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FACULTY OF SOCIAL SCIENCES

Southampton Business School

Assessing the extent to which risk information in annual reports can predict the future performance of banks

By

Oluwaseun Osituyo

Thesis for the degree of Doctor of Philosophy

July 2019

UNIVERSITY OF SOUTHAMPTON

ABSTRACT

FACULTY OF SOCIAL SCIENCES

Southampton Business School

Thesis for the degree of Doctor of Philosophy

ASSESSING THE EXTENT TO WHICH RISK INFORMATION IN ANNUAL REPORTS CAN PREDICT THE FUTURE PERFORMANCE OF BANKS

BY: OLUWASEUN OSITUYO

The aim of this thesis was to examine the extent to which risk information in the annual reports of banks reflects their future performance. Although research and recommendations have emphasised that risk disclosures should be informative, prior research has not arrived at any firm conclusions on the relevance of risk disclosures on bank performance. In the first paper, this thesis examined the extent of adumbrative risk reporting practice (i.e., vague, partial or circuitous disclosure prior to negative events) by banks. Using institutional theory and upper echelons theory to understand risk reporting practice by banks, an in-depth investigation was conducted on the annual reports of two UK resident banks that performed very differently during and after the global financial crisis.

This identified that adumbrative risk reporting was practiced more by the failed bank. Subsequently, the second paper examined the impact of risk reporting systems on bank performance. Using accounting and market based measures, the relationship of voluntary, adumbrative and mandatory risk disclosure practice were separately examined with performance of all UK resident banks during and after the financial crisis. Panel data regression analysis was used. While no relationship was found between adumbration and performance, the results showed that mandatory risk disclosure negatively affects performance while voluntary risk disclosure positively affects performance. The researcher found less disclosure on securitisation activity after the financial crisis. Financial leverage was negatively related to bank performance, while the number of board sub-committees and income diversity were found to be positively related to bank performance. The differences in the risk reporting practices of banks within the same environment led to the quest to examine the variability of risk disclosure practice across banks resident in different cultural environments. Hence, the third paper examined the impact of national cultural dimensions on risk reporting transparency of European banks. Using voluntary disclosure theory and national culture theory as respective guides to understanding risk reporting transparency and national cultural dimensions, a longitudinal analysis was conducted of the risk information provided in annual reports of European banks prior to actual adverse events. These results were compared with uncertainty avoidance, power distance and long-term orientation cultural dimensions using weighted least square regression analysis. The results showed that while uncertainty avoidance was negatively related to risk reporting transparency, power distance was positively related to risk reporting transparency. The thesis contributes to risk disclosure research, particularly in the banking industry, by highlighting the need to study (a) adumbrative risk reporting, (b) the potential drawbacks of categorised risk disclosure regulations, and (c) national cultural differences in order to better understand the variability in risk disclosures relating to actual events at banks. This thesis also demonstrates that valuable risk information (related to bank specific circumstances) can be identified using qualitative content analysis which otherwise may be neglected with the use of quantitative content analysis as used in prior studies. With this, several evidence-informed recommendations have been developed for better risk disclosure practices.

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Declaration of Authorship

Print name:	Oluwaseun Osituyo
Title of thesis:	Assessing the extent to which risk information in annual reports can predict the future performance of banks

I declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. My supervisors have contributed to the supervision and direction of my research. However, the advice from my supervisors provided limited assistance in revising the final draft of each paper and there were no changes made to the intellectual content as a result of this advice;
8. Parts of this work have been published and submitted for publication as:

Osituyo, O., Dawson, I.G.J. and Marnet, O. (2018) Transparency or adumbration: An in-depth study of risk reporting practices at HSBC and HBOS, submission under review, *Accounting, Auditing & Accountability Journal*.

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Osituyo, O., Dawson, I.G.J. and Marnet, O. (2018) The impact of mandatory and voluntary risk disclosure on performance of UK banks during and after the financial crisis of 2007 to 2009. Paper presented at Breaking Silos Conference- Transforming research and practice through cross-disciplinary insights in Business, Law and Art (Doctoral conference), 10-11 April 2018.

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Definitions and Abbreviations

ARD	Adumbrative Risk Disclosure
BBA	British Bankers Association
BCBS	Basel Committee on Banking Supervision
CDO	Collateralised Debt Obligations
CEO	Chief Executive Officer
CFA	Chartered Financial Analysts
CRD	Capital Requirements Directive
CRO	Chief Risk Officer
ED	Executive Director
ELA	Emergency Liquidity Assistance
FCA	Financial Conduct Authority
FCIC	Financial Crisis Inquiry Commission
FRC	Financial Reporting Council
FSA	Financial Services Authority
FSB	Financial Stability Board
FSMA	Financial Services and Markets Act FT Financial Times
GDP	Gross Domestic Product
IAIS	International Association of Insurance Supervisors
ICAEW	The Institute of Chartered Accountants of England and Wales
IOSCO	International Organisation of Securities Commissions

IRM	Institute of Risk Management
LSE	London Stock Exchange
LTO	Long Term Orientation
MBS	Mortgage-Backed Securities
MRD	Mandatory Risk Disclosure
NED	Non-executive Director
NYSE	New York Stock Exchange
PD	Power Distance
PRA	Prudential Regulatory Authority
RDI	Risk Disclosure Index
UA	Uncertainty Avoidance
VRD	Voluntary Risk Disclosure

Chapter 1: Introduction

This thesis aims to contribute to the existing literature on risk disclosure practices of banks by investigating the possibility of adumbration (i.e., vague, partial or circuitous disclosure prior to negative events) in risk communication and the extent of risk reporting transparency of banks. Apart from the direct consequences for the banks of a lack of proper risk management, the economic and social implications cannot be overemphasised. The global financial crisis of 2007 to 2009 has presented an exemplary chain of consequences as a result of poor risk management especially in the banking sector (Kirkpatrick, 2009). In the UK, these consequences included huge plummet in profits and share prices of banks, a bank run and insolvency. On a broader scale, the financial crisis was characterised with rising unemployment, job losses, increased suicides, reduced standards of living, bailouts by the government leading to increased taxes, reduction of government spending on public services and economic recession, among others (Mishkin, 2011; Barr et al., 2012; Reeves, McKee and Stuckler, 2014). This has drawn a great attention of stakeholder groups to the risk management practices of the banking sector. An effective way acknowledged to identify effective risk management practice is through the risk reporting practice usually disclosed in the annual reports of the reporting bank (Solomon et al., 2000; Linsley and Shrives, 2005). It is also essential that risk disclosures are specific to the bank's circumstance to be informative and useful (British Bankers Association, BBA, 2010).

The research on assessment of risk reporting practice in the banking sector has been predominantly quantitative (i.e. by counting words, phrases, sentences, paragraphs or pages of risk-related information). In essence, the concentration of prior research with regards to bank risk disclosure has been on risk information received rather than risk information receivable (available through scrutiny and understanding the meaning of risk information provided). It is arguable that this form of investigation may not capture the informativeness of the risk information supplied or address the issue of generic and specific risk reporting practice in terms of whether the information disclosed relates to actual occurrences experienced by the bank or as a result of a tick box exercise following risk disclosure regulatory requirements. This thesis addressed these gaps in three papers by examining how informative risk disclosures are presented in banks' annual reports, the effects of mandatory and voluntary risk reporting practice on bank performance and the effect of national cultural differences on informative risk disclosure as discussed in the following sections. The UK banking industry was used as the case study in major parts of the thesis to have an in-depth understanding of the concept of

adumbration. The background to the study given below discusses problems identified with risk reporting practices that have not been investigated in the research field of risk disclosure.

1.1 Background to the study

Corporate failures prior to the global financial crisis increased interest of investors and other stakeholders to devote more attention to risks and uncertainties facing banks (Solomon et al., 2000). More so, the reverberating effect of the financial crisis of 2007 to 2009 still lingering up till date more deeply increased pressure on bank directors regarding responsibilities for risk management and in effect risk disclosure (Lo, 2009). Prior studies on risk disclosure have also shifted focus from investigating general (also known as aggregated) risk disclosure practices by banks (e.g., Linsley and Shrives, 2006; Linsley et al., 2006; Deumes, 2008; Hassan, 2009; Maffei et al., 2014) to investigating level of compliance with risk disclosure regulations (i.e. mandatory risk disclosure practice) and identification of risk information not required by regulations (voluntary risk disclosure practice) (e.g., Barakat and Hussainey, 2013; Elshandidy et al., 2013, Elshandidy and Neri, 2015; Nelson and Pritchard, 2016). However, research into the possibility of bank annual reports foreshadowing risks vaguely that have or may likely turn out into negative events have not been investigated. In essence, the degree of transparency of useful risk disclosures have also not been investigated. Prior research on risk disclosure practice of the banking industry has mainly dealt with aggregated, mandatory or voluntary risk disclosures without linking to events that actually took place. Although, it is agreed that certain risk disclosures of banks in the risk management sections of the annual report have been boilerplate information (Oliveira et al., 2011), the researcher argues that informative risk disclosures may have been included in the annual reports. This is because of the following reasons. The Institute of Chartered Accountants of England and Wales (ICAEW, 1999; 2011) noted and Linsley (2011) argued that risk information could be found dispersed in various sections of the annual report apart from the risk management section. Similarly, the Chartered Financial Analyst (CFA, 2015) identified that the important risks are the ones that get ‘underreported’. Finally, Abraham and Shrives (2014) modelled, investigated and found that certain events that actually occurred were reported as risks by non-financial firms in prior periods. In essence, the possibility of foreshadowing vaguely negative events as risks is essential in preventing future catastrophes such as the global financial crisis of 2007 to 2009.

1.2 Research aim, research objectives and research questions

The main aim of this research is to contribute to the literature on risk disclosure in the banking industry by assessing the extent to which the risk reporting practices of banks were transparent in relation to future performance, in order to develop evidence-informed recommendations for better risk disclosure practices. It is acknowledged that more useful risk information may help in better decision making by readers of annual reports (such as better-informed investment decisions and adequate enforcement and supervisory actions). Hence, the ability to understand useful risk information that are reported obscurely is pertinent for readers of annual reports. This thesis takes a three-paper route. Several existing theories were tested and the concept of adumbration was adopted in achieving the research aim in all three papers. The sample period is from 2002 to 2017. By introducing and exploring the concept of adumbration in risk reporting, the researcher used institutional theory to understand the risk reporting practices of the banks in terms of actual experiences faced by the banks and changes made to risk disclosures over time. Secondly, upper echelons theory was used as a guide to understand the extent to which banking related work experiences and professional qualifications relate to poor risk reporting practice.

Furthermore, theories of voluntary disclosure and mandatory disclosure were tested in line with performance to examine the effect of these practices on bank performance. Also, the researcher attempted to extend voluntary disclosure theory by including the concept of adumbration. Finally, national culture theory and the concept of adumbration in voluntary disclosure theory were utilised to examine the differences in risk reporting practices of European banks and to examine the extent of their transparent risk reporting. This thesis examined risk reporting practice in the pre-crisis period and post-crisis period. Hence the objectives of this research are:

1. To identify the possibility of adumbrative risk disclosure practices of UK banks by analysing annual reports before the financial crisis (Paper 1);
2. To identify the extent to which the relevant professional qualifications and risk management experience of UK banking directors relates to the degree of adumbrative risk disclosures in UK banks before the financial crisis (Paper 1);
3. To investigate the impact of mandatory, voluntary and adumbrative risk disclosure practice on the performance of UK banks during and after the financial crisis (Paper 2);
4. To investigate the impact of national cultural differences on the risk reporting transparency practices of European banks (Paper 3).

To achieve the research aim and objectives, the following research questions were asked:

1. To what extent did the risk statements produced by UK banks between 2002 and 2006 change? (Paper 1)
2. To what extent did the risk statements in the annual reports of UK banks reflect the actual experience of those banks between 2002 and 2006? (Paper 1)
3. To what extent was adumbrative risk disclosure practiced by UK banks between 2002 and 2006? (Paper 1)
4. Is there a relationship between the related work experience and professional qualifications of UK bank directors and the extent of risk disclosure in bank's annual reports? (Paper 1)
5. To what extent were mandatory, voluntary and adumbrative risk disclosures related to the performance of UK banks during and after the financial crisis? (Paper 2)
6. To what extent does national culture affect the risk reporting quality of European banks? (Paper 3)

1.3 Overview of thesis

Chapter 1 provides an introduction to the thesis with a brief background to the study, discussion on the research aim, research objectives and the research questions. The theoretical contribution and practical implications of the results of this thesis are also discussed in this chapter. Chapter 2 critically discusses in detail, related empirical research on risk disclosure and issues found to have led to the global financial crisis of 2007 to 2009. The regulatory system of the UK banking industry is discussed and theories of voluntary and mandatory disclosure as applied in accounting research is also reviewed. Thereafter, transparency and adumbration in risk disclosure is discussed based on official recommendations and review findings related to risk reporting practice. From the evaluation of prior research, the research gaps which have been addressed in this thesis were revealed. The theoretical framework is also discussed in this chapter. Chapter 3 provides the methodology applied in the three papers of this thesis. The philosophical stance and research approach adopted in this thesis are discussed. Thereafter, the research design for each of the three papers is presented. The researcher also discusses issues of reliability, quality validity and ethical considerations, and how these were addressed in the thesis.

Chapter 4 presents Paper 1. In this paper, the researcher conducted an in-depth longitudinal study on the nature of risk disclosure practices by investigating annual

reports of two large UK banks that have performed distinctively as regards funding during the financial crisis. The researcher examined the nature of risk disclosure practice by using institutional theory. Also, with explanations from the concept of adumbration in risk disclosure, the researcher analysed the degree of transparency and adumbration of risk information found in the annual reports prior to the financial crisis and this was related to significant negative events provided in the annual reports and media news articles following the risk disclosure between 2002 and 2006 with qualitative content analysis. Additionally, the researcher analysed prior banking related qualifications and experience of the directors by using upper echelons theory. The results suggest that risk disclosures in both of the banks' annual reports foreshadowed some of the negative events that were experienced by each respective bank and the financial crisis in general. However, the practice of adumbrative reporting was mostly practised by the failed bank rather than the successful bank. At the successful bank, where risk disclosure was more extensive, most executive directors had extensive experience in banking and possessed relevant professional qualifications. While this was not the case in the failed bank, the non- executive directors in the failed bank did have more work experience in banking and other financial services sector indicating that non-executive directors might have been ineffective in the board oversight responsibilities with regards to risk management.

Chapter 4 investigated risk reporting practice in line with future negative events without making distinction between the risk information required and /or recommended. The researcher argued that this separation is important in order to identify how banks comply with disclosure regulations and/or adopt risk disclosure recommendations and the influence of each risk reporting system on their performance. Additionally, it was argued that it is important to investigate the level and influence of adumbration in risk reporting systems on bank performance. As reported in Chapter 5, this led to the investigation into the impact of mandatory, voluntary and adumbrative risk disclosure practice on bank performance.

Chapter 5 presents Paper 2. In this paper, the researcher examined the effect of mandatory, voluntary and adumbrative risk disclosure practice during and after the global financial crisis on financial performance of all UK registered and listed banks between 2007 and 2016. Using mandatory and voluntary disclosure theories and the concept of adumbration, a longitudinal study of the risk information provided based on compliance and willingly disclosed information was conducted. Using a panel regression analysis, the findings showed that mandatory risk disclosure negatively affects performance while voluntary risk disclosure positively affects performance. There was

less disclosure on securitisation activity after the global financial crisis. Also, financial leverage was negatively related to bank performance while income diversity and the number of board sub-committees were found to be positively related to bank performance.

Paper 1 showed how two large banks operating in the same country can have distinctive reporting practice. Similarly, Paper 2 further showed a difference in compliance and adopting recommendations on risk reporting by all UK retail banks. The researcher argues that the examination of banks across different societies may reveal differences on how risk information related to future events are presented. Previous research into the influence of national cultural differences on risk reporting transparency of non-financial firms reveals that there is a significant relationship (Elshandidy et al., 2015; Dobler et al., 2016). However, this has not been investigated in the banking sector. As reported in Chapter 6, this led to the investigation of the impact of national culture on risk reporting transparency of European banks.

Chapter 6 presents Paper 3. In this paper, the researcher examined the impact of national cultural dimensions on risk reporting transparency of European banks. Using voluntary disclosure theory and national culture theory, respectively, as a guide to understanding risk reporting transparency and national cultural values, the researcher conducted a longitudinal analysis of risk information provided in annual reports of 30 European banks from 2010 to 2016. Risk information supplied were further compared to negative events that occurred following the publication of these reports. This was examined with uncertainty avoidance, power distance and long-term orientation cultural dimensions. The results showed that while uncertainty avoidance was significantly and negatively related to risk reporting transparency, power distance was positively and significantly related to risk reporting transparency. Listing on New York Stock Exchange and regulations as control variables were also positively related to risk reporting transparency.

Chapter 7 presents the conclusion of this thesis. Here, the research aims are revisited and a summary of the results of the research are presented. The theoretical contribution and practical implications of the thesis are discussed. This is followed by a summary of opportunities for future research.

1.4 Research contribution

This thesis contributes to the existing theories of risk disclosure, with an emphasis on the

practices of the banking industry. Specifically, the research in Paper 1 contributes to the risk reporting literature by demonstrating that adumbration can be found in the disclosure of risk information, which in turn may lead to negative events. The paper contributes to institutional theory on risk disclosure by demonstrating that banks react to internal and external pressure and demonstrate this in their risk reporting process (Zucker, 1987; Abraham and Shrives, 2014). Additionally, the paper contributes to upper echelons theory by demonstrating that the background characteristics of directors may relate to risk management and risk reporting practice of banks (Hambrick and Mason, 1984; Allini, Rossi and Hussainey, 2016). The study provides prime evidence on relating the extent of semantic risk information disclosure to actual occurrences in the banking sector with the use of qualitative content analysis (ICAEW, 2011; Abraham and Shrives, 2014). Based on the findings from Paper 1 that risk information that might relate to future events can be presented in an obscure manner, the study highlights the need to study adumbrative risk reporting practice and dangers of excessive adumbrative risk reporting practice. This is because the findings showed that the bank that performed poorly subsequent to the financial crisis was found to have practiced adumbrative reporting more than the successful bank. In the quest to understand the usefulness and impact of risk disclosure systems on banks, Paper 2 contributes to the limited investigation of relating risk disclosure practice of banks to performance using theories of voluntary and mandatory disclosure. The paper provides supporting evidence that mandatory risk reporting negatively affects bank performance (Hassan, 2009; Miihiknen, 2012; Elshandidy et al., 2015; Bischof et al., 2016) while voluntary has a positive effect on performance (Nahar et al., 2016; Al-Maghzom, 2016). Furthermore, the findings of Paper 3 highlight the need to understand national cultural differences as this can have an impact on how banks disclose risk information that are related to their actual occurrences (Elshandidy et al., 2015; Dobler et al., 2016; Khlif and Hussainey, 2016). The investigation of national cultural dimensions on risk reporting for banks has not been investigated to include all risk categories. Being a unique industry often characterised by strict regulations, it was important to examine the extent to which risk disclosures by banks can inform the public of future events.

The practical implication of this research extends to the banks, readers of annual reports and policy makers. From the findings of Paper 1, the researcher suggests that board of directors of large banks improve on meaningful reporting of risk disclosures transparently to indicate effective risk disclosure practice and effective risk management in extension. To the readers of annual reports, the results of this research suggest that obtaining more knowledge on risk information especially from annual reports entails

more than concentrating on the risk sections in the present regime. This may be because banks have not fully adhered to recommendations on relating risk information with business models or because risk reporting is still being viewed as a different report rather than in conjunction with other sections included in the annual report. From the findings of this study, policy makers have improved on ensuring transparency of risk disclosures. However, regulators might wish to consider the enforcement of monitoring policies regarding risk reporting and particularly constant evaluation of the capability of qualified bank directors, for example through training and performing scenario-based examinations for directors. For Paper 2, voluntary disclosure practice should be encouraged but not to the extent of no guidance. This is demonstrated more in Paper 3 as the findings showed that banks are more likely to disclose risks relating to future events if risk disclosure regulations are not made specific into categories. This recommendation agrees with the enforcement of self-regulatory practices in line with Bischof (2009) and Oliveira et al. (2011) who mentioned that when regulations focus on one type of risk rather than another, banks then do the same by ignoring those other risks that were not highlighted in the regulations. By doing this, the banks may fail to disclose important risk information.

1.5 Thesis structure

The remainder of this report is structured as follows. Chapter 2 gives an overview of risk disclosure, prior studies on risk disclosure, the financial crisis, the regulations governing and practices of the UK banking industry, an overview of voluntary and mandatory risk disclosure, a discussion on transparency and adumbration in risk reporting; and the theoretical framework. Chapter 3 provides the research methodology adopted to answer the research questions in the three papers. Chapter 4 presents the first paper which explored adumbrative risk disclosure in two distinct UK banks before the financial crisis of 2007 to 2009. Chapter 5 presents the second paper which examined the impact of mandatory, voluntary and adumbrative risk reporting practices on performance of UK registered and listed banks. Chapter 6 presents the third paper which examined the impact of national cultural differences on risk reporting transparency of European banks. Chapter 7 presents the conclusion for the overall thesis.

Chapter 2: Literature review

2.1 Definition of risk and importance of risk disclosure

Risk is defined by Hopkin (2013, p. 1) as “those events with the potential to have a significant negative impact on the organisation.” Therefore, risk disclosure consists information that inform the reader of risks faced as a result of business activities carried out by the reporting bank. Regulations and recommendations on risk disclosure practice have attempted to be more explanatory on expectations for risk disclosure over the years.[1] The section of the combined code on corporate governance of 1998 merely stipulates that directors of companies should review and report on the effectiveness of internal control and risk management procedures/systems. This has been updated over the years to ensure effective risk reporting practice. Most recently, the UK Corporate Governance Code (Financial Reporting Council, FRC, 2018b) on risk management aspect has placed more emphasis on clear reporting of identified risks, assessment criteria including the time frame for assessing the risks, and an assurance/attestation by the board on the continued existence of the company into a foreseeable future. Certainly, before the financial crisis, there were discrepancies as to how risk disclosure was practiced owing to the vague regulatory requirements of risk disclosures (Solomon, 2007; FRC, 2009a). The importance of these updates has majorly been as a result of attempting to prevent corporate failures, especially in the financial services sector as was experienced during the global financial crisis (FRC, 2010).

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[1] The Great Britain Companies Act (2006, [CA 06, s.417] requires that directors of companies report on principal risks and uncertainties. Disclosure and Transparency Rules (DTR 7.2.5 and DTR 7.2.10) require directors of listed companies to report on features of risk management and internal control systems in the corporate governance statement. Recommendations in corporate governance codes relating to risk management have also changed over the years. The Combined Code 1998- D.2.1, the Combined Code on Corporate Governance 2003- C.2.1, The Combined Code on Corporate Governance 2008- C.2.1, UK Corporate Governance code- 2010- C.2.1, UK Corporate Governance code- 2012- C.2.1 stipulate that directors of companies should review and report on the effectiveness of internal control including risk management systems in the annual report. More recently, UK Corporate Governance code- 2014- C.2.1, C.2.2, C.2.3, UK Corporate Governance code- 2016- C.2.1, C.2.2, C.2.3 in line with the recommendations from FRC’s (2014) Guidance on risk management, internal control and related financial and business reporting and the FRC’s (2014) Guidance for directors of banks on solvency and liquidity risk management and the going concern basis of accounting, stipulate that directors should describe principal risks facing the company, how they were assessed, the impact of future performance and solvency, and measures used to manage or mitigate the identified risks and report on the effectiveness of the risk management and internal control systems.

Risk disclosure is vital for appropriate decision making (Shehata, 2014). Undoubtedly, there are costs and benefits attached to risk disclosure practiced by companies as identified in prior research. Khlif and Hussainey (2016) found that risk disclosure is positively associated with bank profitability. Linsley et al. (2006), Oliveira et al. (2011) and Eshandidy et al. (2013) did not find any significant relationship, while the findings of Helbok and Wagner (2006) and in contrast, Allini et al. (2016) found a negative association between risk disclosure and profitability. More specifically, too little disclosure may yield little or no insights as to company activities in terms of expectation for future performance (Elshandidy and Neri, 2015; Allini et al., 2016). On the other hand, it is envisaged that sufficient disclosure of risks to the public may be unfavourable especially for smaller companies but may benefit large companies as this increases confidence in the market (Jorgensen and Kirschenheiter, 2003). This is so because it is assumed that information asymmetry is reduced between managers and the public at large (Elshandidy and Neri, 2015) or at worst results in an insignificant decline in turnover (Allini et al., 2016). Finally, Deumes and Knechel (2008) revealed that managers actually take into consideration the cost and benefits (“trade-off”) of the risks they disclose to the public.

2.2 Prior literature on risk disclosure

This section provides a summary on relevant studies conducted on risk disclosure. Notable investigations conducted include research into components of relevant risk disclosure, framework for risk reporting and the influence of risk reporting systems (i.e. mandatory and voluntary) on banks.

With regard to components of effective risk disclosure practice, prior research has evaluated risk disclosure practice predominantly by assessing the quantity of risk information supplied by firms. The research of Linsley and Shrives (2006) on risk disclosure of non-financial UK companies showed that disclosure on non-monetary risks was more than monetary risks and that there was disparity in risk disclosure. Their results suggest that companies disclose more information about a risk probably because they seem capable to manage the risks or because they are more prone to the risk e.g., environmental risk. The data on risk disclosure was analysed by counting risk- related sentences provided in the annual reports.

Furthermore, research into all-inclusive risk disclosure practice of banks is limited. Some research conducted in this area have focused on a specific risk category such as credit risk (e.g., Frolov, 2006), operational risk (e.g., Helbok and Wagner, 2006; Oliveira et al.,

2011; Baraket and Hussainey, 2013), market risk (e.g., Perignon and Smith, 2010; Scannella and Polizzi, 2017), liquidity risk (e.g., Wang, Zhu and Yao, 2011; Boubakri, Mirzaei and Samet, 2017). However, prior studies have revealed that more useful insights may be obtained when risks are viewed together rather than independently (e.g., Gordon, Loeb and Tseng, 2009; Imbierowicz and Rauch, 2014; Bromiley et al., 2015).

Research on relationship between risk reporting and profitability has yielded mixed results. On all risk categories, Linsley et al. (2006) investigated risk disclosure practices of Canadian and UK banks in their annual reports for the financial year end of 2001 by adopting quantitative content analysis methodology. They found no association between level of risk disclosure and risk level of the bank or bank profitability, positive association with the size of bank and the number of definitions for risk types with no significant difference between the level of risks disclosed by Canadian banks and UK banks. They also found that banks commonly practised disclosure of qualitative risk information, backward looking information, than qualitative and forward looking risk information.

Similarly, Lipunga (2014) investigated the level of risk disclosure of seven Malawian banks by analysing the annual reports of 2012. Lipunga (2014) developed a risk disclosure index based on requirements of Basel II, IFRS 7 and guidelines from the regulatory bank of Malawi. Lipunga found that there was a high level of risk disclosure on the average by all banks investigated but as found by Linsley et al. (2006), profitability was insignificant in determining the level of risk disclosure. However, Jizi and Dixon (2017) investigated the extent of risk management disclosures by US national commercial banks by analysing the Management and Discussion Analysis sections of the banks' annual reports from 2009 to 2010 using content analysis. They found that 'better content' (measured as disclosure of definition, policies and assumptions for assessing risks, numerical figures and comparative analysis with previous year's data or projected figures) is rewarded with increased total investment return as investors feel more confident when more risk management information is disclosed.

On relationship between risk level and risk reporting practice, Zeghal and El-Aoun (2016) investigated impact of the financial crisis on the enterprise risk management disclosure of US banks by analysing annual reports of the banks from 2006 to 2009. They found that enterprise risk management disclosure was positively associated with financial crisis, bank size, independence and duality of board. They found a negative association between enterprise risk management with profitability, leverage and board size.

Specifically, there was a significant positive effect of the financial crisis on voluntary and aggregated risk disclosure. Similarly, Fiechter and Zhou (2016) investigated the impact of Greek crisis on disclosures by 173 European banks by analysing their annual reports. They found that banks increased the quantity of information in risk reporting sections and those that were more affected by the crisis increased risk disclosure. On the average, they found that changes in risk disclosure was not significantly related to increase in length of annual reports but was significantly related to the subsequent recovery of bank's beta.

On risk reporting systems, Maffei et al. (2014) investigated mandatory risk disclosure practices of Italian banks by analysing 2011 notes to the financial statements and public reports of the banks. They found that banks provided more risk information in the public reports than notes to financial statements. They found that the characteristics of risk information for each risk category was uniform when disclosing quantitative information, the actual state of risks and concentrating more on non-financial risks. Also, the weight or density of risk factor statements increased in notes to financial statements and public reports in line with the risk level of the banks. Al-Maghzom et al. (2016) investigated the influence of corporate governance characteristics and demographic background of top management on voluntary risk disclosure of 12 Saudi listed banks by analysing their annual reports from 2009 to 2013. They developed a risk disclosure index from prior studies and found that the bank size, (board size), higher level of outsider ownership, greater number of audit committee meetings, high profitability and mixed gender significantly determine voluntary risk disclosure. Al-Maghzom et al. (2016)'s research, as others have evaluated risk disclosure practice of banks based on the quantity of risk information disclosed.

