partner holds a substantial amount of Bank D's share capital (critical link 15).

All the banks have considered future banking prospects in their 2013 integrated reports. Issues of specific concern include: (i) unbalanced global growth recovery; (ii) interest rate volatility; (iii) the global effect of the US quantitative easing; (iv) global growth below long-term average; and (v) South Africa's current account and fiscal deficit (critical link 16). Bank F has indicated that it only plans to expand into other countries in five years from now (critical link 16).

Region-specific risks were also considered by all banks. These include: (i) South African consumers under financial pressure; (ii) infrastructure constraints; (iii)

challenging nature of business in Africa; (iv) continued depreciation of African currencies; and (v) only considering regions with above-average domestic growth (critical link 17).

The discussion above suggests that macroeconomic conditions are of critical importance for business prospects. A more detailed examination of adverse macroeconomic conditions affecting banks is outlined in the section below.

#### 3.4.6 Market risk (systematic risk)

## i) Objective of question

Systematic risk, which is inherent in the entire market, may have a significant impact on larger banks (refer to paragraphs 2.3.1 and 2.3.2). This kind of risk is analysed in the following section.



No.	Critical link	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F
18	Do the integrated reports explain the impact of adverse macroeconomic conditions on banking activities?	1	1	1	1	1	1

Source: Critical link of Chapter 2 (own evaluation)

All banks have explained adverse macroeconomic conditions. Issues of specific concern include: (i) changing macroeconomic cycles coupled with new regulatory interventions; (ii) industrial action in key sectors; (iii) continued slowing of domestic GDP; (iv) the muted housing market; (v) higher inflation due to administered prices; (vi) greater risk of job losses; and (vii) the downgrading of South Africa's credit

rating, considered as one of the greatest risks affecting bank margins (critical link 18).

An unhealthy business environment may trigger investor flight behaviour. Remedies for capital flight risk used by banks are discussed below.

#### 3.4.7 Capital requirements

## i) Objective of question

Banks' default reasons are primarily due to adverse macroeconomic conditions. The diversification of banking activities can help to redirect banking business into areas of domestic growth. The consideration of whether better capitalisation can limit the risk of banking default (refer to paragraphs 2.3.3 and 2.3.4) is discussed in the following section.

## ii) Findings

**Table 7: Capital requirement considerations** 

No.	Critical link	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F
19	In conjunction with critical links 11 and 12, do the integrated reports contain evidence of comparative disclosure of capital levels required for compliance with Basel III versus actual capital levels held?	1	1	1	1	0	1
20	Do the integrated reports explain diversification of banking activities and associated risk?	1	1	1	1	1	1

Source: Critical links of Chapter 2 (own evaluation)

All the banks except for Bank E disclosed that they are all above the minimum capital requirements, as set for 2013 (critical link 19). Bank E's board has stated that

it is adequately capitalised (paragraph 3.4.4 critical link 11) but did not supply comparative figures against minimum requirements for the period under review (critical link 19).

All banks have diversified their portfolios. Examples include: (i) diversification through risk transfer and insurance; (ii) expansion into Africa; (iii) segment split between retail, commercial and corporate earnings; (iv) diversification of deposit mix; and (v) investment of 'surplus cash' into money market unit trusts (critical link 20).

Fuelling banking business by granting extensive credit in maximising the money multiplier to increase revenue, constitutes irresponsible lending. Consideration of how to address this issue is outlined in the section below.

#### 3.4.8 Credit risk

#### i) Objective of questions

The comparison of non-performing loans with total loans and unsecured loan growth is a backward-looking risk management technique to establish if credit granted falls within risk appetite levels. These levels are, in return, dependent on prevailing economic conditions (refer to paragraph 2.3.5). This issue is discussed below.

#### ii) Findings

**Table 8: Credit risk considerations** 

No.	Critical link	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F
21	Do the integrated reports disclose credit risk management by addressing key aspects such as:  (i) Non-performing loans to total loans and risk appetite?  (ii) Unsecured loans growth trends and links to risk appetite?	1	1	1	1	1	1

Source: Critical link of Chapter 2 (own evaluation)

Table 8 (continued): Credit risk considerations

No.	Critical link	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F
22	Do the integrated reports contain evidence of specific disclosure to limit or expand credit growth in given sectors based on economic conditions or planned changes in the bank's credit risk profile?	1	1	1	1	1	1

Source: Critical link of Chapter 2 (own evaluation)

All the banks have active credit risk management processes in place. The appetite for unsecured lending in South Africa has declined. Bank F used stricter credit scoring criteria for its unsecured credit market. Unsecured lending into the rest of Africa continues, but is higher-priced by some of the banks with international exposure. Unsecured lending may affect business models if planned regulatory changes are implemented. All the banks are starting to prepare for a rising interest rate cycle (critical link 21). It should be noted that Bank E's operations are different and that Bank E does not have significant exposures of credit risk. Bank E's risk depends, for example, on fluctuations of positions taken in the derivative market which may be influenced by changes in the credit rating of these instruments (critical link 21).