From the prior research discussed above, the followings gaps have been identified. Firstly, most risk disclosure studies on banks have adopted quantitative analysis of annual reports as highlighted above. The demerit of this method is that certain aspects of risk disclosure may be neglected such as the nature of qualitative risk content disclosed in the annual reports. By constructing a risk disclosure index from official requirements or prior studies, it limits the ability to identify other risk information that fall outside the index. Also, where certain sections of the annual reports are analysed such as the risk management section or notes to the financial statements, risk disclosures that have been provided in other sections of the annual reports may be neglected. More so, where risk disclosure index is used, certain hidden but insightful risk information may be neglected if they do not meet the risk disclosure index criteria. Finally, research into

informative risk disclosures in terms of relating risk information to actual events is limited. The first problem is summed up as '*adumbrative risk disclosure'*. Adumbration as defined in Merriam Webster dictionary (2016) means "to foreshadow vaguely" or "to suggest, disclose, or outline partially". Hence in this thesis, adumbrative risk disclosure is referred to as the partial disclosure of related risks prior to events. Adumbration may surface where there is little or no intention to fully disclose information at that particular time. The importance of adumbration has been emphasised by Hall (1964) that adumbrated information is useful once understood. This means that the aim of adumbration may be known or unknown but the information supplied is useful. The end result of ignoring risk information and ineffective risk management played a major role in the financial crisis of 2007 to 2009 (Brunnermeier, 2009; Financial Crisis Inquiry Commission (FCIC), 2011; Andersen et al., 2012; Ashby, Peters and Devlin, 2014). Hence, the need to investigate useful risk information adumbratively disclosed.

Secondly, in prior studies on bank risk disclosure, certain characteristics of the board of directors such as relevant work experience and professional education background have not been investigated. To avoid being unprepared and/or underprepared for a future financial crisis due to poor risk management, Kirkpatrick (2009) and Walker (2009) essentially suggested that bank boards should consist of executive and non-executive directors with relevant skills, prior experience in banking and risk management related disciplines. The essence of this is to ensure that the directors are well-grounded in the knowledge of the rudiments of the banking industry. Hence, it is pertinent to investigate the relationship of work experience and professional education background of bank directors before being appointed to the board, and risk disclosure practices of banks before the financial crisis period.

With regard to the influence of risk reporting systems on bank performance, investigation on effect of mandatory and voluntary risk disclosure on bank accounting and market performance is limited. Based on the researcher's knowledge, prior studies other than Elbannan and Elbannan (2015) on bank risk disclosure have inversely focused on profitability as a determinant of risk disclosure (Linsley et al., 2006; Barakat and Hussainey, 2013; Lipunga, 2014; Zeghal and El-Aoun, 2016; Al-Maghzom et al., 2016). This became a point of interest based on recommendation by Slack and Campbell (2008) on the effect of clarity or incomprehensiveness of disclosures on attractiveness of the reporting bank. In line with this, Elbannan and Elbannan (2015) looked into the effect of bank risk disclosure on performance of Egyptian banks before and during the financial crisis. They found a positive association between higher risk disclosure and performance

(measured as operating performance and market valuation), although the significance of association weakened during the financial crisis. They also found that credit risk and liquidity risk had the highest association with performance. The research of Elbannan and Elbannan (2015) did not distinguish voluntary risk disclosure from mandatory risk disclosure, nor identify adumbrative characteristics of risk information disclosed in the annual reports. More so, the research was investigated before and during the financial crisis, while the risk disclosure practice in the subsequent period was not investigated. Due to the vagueness of expectations on risk disclosure in the past, Solomon et al. (2000) investigated 97 institutional investors through questionnaire to provide an acceptable framework for risk disclosure. According to the findings of Solomon et al. (2000), institutional investors agreed that risk disclosure enhances proper investment decisions and that risk disclosure should be made voluntary rather than mandatory to enable banks report on the risks that mostly affect their business activities. Hence, this study fills this gap by investigating the possibility of adumbration in voluntary risk disclosure practices of banks and by identifying the impact of mandatory, voluntary and adumbrative risk disclosure practice on their performance. This investigation includes the crisis and post-crisis period.

Finally, while it has been established that national culture can affect risk disclosure practice of non-financial firms, research on the impact of national cultural characteristics on risk disclosure practice of banks is yet to be investigated. Elshandidy, Fraser and Hussainey (2015) investigated the impact of firm and country characteristics on mandatory and voluntary risk reporting using Germany, UK and US as case studies. They found that non- financial firms in societies with lower power distance, uncertainty avoidance, individualism and long-term orientation are more likely to show less differences in voluntary disclosures. In terms of mandatory risk disclosures, they found that non-financial firms with higher uncertainty avoidance, long-term orientation and lower individualism are more likely to provide higher levels of mandatory risk disclosures. Similarly, Dobler, Lajili and Zeghal (2016) investigated the impact of national cultural values on the level of risk disclosure of manufacturing firms, using Canada, US, UK and Germany as case studies. They also found that uncertainty avoidance, individualism, long-term orientation and power distance are positively associated to risk disclosure level. Based on the researcher's knowledge, Boussanni, Desrochers and Préfontaine (2008) is the only study that attempted to relate national culture to bank risk disclosure. They found that there were differences in the extent of liquidity risk financial disclosure across 21 Western European banks. However, their study did not specifically address national cultural differences of Hofstede and was restricted to liquidity risk disclosures.

Hence, there is a need to understand how banks domestically resident in different countries are transparent in reporting their risks and how these risks have related to negative events following their disclosure in the annual reports as risks. This study fills this gap by investigating the impact of national cultural differences on the risk reporting transparency of domestically resident European banks.

2.3 The Global Financial crisis of 2007 to 2009

The global financial crisis which affected major developed countries was attributed to actions and inactions of individuals (Power, 2009; Partnoy, 2010; FCIC, 2011). Large banks were characterised by atrocious lending practices while they achieved tremendous growth in trading activities (FCIC, 2011; Financial Conduct Authority and Prudential Regulation Authority (FCA and PRA, 2015). Confidence was also placed on the continuous rise in housing prices and profits from securitisation activities (Sorkin, 2009). The financial crisis was connected to weak regulatory oversight, collapse of the housing market in the USA, liquidity and funding problems, series of bank run (e.g., Northern Rock), large banks filing for bankruptcy (e.g., Lehman brothers), emergency bailouts by other banks (e.g., JP Morgan's acquisition of Bear Sterns; Lloyds Bank acquisition of HBOS), nationalisation of banks (e.g., RBS, Northern rock) and huge plummets in actual profits (Soros, 2008; Taylor, 2009; Sikka, 2009; Kirkpatrick, 2009; Shin, 2009; Ivashina and Scharfstein, 2010; FCIC, 2011; Green, 2015). While countries such as the US, UK, France and Switzerland were greatly affected by the crisis, countries like Canada largely avoided direct impact (Huang and Ratnovski, 2009; Erkens, Hung and Matos, 2012). The immunity of the Canadian banks in this era was supposedly due to the stringent regulations and effective monitoring of banks' activities which fostered their effective risk management practices (Bandyopadhyay, Jha and Kennedy, 2017). The causes of the global financial crisis identified are as follows.

First, the housing bubble and credit boom are central to the cause of the financial crisis that started in 2007 (Acharya and Richardson, 2009). Prior to 2007, persistent growth in house prices were witnessed in developed countries such as the US, Ireland and UK. In the early 2000s, house prices skyrocketed at about 11 per cent every year (Acharya and Richardson, 2009). Individuals who could not afford to buy houses were now able to due to the relaxed rules on lending and government policies that supported homeownership (FCIC, 2011). Low interest rates were introduced by the government at the time and the continuous rise in house prices encouraged banks to engage in subprime mortgage lending (FCIC, 2011; Hull, 2015; FCA and PRA, 2015). In essence, banks considered and provided mortgage loans to customers who could not afford to buy those houses or

repay the loan. Banks then traded these mortgages as a form of securitisation (Acharya and Richardson, 2009; Hull, 2015). In essence, mortgage backed securities (MBS) were sold to investment banks who converted these securities to collateralised debt obligations (CDOs) through special purpose vehicles and sold to bondholders (Hull, 2015). The problem emanated in the default of the unsecured mortgage loan borrowers. Thus, their houses were foreclosed and put up for sale in the market. Unsurprisingly, the market became filled with houses which in turn led to the drastic reduction in the value of the CDOs and later led to bankruptcy of some of the biggest investment banks that engaged heavily in this practice as in the case of Lehman brothers (Soros, 2008). Consequently, the original lending banks were unable to receive back income from the special purpose vehicles on the mortgage sold (Pozsar, Adrian, Ashcraft and Boesky, 2010).

Second, the global financial crisis has also been attributed to the lack of transparency and accountability of the banks in their practices. The asset side of the banks' balance sheets were basically pumped to present an impression that the banks were performing well in their operations (Sikka, 2009). For example, the CDOs that were classified as risky were bought back by the banks to generate higher returns (Pozsar, 2008). Also, investment banks in particular were found to practice creative accounting by selling assets just before the reporting period and buying back these assets after the reporting period to reduce the already-high leverage ratios (FCIC, 2011).

Third, weaknesses in regulatory supervision in affected countries may have been a contributing factor in the run-up to the global financial crisis. In the UK for example, a 'light touch' approach was preeminent in the pre-crisis period as the Financial Services Authority (FSA) responded to political demands by placing low priority on the supervision of banks' liquidity and on prudential supervision of banks to encourage competition within the sector (FSA, 2011). In addition to the political pressure, this practice was carried out based on the assumption and belief that the financial system of the economy was stable or at worse capable of self-correcting itself and that the Basel II principles introduced were sufficient in aiding a sound banking system (FSA, 2011). Similarly, in the US, due to the immense growth in the banking industry, pressure was placed on regulators, the Congress and legislators by banks to relax growth and competition barriers (FCIC, 2011). Response to the relaxation of growth and competition included the introduction of the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 which allowed bank holding companies to acquire banks in all states and have branches in more than one state (FCIC, 2011). Consequently, from 1994 to 2005, the

ownership of industry's assets by large US bank holding companies grew from 25% to 55% (FCIC, 2011). In this phase, the Federal Reserve, which is the supervisory and regulatory authority, was confident that banks were capable of self-regulation through the management of risks that affected their own activities (FCIC, 2011).

Ironically, banks' actions suggest that they viewed compliance with risk management regulations was safe enough for their risk management activities (Acharya, Gujral, Kulkarni and Shin, 2011). This leads to the fourth cause attributed to the financial crisis which is ineffective risk management practice. Certain risks that were highlighted in certain activities carried out by banks were downplayed or ignored. For example, in the case of HBOS, while its international division was highlighted for rapid growth as a risk, there was no evidence that any precaution was taken to manage the risk (FCA and PRA, 2015). The outrageous incentive systems has also been highlighted as a possible reason for the intentional ignorance or downplaying of risks identified by banks (Kirkpatrick, 2009). Additionally, it was found that risk models applied by banks in this era only considered technical aspects and did not include the behavioural aspects of the decision makers (in this case, the CEO and other members of the board) (Kirkpatrick, 2009). For stress tests, efforts to ensure that the board in some banks accepted and took precaution based on the forward-looking stress scenarios almost proved futile (Kirkpatrick, 2009).

Fifth, there was the issue of the mismatch of assets and liabilities by banks. In theory, short-term funds should be used to finance short-term loans while long-term funds should be used for long-term loans to avoid liquidity problems (Adrian and Shin, 2009). Some banks (e.g., Northern Rock, Bear Sterns and Lehman Brothers) used short-term deposits to fund long-term loans (Claessens, Dell'Ariccia, Igan and Laeven, 2010; Drehmann and Nikolaou, 2013; Hull, 2015). In extreme case where confidence is lost as was the case of the aforementioned banks, customers may withdraw their deposits, leading to serious liquidity problems for these banks.

Finally, inappropriate ratings by the credit ratings agencies was also identified as a contributor to the financial crisis. Originally, credit rating agencies were serviced by investment banks which may have affected objectivity in rating the products of these banks (Crotty, 2009). Another reason for the positive ratings was probably due to the continuous and much anticipated rise in house prices and the lack of relative historical data for structured products such as MBS (Martin, 2011; Hull, 2015).

In the wake of the global financial crisis, regulations and recommendations have been introduced to avoid the possibility of a future financial crisis. These include the Dodd-frank Act of 2010 in the US, introduction of Basel III principles, corporate governance codes in the UK, France, Germany and Switzerland, amongst others. However, the adequacy of these regulations and recommendations in the prevention or ensuring minimal impact in another financial crisis will be dependent upon other factors including the attitudes of the decision makers, importance placed on financial stability and political influence in stronger economies (Turner, 2008; Power, 2009; Partnoy, 2010).

2.4 The UK Banking Industry

Special attention is drawn to the banking industry for many reasons. Firstly, the failure of one big bank may affect the banking industry, and as a result the financial services sector may be affected which may have a gross impact on the financial state of the economy as a whole (Clare and Priestley, 2002). It is a different case for a non-financial firm because when it fails, government bailout is hardly practised. Secondly, the complex nature of activities of the banking industry has necessitated separate strict regulations (Stern and Feldman, 2004). Even so, the increasingly complex activities these banks engage in, continues to make its control difficult (Baumann and Nier, 2004; Becht, Bolton and Roeell, 2011).

Prior to the global financial crisis, the UK banking industry was regulated by the Financial Services Authority (FSA), the Bank of England and Her Majesty's (HM) Treasury (Casu, Girardone and Molyneux, 2015). The introductory regulation to the UK banking industry was Bank of England Act 1979. The FSA Act of 1986 was passed by the UK parliament to regulate banks and other financial service firms which was replaced by the Financial Services and Markets (FSMA) Act of 2000. The global financial crisis of 2007 to 2009 called for amendments to the regulation in 2010 and 2012. In 2010, FSA Act was passed to regulate remuneration of bank employees (Great Britain. Financial Services Act, 2010). Subsequently in 2012, the FSA was dissolved and repealed by the Financial Conduct Authority (FCA) and the Prudential Regulatory Authority (PRA). Hence, another FSA act was passed providing new regulations for banks and other financial services firms (Great Britain. Financial Services Act, 2012). Recently, the Bank of England and Financial Services Act of 2016 was passed to increase power and responsibility of the Bank of England in terms of governance, accountability and transparency with the aim of improving financial stability in the financial sector (House of Lords, 2015; HM Treasury and Baldwin, 2016). Additionally, UK banks as other companies are required to adhere to the UK Companies Act of 2006 (CA 06). The Financial Conduct Authority also

requires banks and other financial services firms to adhere to the Disclosure and Transparency Rules.

In relation to disclosure, the Basel Committee on Banking Supervision addressed this in its report of 1998 titled '*Enhancing Bank Transparency'*. This report emphatically discussed the benefits of disclosure on risks to the public, supervisors and banks on appropriate decision making. Basel II emphasised on encouraging banks to fully disclose all material risks to ensure credibility and confidence in the market, and to ensure effective market discipline (Basel Committee on Banking Supervision (BCBS), 2004). Basel III which was enacted to address the financial crisis further stressed on more transparent disclosure of liquidity risks (BCBS, 2008). In 2006, the European Parliament introduced Capital Requirements Directive (CRD I) to regulate credit institutions which was adopted in the UK in 2006 and implemented early January 2007 (Financial Conduct Authority, FCA, 2011). The CRD I contained detailed regulations on requirements for disclosure of risks. The CRD II published in 2010 was an amendment of CRD partly to address the financial crisis. CRD III was issued in 2011 to address recommendations of Basel on trading book, remuneration and re-securitisation procedures. CRD IV is currently being developed to address the financial crisis more intensely and to implement Basel III (FCA, 2011). Also, unlike some other countries where corporate governance is mandatory such as the US, Germany, Italy and Spain, the practice of corporate governance is voluntary in the UK (Elshandidy et al., 2015). Banks are encouraged to adhere to the corporate governance code or explain where a different approach is used other than those prescribed in the code.

2.5 Voluntary and mandatory risk disclosure theories and practices

2.5.1 Theories of voluntary disclosure

The theory of voluntary disclosure states that managers will withhold information from the public when they are aware that full disclosure may lead to a decrease in the market price of the bank's asset (Verrecchia, 1983). In other words, managers only disclose information where the benefit of disclosure exceed its cost. However Dye (2001) noted that there may be other incentives for voluntary disclosure than immediate increase in stock price as information may be delayed for some reason and then disclosed in a later period to suit the bank's need. Dye (2001) also noted that firms will only give full disclosure if they have devised other means to manage the adverse effect of information disclosed. In essence, voluntary disclosure for which ever reason disclosed is for the benefit of the firm.

Supporters of voluntary disclosure proposed that managers view disclosure as proprietary cost since the information disclosed may be utilised by competitors, regulatory and tax authorities, potential and existing investors, affect credit suppliers' view of bank's ability, amongst others, thereby affecting the future earnings of the bank (Verrecchia, 1983; Guo et al., 2004). Dye (1985) added to knowledge on voluntary disclosure by proposing that banks may withhold other information that are not proprietary but may affect the bank's price. Dye noted that shareholders may choose to restrict managers from disclosing certain information if the disclosure will result in an adverse effect on the price of the bank, while investors may react negatively if they are aware that certain information has been withheld.

Empirical results from prior research have confirmed that voluntary disclosure reduces information asymmetry (Leuz and Verrecchia, 2000), cost of capital (Botosan, 1997; Botosan and Plumlee, 2002; Brown and Hillegeist, 2007) and increases stock price (Healy, Hutton and Palepu, 1999; Lang and Lundholm, 2000). Also, empirical findings have shown that determinants of voluntary disclosure include firm size (Depoers, 2000; Watson, Shrives and Marston, 2002; Kent and Ung, 2003; Eng and Mak, 2003; Huafang and Jianguo, 2007; Hossain and Hammami, 2009; Oliveira et al., 2011), international diversification (Raffournier, 1995; Depoers, 2000), ownership structure (Chau and Gray, 2002; Eng and Mak, 2003; Huafang and Jianguo, 2007; Wang and Claiborne, 2008), profitability (Watson et al., 2002; Wang and Claiborne, 2008), industry (Watson et al., 2002), board composition and independence of directors (Bujaki and McConomy, 2002; Patelli and Principe, 2007; Huafang and Jianguo, 2007), intention to improve stakeholder engagement (Boesso and Kumar, 2007) and intention to raise new share capital (Collet and Hrasky, 2005).

Voluntary disclosure has also been linked to risk reporting/disclosure. For example, Oliveira et al. (2011) investigated factors affecting voluntary risk disclosure of Portuguese banks and found that bank size, listing status, bank age, depositor confidence and risk management ability influence voluntary risk disclosure. Consistently, Elshandidy et al. (2015) investigated factors that may influence mandatory and voluntary risk reporting of non-financial firms in the UK, US and Germany and found that cultural values, firm size, volatility of firm's market share in relation to market index and legal origin of country, particularly those under common law significantly influence voluntary risk reporting.

2.5.2 Theories of mandatory disclosure

Mandatory disclosure involves disclosure by banks based on requirements by the relevant regulatory authority. The theory of mandatory disclosure holds that involvement of supervision through the provision of disclosure requirements, when complied with is beneficial to stakeholders in order to reduce information asymmetry and enhance better informed decisions (Darrough, 1993). Friend and Herman (1964) and Singhvi and Desai (1971) agreed that consistent practice of adequate disclosure reduces the gap between the initial price of a bank and its 'intrinsic value' (actual value). Other benefits of mandatory disclosure requirements were also highlighted by Leuz and Wysocki (2008), being to encourage uniform disclosure irrespective of the season (good and bad times, at IPO or afterwards), reducing and eliminating to an extent the cost to banks of identifying which information to withhold and encourages new market entrants to join the market and raise finance. However, opponents of disclosure regulation such as Dalley (2006) noted that disclosure regulation in itself may be irrelevant especially when requirements are misunderstood or unnecessarily precise. For example, where banks are required to provide all information on a particular disclosure item if disclosed, some banks may prefer not to disclose at all than bear the cost of disclosing all information on the item. Again mandatory disclosure results in costs to both the regulator (Dalley, 2006) and higher costs for smaller companies than larger companies (Owusu-Ansah, 1998).

Findings from prior research have revealed some determinants of bank compliance with mandatory disclosure requirements. These include company size, age, status, profitability and ownership structure. However, the direction of relationship varies across different contexts investigated. For example, Wallace (1995) investigated determinants for compliance with disclosure requirements by firms listed on the Stock Exchange of Hong Kong (SEHK) and found that company size, profit, type of independent auditor (either affiliated to the big six international audit firms or not) and level of business activity diversification accounted for the differences in risk disclosure practice by the firms. Similarly, Owusu-Ansah (1998) investigated listed companies in Zimbabwe and found that company size, ownership structure, company age, profitability and affiliation of company with multinational corporations had a positive significant impact on compliance with mandatory disclosure requirements. In contrast, Akhtaruddin (2005) who investigated listed companies in Bangladesh found that company size, company age, profitability and company status (traditional or modern firms) have no significant effect on firm compliance with mandatory disclosure requirements. One may assume this difference in findings may have arisen as a result of cultural differences of the

contexts studied. However, the research of Hasan, Karim and Quayes (2008) conducted on listed firms in Bangladesh proved otherwise as they found that the level of compliance with mandatory disclosure requirements was significantly influenced by company size, qualification of accounting staff involved in the preparation of financial statements and the reputation of the audit firm. Reforms in disclosure regulations have also been found to significantly affect level of compliance to mandatory disclosure requirements (e.g., Al-Akra, Eddie and Ali, 2010).

Studies on mandatory risk disclosures have also been conducted to reflect the usefulness of mandatory requirements and drivers for compliance with these requirements. For example, Greco (2012) investigated compliance level and changes in risk disclosure policy by managers of twenty Italian non-financial firms to the risk disclosure requirements issued by the Italian Civil Code. Greco found that new risk disclosures added no value as the content added was the narration of the definition of each risk factors but not on the relevance of each risk to the firm. In essence, although the quantity of the risk reporting increased after the issuance of the new regulation, there was a weak form of compliance. In contrast, Miihiknen (2012) investigated factors that influence mandatory risk disclosure quality of 99 Finnish non-financial listed firms following reviews by IFRS on disclosures and found that firm size, profitability and listing on the NYSE has a positive influence on the quality of risk disclosure. Miihiknen (2013) examined the usefulness of risk disclosures in annual reports of 99 Finnish financial firms and found that overall high quality risk disclosures reduces information asymmetry and therefore risk disclosures in annual reports are useful to investors. Similarly, Campbell et al. (2014) investigated the usefulness of the risk section to investors following mandatory requirements for all firms by the Securities and Exchange Commission in 2005. They found that the risks were described specifically as they affected individual firms, and there was a positive association between risk disclosure and stock return volatility, suggesting that the risks disclosed reduced information asymmetry since investors could better assess the risks faced by firms.

2.6 Transparency and adumbration in risk disclosure

With changes in regulations over the years and continuous publication on reports and recommendations for more effective and transparent risk reporting, it could be inferred that risk reporting in the UK has been inadequate and, therefore, that scope for substantial improvements may still exist. The FRC (2009b)'s *Going concern and liquidity risk: Guidance for directors of UK companies* recommended that the board should disclose risks that are mostly significant, by providing information on their financial

and/or economic effect, how the impact has been assessed and measures that have already been put in place to manage the risks. However, the review of companies for the financial year ending 2010 of the Financial Reporting Review Panel (FRC, 2011) in its report titled *Annual report 2011: Review findings and recommendations* mentioned that companies were still found guilty of producing a lengthy list of principal risks described rather generically, or providing the risk framework rather than actual principal risks and uncertainties, and the information in risk section not linking to the other information provided in the annual report.

Similarly, in 2010, the British Bankers' Association (BBA, 2010) published the BBA code which recommended that banks should provide risk information in a more comprehensible manner, avoid boilerplate disclosures and provide details on the exposure of the risk and its management. BBA (2010) also recommended that risk information should be disclosed in a manner that ensures comparability over time and across other banks in the industry. The FRC (2012a)'s review of annual reports of companies with financial year ending 2011 identified that there was a need to improve on how companies report actions taken to mitigate risks.

In 2012, the FRC (2012b) recommended in its report titled *Sharman inquiry on Going Concern and Liquidity risks: Lessons for companies and auditors* that banks should focus on long-term while disclosing risks by providing risk information in relation to going concern needs and endeavour to go beyond the focus on liquidity to solvency. Also, the Financial Stability Board (FSB, 2012) published *Enhanced disclosure taskforce report: Enhancing the risk disclosure of banks* which recommended that banks should disclose principal risks and uncertainties in a comprehensive manner, explaining business process and how risks have been identified therein and how they have been managed. However, the FRC (2014a, 2014b)'s *Technical Findings* and *Corporate Reporting Review* identified respectively that the compliance level for disclosing principal risks and uncertainties was still inadequate as risks were in certain cases discussed in generic terms.

In 2014, the FRC published the *Guidance on the Strategic Report, Guidance on Risk Management, Internal Control and Related Financial and Business Reporting* and *Guidance for Directors of Banks on Solvency and Liquidity risk management and the Going concern basis of accounting*. The *Guidance on the Strategic Report* in explaining the expectations of banks based on the CA 06 (s.415) recommended that companies should provide risk disclosures that are specific to their business activities by discussing

how the risks have been arrived at, the circumstances that make the risks relevant, the impact and how they are managed (FRC, 2014c, FRC, 2018a). The *Guidance on Risk Management, Internal Control and Related Financial and Business Reporting* encouraged banks to focus more on disclosing how risks affect them directly even if the risks are generic to the industry or environment, rather than providing long statements with little relevant "insights" (FRC, 2014d). The *Guidance for Directors of Banks on Solvency and Liquidity risk management and the Going concern basis of accounting* encouraged banks to be more transparent in risk reporting, adding that banks should report on solvency risks, liquidity risks and going concern. It also recommended that banks may not disclose in their annual reports when a liquidity assistance is received or if material disclosure has been assessed to be at the detriment of the bank (FRC, 2014e). However, the FRC's report (2015) on *Clear and Concise: Developments in Narrative Reporting* still identified inadequacies in company risk disclosures. These include providing boilerplate disclosures especially in the sections for principal risks and uncertainties, and providing generic risk disclosures rather than explaining specifically the impact on their business activities and business model. The Chartered Financial Analyst (CFA, 2015) review titled *CFA UK annual survey on Financial Reporting and Analysis* also indicated that there was a need for improvement in the manner in which principal risks and uncertainties are disclosed. These illustrations indicate that risk disclosure in the UK has not been fully transparent.

While risk disclosure has been shown in prior research to be useful to the bank and stakeholders, and transparency has been identified as a major issue lacking in risk reporting practice, Slack and Campbell (2008) noted that there is a need to investigate the relationship between the vagueness or otherwise of material disclosures and the 'attractiveness' of the reporting bank. In the review of CFA (2015, p.8) on financial reporting, a quote from one of the participants regarding risk reporting stated that: "Most of it is irrelevant. Useful things are the primary risks faced that get under-reported if reported at all. Auditors are to blame for not focussing more on quality over quantity". These illustrations indicate that despite the inadequacy of risk disclosures, there may be some indication of adumbration in risk disclosures whereby significant risk information are provided in an incomplete state or provided in a less comprehensible manner. Slack and Campbell (2008) and Linsley (2011) indicated that banks are more likely to practice vague risk reporting due to the complex nature of their business activities. This means that risks reported are incomprehensible to the public and may in the end yield little or no insights. Slack and Campbell (2008) further concluded that risk reporting by banks in the annual reports are not useful to readers implying that although risks may be disclosed in

the risk sections of the annual reports, they are standard and mostly boilerplate with no change in information from year to year. Having known that risk reporting practice may be incomprehensible and incomplete, the researcher argues that some risk information provided in the annual report may be useful to the extent of indicating risks that may likely lead to a future event.

Hall (1964) introduced the notion of adumbration in communication, and highlighted that adumbration precedes the main information passed or may be used where the sender of information has no intention at the particular time to reveal full information. The intention for adumbration varies but may be linked to agency problem. Hall (1964) indicated that adumbration may be practised as a result of the desire to have more control of information, protection of oneself, to keep others in suspense or avoid being over-committed to information provided. Risk disclosure may be related to adumbration in communication in the sense that full information on risks conversant to the board and top management may be withheld. Also, it may be the case that adumbration is practised as a result of not having full knowledge on the impact of the risks or how they can be managed. Similarly, Breakwell (2007) mentioned that risk communication is difficult and may be misunderstood by the receivers such that it is placed too highly or less serious than it actually is. While reasons for adumbration in risk disclosure appear to be beneficial to the sender (bank) rather than the receiver (stakeholders), it is vital to understand that in the long run, adumbration may be detrimental to the bank, for example, the financial crisis of 2007 to 2009. Acharya and Viswanathan (2011) and Green (2015) have noted that risks that were ignored or not given much attention were the risks that had most significant impact on the financial crisis. Hence, as important as transparency in risk reporting is, it is important to investigate adumbrative risk reporting practices of banks by highlighting useful risk information that have been incompletely provided and hidden in the annual reports.

2.7 Theoretical framework

Annual reports of banks are published with the purpose of informing the public about their activities, performance, survival and risks faced in carrying out their operations (Branco and Rodrigues, 2008). The review of literature shows that while a dominant theory for risk disclosure is yet to be established, the utilization of certain multi-theoretic approaches are used to explain risk disclosure practices (Abraham and Shrives, 2014; Oliveira et al., 2011). Based on literature, specific theories that may link informative risk disclosure and performance include economic theories such as institutional theory, upper echelons theory, voluntary disclosure theory, mandatory disclosure theory and

national culture theory. These theories were utilized in the three papers of this research. The assumptions of these theories form the theoretical basis for this research as shown in Fig 2.1.

On the current state of risk reporting, the tenets of institutional theory, upper echelon theory and national culture theory are utilized in this research. The proponents of institutional theory affirm that organisations react to internal and external pressures (professional and legal) with the assumption of isomorphism (Selznick, 1957; Tolbert and Zucker, 1983; Zucker, 1987; Hassan, 2009). However, research conducted on risk disclosure using institutional theory in the same industry has revamped this assumption that risk reporting practice is determined by the extent of reaction of banks to pressure (Oliveira et al., 2011; Abraham and Shrives, 2014; Nahar et al., 2016). This reaction is demonstrated by changes to processes, and certainty of accuracy and judgment. Relating these assumptions to this research, banks are expected to demonstrate: (a) changes through the identification of new risks from year to year and/or updating the risk statements provided in annual reports and (b) providing risk information that can be related to events that occur after their disclosure.

The proponents of upper echelons theory have affirmed that performance is influenced by the background characteristics of the decision makers of an organisation (Hambrick and Mason, 1984; Hambrick, 2007). Skills and experience gained in the banking industry and/or other financial services industry are encompassed in these background characteristics. While Rost and Osterloh (2010) argue that executive may have a higher indirect influence over these decisions, Walker (2009) and Pirson and Turnbull (2015) argue that this influence may be minimised with the skills and experience of bank directors. Relating these assumptions to this research, the functional and professional background of the directors are used to illustrate the background characteristics of the board of directors and related to the extent of risk disclosure (FSA, 2009; Ismail and Rahman, 2011; Ellul and Yerramilli, 2013; Allini et al., 2016; Paisey and Paisey, 2018).

The assumptions for voluntary disclosure theory are the reduction in information asymmetry and improvement in performance as a result of public trust and confidence (Lang and Ludholm, 1993; Leuz and Verrecchia, 2000). Relating this to risk disclosure, higher risk disclosure level beyond mandatory requirements would signify the intention to be transparent, which improves future performance of banks (Healy and Palepu, 2001; Elshandidy and Neri, 2015; Al-Maghzom et al., 2016; Nahar et al., 2016). While proponents of mandatory disclosure theory agree that compliance with disclosure

requirements reduces information asymmetry (Darrough, 1993), literature has shown mixed propositions on the direction of relationship between risk disclosure and bank performance (e.g. Li and Madarasz, 2008; Hassan, 2009; Tsalavoutas and Dionysiou, 2014; Elshandidy et al., 2015; Bischof et al., 2016). The reason for this difference highlighted from literature is mainly on whether mandatory disclosure is practiced as a result of avoiding public scrutiny especially where the bank has identified a weaker future performance (Bischof et al., 2016), or that banks are rewarded with improved market value for compliance (Tsalavoutas and Dionysiou, 2014). This research assumes a non-directional relationship between mandatory risk disclosure and bank performance.

The assumption of national culture theory is that national culture influences the social norms and behaviours of decision makers in societies (Swidler, 1986; Hofstede, 2001; Li and Harrison, 2008). National culture can also be related to organisations as it influences the structure and functions of organisations (Li and Harrison, 2008). Research has shown that national cultural differences influence the level of risk disclosure of firms in the same industry but different countries (Elshandidy et al., 2015; Dobler et al., 2016). Relating national culture to risk disclosure practice in this research, the researcher makes the assumption that national culture influences the level of risk disclosure of banks regulated by the same authority (i.e. the European Banking Authority).

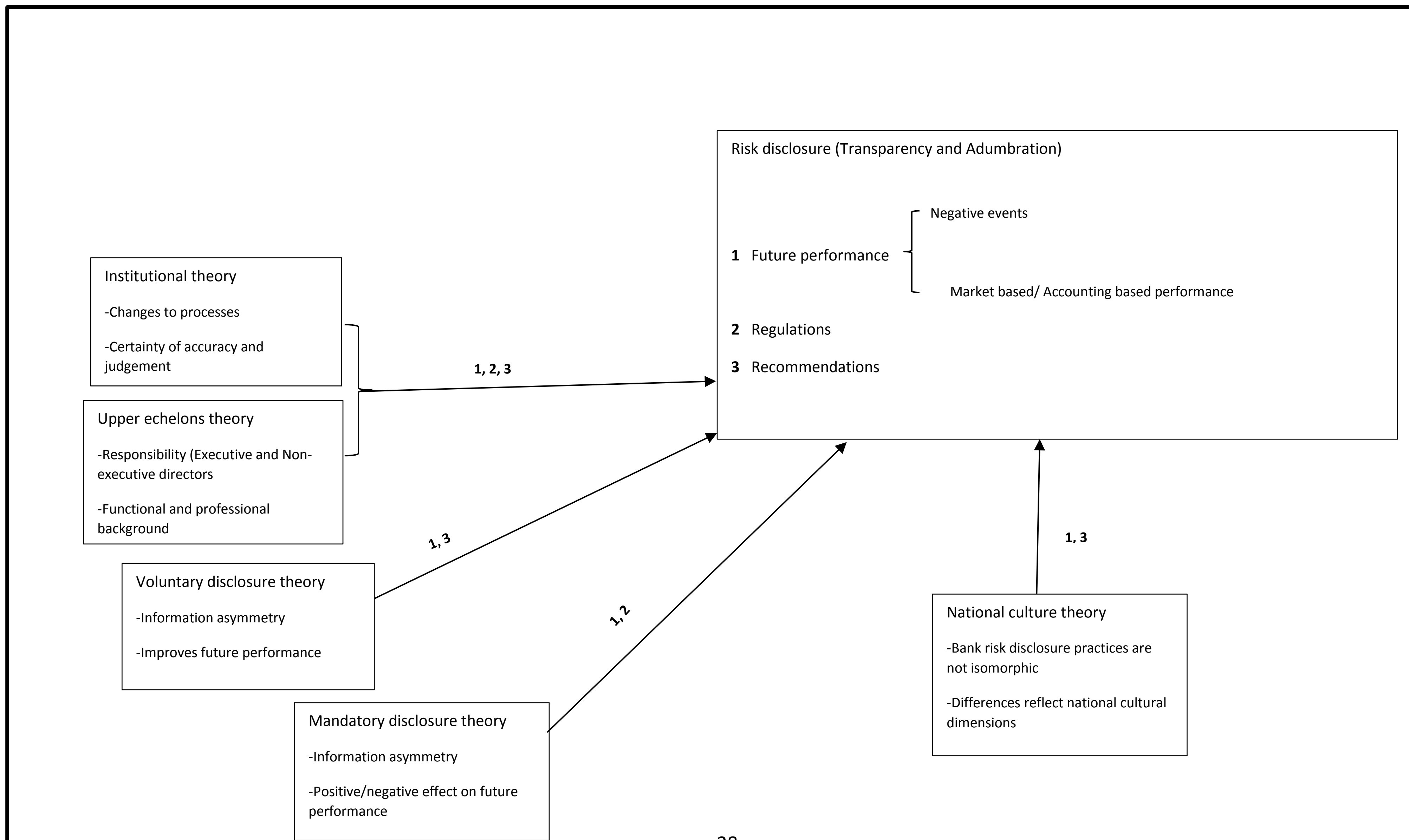

Figure 2. 1 Theoretical framework

2.8 Conclusion

Risk disclosures are useful when they are informative. The aim of this thesis is to assess the extent to which risk information supplied by banks in their annual reports are informative in terms of relating to future performance. This chapter provided an overview of risk disclosure practices in the UK. While prior research has concentrated on quantitative analysis of risk information, the qualitative elements of risk information disclosed are often neglected. Prior research has also not been constructive in investigating the disclosure of informative risk disclosure in terms of how risk information related to actual bank-specific events are disclosed by banks. The problems that occurred during and subsequent to the global financial crisis highlight the potential importance of having access to effective and informative risk disclosure by banks. The UK banking sector has received a number of reforms following the financial crisis including the replacement of the Financial Services Authority with the Financial Conduct Authority and Prudential Regulatory Authority; repealed Acts that were deemed ineffective and establishment and publication of more Acts, and official recommendations to ensure good banking practice respectively. While risk disclosure laws and recommendations should provide guidance for effective risk reporting, research has shown that the demerits, ambiguity and inadequacies of regulations and recommendations may affect the level of risk disclosure by banks. As such, this may not be sufficient in ensuring transparent or uniform risk reporting practice across banks. Chapter 3 describes the research approach used to answer the research questions for this thesis.

Chapter 3: Methodology

3.1 Introduction

This thesis consists of three papers wherein different methodologies have been applied. The aim of this research is to contribute to the literature on risk disclosure in the banking industry by assessing the extent to which the risk reporting practices of banks were transparent. This chapter evaluates the research paradigm underpinning the research and other possible paradigms that have been adopted in related research. Thereafter, the data collection methods and data analysis techniques used for each paper are discussed.

3.2 Research philosophy

In order to understand the rationale for choosing a philosophical stance, it is important to recognise that research begins with assumptions (Saunders, Lewis and Thornhill, 2016). These assumptions are widely based on ontology, epistemology and axiology. Ontological assumptions refer to the way the researcher views a social entity in relation to the social actors (Bryman and Bell, 2015). In this thesis, the social entity refers to risk disclosure practice of banks while the social actors refer to directors who are charged with the responsibility of reporting risks in the annual reports (Great Britain. Companies Act (2006, [CA 06], s.417). Objectivists argue that the social entity is independent of social actors and the latter act on policies of the former. This is verifiable since there are risk disclosure requirements for banks to be followed by directors, while reporting risks that may affect the business activities and organisational set objectives. However, prior studies such as Peters and Romi (2013) and Abraham and Shrives (2014) have found that risk reporting by banks in the same industry which are regulated by the same authorities is still practised differently. This implies that even though the risk report preparers (directors) are aware of the requirements on risk reporting, different interpretations may have been given to such requirements. Hence, the researcher argues in contrast to objectivism that social actors (directors) influence the social entity (risk disclosure practice). This research is in accordance with subjectivism, which holds that the social entity depends on the interpretations and actions of the social actors (Saunders et al., 2016).

Epistemological assumptions refer to acceptable human assumptions of knowledge and how this knowledge can be communicated (Hofer and Pintrich, 2004; Saunders et al.,

2016). As identified from prior literature, investigation of risk disclosure practices may be achieved by constructing a risk-word list and counting the sentences (e.g., Barakat and Hussainey, 2013; Elshandidy et al., 2013). However, this type of research may not go in-depth in terms of investigating the meaning of information supplied. In other words, the degree of transparency, meaning of risk information supplied in terms of relevance and identification of other risk information indirectly supplied in the annual reports through methods such as change in terminology, use of positive tone, providing threat information as an opportunity, amongst others, may not be captured with quantitative content analysis alone. Hence, this research focusses more on the meaning rather than the quantity of risk information disclosed.

Axiological assumptions refer to value assumptions of the researcher with regards to value- free or value-bound research (Saunders et al., 2016). Based on the ontological and epistemological assumptions adopted, the philosophy of critical realism is suitable for this research. Positivism involves observation of a social reality with the aim of making a generalisation from findings (Saunders et al., 2016). Interpretivism on the other hand goes beyond the natural science approach and dwells on understanding the meaning of data with the view that social contexts are different (Scherer, 2003; Saunders et al., 2016). However, critical realism takes the stance of reality as the focal point. In essence, this philosophy adopts both characteristics of positivism and interpretivism by observing and then interpreting what has been observed (Guba and Lincoln, 1994). The suitability of this philosophy also dwells on the study of a social reality over a long period of time with the aim of identifying reasons for what has been observed over the period (Reed, 2005 cited Saunders et al., 2016). Axiological assumptions of this thesis is more focused on creating value (value-bound) rather than focusing on generalisation of findings (value-free). Risk disclosure creates more value when the meaning is understood rather than lengthy disclosures with little relevant insights. The researcher argues that the essence of supplying risk information in annual reports is to enable stakeholders make effective decisions. Hence, the focus of this research is on useful risk disclosure (meaning) provided in relevant sections of the annual reports rather than identifying risk word count. Acknowledging that bias is inevitable owing to these personal values and in a qualitative research like this, the researcher has taken caution by analysing data using quotes from the annual reports (explicit references) rather than merely implying the information provided. Also, arguments around the results are presented based on direct information supplied in the annual reports.

3.3 Research approach

3.3.1 Deductive, inductive and abductive approach

Three approaches have been widely used in research namely, deductive, inductive and abductive approach. Deduction involves testing an existing theory on a large sample with the aim of arriving at findings that support or reject the theory (Saunders et al., 2016). Although advocates of deductive approach support the use of strict quantitative measures to objectively arrive at findings, Denscombe (2014) argues that deductive approach may be used to understand the applicability of theories to selective settings or context and smaller samples thereby fortifying the value of the existing theory. Deductive approach has been criticised for possible errors in terms of generalisation, and that the approach is abstract as not all cases from the population may be tested, and different conclusions may be found when the same phenomenon is observed at different points in time (Gill and Johnson, 2010). This limitation is considerably addressed by the inductive approach. Induction involves the collection and analysis of research data with the aim of building a theory (Saunders et al., 2016). This research approach is often applied to small samples with the aim of gaining in-depth insights on a phenomenon. Inductive approach has also been criticised due to its inability to draw generalised conclusions (Gill and Johnson, 2010). Abductive approach involves collection and analysis of data to modify an existing theory with the aim of testing the theory consequently (Saunders et al., 2016). This approach emerged due to the need to complement observed facts with practical reasoning (Peirce, 1955).

As mentioned above, while inductive and deductive approach have their strengths and weaknesses, the purpose of applying each approach is vital to achieving the research aim and objectives (Saunders et al., 2016). In this thesis, existing theories were tested in order to identify causal relationships between variables, while data was collected with the aim of building a theory, therefore deduction and induction were appropriate. Similarly, existing theories were modified to include the concept of adumbration and, therefore, abduction was suitable. Different approaches have been adopted to the three papers of this thesis as discussed in section 3.3.

3.3.2 Textual analysis methods

In analysing disclosures, two widely used methods have been adopted in accounting research. These are content analysis method and disclosure index method as discussed below.

3.3.2.1 Content analysis

Content analysis refers to the coding of texts into categories based on selected criteria (Weber, 1988). The suitability of this method in analysing disclosures is in its ability to attain replicable and valid results from analysing the text through specialised procedures (Krippendorff, 2013). This method has been applied in analysing disclosure practices of banks for a long time and has gained its ground in accounting research (e.g., Cowen, Ferreri and Parker, 1987; Raar, 2002; Linsley and Shrives, 2006; Deumes, 2008; Amran, Manaf-Rosli-Bin and Che-Haat-Mohd-Hassan, 2008; Elzahar and Hussainey, 2012; Al-Shammari, 2014; Dumay and Hossain, 2018; Neri, Elshandidy and Guo, 2018). While some of the aforementioned authors have applied a combination of quantitative and qualitative content analysis techniques, others have adopted either method. Both methods have been identified to have their own advantages as well as disadvantages.

Quantitative content analysis focuses on the manifest content of the text (Berelson, 1952). Proponents of quantitative content analysis such as Shapiro and Markoff (1997 cited Krippendorff, 2013) view content analysis as a scientific measurement of text based on frequency, presence and extent. In other words, only the literal content is coded based on a set of rules for which findings are generalisable. This method has been criticised in accounting research based on how information is measured. In quantitative content analysis, the unit of analysis is mostly measured by frequency of a word, phrase or sentence, paragraphs, pages, appearance of an information, amongst others in each category (Kassarjian, 1977; MacArthur, 1988; Zeghal and Ahmed, 1990). Critics of this method have argued that there is more to a text than frequency (Holsti, 1969). First, the semantic meaning of text is not disclosed (Holsti, 1969; Schreier, 2012; Krippendorff, 2013). Second, the frequency of a word or phrase may not necessarily mean that the information is important and/or useful (Burritt and Welch, 1997). For example, Schreier (2012) noted that an information may be important but mentioned only once in a text. This may not necessarily mean that it is less important than the information frequently mentioned in the same text.

Consequently, proponents of qualitative content analysis affirm that the latent (hidden) meaning of an information is more important than the manifest meaning (Kracauer,

1952; Schreier, 2012). This technique is defined as “a method for systematically describing the meaning of qualitative material” (Schreier, 2012, p.1). Qualitative content analysis was adopted in this research because it is more suitable to achieve the research aim. Since this research is interested in relevant risk information that are transparently disclosed, it was necessary to demonstrate this with quotes to support the interpretations (Krippendorff, 2013). The researcher argues that by simply counting risk related words, phrases, sentences, paragraphs or pages based on a selected criterion, the meaning portrayed in the text, relevance of the disclosure to the bank’s specific circumstance may be omitted, and consequently tends to be difficult to assess how informative these disclosures are in informing users of the reports.

3.3.2.2 Risk disclosure index

Disclosure index method has been widely used in accounting research (e.g., Cheung, Jiang and Tan, 2010; Joseph and Taplin, 2011; Barakat and Hussainey, 2013; Hooghiemstra, Hermes and Emanuels, 2015; Al-Bassam, Ntim, Opong and Downs, 2018). It involves the construction of an index with a list of items based on the researcher’s area of interest (Marston and Shrives, 1991). Disclosure index can be used to measure the level of compliance and/or voluntary disclosures by banks using the content of their communicative tools such as annual reports, prospectuses, quarterly reports, and minutes of board meetings. Annual reports are most commonly used to measure disclosure level (Marston and Shrives, 1991; Stanton and Stanton, 2002). Items in the index may consist of both qualitative and quantitative information, while the scoring technique adopted have varied from the use of weighted and unweighted scores. Both methods have been justified and criticised by accounting scholars.

Weighted scoring technique which involves assigning scores based on perceived relative importance has been justified due to the reason that not all items in an index carry equal degree of importance and that it is important to differentiate this (Cooke, 1991; Barako, Hancock and Izan, 2006; Joseph and Taplin, 2011; Oliveira, Rodrigues and Craig, 2013). This technique has been criticised due to the possibility of bias arising from the researcher’s perspective on perceived relative importance of the items in the disclosure index (Ntim, Opong and Danbolt, 2012; Allegrini and Greco, 2013; Barakat and Hussainey, 2013). In essence, how the items are scored remains unclear and subjective. For example, a study conducted by Botosan (1997) on the disclosure of manufacturing firms placed more weight on quantitative information than qualitative information for items in the disclosure index due to the reason that quantitative information are precise and more useful. However, it is not always the case that numbers are more important

than narrative comments (Marston and Shrives, 1991). Therefore, proponents of unweighted scoring technique favour this approach as it tends to overcome this bias.

Unweighted scoring technique is a dichotomous method where scores assigned are either 1 for disclosure of the item in the index or 0, if otherwise (Ntim, Opong and Danbolt, 2012). Nevertheless, Coy and Dixon (2004) and Ali, Ahmed and Henry (2012) have argued that unweighted scoring technique may not completely overcome the problem of subjectivity, and may lead to misjudgement of the quality of annual reports. For example, assigning equal weights to items in the index where information that is relevant to certain firms is irrelevant to others may affect the perceived quality of the report (Ali, Ahmed and Henry (2012). The researcher argues that this limitation is minimised in the papers of this thesis as the disclosure index was applied to banks in the same industry, engaged in similar operations and regulated by the same authorities. In Chapters 5 and 6 where risk disclosure index approach was adopted, unweighted scoring technique was deemed suitable in order to avoid bias of subjective assessment. Additionally, the focus of this research was on all users of bank disclosures and not specific to a user group (Hassan, 2009).

3.4 Research design for the three papers

The objective of Chapter 4 was to identify the possibility of adumbration in risk reporting practice of two large banks that performed differently during the financial crisis with the purpose of building a theory from the research findings. Existing theories such as institutional theory and upper echelons theory were used in explaining risk disclosure practice, while adumbration in risk disclosure was the new concept. Hence both deductive and inductive research approaches were suitable for this archival research. Qualitative and quantitative methodologies were adopted in the research. Identification and in-depth understanding of the nature of risk disclosure practice requires qualitative methodology since the interest of the research in this case was to explore meaning from risk information disclosed. Also, banking related professional qualifications and work experience of the bank directors were analysed quantitatively in order to identify differences between the two groups of directors, and therefore quantitative methodology was adopted. Secondary data sources were used and data was collected for the purpose of the study from annual reports, media news articles, and databases for directors' information such as BoardEx, EDGAR and Bloomberg. The annual reports and media news articles were analysed using qualitative content analysis so as to access the latent meaning rather than the manifest meaning of the data (Kracauer, 1952; Schreier, 2012).

Chapter 5 investigated the impact of voluntary, mandatory and adumbrative risk disclosure practices on performance of UK banks. Thus both deductive and abductive approach were suitable for this archival research as the findings were intended to test mandatory disclosure theory, and to an extent modify voluntary disclosure theory with the inclusion of adumbration. Hence, hypotheses were developed and quantitative methodology was adopted to achieve the findings. Risk disclosure index was developed for mandatory and voluntary risk disclosure and annual reports of the banks were analysed to achieve the research objective. The index comprised of 88 disclosure items (80 for MRD and 8 for VRD). Also, qualitative content analysis was used to identify the adumbrative risk disclosure practices of the banks from the annual reports investigated. All listed banks registered and domestically resident in the UK were included in the analysis. It was important to investigate differences in risk reporting practices of banks that are regulated and supervised by the same authorities and provided with the same guidance for effective reporting. Hence, the risk disclosure index was constructed based on the Capital Requirements Directives, Corporate Governance codes, guidance from Financial Reporting Council and the British Bankers Association code. Panel data regression analysis was used to analyse the relationship between the risk reporting systems and bank performance.

Chapter 6 investigated the impact of national culture on the risk disclosure transparency of European banks. National culture theory and voluntary disclosure theory were used in explaining societal differences and the likely impact on how transparent the banks domestically resident in these societies are in reporting risks related to future negative events. Therefore deductive approach was adopted. Hypotheses were developed based on the review of literature on risk disclosure and national cultural dimensions and quantitative methodology was adopted to answer the research questions. Qualitative content analysis was used to identify the extent of transparency in terms of the risk disclosure practice of the banks. Because categorised form of mandatory disclosure requirements have been criticised for the inability to ensure transparency (Bischof, 2009; Oliveira et al., 2011), a self-constructed risk disclosure index was used following content from guidance of the Basel Committee on Banking Supervision (1998; 2015), and this was used to identify the nature of risk information disclosed by the banks. Using a five-item disclosure index, risk information relating to specific negative event occurring in each bank were assigned scores (0 for non-disclosure and 1 if disclosed). Data was collected from the annual reports of 30 banks in 11 European countries with the highest GDP. National culture was measured for each country with Hofstede's national cultural dimensions. Negative events were collected from media news articles, dates of which

were identified through event study methodology to identify the abnormal stock return. Weighted least square regression analysis was used to identify the relationship between the national cultural dimensions and the extent of banks risk disclosure related to future negative events.

3.5 Reliability, quality and validity

Reliability in textual analysis aims to ensure that the same results are reproducible when the same methods are applied (Schreier, 2012; Neuendorf, 2017). For both content analysis and disclosure index techniques, different measures have been used to measure reliability in prior research. In order to determine the suitable measure, it is important to mention that both inter-coding (e.g., Deumes, 2008) and intra-coding (e.g., Shephard and Cairney, 2005) have been applied in disclosure related research. Inter-coding involves two or more researchers coding the same sample of text while intra-coding involves re-coding by one researcher at different points in time (Neuendorf, 2017). Although intra-coding has been identified as a weaker form of analysis (Krippendorff, 2013), its suitability springs from the reason that this was an independent research. Reliability is important for either type of coding used and the same method can be applied (Shephard and Cairney, 2005). These reliability measures include percentage of agreement, Scott's pi, Cohen's kappa and Krippendorff's alpha (Lombard, Snyder-Duch and Bracken, 2002). Krippendorff's alpha was used to measure coding reliability as it accounts for agreements that happen by chance in Paper 1(Lombard et al., 2002; Krippendorff, 2013). The researcher also used Cronbach's alpha to measure the internal coding consistency among items in the index in Paper 2 and Paper 3 (Lombard et al., 2002; Hooghiemstra et al., 2015). Robustness tests were also performed in Paper 2 and Paper 3 to ensure validity of the models (Elshandidy, Fraser and Hussainey, 2013).

In ensuring quality of textual analysis and qualitative data, Scott (1990) has recommended authenticity, credibility, representativeness and availability, meaning and validity in both the data collection and analysis. Therefore, the data analysed were downloaded from the banks' websites. Both the use of quotes from the annual reports and interpretation were utilised in the analysis. It has also been affirmed that validity is related to consistency of coding, which is measured as reliability (Creswell, 1998; Morse et al., 2002; Lissmann, 2008 cited Schreier, 2012). Another way to ensure validity was the use of official guidances and risk disclosure regulations as a guide for the qualitative content analysis and in construction of the risk disclosure index (Mokhtar and Mellet, 2013; Barakat and Hussainey, 2013).

3.6 Ethical considerations

Ethical issues arising from secondary sources are limited (Saunders et al., 2016; Neuendorf, 2017). The annual reports, media news articles and directors' information are publicly available. However to maintain confidentiality, the names of directors were anonymised. In all instances, approval was obtained from the University of Southampton's Ethics and Research Governance Office before data collection started (see Appendix F for ERGO Approvals to conduct the three studies).

3.7 Conclusion

The main aim of this thesis is to assess the extent to which risk information supplied by banks in their annual reports are transparent, in terms of linking risk disclosure to future performance. This chapter discussed in detail the research approach adopted in this thesis. The researcher has taken the stance of subjectivism as risk disclosure regulations and recommendations may be accorded different interpretations by different banks. The research was based on the assumption of critical realism as the focus is on investigating the meaning of risk information disclosed rather than quantity of risk information supplied. Data on risk disclosure was collected mainly from annual reports of the banks and bank specific news reported in Financial Times. Qualitative content analysis was used to analyse the data on risk disclosure in order to identify the meaning of information disclosed (Schreier, 2012). A more empiricist approach was adopted in Paper 2 and Paper 3 as existing theories were tested to assess the nature of relationship between risk reporting practice and performance, and national culture. In addition, for Paper 2 and Paper 3, regression analysis were performed on SPSS to identify the relationship between risk disclosure and performance and national cultural differences respectively. To ensure reliability, validity and quality of research, consistency checks using Cronbach's alpha, Krippendorff's alpha and robustness checks were performed in the three papers as applicable. Ethical standards were also followed at each stage of the research. The next chapter presents the Paper 1 which explores the possibility of adumbrative risk reporting of UK banks.

Chapter 4: Transparency or adumbration: An in-depth study of risk reporting practices at HSBC and HBOS

Abstract

Risk information disclosed in annual reports is often deemed uninformative. This research investigates two banks that performed differently regarding their subsequent financial performance following the financial crisis of 2007-2009 to illustrate the prevalence and informational value of adumbrative risk reporting practice. Data are collected from annual reports of the banks and analysed using qualitative content analysis. These are examined against negative events published in the Financial Times (FT). Professional qualifications and work experience of directors appointed in the banks are also analysed. The poorly performing bank practiced more adumbration in risk reporting, indicating that negative events experienced were vaguely foreshadowed in the annual reports. Furthermore, while executive directors at the successful bank had extensive experience and related professional qualifications in banking and/or other financial services sector, non-executive directors in the poorly performing bank had more experience in banking. The results of this research reveals that risk information in annual reports are relevant and informative in terms of foreshadowing negative events. However, this information may only become evident via painstaking scrutiny. This study contributes to the risk reporting literature by linking adumbration in communication to risk disclosure drawing upon institutional theory and upper echelons theory. The study highlights the need to study adumbrative risk reporting practice and the dangers of excessive adumbrative risk reporting practice.

Keywords Adumbration, Banks, Qualitative content analysis, Risk reporting, Transparency

4.1 Introduction

Risk reporting practices, particularly in the banking sector, have drawn the attention of many stakeholder groups following the aftermath of the financial crisis of 2007-2009, leading to subsequent reforms of regulations and institutions (Solomon, 2007; The Institute of Chartered Accountants of England and Wales (ICAEW), 2011; Financial Stability Board (FSB), 2011, 2012; Miihkinen, 2013; Financial Reporting Council (FRC), 2014d)[2]. Extant research on risk reporting by banks has predominantly relied on quantitative analysis of risk disclosure with the use of risk disclosure indices and quantitative content analysis (see Table 4.1 for a summary of risk disclosure studies). Consequently, semantic disclosures in annual reports have been ignored which, in turn, raises a number of issues with regard to the relevance and usefulness of risk information that can actually be deduced from a bank's annual report. First, the extent of information supplied (in terms of meaning) may be useful in identifying risks in business activities of banks. For example, similarities or changes in risk statements over time may be indicative of the extent to which the bank effectively adjusts its risk management practices in response to evolving threats and opportunities. Second, while the researcher acknowledges that boilerplate disclosures are not completely uninformative, Abraham and Shrives (2014) argued that risk reporting should go further by providing stakeholders with detailed risk information about the actual experiences that the bank has encountered while carrying out its business activities as this tends to yield more informative disclosures. Finally, ICAEW (1999; 2011) noted that more information on company risk can actually be found when the whole report is read and that some risks could be disclosed without being labelled as 'risks'. This points towards the uninvestigated possibility that adumbration (i.e., vague, partial or circuitous disclosure prior to negative events) is common in risk reporting. Hence, the use of quantitative measures based on arithmetic metrics or word-count frequencies to evaluate risk disclosure in annual reports may be inadequate due to an inability to identify (i) the semantic value of the information provided (ii) how variations in terminology may reveal or hide important information and (iii) the extent to which risk management practices evolve over time and in response to changing circumstances. The main research question is: *To what extent are two UK banks' narrative risk disclosures in annual reports transparent?* This question is important as it informs the usefulness of the

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[2] In the UK, the Financial Services Authority was replaced in 2013 by the Financial Conduct Authority and the Prudential Regulatory Authority. The current regulatory act is the Bank of England and Financial Services Act 2016 (an amendment of the Financial Services Act 2012).

narrative content in the annual reports of these banks as well as if and how these informative risks are disclosed in their annual reports in relation to future events. Specifically, the results highlight possible dangers linked to adumbrative risk reporting practice with the study of two distinct cases. The main research question is broken down into three parts based on the theories used in the paper.