Credit growth is interlinked with the economic conditions of a region or country. A rising interest rate cycle reduces banking margins. All the banks are positioned for this eventuality and their credit growth appetite is declining. Losses due to less stringent credit practices in the past are still within set tolerance levels (critical link 22).

Banks must ensure that they have sufficient cash to fund banking business processes. This point is discussed in the section below.

#### 3.4.9 Liquidity risk and regulation

## i) Objective of question

Cash flow planning is essential to ensure that banks have sufficient cash resources to fulfil their payment obligations. This planning breakdown is considered below.

#### ii) Findings

Table 9: Liquidity risk consideration

No.	Critical link	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F
23	Do the integrated reports disclose the maturity breakdown or liquidity position details?	1 UNI\	1 /ERS	1 ITY	1	1	1

Source: Critical link of Chapter 2 (own evaluation)

It should be remembered that the Basel III regulations only became effective after 2013 yet all banks do practice liquidity management. In terms of liquidity, there is a structural constraint in the South African market where short-term funds are used to finance long-term assets such as mortgages (critical link 23). It should be noted that Bank F already complied with the liquidity requirements of Basel III (to be implemented after 2013) in the 2013 reporting period (critical link 23).

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Interest rate risk is dependent on the monetary policy of the Reserve Bank. The response of banks to rising interest rate expectations is discussed below.

#### 3.4.10 Interest rate risk

## i) Objective of question

The monetary policy of the South African Reserve Bank is defined by the mandate it receives from the government. Drivers that have an impact on the decisions taken by the South African Reserve Bank are, *inter alia*, inflation expectations, actual inflation and growth considerations. The reaction of banks depends on their interpretation of expected actions taken by the South African Reserve Bank. Consideration of these actions is outlined in the section below.

#### ii) Findings

Table 10: Interest rate consideration

No.	Critical link	Bank A	Z Bank B	N Bank C	Bank D	Bank E	Bank F
24	Do the integrated reports incorporate the effect of rising interest rate expectations?	1	1	1	1	1	1

Source: Critical link of Chapter 2 (own evaluation)

All banks scrutinise actions, and possibly signals, of planned actions for the future from the South African Reserve Bank regarding the repo rate. Even a credit rating downgrade by international credit rating agencies would have an impact. The higher the risk in the international arena, the higher the reward (interest rate) for taking such risk. All banks have simulated the effect of, for example, a 2% interest rate rise into their business processes. The impact of this is incorporated into their 2013 integrated reports (critical link 24).

Modelling relies extensively on IS. Ensuring a reliable IS is discussed in the section below.

#### 3.4.11 Information System security risks

## i) Objective of question

IS form the backbone on which banks run their business processes and on which they depend in the management decision-making process. Considerations of IT risk mitigation plans to reduce the impact on the IS are outlined in the section below.

#### ii) Findings

**Table 11: Information System security considerations** 

No.	Critical link	Bank A	Bank B	H Bank C	Bank D	Bank E	Bank F
25	Do the integrated reports contain evidence of IT governance and/or any director or employee training relating to IT risks?	HAN	OF — INES	BUR	<b>G</b> 1	1	1
26	Do the integrated reports contain information on IT risk management and/or security violations and remedies?	1	1	1	1	1	1

Source: Critical links of Chapter 2 (own evaluation)

IT governance is a specialised field and at least a limited awareness by all involved in governance, as well as at management level, would help to release funds and appoint specialists to curb these risks. Outsourcing cannot address all these types of risks (refer to paragraph 2.2.3 and 2.3.8). Awareness aspects include: (i) Bank A conducted an in-depth review of IT governance and director training; (ii) Bank B has a future priority to oversee the management and mitigation of technology risk; (iii) Bank C has undergone training; (iv) Bank D will continue to improve the skills of the board; (v) Bank E's board has fulfilled its duty, as per the King III integrated reporting disclosure compliance list regarding IT governance; and (vi) Bank F's mitigating strategy is based on COBIT, ITIL, ISO25999 and ISO27001 (critical link 25).