Table 4. 1 Studies related to bank risk disclosure practice

Author (year)	Country	Content analysis Method	Measurement system	Number of years of observation	Sample size	Type of disclosure (Information analysed)	Risk category
Baumann and Nier, (2004)	31 countries	RDI	Scoring system (0-1)	8	591	Qualitative and quantitative	interest rate risk, credit risk, liquidity risk and market risk
Helbok and Wagner (2006)	North America, Asia, Europe	Content analysis and RDI	Number of pages and scoring system (0-2)	4	173	Qualitative	Operational risk
Linsley, Shrives and Crumpton (2006)	UK and Canada	Content analysis	Number of risk and risk management sentences	1	18	Qualitative and quantitative	All risk categories
Boussanni, Desrochers and Préfontaine (2008)	9 countries	Content analysis and RDI	Scoring system (1-3)	1	21	Qualitative and quantitative	Liquidity risk

Pérignon and Smith (2010)	US and Canada	RDI	Scoring system (0-1)	10	60	Qualitative and quantitative	Value at Risk
Oliveira, Rodrigues and Craig (2011)	Portugal	Content analysis	Number of risk related sentences	1	111	Qualitative and quantitative	Operational risk
Barakat and Hussainey (2013)	Europe	RDI	Scoring system (0-1)	3	137	Qualitative and quantitative	Operational risk
Lipunga (2014)	Malawi	RDI	Scoring system (0-1)	1	7	Qualitative and quantitative	All risk categories
Maffei, Aria, Fiondella, Spanò, and Zagaria (2014)	Italy	Content analysis	Number of risk related sentences		66	Qualitative	All risk categories
Elbannan and Elbannan, (2015)	Egypt	RDI	Scoring system (0-1)	11	62	Qualitative	Credit risk, liquidity risk, market risk and interest rate risk

Al-Maghzom, Hussainey and Aly (2016)	Saudi Arabia	Content analysis and RDI	Number of risk-related words	5	12	Qualitative	All risk categories
Jizi and Dixon (2017)	US	Content analysis and RDI	Scoring system (1-3)	2	196	Qualitative and quantitative	Credit risk, interest- rate risk, liquidity risk, market risk, legal and compliance risk, operational risk
Scannella and Polizzi (2018)	Spain, France, Germany and Italy	Content analysis and RDI	Scoring system (0-1 for quantitative information; 0-5 for qualitative information)	4	4	Qualitative and quantitative	Market risk

Note: These include banks, credit institutions. Most of the studies investigated listed banks.

Linsley, Shrives and Crumpton (2006) and Oliveira, Rodrigues and Criag (2013) recommended the longitudinal study of bank's risk disclosures to identify if and how risks have changed over time, and to identify why risk information may or may not be fully disclosed. To this end, this research analysed annual reports of two distinct banks, HSBC and HBOS, from the period 2002 to 2006 to identify the risk reporting practice in this period. The 'pre-financial crisis period' was examined because it provides the opportunity to examine the extent to which the banks explicitly disclosed risk awareness and adequate risk management practices in the period immediately before the pending crisis. In order to examine if and how the actual experiences of each bank relate to the risk information disclosed in their annual reports, firm specific articles in the Financial Times (FT) were collected (Abraham and Shrives, 2014). Additionally, negative events (in words and figures) disclosed in the annual reports were collected to identify if and how the related risks were reported. Data on the directors' professional qualifications and their work experience in the banking and financial services sectors were also collected to identify whether there is a relationship between these specific board characteristics and the quality of risk information disclosed in the annual reports.

The results of this paper showed that risk information relating to actual events is sometimes partially disclosed in annual reports which negates the view that annual reports are completely uninformative. While there was a reaction to internal and external pressure leading to change in processes and decisions including risk reporting (Zucker, 1987; Abraham and Shrives, 2014), this change in risk information appeared stronger at the successful bank. This was demonstrated through continuous identification of new risks and regular updates to previously identified risks. Additionally, while vague risk disclosures were witnessed, more evidence of adumbration (partial risk reporting of negative events) was noted at the poorly performing bank (Hall, 1964; Green, 2015). Furthermore, a number of executive directors charged with risk management responsibilities of identifying, managing and reporting risks to the board at the bank that subsequently experienced financial misfortune had little or no prior banking-related work experience (Pirson and Turnbull, 2015). This highlights a possible cause of adumbrative risk reporting.

This study contributes to the risk reporting literature by linking adumbration in communication to risk disclosure drawing on institutional theory and upper echelons theory. This study provides prime evidence on relating the extent of semantic risk information disclosure to actual occurrences in the banking sector with the use of qualitative content analysis. The study highlights the need to study adumbrative risk

reporting practice and dangers of excessive adumbrative risk reporting practice. In terms of practical relevance, the findings provide support for arguments which highlight the importance of relevant and required knowledge, skill and experience in banking and other financial sectors for effective risk management practice including risk reporting (Walker, 2009). Additionally, the findings provide regulators with possible guidance on how risk reporting practices may be improved.

The remainder of this paper is structured as follows. Section 4.2 discusses the theories and concept used as the basis for understanding risk reporting practice. Section 4.3 discusses the research context and case selection. Section 4.4 presents the method, and results are presented in Section 4.5. Section 4.6 discusses the findings and their implications for theory and practice and provides suggestions for future research. Section 4.7 presents the conclusion.

4.2 Theories and hypotheses development

This research drew on institutional and upper echelons theories to provide explanations for risk disclosure practices, and explored adumbrative communication in risk disclosure practices to understand its informational value.

4.2.1 Institutional theory and risk disclosure

Institutional theory can be used as a guide to explain the extent of relationship between an organisation and its institutional environment. Old institutional theory emerged with different perspectives in terms of the type of system and what an institution constitutes. For example, while early economists view institutions as established regulatory systems built to introduce rules and laws that moderate the behaviour of individuals and organisations and reduce conflicting interests; sociologists view institutions as normative systems where social actors react to expectations of internal and external parties rather than mere focus on self-interests (Selznick, 1957; Zucker, 1987; Scott and Christensen, 1995). The neo- institutional theory draws from both perspectives and holds that organisations respond to normative and regulatory pressures in order to satisfy stakeholders (Fernández-Alles and Valle-Cabrera, 2006). Zucker (1987) further notes that reaction to internal and external pressures is reflected in changes to processes or procedures, and certainty of accuracy and judgment. Empirically, it has been proven that institutional forces vary across organisations and the adoption of rules and obligations is dependent upon whether rules are legitimated (Tolbert and Zucker, 1983) or whether they are believed to please or satisfy the stakeholders (Fernandez-Alles and Valle-

Cabrera, 2006). The banking industry in developed countries is characterised with distinctive regulations which is different from non- financial firms such as the Capital Requirements Directives I-IV for European banks (European Parliament (EP), 2006; 2010; Financial Conduct Authority (FCA), 2011), Bank for International Standards (BIS) such as pillar 3 disclosure requirements, as well as national standards for countries where the banks operate (e.g., FCA handbook and PRA rule book for UK banks). However, as explained by Scott and Christensen (1995) and Prowse (1997), regulations are inadequate due to the imbalance between the interests of social actors (in this case, management and stakeholders). Also, it is almost impractical to introduce regulations that ensure maximum satisfaction of shareholders while reducing to the bearable minimum the probability of bank failure (Prowse, 1997). Hence, while identifying the importance of rules to banking activities, this paper argues that social norms are equally vital to understand the reason for actions taken by the social actors.

Additionally, while some proponents of institutional theory have identified that organisations in the same institutional environment are likely to behave isomorphically since they are governed by the same regulatory authority (DiMaggio and Powell, 1983; Hassan, 2009), others have identified that the characteristics of the social actors is vital to the extent of reaction to the pressures in even in the same environment (Scott and Christensen, 1995). Hence, this paper argues that there is a need to understand if there are differences in the risk reporting strategy of banks operating in the same institutional and professional environment. Given that effective risk disclosure practice includes regularly updating risk statements (ICAEW, 2011; FSB, 2012; Abraham and Shrives, 2014; Elshandidy and Neri, 2015), institutional theory suggests that changes in the business environment should lead to changes in the assessment and management of risk and that these changes should be disclosed. These disclosures may include identification of new risks, developing new responses to risks identified in the previous period, or even reporting on the effectiveness of the risk management procedure applied in the previous year (Basel Committee on Banking Supervision (BCBS), 1998; BCBS, 2000; BCBS, International Association of Insurance Supervisors (IAIS) and International Organisation of Securities Commissions (IOSCO), 2001; BCBS, 2015). In their research on the risk disclosure practices of food production and processing companies, Abraham and Shrives (2014) proposed that effective risk reporting should be capable of reflecting actual risk experiences and relate to actual events of the reporting company. Relatedly, the BCBS, IAIS and IOSCO (2001), Accounting Standards Board (ASB, 2006), FSB (2012) and FRC (2014d, 2014e) recommended that risk disclosures should be based on how they actually affect business performance because this aids transparency.

Therefore, following institutional theory, this research proposes that effective risk reporting should include (a) changes in risk disclosure statements over time (b) details of events and developments that could have a substantial impact on bank performance, and (c) reflections on actual experiences. This formed the basis for themes 1 and 2 as shown in Table 4.2 which shows the taxonomy of the themes from which the research questions were developed.

4.2.2 Adumbration in risk disclosure

The essence of risk disclosure is to enable readers assess the present condition of the bank and the effectiveness of current risk management practices, as well as to evaluate the bank's potential future performance. Linsley and Lawrence (2007) and ICAEW (1999; 2011) noted that it is possible for risks to be disclosed in annual reports without being labelled as risks, or to be confined solely to the risk reporting section of the annual report. Consequently, automated content analysis may, at best, only locate explicit uses of the term 'risk' or risk-related synonyms, yet overlook other relevant content that uses different terminology. In line with the argument on institutional theory, and according to the BCBS (1998; 2000; 2015), effective and transparent risk disclosure involves providing comprehensive and complete risk information in a coordinated section of the reports. This includes risk identification, impact, response and effectiveness of previously identified risks (BCBS, 1998; 2015). In line with this, British Bankers Association (BBA, 2010) and FSB (2012) further emphasised that information on a risk ideally should be provided in the same section or cross-referenced if provided in other sections to aid transparency. In addition, these institutions state that effective risk disclosure is indicated by specific risk disclosure relating to actual business activities rather than generic disclosure.

Adumbration means partial disclosure and foreshadowing vaguely (Merriam-Webster, 2016). In this paper, 'adumbrative risk reporting' is defined as the partial disclosure of risks relating to future negative events. Essentially, adumbration negates transparent risk disclosure. Hall (1964) mentions that adumbration may be used intentionally in order to have more control of information, to protect oneself, as a means for keeping one in suspense or to avoid being overcommitted to information provided. Breakwell (2007) also affirmed that communication can be particularly difficult when it concerns risk-related information because it can easily be perceived differently (more or less serious than it actually is) or misinterpreted by the recipients. Moreover, stakeholders may have paid insufficient attention to risk management before the global financial crisis as reporting banks were ostensibly performing well. As suggested by Acharya and

Viswanathan (2011) and Acharya and Naqvi (2012), it is often assumed that when the financial system seems to be doing well, reasoning among stakeholders towards the chance of a crisis is low and may even be neglected. Relatedly, when a greater number of banks in the financial sector are affected by the same market conditions (such as the experience of a housing “bubble”), it can be the case that stakeholders become less concerned because the risk is perceived as being diversified across the whole sector (Tourish and Hargie, 2012).

While the use of adumbration in risk disclosure may appear to be more beneficial to the sender (bank) than the receiver (stakeholders), it is vital to understand that in the long run, adumbration may be detrimental to the bank as well. Acharya and Viswanathan (2011) and Green (2015) noted that risks that were ignored or downplayed were the risks that had most significant impact on the global financial crisis. Hence, while it is important that banks are transparent when reporting risks, it is also important to investigate adumbrative risk reporting practices by highlighting instances where useful risk information has been provided in limited detail or has been presented in a section(s) of the annual reports in which one might not expect it to be located. This research considers it possible that although adumbration may have been practiced by banks, it was more intensively used by the banks that later experienced extreme difficulties during the financial crisis because these banks may have been the ones that were unwittingly ignorant or deliberately neglectful of the relevant risks. This formed the basis for theme 3 as shown in Table 4.2.

4.2.3. Upper echelons theory and risk disclosure

The theory of upper echelons states that organisational performance to an extent reflects the behavioural components of its “powerful actors” (Hambrick, 1984, p.193). Particularly, this relationship is assumed to be stronger when the situation for which decisions are to be made is complex (Child, 1972; Chuang, Nakatani and Zhou, 2009). The behavioural components include background characteristics and cognitive values of decision makers such as age, experience, educational and professional background, socioeconomic background, financial position and group diversity (Hambrick and Mason, 1984; Tihanyi, Ellstrand, Daily and Dalton, 2000; Hambrick, 2007). This research focused on the functional background (experience) and professional education of the bank directors. Decisions made to an extent reflects the decision makers’ knowledge on the consequences and alternatives as well as assumptions of future events regarding the decision (Hambrick and Mason, 1984). This knowledge may be constrained to information supplied on the issue considered as prior research has shown that

executives in an organisation dominate the decision making process. For example, Rost and Osterloh (2010) and Nguyen, Hagendorff and Eshraghi (2015) affirmed that Executive Directors (EDs) demonstrate influence on the board by developing and presenting suggestive strategies towards achieving business objectives while the Non-Executive Directors (NEDs) are charged with the responsibility of accepting or rejecting suggestions provided. However, Walker (2009) explained that adequate knowledge and experience of NEDs in the financial industry, for example, can reduce this influence.

As required by the UK's Companies Act (2006, [CA 06]), the UK Corporate Governance Code (FRC, 2018b) and related guidance reports, the board of directors is responsible for providing risk reporting information to stakeholders. Upper echelons theory serves as a conceptual basis to explain risk disclosure practices because the decisions made by the board, including reporting of risks to the public, would reflect the characteristics of the board members. The functional background of decision makers may not necessarily determine the organisation's performance, but may influence it. For example, Hambrick and Mason (1984) noted that decision makers approach problems that have a wider scope than their jurisdiction, with their expertise and experience. Similarly, Allini et al. (2016, p.115) acknowledged that risk reporting quality of state-owned enterprises is enhanced by "knowledge and skills in accounting and finance" of the board. Additionally, the Turner Review (Financial Services Authority (FSA), 2009) has highlighted the need to ensure that directors on risk committees have adequate relevant skills and experience. This points towards the direction that relevant knowledge and skills acquired by NEDs are equally important as those acquired by EDs for effective decision making. Similarly, banking related professional qualifications are equally important since Teodoro (2014) noted that specialised formal education is vital as it influences policy process decisions. This is so because Fondas and Wiersema (1997) noted that professional education influences the perceptions and actions of decision makers as these decision makers tend to abide by the norms of their profession even when this is in conflict with the organisational norm. Paisey and Paisey (2018) acknowledged that obtaining relevant and related professional qualifications provides technical knowledge, which is considered highly valuable in financial practices. Therefore, in this research, it was considered that experience in banking or other financial services of the board members and obtaining banking related professional qualifications prior to being appointed is vital in making important decisions, including how to manage and report risks.

It can be argued that risk communication may be ineffective, even where directors have the right level of competence in risk management. For example, Fischhoff (1995)

explained that in risk communication it is possible for those with the required knowledge, skills and experience to avoid putting this into actual practice. Nevertheless, the end product of risk disclosure, especially bank specific disclosure, can be highly beneficial to the bank in terms of improved market share (Jorgensen and Kirschenheiter, 2003). However, while poor risk disclosure and risk management may not necessarily lead to problems in the short-term, it can be dangerous in the long-term as witnessed in the global financial crisis (FSA, 2009). Thus, it is reasonable to expect that qualified directors might be more transparent in disclosing risks as they are conversant with the banking activities and have sufficient experience to identify the dangers ahead and the effect of poor risk disclosure and risk management. This formed the basis for theme 4 as shown in Table 4.2.

Table 4. 2 A taxonomy of relevant themes in institutional theory, upper echelons theory and adumbration in communication and how these themes correspond to the present research questions.

	Explanation	Themes	Research questions
Institutional theory	Organisations react to internal and external pressures. They react to the extent of making change to content or rationale process. (Zucker, 1987; Abraham and Shrives, 2014).	1. Risk disclosure statements should change over time. 2. Risk disclosure statements should reflect actual experiences.	Did risk statements change over time? Did risk statements reflect actual experience of the banks?
Adumbration in Communication	Adumbration is practiced in communication (Hall, 1964). This may be practiced in risk disclosure (ICAEW, 2011).	3. Risk disclosure may be adumbrative.	To what extent was adumbrative risk disclosure practiced?
Upper echelons theory	Specific board characteristics affect reporting quality (Hambrick and Mason, 1984; Tihanyi et al., 2000; Allini et al., 2016)	4. The board with more knowledge and work experience with relation to banking should be more transparent in risk disclosure.	Is there a relationship between the work experience and professional qualifications of bank directors, and the extent of risk disclosure?

4.3 Research context and case selection

4.3.1 Risk reporting by banks in the UK

The banking environment has always been distinctive and strictly regulated due to their complex activities and importance to the economy. Linsley et al. (2006) noted that it is important for banks to disclose the risks that they face in order to enable shareholders and other stakeholders assess the banks' performance and take effective decisions with regards to their risk positions. Nevertheless, prior to the financial crisis of 2007-2009, the regulations and codes requiring companies based in the UK to report on the management of risks were not detailed enough leading to different interpretations by reporting firms (Solomon, 2007). For example, in their analysis of annual company reports, the FRC (2009a) found that companies reported principal risks ranging in quantity from 4 to 33[3]. This is important given that the global financial crisis was partially caused by some of the risks which directly affected the banks in the preceding period.

Some of the risks associated with the performance of banks during the financial crisis were liquidity and funding risks, credit risks, market risks and operational risks (Financial Services Authority (FSA), 2009; Hopkin, 2010; Financial Conduct Authority and Prudential Regulation Authority (FCA and PRA), 2015). Problems encountered during the financial crisis (e.g., funding difficulties by virtue of higher mortgage (wholesale) lending activities; volatility in equity prices and trading losses due to change in investors' perceptions; securitisation activities) have shown that simply setting up only the required capital for these risks is not sufficient for effective risk management (FSA, 2009; House of Commons, 2009; Stulz, 2010; Hull, 2015; Vazquez and Federico, 2015). These problems have been linked to the bank directors' inability to set a limit for risk appetite, tolerance or culture, not considering economic factors, and inability to manage rapid growth increase (The FCA and PRA, 2015; Green, 2015). On risk disclosure practice, the BCBS (1998) emphasised the need for transparency in reporting risks by identifying (i) details of the business activities that create the risk (ii) the nature of the risk and (iii) the effectiveness of previous risk management strategies. Furthermore, risk reporting should be specific to individual banks even if the risk in question affects the industry (FSB, 2012). The present research argues that if the banks had effectively disclosed the

[3] "The information included in the report technically complies but falls short of the spirit of the requirements. For example, one company listed 33 principal risks and we have trouble seeing how such a large number of risks could all be principal" (FRC 2009a, p.16).

major risks (i.e., credit risk, liquidity risk, market risk, operational risk) that they faced prior to the global financial crisis, stakeholders would have been better informed on the bank's exposure to these risks and, therefore, better placed to make decisions.

4.3.2 Case selection: HSBC and HBOS

In order to conduct an in-depth investigation, two banks were used as case studies: HSBC and HBOS. In-depth study of a small number of cases has been employed in prior research for different purposes and is particularly useful in explaining detailed differences between two important examples from a limited population (e.g., Cabedo and Tirado, 2004; Abraham and Shrives 2014; Siepel and Nightingale, 2014)[4]. HSBC and HBOS had similarities and differences prior to the global financial crisis. In terms of similarities, both banks were incorporated in the United Kingdom and primarily regulated by the FSA, Her Majesty's Treasury (HM Treasury) and the Bank of England. Also, both banks were involved in the same activities such as insurance business, corporate lending and personal lending (although it could be argued that the level of commitment to each activity was different). In terms of the differences, HSBC was more globally represented and larger in asset size. In addition, both banks performed differently in terms of financial and funding difficulties following the financial crisis. As shown in Figures 4.1-4.4, HBOS had a huge concentration on wholesale funding and maintained a higher loan to deposit ratio than its peers, with a lower Tier 1 capital ratio prior to the financial crisis, which in turn led to difficulties in liquidity and funding of its activities. Specifically, HBOS's share price fell sharply (see Figure 4.4), the company received Emergency Liquidity Assistance (ELA) from the Bank of England (HM Treasury, 2012) and was later acquired during the financial crisis by Lloyds bank, which in turn, shortly thereafter required substantial state support for continued operation (FCA and PRA, 2015). Casu, Girardone and Molyneux (2015) affirmed that banks that have been liquidated, merged or acquired by another bank (with or without government assistance), or received financial aid from the government are considered to be 'failed banks'. HSBC did not experience these problems and its financial stability during the global financial crisis was demonstrated when it provided funds to other banks (Griffiths and Aldrick,

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[4] Cabedo and Tirado (2004) developed a quantification framework on how companies should effectively disclose the risks they are exposed to. This framework was explained with data from a multinational company. Siepel and Nightingale (2014) explained the differences in governance model adopted in US and UK by investigating the causes of failure of Lehman Brothers in US and Royal Bank of Scotland in the UK. Abraham and Shrives (2014) developed a model for assessing the quality of risk disclosure and applied to four companies in the food production and processing sector.

2008).

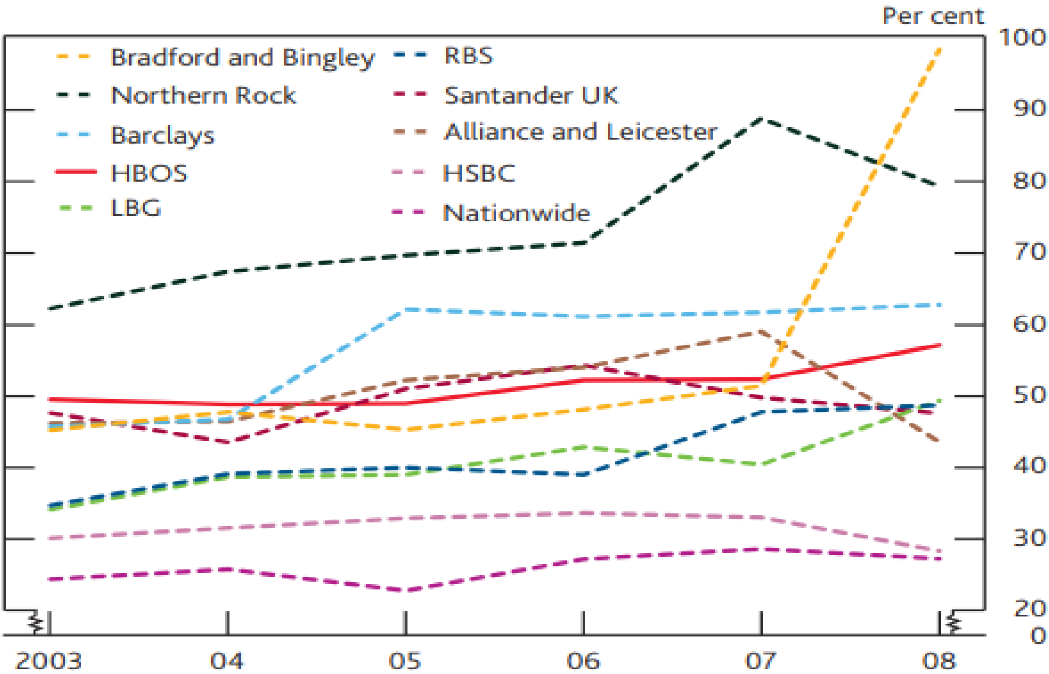

Figure 4. 1 Wholesale funding as a proportion of total funding from Annual reports and Accounts (FCA and PRA, 2015, p.126).

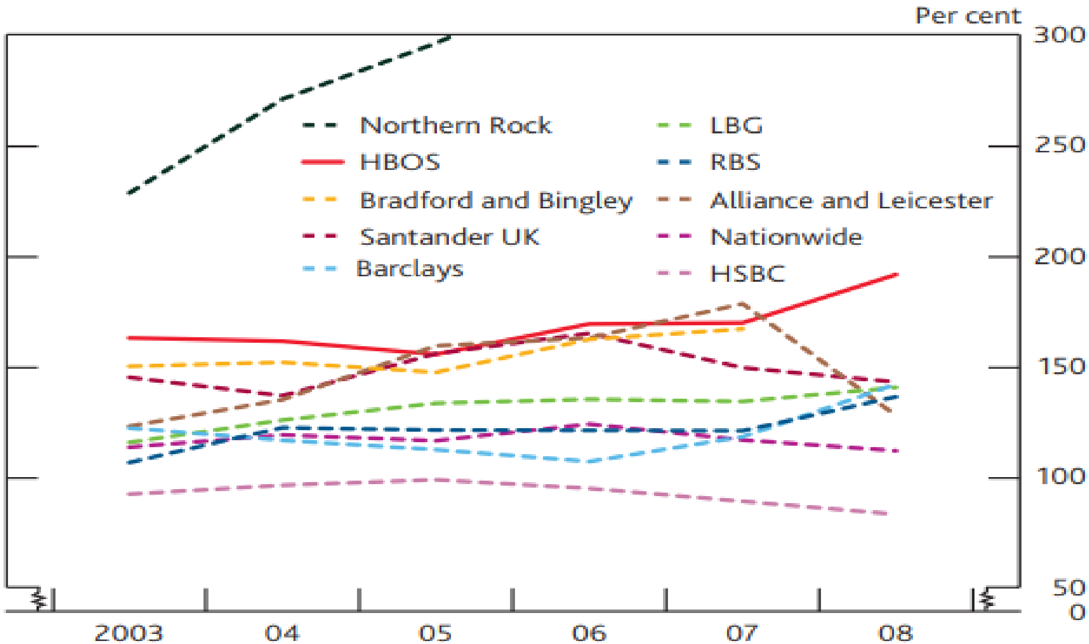

Figure 4. 2 Major UK banks' loan to deposit ratios from Annual Reports and Accounts and Review calculations (FCA and PRA, 2015, p.128).

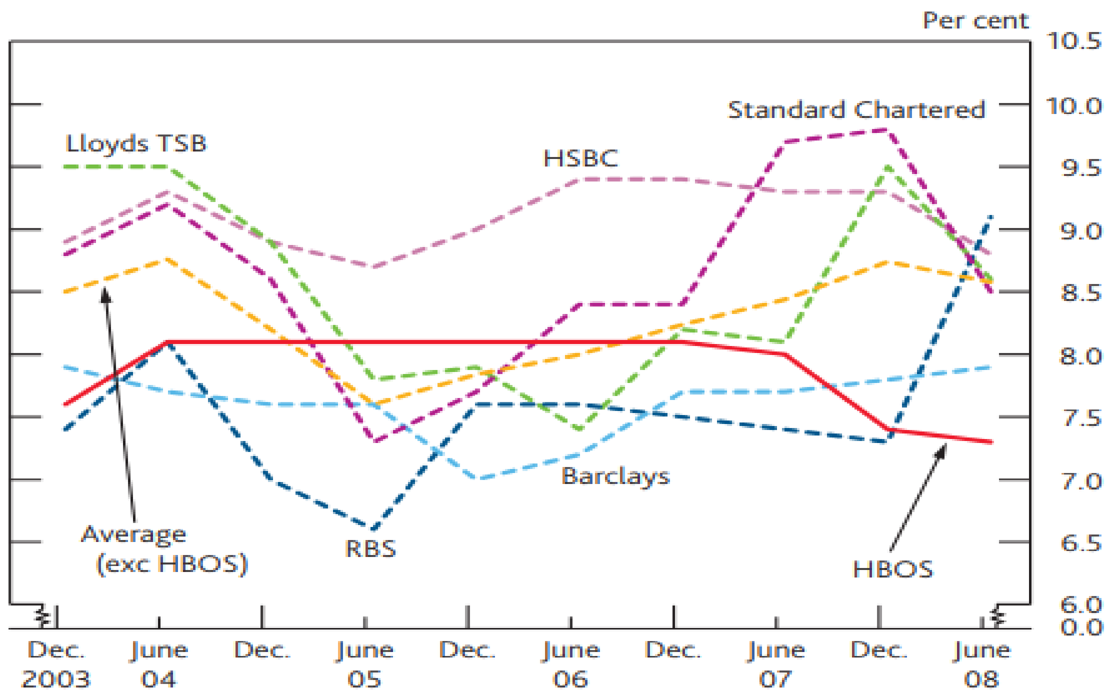

Figure 4. 3 UK banks' published Tier 1 capital ratios from Annual Reports and Accounts and Interim results (FCA and PRA, 2015, p.67).

Figure 4. 4 HBOS and UK peer banks' share prices from Bloomberg and Review calculations (FCA and PRA, 2015, p.153).

4.4 Method

4.4.1 Sample

The research questions in this study were answered based on the annual reports published by HSBC and HBOS between 2002 and 2006. The analysis started from 2002 because HBOS commenced operations fully as a merger between Halifax and Bank of Scotland in September 2001 and the first full annual report was in 2002 (HBOS, 2002). The analysis stopped at 2006 in order not to capture the period immediately prior to the time when the financial crisis emerged in 2007. Annual reports were downloaded from the banks' websites to ensure authenticity (Scott, 1990). Annual report is a main communicative tool through which companies communicate their activities to the public (Hellmann, Yeow and Mello, 2017)

4.4.2 Data analysis

Qualitative content analysis was adopted in the present research. This analytical approach involves reading through the text to identify where coding fits in the material to ensure consistency (Kracauer, 1952; Schreier, 2012). The first stage of the process involved reading through the whole annual report for 2002 for the two banks in order to (a) identify risk statements in general and those relating to negative events as shown in Figure 4.5; (b) identify sections of the annual reports where risk information was predominantly found for subsequent coding; and (c) check for consistency. A first reading of the annual reports of both HSBC and HBOS, revealed that risk statements (implicitly and/or explicitly stated) appeared in the *Chairman's statement*, *Interview with the CEO*, *Business activity review*, and *Financial review and risk management* sections of the report. These sections were read and initially coded using Adobe Acrobat Pro and then coded in NVivo. To check for consistency in the present study, the second coding process took place two-four weeks after the first coding process. Consistency is assessed by how the same statement is understood when checked within a specific time interval or by multiple independent coders (Schreier, 2012). Using Krippendorff's alpha to measure the coding consistency, it was identified that the codes were mostly in agreement, with α=0.86 and 0.77 for HBOS and HSBC respectively[5]. Differences in the

[5] Krippendorff's alpha is a coefficient applied in content analysis research to measure inter-coding reliability when information content is coded more than once (Hayes and Krippendorf, 2007). It ranges from 0 (totally disagree) to 1 (totally agree). Findings from content analysis with $\alpha \geq 0.7$ is considered acceptable (Hayes and Krippendorf, 2007).

coding using both tools were resolved and the main analysis was revised. To further ensure that internal quality was high, direct quotes and inferred interpretations from the reports in the results were used (Kuckartz, 2014). By conducting this exercise and showing transient meaning of the annual report content, the researcher was able to show how the "inferred interpretations open up possibilities for interpretation by the receivers of the text" (in this case, readers of the annual reports) (Scott, 1990, p.35).

The types of risks disclosed were identified from reading the annual reports and the information on these risks was coded accordingly. The risks were categorised hierarchically for both banks using 'risk identification' and 'risk management' as the two main categories followed by five sub-categories as shown in Figure 4.5. Table 4.3 shows examples of risk statements coded into the sub-categories for the banks. The following sections explain how this data was used to answer the research questions.

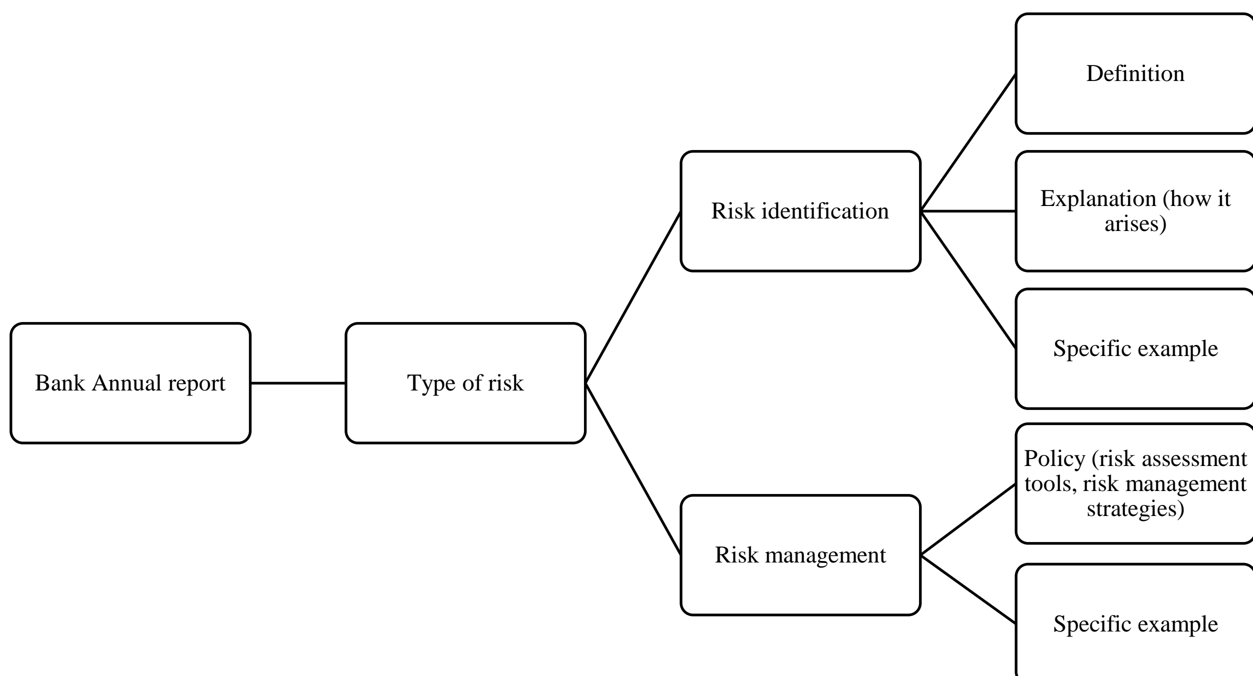

Figure 4. 5 Coding framework used to categorise the risks disclosed in the bank's annual reports.[6]

[6] Risk information in the annual reports were coded in Adobe Acrobat Pro and NVivo using this framework. Information on definition, further explanation and examples showing how the risk occurs were classified under 'risk identification'. Generic information on risk assessment tools and risk management responses, and examples given on specific actions taken to mitigate or manage the risks were classified

Table 4. 3 Description and coding examples for risk disclosures in the annual reports

	Sub-category	Description	Example
Risk identification	Definition	Where the risk statement contains elements of definition only.	"Credit risk is the risk that financial loss arises from the failure of a customer or counterparty to meet its obligations under a contract." (HSBC, 2003, p.136)
	Explanation	Where risk statement provides information beyond definition of risk, such as how it may arise.	"It arises principally from lending, trade finance, treasury and leasing activities." (HSBC, 2003, p.136)
	Specific example	Where the risk statement illustrates risks specific to the bank's activities	"If HSBC were to fail to maintain and implement adequate programmes to combat money laundering and terrorist financing and to comply with economic sanctions, or was found to be in breach of relevant laws and regulations, including by failing to observe economic sanctions, serious legal and reputational consequences for the Group could arise." (HSBC, 2006, p.169).
Risk management	Policy	Risk statements on the risk assessment methodology, monitoring process and risk management strategies without	"This methodology combines an analysis of the Group's interest rate risk position overlaid with behavioural assessment and repricing assumptions of planned future activity." (HBOS 2006, p.85).

under 'risk management'.

	specific examples that illustrate the bank's circumstance.	
Specific example	Risk statements relating to risk management illustrating bank's specific circumstance.	"No – in fact it wasn't that much of a change really – the nature of the arrangement we and other banks historically had with the insurers meant we were all but underwriting the business ourselves. So we don't see that the move to actually being the repayment insurer has changed our risk profile." (HBOS, 2002, p.4)

4.4.2.1 Research question 1: Did risk statements change over time?

Based on institutional theory, it is expected that reporting banks will react to internal and external pressure (i.e., changing regulations and recommendations) and that this will be demonstrated in their change to process including risk reporting. For each bank, the researcher compared the text in equivalent sections of its annual reports from the years 2002 to 2006. Relevant sentence changes in the risk management sections of the report such as changes to identified risks, methodology and tools of assessment, risk response and monitoring policies were identified and coded as illustrated in Figure 4.5. Ferret copy detection tool (Lane, 2013) was also used to identify the extent of boilerplate risk reporting by assessing similarity scores of information from the risk management sections of both banks from year to year[7].

[7] Ferret copy detection tool is a software used to identify duplicate texts within compared documents. The degree of relative similarity is measured as similarity scores from 0 (not copied at all) to 1 (all copied) (Lane, 2013).

4.4.2.2 Research question 2: Did risk statements reflect the actual experience of the banks?

The question was investigated in two ways. First, because the global financial crisis was caused by a combination of negative events, the negative events identified in the annual reports were compared to risk statements made in the previous years. This was done in order to identify whether the banks demonstrated knowledge of potential threats by revealing these threats before the negative events occurred. Kiyotaki (1998) and Krugman (1999) affirmed that decline in balance sheet values can affect investment capability. Similarly, Kim, Li, Lu, and Yu (2016) found that comparing financial statements aids reduction of information asymmetry by providing a better understanding of the company's activities, performance and current state. Therefore, in order to identify negative events from the annual reports, the researcher included qualitative disclosure of negative events such as operating losses, increase in impairments, impairment charges, etc., that were reported in the review sections, as well as negative trends of income and assets, and positive trends of expenses and liabilities in the financial statements. Second, the researcher identified events from extreme changes in share price from 2003 to 2007 to capture negative events reported in the news after risk statements were reported in the annual reports (i.e., 2002 risk statements were compared with bank specific negative experiences reported in 2003 news). Share price data was collected from Datastream and percentage change was calculated for the observed years (Datastream, 2016)[8]. Dates for the ten most extreme negative share price changes in both banks were selected from which the researcher identified negative instances in all observed years (2003 to 2007). In order to identify the relevant events, the researcher searched news from the FT pertaining to each bank two days before and three days after the selected dates (Abraham and Shrives, 2014). The news items identified were then compared to risk statements disclosed in the previous years' annual reports. Table 4.4 shows the negative events found in both the annual reports and FT for both banks.

[8] Datastream is a universal database that provides financial, economic and market data of companies.

Table 4. 4 Negative news disclosed in annual reports of HBOS and HSBC, and FT news by category.

Negative events found in annual reports by category (2002-2006)	**Frequency**
Decline in profits	5
Decline in revenue/income	11
Increase in impairments, NPA, Bad and doubtful debts	8
Competition	1
Total	**25**
Negative events reported in the news (FT) by category (2003-2007)	**Frequency**
Rise in bad debts	2
Funding difficulties	1
Failure of a line of business	2
Pension liabilities	1
Housing bubble	1
Regulatory action	4
Increase in interest rates	2
Decline in profits	2
Creative accounting	1
Total	**16**

4.4.2.3 Research question 3: To what extent was adumbrative risk disclosure practiced?

As previously mentioned, providing complete risk information in a coordinated section of the annual report signifies effective risk reporting and the intention to be transparent

(BBA, 2010; FSB, 2012). By contrast, adumbrated risk disclosures could be presented in other sections of the annual reports, potentially signifying some level of ignorance or a desire to obscure risk-related information. In addition, transparent risk disclosure involves providing risk information that relate to actual business activities and future events (BCBS, 1998; 2015). Hence, where disclosures are incomplete (e.g., annual report contains a sentence or paragraph that does not mention the potential impact of risks, risk management response or lacks details of specific risk context) and are relevant (relating to actual events) but only reported in sections other than the risk management section of the annual report, these disclosures were classified as adumbrative. This is diagrammatically demonstrated in Figure 4.6. Relevant risk information were identified as those relating to negative events in the annual reports and media news articles of future periods. Additionally, the researcher checked the risk reporting nature for risks common to the banking industry during the observation period. Common banking risks reported in FT news were selected by conducting a search on FT news by imputing “risk/risks”, “UK”/United Kingdom”, and “Banks”/”Banking industry” in the search box from the periods of July to December each year (2002 to 2006). This was done in order to capture relevant news containing risks that were common to the UK banking industry and reported in the news within six months prior to the reporting period, and to verify if and how these risks were explicitly reported as ‘risks’ in the annual reports of the banks investigated.

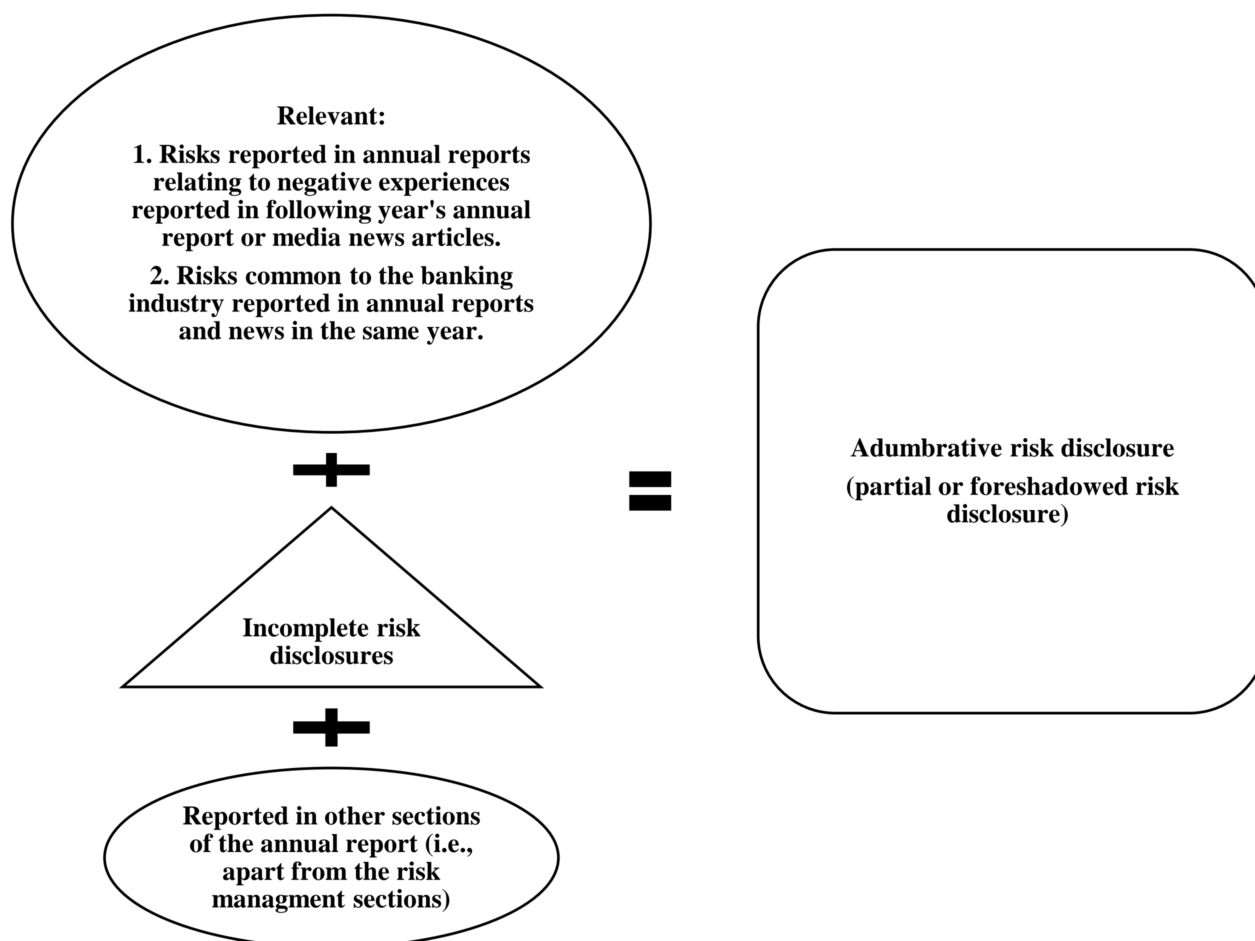

Figure 4. 6 Adumbrative risk reporting framework.

4.4.2.4 Research question 4: Is there a relationship between the work experience and professional qualifications of the bank's directors and the extent of risk disclosure in the annual reports?

In order to identify whether there is a relationship between the competence of the directors on the board of the banks and their conduct towards transparent or adumbrative risk reporting, biography data of directors were collected from BoardEx, Bloomberg, Google.com, EDGAR, LinkedIn, the banks' annual reports and annual reports of directors' affiliations. The data consisted years of work experience in the banking or financial services sector and the professional banking, accounting and risk management qualifications (e.g., ICAEW, CIB, qualification in actuarial science, etc.) of the directors prior to their appointment.

From the annual reports of both banks, the researcher identified that specific risk management responsibilities were delegated to heads of division (EDs) and the audit committee (NEDs) while the entire board was charged with board oversight responsibilities on risk management (CA, 06). Therefore, the researcher analysed the relationship between the disclosures in the report with the length of work experience and the number of professional qualifications of the directors. The length of work experience of each director in banking and other financial services, together with relevant professional qualifications were analysed and presented in form of descriptive statistics. As Rost and Osterloh (2010) found that EDs influence the board decisions due to the reason that they are more informed of the actual business activities and occurrences, the researcher then conducted independent *t* test of significance to identify whether the two groups were statistically different with reference to length of work experience of the EDs[9]. By this, using a probability value of p=0.05, the hypotheses are defined as follows:

Hypothesis 1. There will be a significant difference between the length of experience in banking among EDs at HSBC and EDs at HBOS.

Hypothesis 2. There will be a significant difference between the length of experience in banking and other financial services among EDs at HSBC and EDs at HBOS.

Furthermore, the work experience and professional qualifications of NEDs with specific risk management functions (e.g. audit committee) in the banks were also analysed using descriptive statistics.

4.5 Results

4.5.1 Change in risk statements overtime

Both HSBC and HBOS displayed boilerplate disclosure practices to some degree, especially in the risk management section. The results from Ferret copy detector (Figures 4.7 and 4.8) indicate that boilerplate reporting in the risk management section was more prominent in HBOS as it shows higher similarity scores from year to year compared to HSBC.

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[9] The aim of applying inferential statistics was to determine significant differences between the executive groups of the two banks investigated rather than the entire UK banking industry.

Table of Similarity Scores from Ferret

Number of documents compared: 5
Number of pairs of documents: 10

Document 1	Document 2	Similarity
HBOS2005rm.txt	HBOS2006rm.txt	0.583259
HBOS2003rm.txt	HBOS2004rm.txt	0.468445
HBOS2002rm.txt	HBOS2003rm.txt	0.456437
HBOS2004rm.txt	HBOS2005rm.txt	0.374196
HBOS2003rm.txt	HBOS2005rm.txt	0.289554
HBOS2004rm.txt	HBOS2006rm.txt	0.279964
HBOS2002rm.txt	HBOS2004rm.txt	0.250893
HBOS2003rm.txt	HBOS2006rm.txt	0.220585
HBOS2002rm.txt	HBOS2005rm.txt	0.145145
HBOS2002rm.txt	HBOS2006rm.txt	0.119148

Figure 4. 7 Screenshot of similarity scores from Ferret (HBOS) in descending order.

Table of Similarity Scores from Ferret

Number of documents compared: 5
Number of pairs of documents: 10

Document 1	Document 2	Similarity
HSBC2005rm.txt	HSBC2006rm.txt	0.446638
HSBC2003rm.txt	HSBC2004rm.txt	0.390169
HSBC2004rm.txt	HSBC2005rm.txt	0.328918
HSBC2002rm.txt	HSBC2003rm.txt	0.295360
HSBC2004rm.txt	HSBC2006rm.txt	0.224669
HSBC2003rm.txt	HSBC2005rm.txt	0.194735
HSBC2002rm.txt	HSBC2004rm.txt	0.181344
HSBC2003rm.txt	HSBC2006rm.txt	0.145454
HSBC2002rm.txt	HSBC2005rm.txt	0.114408
HSBC2002rm.txt	HSBC2006rm.txt	0.093497

Figure 4. 8 Screenshot of similarity scores from Ferret (HSBC) in descending order.

From 2003, HSBC changed their risk statements by including definitions within a new risk management policy, explanations of the impact of risk and direct statements implying that certain risks had been identified within their regular business activities. New risks identified by HSBC after 2002 were regulatory risk, investment credit risk, insurance risk, reputational risk, legal risk, pension risk, settlement risk, residual value risk, non-trading risk and sustainability risk (see Appendix A). By contrast, HBOS identified one new risk, ‘group risk’ from 2002 through to 2006 (see Appendix A). As an example, Figure 4.9 and Figure 4.10 distinctively show risk disclosure practice in the risk management sections of the annual reports of HSBC and HBOS from 2003 to 2004 respectively, as coded in NVivo. The left- hand section of the diagram represents the risk statements in 2003 that related to risk identification and/or risk management policy which were updated from the 2002 annual report. The middle section represents risk information updated in 2003 and 2004 annual reports. The right-hand section represents risk information pertaining to risk categories in 2002 not updated until year 2004 and new risk disclosures that have not been mentioned in previous year’s annual reports.

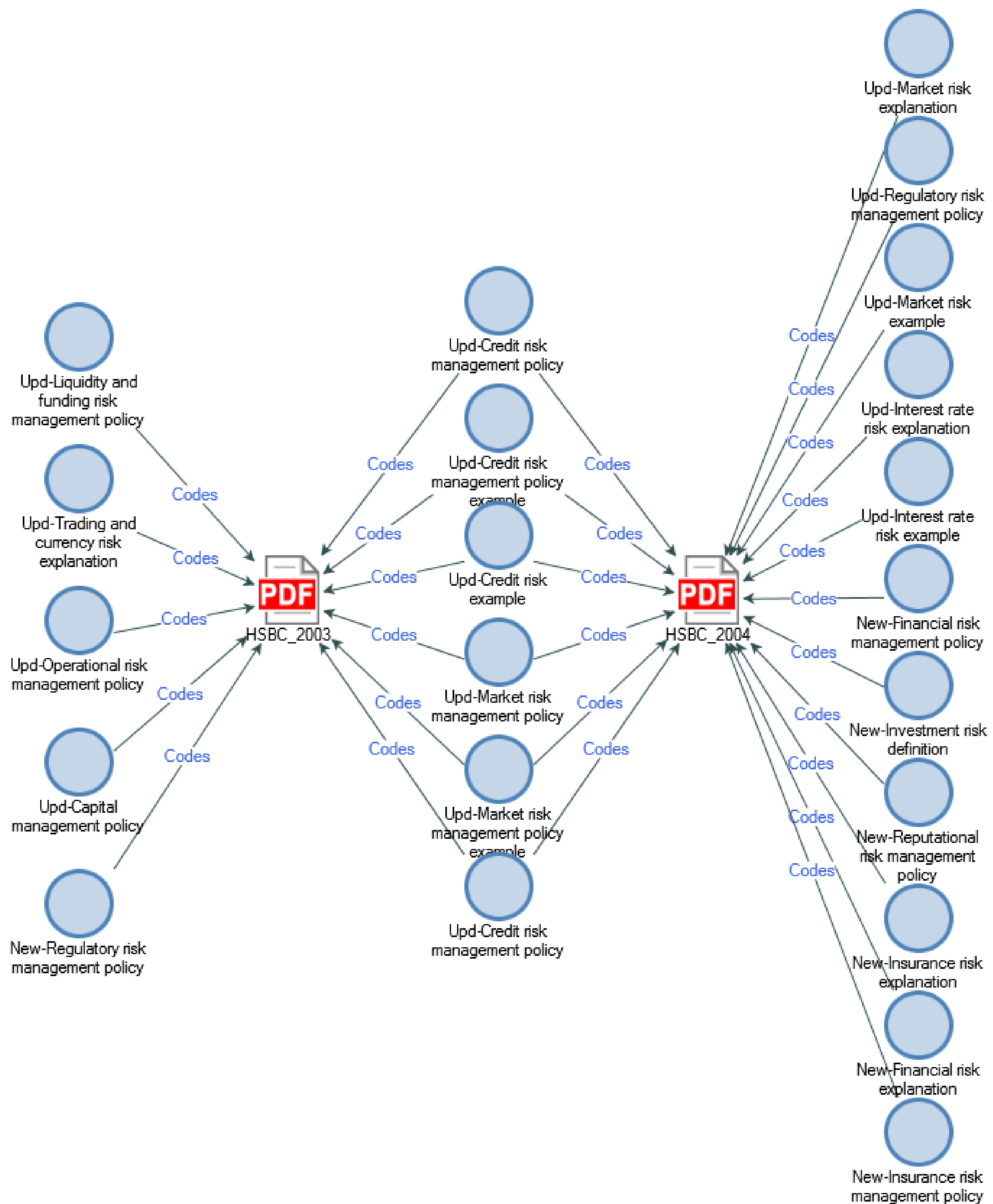

Figure 4. 9 HSBC Risk disclosure statements from 2003 to 2004 coded in NVivo.[10]

[10] Arrows from the circles pointing at annual reports (box-like files labelled as bank name and year) depict that information on subcategory was found in the labelled annual reports. 'Upd' stands for updated risk information on the subcategory.

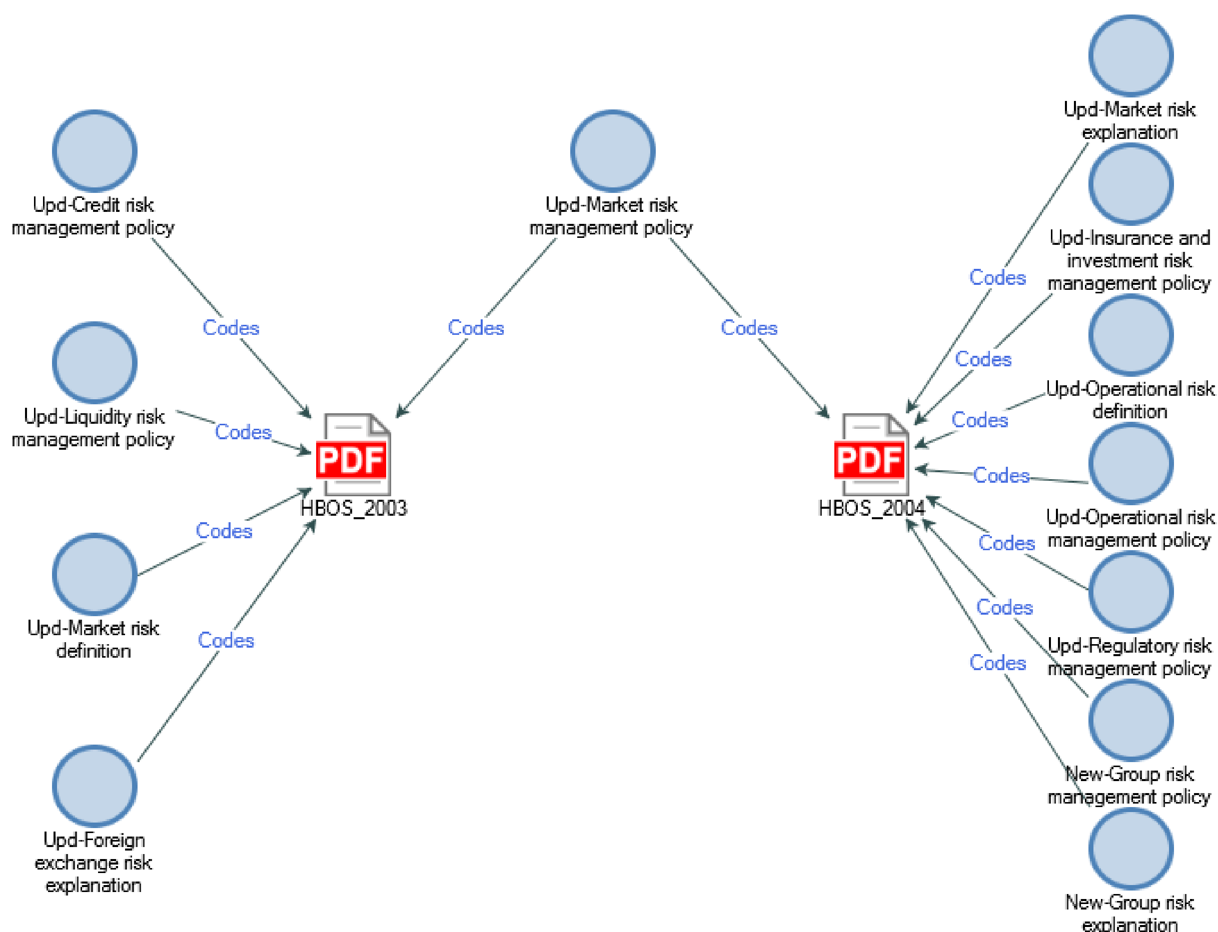

Figure 4. 10 HBOS Risk disclosure statements from 2003 to 2004 coded in NVivo.

Figure 4.9 shows that in 2004 the risks that were newly identified by HSBC were financial risk (of their insurance business), reputational risk, investment risk and insurance risk.

Figure 4.10 shows that HBOS identified “group risk” as the only new risk, which was described as the management of aggregated risks arising from the corporate group. Also, as indicated by the middle section of both diagrams, HSBC appeared to have more regularly monitored its risk management procedure than HBOS because more policy updates were found for HSBC during 2002 to 2004 than for HBOS (see Appendix A). This also indicates that the risk management section in the annual report of HBOS may have been more reliant on boilerplate statements. Furthermore, HSBC presented

specific experiences to show how their risk exposure had changed from year to year. Table 4.5 shows an example, in summary, of how HSBC identified sector specific credit risk changes from year to year. This practice was not found in HBOS annual reports.