All the banks have acknowledged IT risks and security issues. The main IT risk management issues are: (i) increasing cybercrime; (ii) moving banking business into digital and mobile applications; (iii) the availability of systems; and (iv) the integrity and confidentiality of information (critical link 26).

Banking operational risk covers a wide spectrum and also incorporates IT. This point is considered below.

#### 3.4.12 Operational risk

#### i) Objective of question

The aim of operational risk scrutiny in this study is to determine whether banks have defined their risk universe from which risk mitigating prioritisation can be done.

## ii) Findings

Table 12: Operational risk consideration

No.	Critical link	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F
27	Do the integrated reports contain evidence of a bank-specific 'risk universe' consideration?	1	1	1	1	1	1

Source: Critical link of Chapter 2 (own evaluation)

All banks have defined the main risks which affect them. The following are examples of key risk areas that need mitigation: (i) Bank A will look at the composition of its board to allow for expertise in a constantly changing risk universe; (ii) Bank B considers the complexities of the Protection of Personal Information legislation as an additional risk to manage in the future; (iii) Bank C states that cybercrime is

increasing and becoming more sophisticated; (iv) Bank D's risk universe treatment depends on the effectiveness of management, which will be constantly reviewed and challenged; (v) Bank E considers market risk as its main risk; and (vi) Bank F's main risks are reputational, operational and liquidity. The risk department of the bank supports the business heads on these key elements (critical link 27).

## 3.4.13 Chief Executive Officer compensation

## i) Objective of question

The remuneration of top risk-takers should be aligned with the desired risk profile, in conjunction with the bank's long-term interests. Excessive risk exposures should not be rewarded.

#### ii) Findings

Table 13: Consideration of Chief Executive Officer's compensation

			INIEC	DIID			
No.	Critical link	Bank A	Bank B	Bank C	Bank D	Bank E	Bank F
28	Do the integrated reports disclose CEO remuneration levels, and is it fair but also guarding against excessive risk-taking?	1	1	1	1	0	1

Source: Critical link of Chapter 2 (own evaluation)

All the banks except for Bank E, have formal disclosable policies and procedures in place which are linked with risk appetite levels on how their CEO will be remunerated (critical link 28). Bank E, however, did explicitly state that it did not disclose the remuneration of its three highest-paid employees. Bank E's remuneration structure is based on the same structure as that of Bank C except for annual bonuses (critical link 28).

#### 3.4.14 Charter value of banks (riskiness versus soundness)

## i) Objective of question

The z-score provides one retrospective measure of the overall soundness or riskiness of a bank, against which the implementation of total risk governance strategies can be measured. This backward-looking tool may give an indication to the board as to whether strategies have been successful (refer to paragraph 2.5).

#### ii) Findings

Table 14: Consideration of the bank's riskiness versus soundness

No.	Critical link	Bank A	S Bank B	Rank C	Bank D	Bank E	Bank F
29	Is there any comparison between the decided level of risk appetite and the exposures of actual risk taken?	HAN	OF— INES	BUR	<b>G</b> 1	0	1
30	Is this comparison quantitatively linked to the overall riskiness of the bank (for example, against the z-score) and is this reflected in the integrated report?	0	0	0	0	0	0
31	Are there any future-looking risk governance priorities?	1	1	1	1	0	1

Source: Critical links of Chapter 2 (own evaluation)

All the banks except for Bank E have plans to reduce some of their actual risk exposures. For example: (i) Bank A wants to reduce its unsecured lending exposure; (ii) Bank B wants to reduce its appetite for crop insurance; (iii) Bank C wants to reduce its personal loans; (iv) Bank D wants to fundamentally redesign its business loans; (v) Bank F is constantly updating its risk regression model (critical link 29);

and (vi) Bank E has indicated that its risk is best managed at an investee level and consequently does not believe integrated reporting has a significant influence on how they run their business (critical link 29).

No bank has disclosed a quantitative comparison of the actual risk of the various portfolios (combined holistically) against the overall bank risk profile, such as the z-score (critical link 30).

All the banks except for Bank E do have future-looking risk governance priorities. For example: (i) Bank A wants to refine its credit risk governance standard; (ii) Bank B wants to refine its risk appetite approach for insurance risk; (iii) Bank C wants to focus on cybercrime in the coming year; and (iv) Bank D wants to be part of the expected growth in the banking population of South Africa but in a responsible manner (critical link 31).