Table 4. 5 Example of disclosure on credit risk by HSBC

	Credit risk (examples of exposure)	Nature of disclosure
HSBC (2002, p. 117)	Telecommunications industry, Brazil, Argentina.	Identification, current condition, risk management policy
HSBC (2003, pp. 160-161)	Telecommunications industry, Argentina.	Identification, current condition, risk management policy
HSBC (2004, pp. 160-161)	Advances to personal customers- personal lending, secured residential mortgages, unsecured lending in all geographical regions.	Identification, current condition, risk management policy
HSBC (2005, pp. 144-145)	Advances to personal customers- personal lending, secured residential mortgages, unsecured lending in all regions. Non-traditional lending.	Identification, current condition, risk management policy
HSBC (2006, pp. 189-191)	Mortgage lending products- US only.	Identification, current condition, risk management policy

4.5.2 Risk statements reflecting actual experiences of the banks in annual reports

The researcher found evidence of negative events reported in annual reports, being reported in previous annual reports of both banks. Specifically, seven instances of this event were found in HSBC and six instances in HBOS. Some instances are illustrated in Tables 4.6 and 4.7.

Table 4. 6 Example of negative events experienced at HBOS and reported in the previous year's annual report as risks

Risk disclosure (HBOS, 2004)	"Whilst we expect secured NPAs to increase further in 2005,…" (HBOS, 2004, p.11)
Credit risk	"Whilst we anticipate more difficult markets in both secured and unsecured lending,…" (HBOS, 2004, p.15)
Negative event: Credit risk (HBOS, 2005)	"Credit experience continued to unfold largely as expected, primarily reflecting the seasoning of business from recent periods of stronger growth. Impaired loans rose to 2.97% of advances (2004 2.19%)." (HBOS, 2005, p. 20)

Table 4. 7 Example of negative events experienced at HSBC and reported in the previous year's annual report as risks

Risk disclosure- cautionary statement (HSBC, 2002, p.5)	"… a number of factors could cause actual results to differ. These factors include…consumer perception of the availability of credit, including price competition in the market segments served by HSBC and the ramifications of ease of filing for personal bankruptcy."
Negative event: Decline in pre-tax profits (HSBC, 2006, p.33)	"Personal Financial Services reported a pre-tax profit of US$1,909 million, 2 per cent lower than in 2005. Net operating income rose by 4 per cent and loan impairment charges increased by slightly more than revenues as increasing numbers of debtors sought formal protection from

Interestingly, an inconsistency was also identified between HBOS's risk policy statement and their practice. From 2004 to 2006, one of the negative events experienced was volatility in the housing market. Risk statements from HBOS and HSBC in 2005, showed that lending criteria were strictly watched against continuous impairment losses as

shown in Table 4.8. However, as shown in Figure 4.11, the trend analysis of loan to deposit ratios for HBOS shows that the loan to deposit ratio maintained a strong upward movement even after this disclosure in 2004 and 2005. By contrast, the loan to deposit ratio of HSBC showed a sharp downward movement. This indicates that risk reporting at HSBC (cf. HBOS) in 2005 may have been more consistent with actual risk management practice.

Table 4. 8 Risk disclosure on credit risk management by HBOS and HSBC in 2005

"Despite the strong pick up in the UK mortgage market in the last quarter of 2005 as consumer confidence in house prices appeared to recover, we remain relatively cautious at this stage in the cycle. Against this backdrop we will continue to adopt a measured appetite for risk and growth, managing the LTV profile of new mortgage lending. In our unsecured lending businesses we will continue to tighten underwriting criteria in pursuit of shareholder returns in preference to market share." (HBOS, 2005, p.25)
"HSBC responded to the weaker UK credit environment by further refining its credit eligibility criteria, and by enhancing its credit scorecards with full positive credit reference data." (HSBC, 2005, pp.59-60).

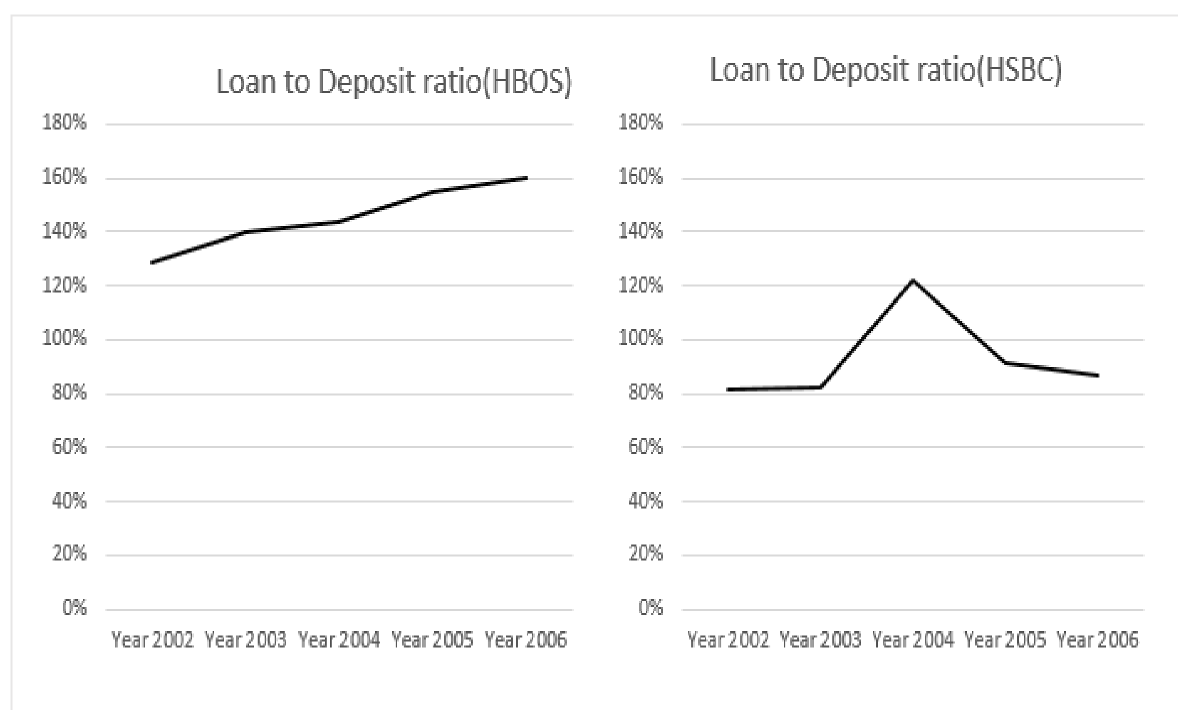

Figure 4. 11 Loan to Deposit ratio (HBOS and HSBC).

4.5.3 Risk statements reflecting actual experiences of banks disclosed in the news

Evidence of six negative news events was found to be disclosed as risks in the prior year's annual reports of HSBC. For HBOS, the research found evidence of five such events. Some of these instances are illustrated in Table 4.9.

Table 4. 9 Examples of negative media reports and related risk disclosure statements made in previous year's annual reports of HBOS and HSBC

Events reported by FT	Risk disclosure examples
Credit squeeze due to problems in mortgage lending markets- 22/11/2007	"In 2007 we expect positive continuing GDP growth in each of the major economies in which we operate. In the UK we remain optimistic about the UK economy with a generally benign business environment supporting growth in secured Retail products. We continue to be cautious, however, about unsecured lending given the cumulative impact of rising interest rates, utility prices and consumer indebtedness." (HBOS, 2006, p.13)
Negative effect of company acquisition- 28/1/2003	""… a number of factors could cause actual results to differ. These factors include…the success of HSBC in integrating the recently acquired Grupo Financiero Bital S.A. de C.V., and in completing the acquisition of, and integrating, Household International, Inc." (HSBC, 2002, p.6) "HSBC believes completion of the Household acquisition announced last year will improve its geographical balance. This will also change the character of risks within HSBC's financial framework by increasing the proportion of earnings from the personal sector which, long term, has more predictable revenue and cost characteristics." (HSBC, 2002, p.37)

Further analysis of the disclosures in annual reports and media news articles into transparent and adumbrative risk reporting is discussed in section 4.5.4.

4.5.4 Adumbrative risk disclosure practice

Using the developed adumbrative risk reporting framework (see Figure 4.6), the researcher found that some risk statements relating to negative events and media news reports were adumbratively stated by both banks. These disclosures were found in the *Business Review*, *Cautionary Statements*, *Chairman's Statement* and *CEO's Report* sections. As shown in the Tables 4.10 to 4.13 below, the reporting of risks that subsequently related to negative events was more transparent at HSBC than HBOS. HSBC reported transparently in four instances and adumbratively in three instances on risks related to negative events reported in the annual reports while HBOS reported only adumbratively in six instances as shown in Tables 4.10 and 4.11. With regard to risk reporting nature in the annual reports of the banks on risks related to negative events reported in the FT news, the results show that HSBC reported transparently in one instance and adumbratively in six instances while HBOS exclusively reported adumbratively in five instances as shown in Tables 4.12 and 4.13.

Table 4. 10 Evidence of adumbrative and transparent risk reporting at HBOS: Negative events and related risk disclosure statements from annual reports[11]

Negative events disclosed in annual report	Type of risk disclosed in annual report	Description	Section in Annual report	Complete-Identification and risk management-Adumbrative (AD)/ Transparent (TR)
Decline in net interest income (2003, p.30; 2004, p.20)	Not stated			
Decrease in profitability due to decline in pension sales (2006, p.51)	Opportunity-Operational risk (2005, p.39)	Identified as an opportunity, expectation of a rise in pension sales	Divisional review-Insurance and investment	AD
Increase in commissions and fees payable (2003, p.10)	Not stated			
Increase in impairments, NPA, Bad and doubtful debts and provisions (2003, pp.10, 11;	Credit risk assessment, (2003, p.26)	Risk assessment, good expectation on bad debt	Divisional review-Corporate banking	AD

[11] Negative events that had not been disclosed in the preceding reports were classified as 'not stated'.

2004, pp.10, 11, 14; 2005, pp.21, 22, 43; 2006, pp.10, 15, 19, 30, 32, 60)	Credit risk (2004, p.11)	Identified as risk, expectation of rise in NPA	Divisional review-Retail	AD
	Credit risk assessment, (2004, p.11)	Risk management		
	Credit risk, (2005, p.24) Credit risk response, (2005, p.24)	Identified as risk Risk management strategy	Divisional review-Retail	AD
Increase in mortgage cases in arrears (2005, p.22)	Not stated			
Reduction in fee income as a result of regulation change (2006, p.34)	Not stated			
Stiff premium rates and decline in sales due to competition (2005, p.36; 2006, p.50)	Market risk management (2005, p.36)	Market risk management-strategy	Divisional review-Insurance and investment	AD

Weak mortgage market (2004, p.13)	Credit risk – Opportunity and risk management (2003, p.13)	Opportunity Risk management	Divisional review- Retail	AD
Weak underwriting performance (2005, p.5)	Not stated			

Table 4. 11 Evidence of adumbrative and transparent risk reporting at HSBC: Negative events and related risk disclosure statements from annual reports[11]

Negative events disclosed in annual report	Risk disclosed in annual report	Description	Section in Annual report	Complete-Identification and risk management-Adumbrative (AD)/ Transparent (TR)
Decline in balance sheet management revenue (2005, p.67; 2006, p.36)	Market risk (2005, pp.158-159)	Identification Impact Risk management	Financial review-Risk management	TR
Decline in investment and pensions sales, Long term assurance and wealth management income (2003, pp.69, 70)	Market risk (2002, pp.5, 139) Market risk management policy (2002, p.139)	Identification Risk management	Cautionary statement, Financial review-Risk management	TR
Decline in net earned insurance premium due to constraints in lending growth (2006, pp.34, 132)	Operational risk management (2004, p.10)	Operational risk management	Description of business-Outlook	AD

Decline in net fees (2006, p.79; 2005, p.67)	Not stated			
Decline in net income- financial instruments (2006, p.34)	Investment risk (2005, p.169), Investment risk management (2005, p.169)	Identification	Financial review- Risk management	TR
Decline in net interest income (2003, p.37; 2004, p.65)	Not stated			
Decline in pre-tax profits (2006, pp. 12, 33, 37)	Economic risk (2002, p.5) Credit risk management (2005, p.141)	Uncertainty on perception of bankruptcy Risk management strategy	Cautionary statements Financial review- Risk management	TR
Fall in fixed income revenues (2004, pp.31, 65)	Not stated			
Fall in value of own debt (2006, p.22)	Not stated			

Increase in charge for bad and doubtful debts and credit costs (2003, p.101; 2004, p. 63; 2005, p.38)	Market risk (2003, p.68;	Identification, worse expectation on housing activity	Financial review	AD
	Market risk (2004, p.9) Market risk management (2004, p.10)	Risk management strategy	Description of business-Outlook	AD
Loan written off (2005, p.144)	Not stated			
Lower yields on corporate lending (2005, p.28)	Not stated			
Rises in default and arrears rate in unsecured lending (2005, p.16)	Not stated			

Table 4. 12 Evidence of adumbrative risk reporting at HBOS: Negative events reported by FT news and the risk disclosure statements in the annual reports of HBOS[11]

Negative events reported in FT news	Risk disclosed in annual report	Description	Section in Annual report	Complete-Identification and risk management-Adumbrative (AD)/ Transparent (TR)
Credit squeeze due to problems in mortgage lending markets- 22/11/2007	Credit risk (2006, p.13, 34) Credit risk management (2006, pp.34, 43)	Identification Risk management	Operating review Divisional review: Retail, Corporate	AD
Funding difficulties- 16/11/2007	Funding risk (2006, p.74) Funding risk management strategy (2006, p.74)	Identification	Divisional review: Treasury & Asset Management	AD

Poor performance of life assurance business- 24/1/2003, 29/1/2003	Opportunity, expectation (2002, p.13) Operational risk- external review (2002, p.37)	Identification	Divisional review: Insurance and investment Financial review and risk management	AD
Threat to pension liabilities- 20/10/2007	Pension risk (2006, p.85) Pension risk response (2006, pp.52, 85)	Identification of pension risk Risk management strategy	Divisional review- Insurance and investment	AD
Weaker housing market, weakening economy- 20/10/2007, 28/12/2007, 29/12/2007	Market risk (2006, pp.36, 53, 64) Market risk management (2006, p. 37)	Identification Risk management	Divisional review- Retail, Insurance and investment, International	AD
Higgs review on avoidance of chairing more than one board to improve corporate governance standards- 21/1/2003	Not stated			

Perception of increase in interest rates- 11/5/2004	Not stated			

Table 4. 13 Evidence of adumbrative risk reporting at HSBC: Negative events reported by FT news and the risk disclosure statements in the annual reports of HSBC[11]

Negative events reported in the news	Risk disclosed in annual report	Description	Section in Annual report	Complete- Identification and risk management- Adumbrative (AD)/ Transparent (TR)
Banks to reduce penalty fees for cards- 1/6/2006	Regulatory risk (2005, p.17)	Identification	Description of business- Competition	AD
Impact of new regulation for foreign ownership- 1/3/2005	Regulatory risk (2002, p.5; 2003, p.5; 2004, p.5)	Uncertainty identification	Cautionary statement	AD
Increase in borrowers' payments- interest payment rise- 16/3/2004	Market risk (2002, p.5; 2003, p.6)	Uncertainty identification	Cautionary statement	AD
Low volumes of corporate bond trading- 29/1/2003	Market risk (2002, p.5)	Uncertainty identification	Cautionary statement	AD
Negative effect of company acquisition- 28/1/2003	Operational risk (2002, p.6)	Uncertainty identification	Cautionary statement	AD
Higgs review- on avoidance	Not stated			

of chairing more than one board and CEO duality to improve corporate governance standards- 22/1/2003				
Rise in bad debt- 9/12/2006, 15/11/2007	Credit risk (2004, p.161) Credit risk response (2004, p.161) Credit risk response- update (2005, p.145) Credit risk management strategy (2006, pp.33, 34-35, 171)	Identification Risk management Risk management Risk management	Financial review- Risk management Financial review- Risk management Financial review- Risk management Business review Financial review- Risk management	TR
Weakness of stocks- 3/3/2005	Market risk (2004, p.9) Market risk management (p.10)	Risk management strategy	Description of business- Outlook	AD

Concerns on quality of bank's earnings- 5/3/2005	Not stated			

For further identification of adumbrative risk reporting, the researcher analysed risks common to the banking industry as stated in the FT from 2002 to 2006. These news reports focused on the issues of regulatory risk (cost of implementing Basel accord), credit risk (use of credit derivatives) and operational risk (cybercrime and competition due to consolidation of banks). The extent of disclosure in the annual reports was different between the two banks. For example, in relation to the credit risks associated with the use of credit derivatives, HSBC explained the level of risk and how it is managed in detail, while HBOS reported this information only briefly, without going into detailed discussion. This is illustrated in Table 4.14.

Table 4. 14 Extent of risk disclosure by HSBC and HBOS on use of credit derivatives in 2003

Common risks (FT news)	Risk disclosure in annual report
Credit risk (use of derivatives)- 5/11/2003	"The credit risk profile generated by the use of credit derivatives has an additional dimension. Where HSBC purchases protection, credit risk arises through the cost of replacing the contract as set out above and it is managed and reduced in the same way as for other derivative contracts. Selling protection through credit derivatives gives rise to additional credit risk. This credit risk arises as a direct consequence of the obligation of HSBC as the protection seller to make a payment to the protection buyer following a credit event on a reference name. HSBC manages the credit risk with regards to reference names by including any such exposures arising from credit derivatives within its overall credit limits structure. In addition the trading of credit derivatives is restricted to a small number of offices within the major centres which in management's view have the control infrastructure and market skills to effectively manage the credit risk inherent in the products." (HSBC, 2003, p.303) "The Group's activity in derivatives is controlled within risk management limits set by the Board and overseen by GALCO. This framework recognises the principal risks including credit, operational, liquidity and market risk associated with derivatives." (HBOS, 2003, p.43)

4.5.5 Banking related work experience and professional qualifications of the banks' directors and their risk reporting practice

As shown in Figure 4.12, it was found that HBOS had appointed directors with less extensive prior work experience in banking than HSBC. The independent *t* test results show that the average length of experience in banking of HSBC EDs was almost twice the average length of experience of HBOS EDs ($p=0.043$) . Therefore, the researcher rejects the null hypothesis and concludes that there is a significant difference between the length of experience in banking among EDs at HSBC and EDs at HBOS. Out of 11 EDs appointed to HBOS board from 2002 to 2006, five had less than five years work experience in a managerial or junior role in the banking industry prior to their appointment on the board, three of which had no professional qualification related to banking, risk management, accounting, finance or actuarial sciences (see Appendix B). When work experience in other financial services sector was included in the analysis, the average mean difference length of experience of EDs in HSBC was more than that of HBOS. However, this was not statistically significant ($p=0.067$). In the case of HSBC, all the EDs had at least 11 years work experience in banking. Specifically, six of the 10 EDs had at least one banking related professional qualification. Hence, the finding that the level of meaningful and extensive risk disclosure was greater at HSBC than at HBOS and that the level of relevant experience of the EDs was greater at HSBC than at HBOS, points towards a potential relationship between the extent of risk disclosure and the relevant work experience of the EDs.

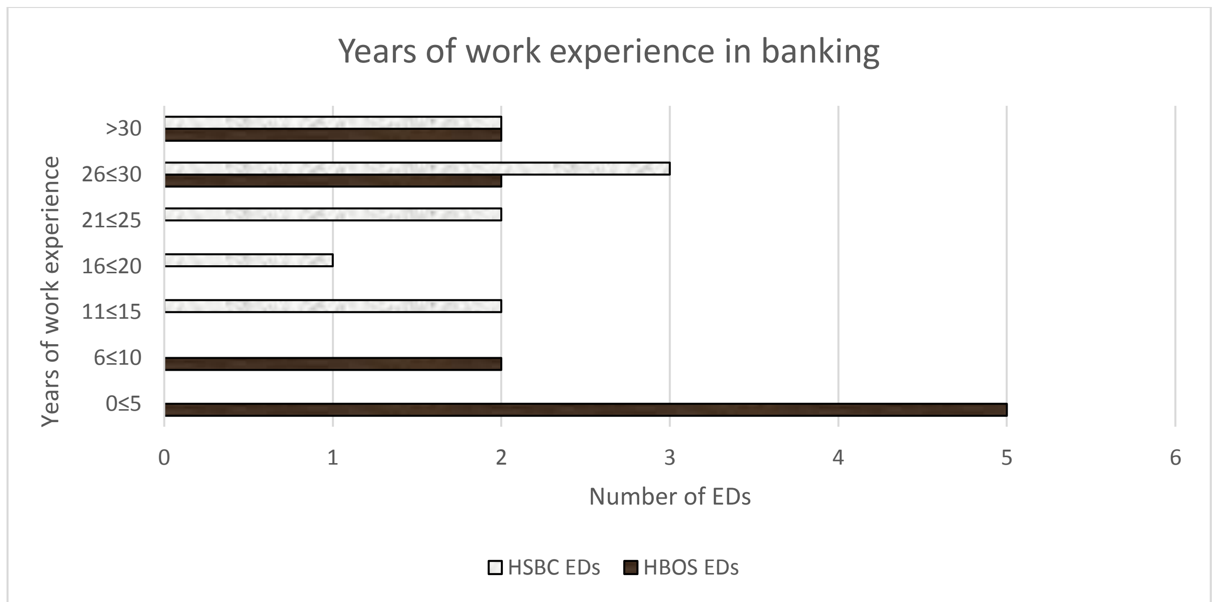

Figure 4. 12 Years of work experience in banking for EDs at HBOS and HSBC.

Both banks mentioned in the annual reports that risk management functions were delegated to the divisional EDs and the audit committee. The divisional EDs were responsible for providing risk information within their division to the board while the audit committee provided advice on risk management. Hence, the work experience and professional qualifications of the NEDs on the audit committee were analysed.

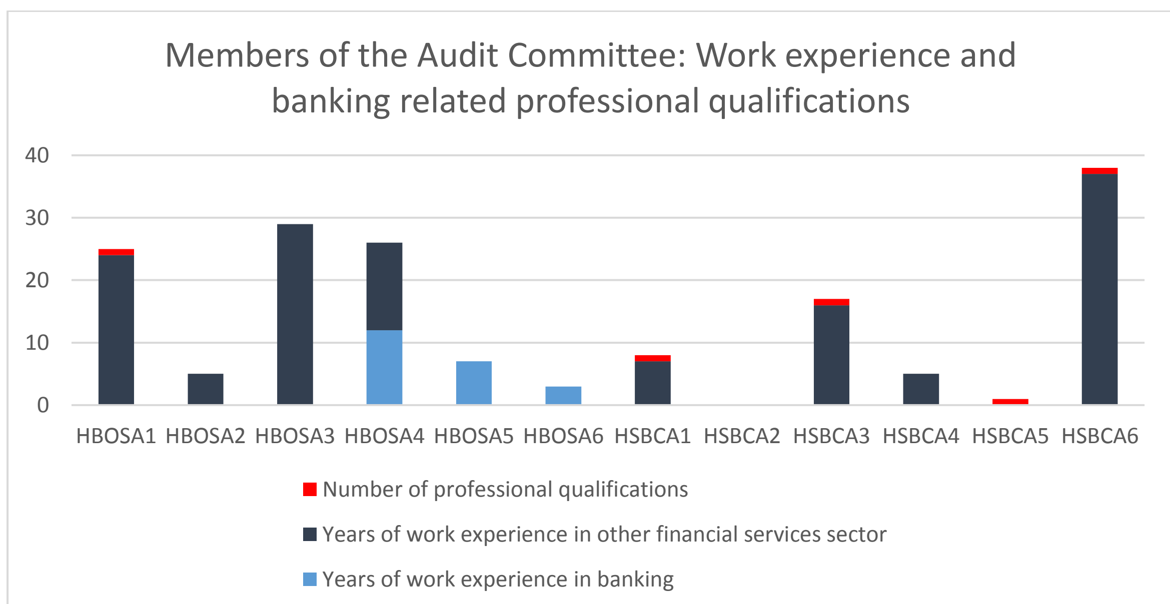

Figure 4. 13 Experience and professional qualifications of Audit Committee members at HBOS and HSBC.

The results show that, in contrast to HSBC, members of the Audit Committee of HBOS had worked in banking and other financial institutions prior to being appointed to the board. However, most members on the audit committee at HSBC did have banking related professional qualifications as shown in Figure 4.13. Since the research has found that risk disclosure was greater and more transparent at HSBC than at HBOS, and the number of members on the audit committee with professional qualification at HSBC was greater than at HBOS, this points towards a potential relationship between the extent and quality of risk disclosure and the professional qualification of the board. Hence, the analysis of the HBOS reports indicates that there is a potential relationship between banking work experience of NEDs to adumbrative risk reporting. Conversely, professional qualifications and extensive experience in other financial services of NEDs in the case of HSBC may relate to transparent risk reporting.

4.6 Discussion and implication of findings

The results of this research are consistent with institutional theory and findings from existing literature of Zucker (1987) and Abraham and Shrives (2014), as both banks demonstrated changes in processes and decisions in risk reporting as an indication of reaction to internal and/or external pressures. However, this change was stronger at HSBC than at HBOS in terms of detail in explanation and revisions to specific risk exposures. Boilerplate risk reporting practice was found from year to year at both banks, but significantly more predominantly at HBOS. In addition, with reference to similar risk statements on loan to deposit activities by both banks, the results suggest that HSBC appears to have been more consistent in actual risk management practice compared to HBOS as the trend analysis of loan to deposit ratios subsequently showed a sharp downward movement while that of HBOS maintained a strong upward movement.

The results show that risk factors that led to the global financial crisis, as stated in the Turner Review (FSA, 2009) and by the FCA and PRA (2015), were disclosed in the annual reports of HBOS and HSBC. However, some of these disclosures were adumbrative as they were partially mentioned or only presented in sections other than the risk management section of the annual reports. Greater evidence of adumbrative risk reporting practice was found at HBOS. This is consistent with the prediction of this paper that adumbrative risk reporting may have been more prominent at the bank that eventually experienced extreme difficulties during the global financial crisis. The reason for this practice could have been, as highlighted by Hall (1964), the fear of over commitment, the desire to have more control over information or for the protection of ego. From another point of view, adumbrative risk reporting may not necessarily have

been motivated by a desire to mislead, rather, may have come about as a result of respective differences in the interpretation of risk exposure (Solomon, 2007). However, the adumbrative reporting may also reflect some incompetence in risk management owing to ignorance or the misjudgement of important risks. As shown in prior research, ineffective risk management did contribute to the global financial crisis (Earle, 2009). Hence, this paper argues that, had transparent risk reporting practice been employed by the banks prior to the crisis, this might have enabled readers of the annual reports to more clearly understand what risks these banks were exposed to.

The results highlight that one potential consequence of adumbration is that readers of annual reports may not be able to fully appreciate the risks that exist immediately prior to a related adverse outcome. In other words, it may be difficult to identify relevant risks disclosed adumbratively until after the adverse event due to the nature of, and motivation for this type of limited disclosure. This is problematic given that, arguably, most users of annual reports may mostly search for risk information in the risk management section rather than go through all sentences of a report that may exceed 300 pages. The BBA (2010), FSB (2012) and FRC (2014d, 2014e) have highlighted changes expected in annual reports of banks in particular and how they should be reported to enhance transparency in risk disclosure. It would be encouraging to see that the annual reports of banks, reflect this in practice and, in addition, clearly provide all relevant risk information in a single designated section of the report.

Prior experience in banking or other financial institutions is essential to foster effective risk management, including effective risk reporting, and that particular caution should be taken in appointing directors without such experience, especially when those directors are directly charged with risk management responsibilities (Walker, 2009; FSA, 2009; Pirson and Turnbull, 2015). The results of this research indicate that the appointment of EDs with extensive prior work experience in banking may be one factor that contributed to the greater degree of risk disclosure at HSBC. This is consistent with upper echelons theory that experience is vital in decision making including risk communication to stakeholders (Hambrick and Mason, 1984). Also, the results indicate that having relevant professional qualifications may be essential for NEDs who are expected to have direct risk management responsibilities (e.g., Audit Committee). This confirms the proposition of Fondas and Wiersema (1997) and Teodoro (2014) that professionals tend to follow the norms of their profession, which may influence their decisions. However, such an interpretation should be approached with caution, as HBOS had a higher proportion of staff on the audit committee with experience in banking.

In line with Rost and Osterloh (2010)'s argument, the NEDs tend to have more restricted functions since EDs influence activities, strategies and organisational performance on a more regular basis. This paper argues that it may be the case that the experience and professional qualification of NEDs have less relevance to good decision making as Nguyen et al. (2015) noted that EDs have more control over information on which NEDs rely on to make decisions. It may also be the case that the NEDs with extensive experience in banking applied this to their risk management functions but that the board decided not to explicitly disclose risks. This supports the argument of Fischhoff (1995) that when communicating information about risk it is possible to have the required knowledge, skills and experience and still not put this sufficiently into use. Fischhoff (1995) also noted that this practice may occur due to the cost of disclosing such information to the public or due to a lack of self-confidence in managing risks, resulting in some risks being deemed negligible and, therefore, not worth reporting. Therefore, this research provides theoretical support for arguments in support of the relevant and required knowledge, skill and experience in banking and other financial institutions by directors, and in addition suggests that adequate supervision of qualified directors is essential. External supervision, through consistent training and setting scenario-based examinations may also be essential to ensure that qualified directors in practice actually apply the knowledge and experience gained.