#### 3.5 **Conclusion**

Integrated reporting of risk governance principles cannot be reduced to a simple tick-box compliance procedure; it is a fundamental approach. The reporting of risk governance should accurately reflect actual risk governance practices and should be integrated into the bank's business processes. To ensure that there is effective risk management throughout the bank, evidence should be obtained that risk governance is part of the overall governance strategy and that the board's approval for risk appetite and tolerance levels for key risk elements has been properly adhered to.

To verify this, consideration has been given in the testing criteria to the following:

- (i) Risk governance practices of listed banks.
  - ➤ All the banks have risk governance practices in place. It could be argued that Bank F's noncompliance is an indirect form of compliance because of the way the bank manages its unsecured loan niche market, which is different to the normal operations of other banks (paragraph 3.4.1).

- (ii) Risk management practices of listed banks.
  - The management of all the banks has taken up the mandate from the boards to manage banking risk in general (paragraph 3.4.2).
- (iii) IT governance and management and information security management practices of listed banks.
  - ➤ All the banks have stated that IT and IS security are critical risk factors that need mitigating treatment (paragraph 3.4.3).
- (iv) BCM practices of listed banks.
  - All the banks comply with the current regulatory requirements applicable for 2013. The phased-in future regulatory requirements may be challenging, as indicated by Banks A, C and D. Bank E's reporting is centred on the approval of its board for investment banking risk exposures, and indirectly, with what Bank C has done (paragraph 3.4.4).

# (v) Crisis management practices of listed banks. SBURG

- ➢ All the banks have identified future banking prospects with potential negative impacts on its operations which depend on how the negative impacts unfold. Region-specific forces have also been considered. Bank F's operations are only South African. Formal policies and procedures with international partners (or holding entities) are not disclosed in the integrated reports. There is evidence of sharing risk exposures between these partners (paragraph 3.4.5).
- (vi) Specific banking risk factor management practices of listed banks.
  - Consideration was given to market risk, capital requirements, credit risk, liquidity risk, interest rate risk, IS security risk, operational risk and CEO compensation (paragraphs 3.4.6 to 3.4.13). All the banks have addressed these risks except for Bank E which was not transparent on certain issues, as highlighted below:

- (a) Bank E was not transparent in disclosing actual capital held in comparison to what is required (paragraph 3.4.7);
- (b) Bank E decided not to disclose its three highest-paid employees. Their remuneration policy is similar to that of Bank C except for annual bonuses (paragraph 3.4.13).
- (vii) Retrospective risk management considerations by comparing actual risk exposures with desired level of risk exposures. This also includes an indication of the degree of satisfaction or dissatisfaction with the bank's overall charter value.
  - ➤ All the banks except for Bank E have disclosed their future-looking aims, based on identification of specific element, to de-risk certain positions. Bank E has indicated that its risk is best managed at an investee level and consequently does not believe integrated reporting has a significant influence on how it runs its business (paragraph 3.4.14).
  - No bank has disclosed the degree of satisfaction or dissatisfaction with its overall risk, expressed in terms of its charter value (paragraph 3.4.14).

Chapter 4 presents the conclusions of the literature and empirical studies and makes recommendations for further areas of study.

### Chapter 4

#### Conclusion

#### 4.1 Introduction

This chapter summarises the significant findings of the literature study in Chapter 2 and the key findings of the empirical study in Chapter 3. Areas for future research are also identified.

#### 4.2 **Deductions**

The quality of reporting risk governance practices is dependent on the actual practices employed. This study thus aimed to first establish how to implement 'state-of-the-art' risk governance practices (literature study) and then to evaluate the disclosure of these practices (empirical study) in the integrated reports of South African listed banks for the 2013 reporting period.

## 4.2.1 From literature study

The literature study indicated that risk governance and the associated integrated reporting are all a central part of modern-day corporate governance practices in South African-listed banks. Identifying, assessing and addressing these risks is of the utmost importance in ensuring the sustainability of South African banks, and indirectly, of the country's economy.

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This can be done by designing a risk governance universe based on international best practice for all South African-listed banks. To achieve this, the following should be considered:

- (i) The King III risk governance principles and their impact on the bank's governance structures;
- (ii) International risk best practice management guidelines and their impact on the current management structures and procedures of the bank. Guidance can be obtained from ISO 31000. The principles of ISO 31000 can then be incorporated into COSO's integrated framework of ERM. COSO's integrated

- risk management framework can then be linked to COSO's interrelated internal control components. Management can then be supported with assurance regarding the effectiveness of the risk management process. This can be done for example through internal audit.
- (iii) Consideration should be given to IT due to the extensive computerisation of South African banking processes. The King III IT governance principles provide guidance in this regard. Best practice regarding the implementation of an IT framework can be achieved by implementing the COBIT 5 process capability model. IS security and other risk mitigation issues can be addressed by implementing the ISO 17799 best practice recommendations. COBIT 5 can thus be supported with ISO 17799. ISO 17799 was renamed to become ISO 27002 (Information Security Community Portal, n.d.).
- (iv) The BCM of South African-listed banks can be addressed through BCP. This can be done by implementing ISO 22313 together with incident response design considerations that could be based on ISO 27001. Specific regulations for South African-listed banks can be adhered to by complying with the South African Reserve Bank's requirements. These requirements actually endorse the Basel III regulatory environment on capital and liquidity. This should set the foundation for improved resilience of South African-listed banks which would thus be better prepared for crisis situations.
- (v) The actual management of key, banking-specific risk factors needs to be controlled. This involves identifying, measuring and mitigating unwanted risk exposures which, in turn, depends on how risk management plans have filtered through all levels of employment in South African-listed banks. In some instances, this may take some time.

### 4.2.2 From the empirical study

The following conclusions can be drawn from the theoretical foundation of the literature study and the findings of the empirical study:

(i) All the banks disclosed their risk governance and management practices which also included their IT risk management strategies in their 2013 integrated reports.

- (ii) All banks expressed some concerns regarding Basel III compliance. Nonetheless, all banks managed to comply with the Basel III requirements for 2013. However, future compliance against a timeline, especially for liquidity, remains an area of concern. Such concerns have been raised by three banks. The future Basel III compliance considerations and other future looking risk governance priorities (refer to paragraph 3.4.14) is a confirmation that integrated reporting regarding risk governance practices by South African listed banks are at work.
- (iii) Integrated reports of all banks indicate the key risk drivers affecting operations. Risk factors which can be controlled or mitigated as well as those which need to be managed from within, have been disclosed. This further supports the premise that risk management practices by South African-listed banks are at work.

Ultimately, any integrated reporting on risk governance should be able to support the resilience and longer-term sustainability of the bank's business model. The reporting should thus incorporate forward-looking aspects and their impact on all stakeholders. This was the case for all banks except for Bank E (Bank E's integrated report seems to be more generic with no real or specific positions taken detail.). The integrated reports of Banks A, B, C and D provided comprehensive disclosure and stakeholders should be able to obtain the value of risk governance reporting form their angle of reference.

Bank F's business model still relies on unsecured markets but with planned improved scrutiny of its client base. Bank F's business model may be tested in terms of longer-term sustainability considerations. Incorporating growth while at the same time reducing the risk profile of clients may appear daunting. The full impact of the South African consumer under financial stress has not been discounted.

Bank E's business model depends on board approval of investee level risk management, which is supported with a documented risk management or investment strategy. Bank E did acknowledge that market risk was its main concern. The risk governance concern may be after the United States' quantitative easing, or during its tapering thereof. The United States issued bonds to supply liquidity to the market.

The effects of this have filtered through to global financial markets. Defaults between third parties may systematically affect Bank E's models of investment and positions taken in the market. The bank's stakeholders may therefore not be able to see the full extent of the bank's risk governance practices in the integrated reports.

#### 4.3 Conclusion

The South African listed banking entities did apply the concepts and principles of risk governance disclosure in their integrated reports of 2013 but the information quality vary between some of these banks.

#### 4.4 Area for future research

### (i) The motivation

Standard Bank, Barclays Africa, FirstRand and Nedbank have disclosed expansion plans into Africa. This decision may be driven by their main shareholders or partnerships with other global players. Standard Bank has followed an approach of sharing the funding risk with major developments elsewhere in Africa. This sharing is done with the consent of its partner, the Industrial and Commercial Bank of China (ICBC). Barclays Africa is supported by Barclays PLC while Nedbank is supported by its main shareholder, Old Mutual PLC.

The way forward is to develop Africa. Research is needed to establish the exact economic conditions and the prerequisite level of infrastructure upon which funding for new projects can be based. Investment-friendly legislation and prevailing political forces must also be researched.

### (ii) Area of future research

Expansion into Africa would require a thorough investigation of the investment climate of each region. This kind of research would disclose the risk exposure so that it could be correctly priced.

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