Some limitations were encountered while carrying out this research. First, it was difficult to gain access to information on any further professional development of the directors. The researcher was only able to find out if the directors were associate members or fellows of the institutional body. Future research may be conducted on level of development in their various fields to examine how this might relate to risk disclosure and risk management practices. Second, risk management duties at each bank would have also been carried out by staff members at the banks other than the board of directors. Thus, these individuals may have had an impact on the banks' risk management practice. Third, while the cases investigated here are arguably representative of the UK banking industry, this study does not include other banks that were in operation before the financial crisis. The purpose of this research was to investigate the possibility of adumbration using two distinct cases. Further research is encouraged on expanding the sample size of banks investigated to test the representativeness of the findings of this study.

4.7 Conclusion

The main research question of this thesis is to assess the extent to which risk information in annual reports can predict future performance. This chapter addresses the possibility of adumbration (vaguely reported risk information linked to future events) in risk reporting practice of the banks studied. The global financial crisis of 2007-2009 has shown that failure to recognise and address imminent and substantial risks can have serious and long-lasting consequences on a global scale. Using qualitative content analysis, this paper investigated the quality and extent of risk statements in annual reports of two UK banks whose funding capabilities performed in markedly different ways during the financial crisis. The research found that negative events that arose in the financial crisis period were reported as risks in the annual reports adumbratively. More evidence of adumbrative risk reporting was found at HBOS which later experienced liquidity and solvency problems, was taken over and ultimately depended on state support, in contrast to HSBC which managed to pass through this period without such complications. In essence, risk disclosures at HBOS were sporadically distributed across numerous sections of the reports, rather than being confined to a single risk management section, and frequently lacked sufficient informative detail or were vague. In the case of HSBC, change in risk statements reflected the identification of new risks and, updates to risk assessment methodologies which resulted in effective changes to risk management policies. By contrast, changes in the risk statements made by HBOS in most cases were additional explanatory text in relation to previously identified risks which largely failed to translate into changes in actual risk management policies. This gives rise to the suggestion that the perceived differences in risk identification and reporting at the two banks resulted in markedly different asset portfolios and associated risk profiles. Furthermore, unlike HSBC, HBOS exercised little caution by recruiting EDs with limited or no prior work experience in banking and financial institutions.

This research suggests that to achieve effective risk reporting, risk statements should change over time to reflect changing circumstances, experiences and responses. Bank directors should ensure at all times that there is an agreement in what is disclosed qualitatively and quantitatively in annual reports to ensure meaningful reporting. The findings of this research also suggest that adumbrative reporting, as vague and misleading as it might appear, may still provide discrete ‘clues’ as to potential future events. However, such vague reporting methods can prevent stakeholders from sufficiently assessing vital information which, ultimately, could be utilised to avoid

serious adverse outcomes. Therefore, banks should be encouraged to provide clearer and more meaningful disclosures in their annual reports that reflect examples of what is currently being experienced and to indicate how changes to risk management practice will be made in response. Based on the present results, this research supports policies and guidance that encourage appointment of directors, both executive and nonexecutives, with adequate knowledge and work experience in banking and other financial institutions in order to help improve risk management and increase the transparent disclosure of bank-specific risks. Additionally, based on the result that the HBOS NEDs who were charged with risk management responsibilities had more prior work experience in the banking sector, regulators might wish to consider greater supervision and support of directors to ensure that the knowledge and work experience gained is put into good practice. This could be in the form of engaging qualified directors in relevant training, performing regular scenario- based examinations for qualified directors, and/or constant review of business practice by an external supervisory authority.

Narrative Bridge

Research on risk reporting in the banking industry has been broadly carried out on aggregated risk reporting and on voluntary or mandatory risk reporting. Aggregated risk reporting research involves the investigation of risk reporting practice without separating disclosures that are recommended from those disclosures that are required (e.g., Lipinga, 2014; Elbannan and Elbannan, 2015). On the other hand, voluntary risk reporting research involves the investigation of risk reporting practice which goes beyond requirements (e.g., Oliveira, Rodrigues and Craig, 2011) while mandatory risk reporting research involves risk reporting practice based on disclosure regulatory requirements (e.g., Maffei et al., 2014). In Chapter 4, the researcher investigated the possibility of adumbration in risk reporting by examining risk disclosures against future negative events. Two banks that performed differently in the subsequent period after the global financial crisis were investigated. The results showed that while adumbrative risk reporting was in fact practiced by both banks, more evidence of adumbration was found at the failed bank. The results also showed that little caution may have been taken by the failed bank in selecting executive directors with work experience in banking and/or other financial institutions. The research highlights that this may have been a cause for excessive adumbrative reporting.

The investigation presented in Chapter 4 is consistent with the prior research that has examined aggregated risk reporting. This is because the investigation made no distinction between the risk information that was required (mandatory) and that which was simply recommended (voluntary). However, it is also essential to investigate the level and influence of adumbration in these different risk reporting systems. Risk disclosure regulations are often deemed to be definitive in terms of stating what information is required (e.g., accounting standards), yet voluntary risk reporting tends to be more flexible because disclosures are expected to be provided in line with the bank's circumstance (Linsley et al., 2006). Hence, the researcher argues that it may be more appropriate to investigate adumbration in line with voluntary risk reporting. More specifically, the argument is that adumbration is not definitive because adumbrative disclosures only indicate future events, which may change from time to time, and are unlikely to be restricted to a prescribed risk category. Thus, the researcher investigates the impact of mandatory, voluntary and adumbrative risk disclosure on the performance of UK listed banks during and after the global financial crisis of 2007 to 2009 in Chapter 5.

Chapter 5: The impact of mandatory, voluntary and adumbrative risk disclosure on performance of UK banks during and after the financial crisis of 2007 to 2009

Abstract

This paper examined the effect of mandatory, voluntary and adumbrative risk reporting on bank performance during and after the financial crisis of 2007-2009. A panel regression analysis was conducted on UK registered bank holding companies from 2007-2016. The results showed that mandatory risk disclosure is associated with negative bank performance while voluntary risk disclosure is associated with positive bank performance throughout the observation period. No significant associations were found between adumbrative risk disclosure and the bank performance measures. Less disclosure was found on securitisation activity which further decreased after the financial crisis. The results also showed financial leverage is associated with negative bank performance, while income diversity and number of board subcommittees are associated with positive bank performance. This paper further contributes to the risk disclosure literature and expands on extant theories of disclosure by including the concept of adumbration (i.e., partial or circuitous risk disclosure) as a predictor of bank performance. The results highlight the need to study risk disclosure when analysing future bank performance and point towards the need for moderation in risk disclosure requirements as mandatory risk disclosure practice can be negatively associated with performance. The researcher suggests that greater effort should be made to encourage banks to make more voluntary disclosures.

Keywords: Adumbration, Banks, Mandatory risk disclosure, Performance, Voluntary risk disclosure.

5.1 Introduction

Ineffective risk management practices in the banking industry were identified as a major contributory factor to the corporate governance problems underlying the financial crisis of 2007-2009 (Earle, 2009; Sieczka, Sornette and Holyst, 2011). Therefore changes in regulations were made in order to reduce the possibility of a financial crisis (Aebi, Sabato and Schmid, 2012) or to be adequately prepared for a future financial crisis (Hull, 2015)[12]. Mandatory risk disclosures (MRD) and voluntary risk disclosures (VRD) of banks have been investigated separately (e.g., Barakat and Hussainey, 2013) and as aggregate risk disclosure (e.g., Baumann and Nier, 2004; Linsley, Shrives and Crumpton, 2006; Lipunga, 2014; Elbannan and Elbannan, 2015; Heinle and Smith, 2017). However, research relating to the banking industry on investigation of MRD and VRD in terms of market and accounting based performance of banks during and after the financial crisis of 2007-2009 is yet to be conducted. In line with the research of Elshandidy and Neri (2015) on the impact of VRD and MRD on performance of non-financial firms, the researcher argues that it is also important to identify how each practice affects performance indicators in the banking industry. Also, extant studies have not identified the adumbrative characteristics embedded in voluntary risk disclosures or studied the relation of the degree of adumbrative risk disclosure to performance. In this paper, adumbrative risk disclosure (ARD) refers to recommended risk disclosures relating to banking activities that are partially or circuitously presented in annual reports.

The Basel Committee on Banking Supervision (BCBS, 1998) noted that providing useful risk information by banks to investors and other stakeholders enables better informed decisions. Where useful risk information is adumbrated rather than being disclosed in terms of accuracy, relevance and transparency, then the information provided is irrelevant for decision making or may be misinterpreted by the users, giving a wrong impression. Hence, there is a need to understand transparent or adumbrated risk information in annual reports and how such information may influence important decisions. There is also a need to identify the benefit or cost of adumbration with regards to risk information provided to bank performance. Jorgensen and Kirschenheiter (2003) found that companies with high volatility in future earnings applied discretion in the disclosure of risk information compared to those with lower volatility in cash flows. They also found that share prices decline when voluntary disclosures are made mandatory. In addition, Maffei, Aria, Fiondella, Spanò and Zagaria (2014) found that relevant risk

[12] Key regulations on risk management risk disclosure in relation to banks introduced subsequent to the financial crisis include the Capital Requirements Directives CRD III and CRD IV, Basel III Accord.

disclosure (determined by timeframe, economic sign, outlook, qualitative or quantitative nature and type of measure) in a mandatory disclosure regime increased as the level of bank risk increased. While risk disclosure in annual reports should inform users of the reporting bank's threats and opportunities in carrying out its operations, transparency in risk disclosure signifies effective risk management practice (BCBS, 1998). Thus, full and transparent risk disclosure can indicate that risks have been properly identified and actions have been put in place to manage the risks. Whereas, risk information that is inadequate, in terms of how the risks are managed and the potential impact of the risk, may imply that risks have (a) not been properly identified (b) been identified and the significance is not known or wrongly judged or (c) been properly identified and are effectively managed but not disclosed in the annual reports. The researcher argues that these reporting practices signify ineffective risk management and, therefore, may lead to poor performance. This research attempts to address these gaps. The main research question is: *To what extent are mandatory, voluntary and adumbrative risk disclosures related to performance of UK banks?*

In order to answer this research question, the researcher conducted a longitudinal study on UK registered and listed bank holding companies. UK was the major focus as it adopts a quasi- mandatory corporate governance system where the corporate governance code is rather flexible and listed banks are required to comply or give reasons for non-compliance if a different approach is used other than the one recommended, unlike countries such as the US and Spain where corporate governance system is made mandatory. The investigation started from annual reports published from 31st December 2007 because this was the year in which the financial crisis was first considered noticeable (Flannery, Kwan and Nimalendran, 2013). Thus banks that were in existence throughout this period were compared with those banks that started after the financial crisis so as to identify if there are differences in risk disclosure practices in terms of compliance and application of risk disclosure regulations and recommendations, and to identify the relationship of this practice with their performance.

This paper contributes to the limited existing literature on comparison of risk disclosure practices of banks to performance. Elbannan and Elbannan (2015) looked into the effect of risk disclosure on performance of Egyptian banks and found that higher level of risk disclosure was positively associated with operating performance and market valuation. However, the present research differs from the research of Elbannan and Elbannan (2015) because the results highlight different degrees of mandatory and voluntary information provisions as well as revealing the impact of varying risk information

provisions on performance. This paper also differs from the research of Barakat and Hussainey (2013), which studied operational risk disclosure, by including all risk categories in the analysis. This paper responds to a call by Linsley et al. (2006) and Al-Maghzom, Hussainey and Aly (2016) for extensive longitudinal studies on how risk disclosure practices have changed over time. The paper expands disclosure theories by including characteristics of adumbration in voluntary risk disclosure. Specifically, by investigating the bank's long-term behavioural patterns of adumbrative practices in voluntary risk disclosures and how this affects performance, we can obtain a better understanding of the potential motives for this kind of practice.

This paper is structured as follows. Section 5.2 discusses risk-related regulations of the UK banking industry and official recommendations on risk reporting. Thereafter, mandatory and voluntary disclosure theories as well as the concept of adumbrative risk disclosure are discussed in the context of the prior research in section 5.3. The researcher draws upon the knowledge gaps identified in this literature to develop the hypotheses and presents the methodology and results in section 5.4 and 5.5. Limitations encountered in the study and recommendations for future research are also discussed in section 5.5. Section 5.6 presents the conclusion.

5.2 The UK banking risk disclosure regulations, official guidance and reports

5.2.1The UK banking regulations on risk disclosure

Prior to the implementation of the Capital Requirements Directive (CRD), Basel Capital Accord of 1988 was established with the main aim of addressing capital adequacy for credit risks of international banks (BCBS, 1988). This was then revised into Basel II in 2004 to include operational risk and market risk (BCBS, 2004). The UK adopted the European Capital Requirements Directive (CRD I) in 2006. The CRD I incorporated Basel II which contains disclosure requirement of definitions, methodologies, valuation assumptions and management of capital risk, credit risk, liquidity risk, operational risk, market risk (including interest rate and equity risks not included in the trading book) and securitisation risk. Soon after, the financial crisis established the need to review risk management and risk disclosure regulations. A combination of global factors resulting in negative events and practices by banks such as swift increase in credit growth due to undue reliance on wholesale funding were witnessed during the financial crisis (Financial Services Authority (FSA), 2009). This in turn led to extreme cases for severely affected banks such as bankruptcy, merger and acquisition between banks and nationalisation by

the government (HM Treasury, 2012). Due to these failures recorded during the financial crisis in Europe, CRD III was initially introduced in 2008 and fully implemented in the UK in 2010 to further address areas such as securitisations, liquidity risk management and hybrid capital instruments (Financial Conduct Authority (FCA), 2011). Specifically, CRD III requires banks to disclose the impact of credit risk, market risk and liquidity risk on securitisation process and how these risks are monitored in the course of securitisation activities. The newly developed proposal for CRD IV in consonance with Basel III provides new requirements for financial institutions. Among the new requirements are governance issues relating to disclosures in annual reports on assurance of the adequacy of risk management system, exposure to certain risks such as credit risk, operational risk, market risk including non- trading risk and securitisation (Deloitte LLP, 2014).

5.2.2 Official guidances and reports on risk disclosure for UK companies

Official recommendations aimed at strengthening corporate governance with a brief reference to risk reporting began in the UK with the corporate governance code (the Code) in 1998. Major changes were made to the corporate governance code after the financial crisis to suit social and environmental concerns. For example, the Financial Reporting Council (FRC, 2009b) *Going concern and liquidity risk: Guidance for directors of UK companies 2009* recommended disclosure of risks that may affect the going concern of the company, indicating the need to include the financial and/or economic impact, how these risks have been assessed and actions taken to manage or mitigate them, with major focus on liquidity risks. Specific to the UK banking industry, the British Bankers' Association code (BBA, 2010) and Financial Stability Board's (FSB, 2012) Enhanced Disclosure Task Force report on *Enhancing the Risk Disclosures of Banks* emphasised the need for transparency of banks in risk reporting. These reports recommended the disclosure of the nature and extent of risks identified within the bank's business model, including changes to methodologies within the risk management system and specifically comparing differences in risks identified during and at the end of the reporting period. They suggested that banks should provide relevant risk information that can be understood and useful to a wide range of readers when comparing risk management performance between reporting periods of the same bank or comparison of banks across the industry.

While FRC (2014e) *Guidance for directors of banks on solvency and liquidity risk management and the going concern basis of accounting* recommended the use of the BBA code and Enhanced Disclosure Task Force report as well as the *Guidance on risk*

management, internal control and related financial and business reporting, they further suggested based on fear of bank run, that banks may not disclose to the public when they receive liquidity assistance from Bank of England unless the liquidity assistance is crucial to the bank's survival. In essence, the banks are only expected to discuss on risks particularly in relation to solvency and liquidity risks, verified by the auditors, while the Bank of England and the Prudential Regulatory Authority determine the extent to which risks faced by these liquidity assistance to demanding banks pose as threats (FRC, 2014e).

5.3 Theories and hypotheses development

This research applied mandatory disclosure theory, voluntary disclosure theory and the concept of adumbration in explaining risk disclosure practice. These concepts are now defined and discussed in the following three sub-sections.

5.3.1 MRD and performance

Mandatory disclosure theory holds that banks are required by regulatory authority to disclose information that are beneficial to stakeholders in order to reduce information asymmetry (Darrough, 1993). Li and Madarász (2008) noted that mandatory disclosures are beneficial to end users as it reduces conflict of interest to a considerable limit and aids better decision making. More so, the essence of risk disclosure is to enable readers assess the present state and future performance of the reporting bank. The results of Tsalavoutas and Dionysiou (2014) showed that firms with higher compliance with regulations on disclosure are being compensated by investors as there was a positive relationship with market value. However, the release of information may be detrimental to the bank in terms of use of information by competitors or negative disclosure which may trigger loss of investors' interest (Fishman and Hagerty, 2003). Jorgensen and Kirschenheiter (2003) also noted that firms that would originally withhold risk information if disclosure was voluntary may incur disclosure costs when required disclosure is mandatory. In conformance to this, Hassan (2009) found a negative association between mandatory risk disclosure (MRD) and firm value. Similarly, Miihiknen (2012) and Elshandidy, Fraser and Hussainey (2015) found that banks with lower profitability provided more MRD. On research in the banking sector, Bischof, Daske, Elfers and Hail (2016) also found that the banks that complied more mandatory regulations on risk disclosure were the ones with weaker performance. The reason for this according to Bischof et al. (2016) is that these large banks with weaker performance may have perceived that they will be closely monitored by the supervisory authority and so decided

to disclose more risk information. This shows that banks with worse current and/or predicted unfavourable future performance tend to disclose more risk information.

It is important to identify the relationship between MRD and bank performance to highlight the advantage to banks. Oliveira, Lima-Rodrigues and Craig (2011) identified that larger banks comply with the regulatory requirements in order to avoid public scrutiny. However, it is important to identify if smaller banks (in terms of asset size) also adhere to requirements on risk disclosure and receive the potential benefits of compliance. More importantly, the researcher argues that the findings in this research are crucial to the banking sector in the UK context because the smaller banks were listed after the financial crisis of 2007-2009 and, therefore, are more likely to be under less public scrutiny because they were not affected by the crisis. This provides us with the opportunity to identify the relationship between compliance and performance by comparing larger and smaller banks. Therefore, using MRD as the predictor, the non-directional hypothesis is designed as follows:

H1: Mandatory risk disclosure practice is related to bank performance.

5.3.2 VRD and performance

Voluntary disclosure theory holds that disclosure which goes beyond requirements reduces information asymmetry, and in turn reduces the reporting firm's cost of capital (Leuz and Verrecchia, 2000). As highlighted in section 5.2.2, major changes and recommendations for risk disclosure particularly for banks aim to provide the general public with information concerning how relevant risks affecting the normal activities are managed, and to avoid unpleasant surprises such as the financial crisis. Thus, it is expected that greater risk disclosure will increase the confidence in the market, hence improve performance (Elshandidy and Neri, 2015). Lang and Lundholm (1993) found that firms with better earnings had greater degree of voluntary disclosure. However, Healy and Palepu (2001) have noted that this relationship may likely be as a result of 'self-selection bias', suggesting that better performing firms may voluntarily disclose more due to their satisfactory performance.

There is limited research on voluntary risk disclosure (VRD) and bank performance. In a study of Bangladesh listed banks, Nahar, Jubb and Azim (2016) found a positive association between VRD and performance. Also, Al-Maghzom et al. (2016) found that banks with higher profitability tend to disclose more risk information voluntarily. This contradicts the findings of Linsley et al. (2006) and Oliveira et al. (2011) as both studies

found no association between VRD and bank performance. This may be as a result of the time period covered. Both Linsley et al. (2006) and Oliveira et al. (2011) analysed reports for one year (2001 and 2006 respectively) while the dataset for Nahar et al. (2016) was from 2006 to 2012 and Al- Maghzom et al. (2016) was from 2009 to 2013. Another reason for different results could be the category of country of study as the latter involved analysis of banks in a developing country while the former involved analysis of developed countries. The researcher also considers the need to investigate the relationship between VRD and bank performance in a country where corporate governance code is made voluntary but essential. Unlike countries such as the US, Spain, Germany, Portugal where the corporate governance code is made mandatory, the UK corporate governance code is quasi-mandatory. In essence, banks in the UK are required to comply with corporate governance recommendations or explain why they have not complied if a different approach is used, rather than the one prescribed in the Code.

Prior research have shown that costs of disclosure may affect the degree of risk information disclosed. For example, Verrecchia (2001) demonstrated that information is willingly disclosed when managers have determined that the benefits exceed costs. However, Heitzman, Wasley and Zimmerman (2010) have argued against this proprietary cost reasoning for the level of the supposed ‘voluntary disclosure’, by identifying that certain material risk disclosures have subsequently been required to be provided by regulatory authorities. The researcher argues that mandatory disclosure practice of material information may vary among banks. The UK Companies Act (CA 06) for example, requires the disclosure of principal risks and uncertainties in the annual reports. However, the degree of information needed to be provided is only recommended in official guidance and publications. In essence, this provides numerous options to the board on how this information, if available, should be presented. Since sufficient disclosure of risk information reflects effective risk disclosure practice as it is beneficial to users in decision making, it is expected that banks that provide greater level of VRD would perform better compared to those that do not. Therefore H2 is designed as follows:

H2: Voluntary risk disclosure practice is positively related to bank performance.

5.3.3 Adumbrative Risk Disclosure and performance

Prior research have often concluded that risk information found in the annual reports are not completely informative (e.g., Linsley and Shrives, 2006; Slack and Campbell, 2008).

Adumbrative risk disclosure (ARD) in this research refers to recommended risk disclosures that are partially or circuitously presented in annual reports. In essence, ARD indicates incomplete risk information that are relevant to the bank's business activities and presented only in other sections rather than the risk management section of the annual report. The term 'adumbration' has been found in the early research of Hall (1964) which discussed adumbration in communication, highlighting the motives and importance of adumbration. The main essence of risk reporting as highlighted in regulations and official guidances is to have an insight as to the exposure faced by the bank and assess its future performance. In essence, providing misleading or incomplete information may be unsuitable to users of these reports. The Chartered Financial Analyst institute (CFA) annual survey on financial reporting identified that there was a need to improve on the reporting of significant risks. One of the participants in the CFA UK annual survey of financial reporting and analysis, stated that "useful things are the primary risk faced that get under-reported if reported at all…" (CFA, 2015, p.8). In Chapter 4, which was an in-depth investigation of one successful and one failed bank based on funding during the financial crisis of 2007-2009, it was found that adumbration was practiced by both banks but a higher degree was found in the failed bank before the financial crisis. The failed bank received Emergency Liquidity Assistance from the Bank of England after experiencing a sharp decline in assets and was later acquired with government assistance by Lloyds Bank (Financial Conduct Authority and Prudential Regulatory Authority, 2015). However, longitudinal study of the relationship between adumbrative risk disclosure practice and bank performance is yet to be conducted. Essentially, adumbrative risk disclosure is the opposite of transparent risk disclosure and, therefore, consistent with voluntary disclosure theory, the researcher argues that banks that transparently disclose risks in their reports gain market trust and in turn will be compensated with improved market performance (Lins, Servaes and Tamayo, 2017). By contrast, banks that are adumbrative in their risk disclosures are more likely not to gain public trust, consequently performance will be adversely affected. Hence, the third hypothesis is designed as follows:

H3: Adumbrative risk disclosure is negatively related to bank performance.

The attributes of ARD practice have been drawn from official guidances that discuss inadequacies in risk reporting and prior studies. First, voluntary disclosure of risk information may have an impact on the bank itself and aid investors and other members of the stakeholder group to make more effective decisions (Elshandidy and Neri, 2015). This implies that ARD are VRD which are important disclosures. Second, the nature of

ARD includes incompleteness. Chavent, Ding, Fu, Stolowy and Wang (2006) noted that directors may apply flexibility in degree of information provided even where these information are mandatorily required to be disclosed. This could arise as a result of not actually having full information or knowledge about the risks (Linsley et al., 2006), or deciding to apply discretion to the information made available (Hall, 1964). Third, ARD may involve indirect notification of the risk information (i.e. secretion). BBA (2010) and FSB (2012) mentioned that for clarification purpose, risk disclosures should be confined to a particular section of the annual report or cross-referenced where necessary. Hence, the researcher argues that banks that intend to maintain transparency in their risk disclosures would, as much as possible, include their risk statements in the risk management section of the annual report rather than spreading the risk statements across sections in the report without reiteration in the risk management section.

5.4 Methodology

5.4.1 Sample and data collection

This paper analysed risk disclosure practices of UK banks during and after the financial crisis and compared this to performance. The research focused on the banks registered and listed in the UK. In total there were 61 observations across 11 banks (see Table 5.1). Data on risk disclosure was collected from the annual reports from financial year ending 2007-2016, downloaded from the banks' websites. Various risk disclosure studies have been conducted with the use of annual reports (e.g., Linsley et al., 2006; Elshandidy and Neri, 2015; Allini, Manes-Rossi and Hussainey, 2016). The annual reports were analysed with Adobe Acrobat Pro DC[13]. Adobe Acrobat Pro DC is a software that enables reading, word search and coding of qualitative data.

[13] Experience gained from analysis in Chapter 4 showed high consistency of coding using both NVivo and Adobe Acrobat Pro DC. Also, in the present chapter, risk disclosure regulations and official recommendations were used to develop the risk disclosure index which served as a guide to check for the risk disclosure practice of the banks analysed. This approach was also time saving due to the number of annual reports analysed in this study.

Table 5. 1 Number of Observations

Name of Bank	Year of establishment	Number of available annual reports (2007-2016)[14]
1. Lloyds Banking Group[15]	1995	9
2. HSBC Holdings PLC	1992	10
3. Royal Bank of Scotland	1964	10
4. Standard Chartered Bank	1964	7
5. Secure Trust Bank	2011	6
6. Virgin Money	2014	3
7. Aldermore PLC	2015	2
8. CYBG PLC	2016	1
9. Shawbrook	2015	2
10. Barclays PLC	1964	10
11. Metro Bank PLC	2016	1
Total		61

5.4.2 Dependent variable: Performance measurement

Market and accounting based performance measures were applied to assess bank performance. Consistent with the formula adopted by Chung and Pruitt (1994) and García- Meca, García-Sánchez and Martínez-Ferrero (2015), performance was

[14] Annual reports of Lloyds Banking Group for 2011 and Standard Chartered Bank for 2014 to 2016 were excluded because they could not be transferred into machine readable documents.

[15] Lloyds Bank acquired failing HBOS in 2008. Its performance has been weighed down by the impact of HBOS activities before acquisition and has only recovered recently (Treanor, 2017).

measured performance with Tobin's Q defined as the market value of equity plus book value of liabilities divided by book value of total assets. The lead values were used in order to identify the effect of the independent variables on the future performance of the banks. For robustness checks, lead Return on Equity (ROE) was used as an alternative measure of performance. Following Bennet, Güntay and Unal (2015), ROE is defined as annual cumulative net income divided by total shareholders' equity.

5.4.3 Independent variables: MRD, VRD and ARD measurement

Disclosure scores were used to measure MRD, VRD and ARD. Disclosure scores have been applied in prior studies (e.g., Barakat and Hussainey, 2013; Elshandidy et al., 2015). To measure MRD and strengthen validity, the researcher developed an index from Capital Requirements Directive (CRD I) 2006 and CRD III 2010 which focused on risk disclosures (see Appendix C). Following Barakat and Hussainey (2013), developing a risk disclosure index for MRD and VRD from disclosure regulations and official recommendations ensures that various aspects of risk disclosure are covered and to reduce the bias of risk disclosure quantity prevailing based on ample disclosure in certain aspects than others. The CRD I was suitable as it was first implemented in the UK in 2006 and the data investigated is from 2007-2016. Annex xii of CRD I contains requirements for technical disclosure on risk exposures for all risks and specific risk categories. CRD III contains amendments to the technical disclosures on risk, particularly requiring qualitative explanation of significant changes to complex calculations disclosed and more disclosure on market risk, credit risk, liquidity risk and securitisation. CRD III was adopted in the UK by banks at different points in time, hence, the need to identify the essence of and impact on the early adopters.

To measure VRD and ensure validity, an index was developed from guidances and official publications for UK listed companies and banks in particular that have emphasised on risk disclosure. These sources include the Financial Reporting Council publications, British Bankers Association code (2010) and the Enhanced Disclosure Task Force report of the Financial Stability Board (see Appendix C). In total, there were 88 sub-items from the categories as shown in the risk disclosure index (80 sub-items for MRD and 8 sub-items for VRD). Scores were assigned based on whether the disclosure item appeared in the annual reports of the banks (i.e. 1 if disclosure was made on the sub-item of the risk disclosure index and 0 where there is no disclosure). Hence, the maximum score obtainable was 88 in total (80 for MRD and 8 for VRD) and the minimum score obtainable was 0. To ensure reliability, cronbach's alpha was used to check for internal consistency of coding items of the index (Cormier and Magnan, 2015). The

Cronbach's alpha was 94.2% indicating high internal consistency.

Adumbrative risk reporting was measured based on VRD index following ARD criteria[16]. These are recommendations for specific risk disclosure and recommendations on how generic risks affect the banks' activities. First, adumbration implies relevant risk information which relate to recommendations on effective risk disclosure. Second, the disclosures were secreted in sections of the annual report other than the risk section. Third, adumbration implies partial disclosure. This connotes that the risk information is incomplete (e.g., risk identification without information about financial or economic impacts or mitigation measures). Thus for adumbration, the researcher scored 1 where (i) the VRD is presented only in other sections of the annual report and not reiterated in the risk management section, and (ii) the risk impact or actions to manage the identified risk is not disclosed. Banks that provided VRD in the risk section of the annual report, stating the risk impact and management were scored 0 for transparency.

5.4.4 Control variables

5.4.4.1 Exchange rate effect

There have been controversies as to the agreement on whether or not exchange rate affects foreign investment income of multinational banks. Bodnar and Weintrop (1997) discovered that exchange rates had no significant effect on foreign income, and Lee and Suh (2012) found that exchange rate had no effect in explaining stock return variability of multinationals. In contrast and in reference to the global financial crisis that started in 2007, Dimitriou and Kenourgios (2013) found that apart from the early and late phases of the crisis, there was a correlation between exchange rates and stock returns. Following Collett and Hrasky (2005), the researcher controlled for exchange rates by assigning 1 to cross- listed banks and 0 to banks that are only listed on London Stock Exchange (LSE). This data was collected from Datastream.

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[16] Based on the research of Hall (1964), adumbration entails indirect communication of incomplete but relevant information to a receiver. This information is relevant as it relates to a future event or forms part of sender's information not intended to be fully disclosed. This was related to risk disclosure as in Paper 1, Chapter 4 as risk information that is relevant (in this case this is being related to voluntary disclosure), incomplete (not stating impact of risk or actions to mitigate risk) and indirectly presented (provided in other sections of the annual report and not reiterated in the risk management section).

5.4.4.2 Misconduct costs

It has been established that misconduct fines levied have negative effect on offending bank's performance. Aguzzoni, Langus and Motta (2013) showed that legacy costs imposed on firms affect their market capitalisation, profits and their reputation in extension. Similarly, Zeidan (2013) found that offending banks experience operating performance losses, negative reaction from the market and reputation losses. As recommended by Tracey, Schnittker and Sowerbutts (2017), misconduct was measured as Misconduct provisions to Total assets. This data was collected from the Financial Conduct Authority enforcement website (FCA, 2019).

5.4.4.3 Other control variables

Findings from existing literature have shown that corporate governance characteristics such as board size, proportion of independent directors, number of board meetings held, number of board sub-committees and CEO duality can have an impact on operational performance (Erkens, Hung and Matos, 2012; García-Meca et al., 2015). Therefore, the researcher controlled for the effect of corporate governance characteristics on bank performance. Data on corporate governance characteristics were collected from the annual reports of the banks. Dietrich and Wanzenried (2014) have also found that higher capital adequacy ratio indicates lower risk which in turn leads to better performance of banks. Thus the researcher controlled for capital adequacy, using Tier 1 capital ratio as a proxy. Opler and Titman (1994) and Campello (2006) found a negative relationship between financial leverage and firm performance. Therefore, debt to assets (measured as total debt to total assets) and debt to equity (measured as total debt to shareholders equity) were used as proxies for financial leverage to control for this effect. Furthermore, existing literature has highlighted that the extent of income diversity (i.e., income derived from other operations compared to interest income) affects bank performance. For example, Busch and Kick (2009), Köhler (2015) and Mergaerts and Vennet (2016) found that income diversity leads to bank profitability in the long-run with the latter study extending this result only to retail banks. In contrast, Lee, Yang and Chang (2014) found no relationship between non- interest income and performance while Aebi et al. (2012) and Kuppuswamy and Villalonga (2015) found a negative relationship between income diversity and performance. Following Aebi et al. (2012), income diversity was measured as follows: 1 – (Net interest income/Total operating income). The researcher also controlled for operational efficiency measured as cost to income ratio, bank size measured in absolute value and as the natural logarithm of asset size. These data were collected from Datastream.

5.4.5 The empirical model

Model 1 is a panel data regression model developed based on the hypotheses predictions. Panel data was suitable for the analysis in this study in order to observe the degree of each type of risk disclosures (MRD, VRD and ARD) of the banks over the different years investigated and to identify the effect on bank performance. The dependent variable in the study is bank performance measured by Tobin's Q and ROE as an alternative measure of performance. The explanatory variables are the MRD, VRD and ARD while control variables are Misconduct costs (MC), Cross listing (CL), Corporate Governance characteristics (board size (BS), board meetings (BM), board independence (BI), Capital adequacy (CA), Financial leverage (FL), Income diversity (ID), Operational efficiency (OE) and Asset size (AS). A dummy variable (CRISIS) was included to differentiate during (2007-2009) and after (2010- 2016) the crisis period with 2007-2009 being the base years. β represents the slope, measuring how strong the independent variable explains bank performance. ε represents the standard error.

Model 1:

$$\text{Tobin'sQlead or ROElead} = \beta_0 + \beta_1 MRD + \beta_2 VRD + \beta_3 ARD + \beta_4 CL + \beta_5 MC + \beta_6 BS + \beta_7 BM + \beta_8 BI + \beta_9 CD + \beta_{10} BSUB + \beta_{11} OE + \beta_{12} CA + \beta_{13} FL + \beta_{14} ID + \beta_{15} AS + \beta_{16} BANK + \beta_{17} CRISIS + \beta_{18} YEAR + \varepsilon$$

5.5 Empirical Results and Discussion

5.5.1 Descriptive statistics

Table 5.2 shows the descriptive statistics grouped into continuous and dichotomous variables. The mean value of Tobin's Q shows that majority of the banks were performing relatively well as the average was above 1. The alternative measure of performance (ROE) also show that majority of the banks on average performed well. On average, the banks included in the study complied with MRD requirements (*M*=40) and also support the corporate governance recommendations on risk disclosure (*M*=6). The results of ARD show that some of the banks provided risk disclosures meeting the ARD criteria with an average of 33% (*M*=0.7). *Financial leverage* was high as expected due to the peculiar nature of the banking industry. On average, there were at least 12 board meetings held during a financial year, with 13 board members per financial year amongst which 66.9% were independent directors, with a mean of five board subcommittees.

Operational efficiency shows that on average, banks were efficient in minimising costs in relation to income. Also, the banks complied with capital requirements with some exceeding the minimum capital requirements to support their activities and ensure stability in operation. *Income diversity* results show that banks were well diversified rather than relying solely on lending activities (*M*=74%). Mean for *Misconduct cost* shows penalty provisions for mis-selling of payment protection insurance products to customers, foreign exchange and other customer redress, investigations regarding LIBOR activities and/or litigation concerning securitisation activities before the financial crisis.

The dichotomous variables table shows that throughout the observation periods for the banks included in this study, the CEO and Chairman had different positions and were not represented by the same person. Also, most banks were listed on more than one stock exchange market.

Table 5. 2 Descriptive statistics of dependent and independent variables

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Tobin's Q lead	51	0.950	1.760	1.03569	0.148449
ROE lead	51	-0.476	0.278	0.04655	0.109329
MRD index	61	17.00	58.00	40.2951	10.47592
VRD index	61	2.00	8.00	6.4426	1.43207
ARD index	61	0.00	2.00	0.6557	0.77212
Total assets	62	307628	2394570000	880384118.03	679298117.44
Natural log of assets	62	12.637	21.596	19.38762	2.566175
Number of board meetings (BM)	58	7.00	30.00	11.9483	5.32595
Board size (BS)	62	6.00	21.00	13.2742	3.84183
Board independence (BI)	62	0.33	0.87	0.6684	0.14959
Number of board subcommittee s (BSUB)	62	3.00	9.00	4.9516	1.15130
Operational Efficiency (OE)	62	-1.286	-0.452	-0.66550	0.171147
Capital adequacy (CA)	62	0.073	0.233	0.13465	0.034926
Debt to total assets (FL)	62	0.000	0.380	0.17949	0.094196
Debt to equity (FL)	62	0.000	17.184	4.22017	3.892735
Income diversity (ID)	62	0.000	1.312	0.74054	0.342839
Misconduct cost (MC)	62	0.000	0.014	0.00131	0.002343

Dichotomous variables: CEO duality and Cross listing

	CEO_duality	**Cross_listing**
Yes (1)	0	51
No (0)	62	11

5.5.2 Descriptive statistics of the trends in MRD and VRD practices across banks

Figure 5.1 shows the extent to which the investigated banks complied with risk disclosure requirements of CRD I of 2006 and CRD III of 2010 based on the analysis. While the banks investigated complied with both capital requirements directives, the researcher identified that the compliance level for the 2010 directive was lower compared to the 2006 directive. CRD III contains regulations on securitisation activity and disclosure of the effects of risks such as credit risks, market risks and liquidity risks on the securitisation exposure. One reason for less disclosure on securitisation activity from 2012 could be because the banks that were engaged in securitisation before and during the financial crisis reduced their involvement in this activity in the later years. This is consistent with findings of Cohen and Scatigna (2016) that banks in European advanced countries swiftly reduced their securitisation activity after the financial crisis. The reason for fluctuation in the maximum score for all banks is due to the inclusion of banks which started operation at different points in time (i.e. from 2010).

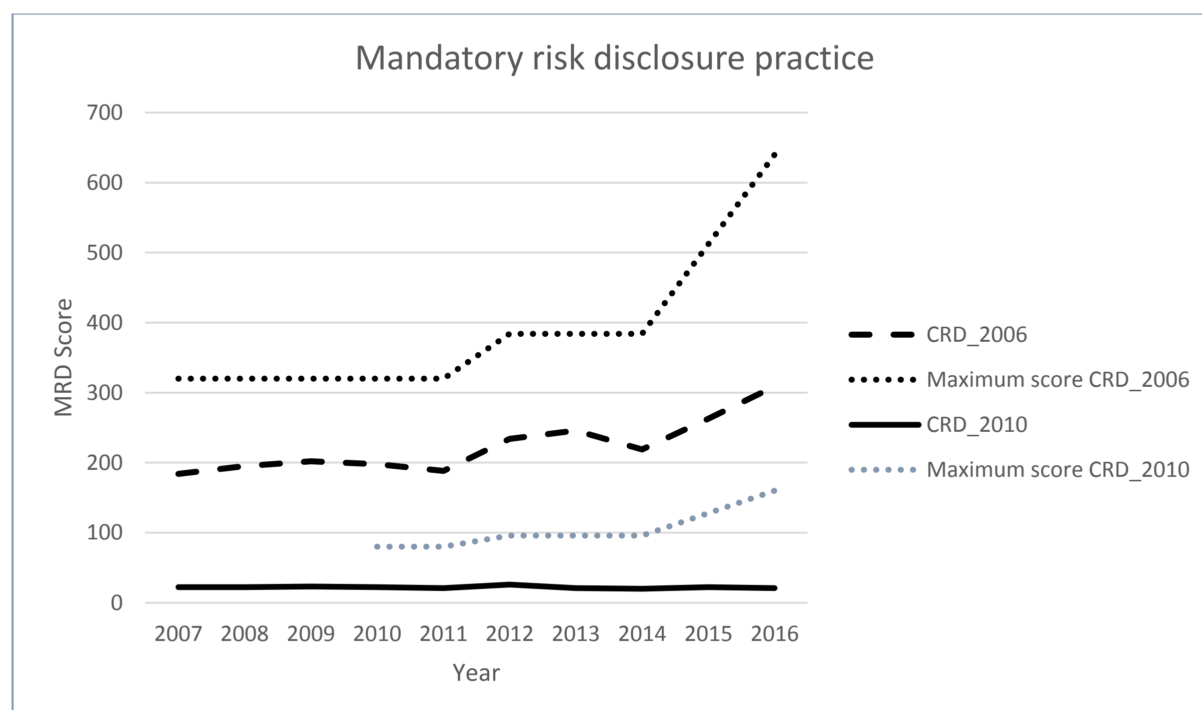


Figure 5. 1 Cumulative compliance level of banks with CRD I and CRD III by year.

Figure 5.2 shows, in aggregate, the extent to which the banks investigated have adopted recommendations on risk disclosure by the FRC (2009b, 2010, 2011, 2014d, 2014e, 2014f, 2015), BBA (2010), FSB (2012) and the UK Corporate Governance code (2016) from 2007 to 2016. The VRD_2009 trend shows that even before the recommendation from the FRC (2009)'s *Going concern and liquidity risk: guidance for directors*, some banks were already providing specific examples of likelihood of risk, explaining the impact (financial or economic), and providing examples of how risks identified have been (or are intended to be) managed. Also, some banks already put into practice the disclosure of the current state of recurrent risks even before the recommendations by the FRC (2010a)'s *Effective company stewardship: enhancing corporate reporting and audit guidance*. The same explanation applies to VRD_2011 and VRD_2014. VRD_2015 shows how banks adopted disclosure of long term viability statement as recommended by FRC (2014d; 2015)[17]. From the aggregate score which increased swiftly in 2016, it shows that most banks started this practice in 2016.

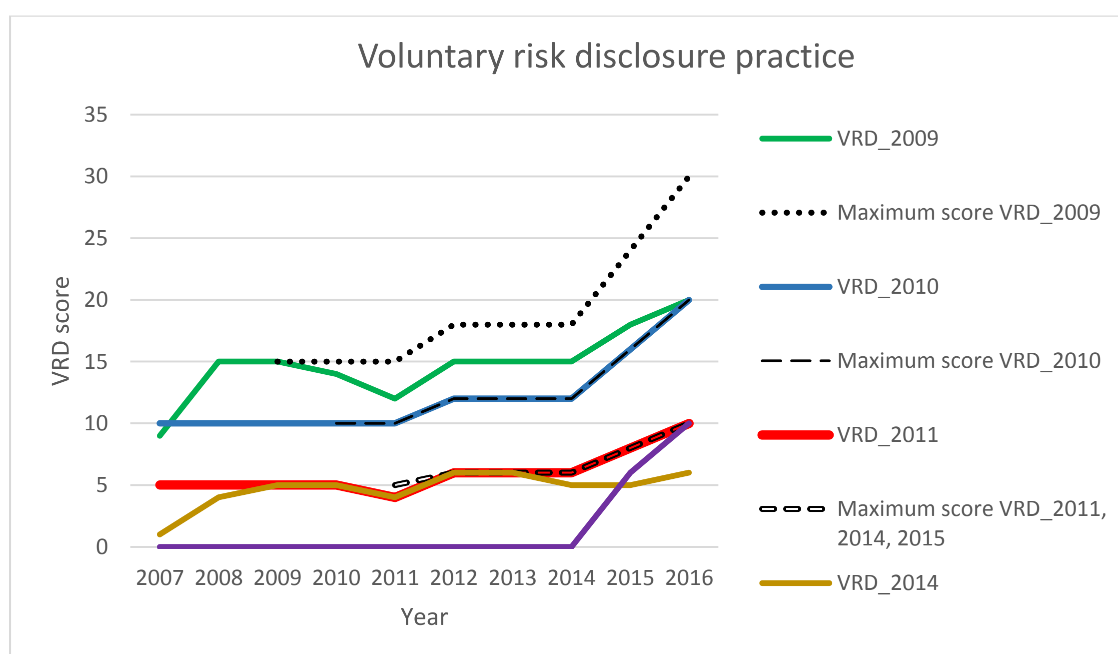


Figure 5. 2 Cumulative application of official recommendations by banks on risk disclosure by year.

[17] FRC (2014d) and FRC (2015) recommend that the board provide a viability statement on a broader perspective, which refers to their expectation on the ability of the company to carry on operations after assessment of principal risks identified.

5.5.3 MRD, VRD and ARD during and after the financial crisis

Banks included in Figure 5.3 comprise the large banks as these were the UK registered and listed banks in existence before and during the financial crisis. Other banks came into existence after the crisis. Figure 5.3 shows that these banks complied with voluntary recommendations on effective risk disclosure practice. Also, to a reasonable extent (above 60%), the banks complied with risk disclosure regulations. However, adumbration was found to be practiced by some banks in 2007, rising steeply in 2008 after which it decreased towards the end of the financial crisis. This is an interesting observation because VRD was 100% where banks disclosed risk information recommended in the later period during the crisis while ARD fluctuated (see section 5.5.2). This shows that although the banks may have applied recommendations on risk disclosure to show effective disclosure and corporate governance practice, some of these disclosures on risk identification, impact and management were not transparently presented in risk management sections of the annual reports[18].

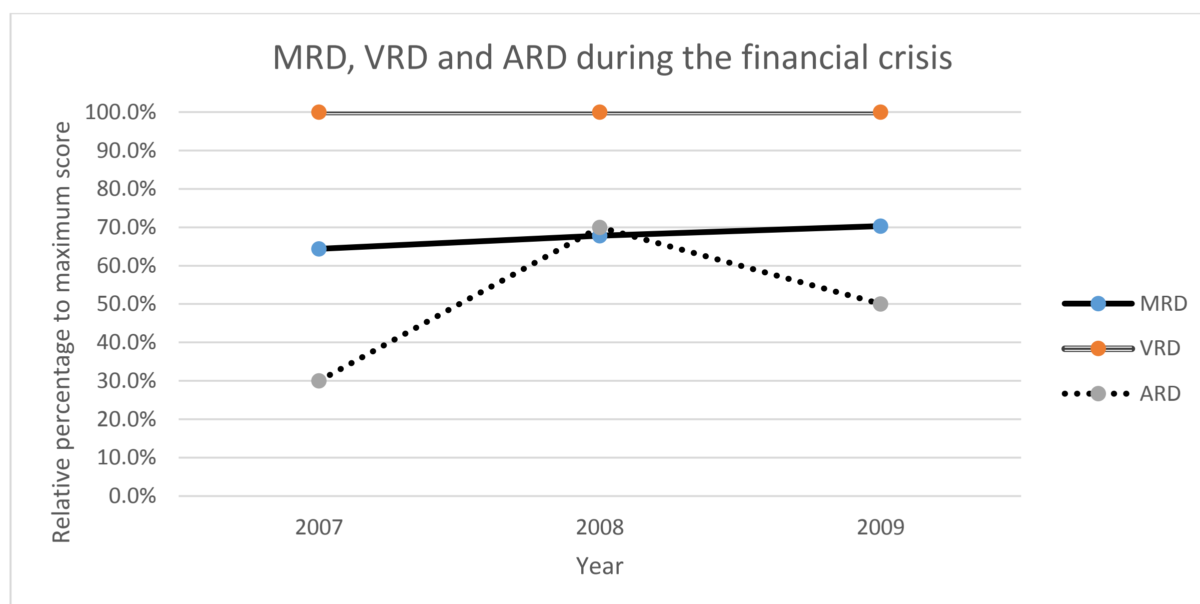


Figure 5. 3 Mandatory, voluntary and adumbrative risk disclosure practice during the financial crisis.

[18] The official recommendations form part of the UK Corporate Governance code which is quasi-mandatory. This means that UK listed companies are required to comply with the code or explain why they have not complied if another approach is used.

The high level of application of VRD recommendations by the banks investigated may have distracted users of the report from identifying adumbrative practice where risk information was not fully disclosed. This is unlike the discretionary disclosure principle of Dobler (2008) where managers intentionally withhold risk information that may harm the firm. In this case, the banks have not withheld disclosure of risks they have identified, rather they have only made it less conspicuous for readers to identify the risk and/or how significant it is to their activities. The increase in adumbration in 2008 may have been as a result of a fear of a'bank run' and decline in market value, amongst others, as was happening to failed banks (Shin, 2009). Less practice of adumbration in 2009 may be as a result that problems in the banks had already been made conspicuous to the public and, therefore, withholding part of risk information was no longer necessary or that the crisis was coming to an end (Wolf, 2009). This could also be as a result of closer supervision of banks by the Financial Services Authority to ensure that banks were fully transparent and effective corporate governance practice was in place (FSA, 2009).

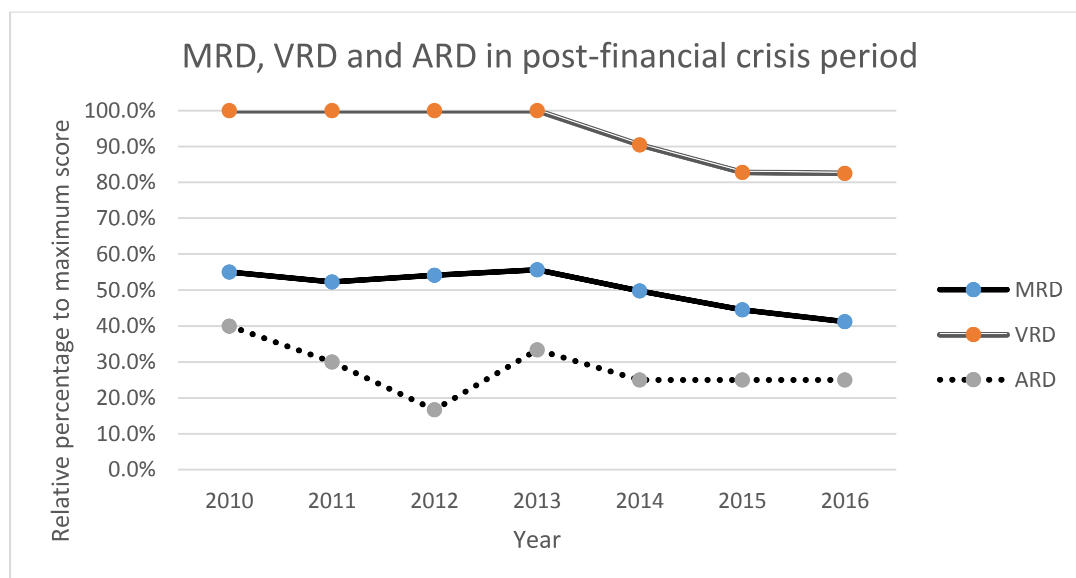


Figure 5. 4 Mandatory, voluntary and adumbrative risk disclosure practice after the financial crisis.

Figure 5.4 shows lower compliance with MRD and lower adoption of VRD recommendations following the implementation of CRD III and amendments of the UK Corporate Governance code based on official recommendations. ARD fluctuated but was much lower than during the financial crisis period (see Figure 5.3). However, Figure 5.4 shows that though ARD is relatively high, the practice has remained steady from

2014 to 2016 despite the fact that VRD reduced sharply in the same time period. This highlights a cause for concern following that ARD was measured based on VRD recommendations.

5.5.4 Regression analysis

5.5.4.1 Multicollinearity problem

In order to minimise the risk of obtaining unreliable regression analysis results, it was important to check for issues of multicollinearity. This occurs where independent variables are highly correlated leading to wrong coefficient estimates (Dougherty, 2016). Hence, the researcher checked for multicollinearity by evaluating the correlations between the independent variables and removing variables that were highly correlated based on their importance to the study (for example where MRD was highly correlated with *cross listing*, *cross listing* was excluded from the model). Although, there is no general rule on what percentage of correlation can be considered as too high, Hassan (2009) recommended that correlation of 70 per cent or more can create multicollinearity problem.

Table 5. 3 Correlation matrix of variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
TobinsQ lead(1)	1	-.670**	-.625**	-0.043	-0.040	-.529**	-.656**	-0.168	0.157	.623**	-.610**	-.391**	-0.269	-0.226	-.764**	-.512**	-.807**
MRD(2)	-.670**	1	.660**	.293**	-.225	.547**	.807**	.355**	-.172	-.507**	.549**	.323*	.559**	.361**	.752**	.802**	.903**
VRD(3)	-.625**	.660**	1	0.200	-0.053	.408**	.671**	.291*	-.304*	-0.239	.387**	0.223	.295*	.383**	.597**	.471**	.695**
ARD(4)	-0.043	.293*	0.200	1	-0.027	0.109	0.143	-0.144	0.103	-0.193	0.209	.328**	0.066	-0.125	0.123	.421**	0.228
Board meetings(5)	-0.040	-0.225	-0.053	-0.027	1	-0.163	-.295*	-.315*	0.013	0.017	.317*	.403**	0.018	-0.189	-0.074	-0.063	-0.079
Board size(6)	-.529**	.547**	.408**	0.109	-0.163	1	.454**	.448**	0.114	-.628**	.372**	0.248	.457**	-0.023	.576**	.515**	.685**
Board independence(7)	-.656**	.807**	.671**	0.143	-.295*	.454**	1	.367**	-.434**	-.292*	.357**	0.105	.477**	.476**	.689**	.614**	.785**
Board subcommittees(8)	-0.168	.355**	.291*	-0.144	-.315*	.448**	.367**	1	-0.022	-0.036	-0.161	-.349**	0.157	0.139	0.202	0.241	.256*
Operational efficiency(9)	0.157	-0.172	-.304*	0.103	0.013	0.114	-.434**	-0.022	1	-.258*	0.041	0.098	-0.017	-.762**	-0.246	-0.066	-0.183
Capital adequacy(10)	.623**	-.507**	-0.239	-0.193	0.017	-.628**	-.292*	-0.036	-.258*	1	-.626**	-.593**	-.372**	0.089	-.423**	-.542**	-.643**
Debt to total assets(11)	-.610**	.549**	.387**	0.209	.317*	.372**	.357**	-0.161	0.041	-.626**	1	.837**	.499**	-0.038	.641**	.519**	.710**
Debt to equity(12)	-.391**	.323*	0.223	.328**	.403**	0.248	0.105	-.349**	0.098	-.593**	.837**	1	.289*	-0.144	.432**	.460**	.495**
Income diversity(13)	-0.269	.559**	.295*	0.066	0.018	.457**	.477**	0.157	-0.017	-.372**	.499**	.289*	1	0.202	.576**	.545**	.643**
Misconduct(14)	-0.226	.361**	.383**	-0.125	-0.189	-0.023	.476**	0.139	-.762**	0.089	-0.038	-0.144	0.202	1	.261*	0.137	.296*
Cross-listing(15)	-.764**	.752**	.597**	0.123	-0.074	.576**	.689**	0.202	-0.246	-.423**	.641**	.432**	.576**	.261*	1	.603**	.876**
Total assets(16)	-.512**	.802**	.471**	.421**	-0.063	.515**	.614**	0.241	-0.066	-.542**	.519**	.460**	.545**	0.137	.603**	1	.815**
Natural log of assets(17)	-.807**	.903**	.695**	0.228	-0.079	.685**	.785**	.256*	-0.183	-.643**	.710**	.495**	.643**	.296*	.876**	.815**	1

*. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The correlation matrix in Table 5.4 above between the continuous variables shows that *board independence* is highly correlated with MRD and *bank size* is highly correlated with MRD and VRD. Therefore *board independence* and *bank size* are omitted from the model. *Debt to equity ratio* is highly correlated with *debt to total assets ratio*. Although both variables have significant correlations to bank performance, *debt to asset ratio* has a higher correlation to performance (Tobin's Q and ROE) compared to *debt to equity ratio* and performance. However, the researcher cannot make the decision to omit either of the two without further evidence on the degree of collinearity. The same explanation goes for *operational efficiency* and *misconduct cost*. The researcher then applied Variance Inflation Factor (VIF) in order to arrive at the best combination of variables for the model with minimum multicollinearity. VIF measures the degree of multicollinearity among variables (O'Brien, 2007). According to the rule, when VIF of a variable is 10 or more, then there is a severe cause for concern (O'Brien, 2007). None of the variables included in the model had VIF exceeding 10. However the lowest average VIF (2.038) was attained when *debt to total equity ratio* and *operational efficiency* were omitted from the model.

Hence, the revised model is as follows: Model 2:

Tobin'sQlead or ROElead= $\beta_0 + \beta_1 MRD + \beta_2 VRD + \beta_3 ARD + \beta_4 MC + \beta_5 BS + \beta_6 BM + \beta_7 BSUB + \beta_8 CA + \beta_9 FL + \beta_{10} ID + \beta_{11} BANK + \beta_{12} CRISIS\ \beta_{13} YEAR + \varepsilon$

Hence the final list of variables were used in the multiple regression analysis as shown in Table 5.5 below.

Table 5. 4 Regression results

	Dependent variables			
	Tobin's Q lead		ROE lead	
	Crisis effect	Year effect	Crisis effect	Year effect
Independent variables				
Constant	1.135***	1.156***	0.040	0.156
	(0.000)	(0.000)	(0.792)	(0.267)
MRD	-0.002***	-0.002***	-0.006**	-0.009***
	(0.002)	(0.001)	(0.039)	(0.002)
VRD	-0.001	0.000	0.034**	0.043***
	(0.680)	(0.941)	(0.035)	(0.006)
ARD	-0.004	0.002	0.004	0.021
	(0.305)	(0.647)	(0.832)	(0.295)
MC	-2.579	-0.325	-14.192	4.207
	(0.219)	(0.901)	(0.162)	(0.718)
BS	-0.001	-0.001	-0.001	-0.006
	(0.574)	(0.341)	(0.875)	(0.287)
BM	0.000	0.000	0.002	0.003
	(0.656)	(0.962)	(0.581)	(0.275)
BSUB	0.003	0.005	0.027	0.050***
	(0.354)	(0.181)	(0.107)	(0.007)
CA	-0.098	-0.121	-0.035	0.177
	(0.514)	(0.399)	(0.961)	(0.782)
FL	-0.220***	-0.251	-0.535**	-0.768***
	(0.000)	(0.000)	(0.036)	(0.003)
ID	0.026**	0.023*	0.046	0.039
	(0.043)	(0.063)	(0.440)	(0.475)
CRISIS	-0.015		-0.054	
	(0.100)		(0.230)	
Year		-0.005		-0.032
		(0.078)		(0.007)
N	51	51	51	51
Adjusted R^2	0.645	0.649	0.270	0.386
Durbin-Watson statistic	1.926	1.949	2.483	2.507
Model F	8.417***	8.558***	2.515**	3.567***

Figures in parenthesis are p-values. ***,**,* significant at 0.01, 0.05 and 0.10 respectively

5.5.4.2 Regression Results and Discussion

The adjusted *R-squared* statistic shows how much the model is able to explain change in bank performance as a result of change in the independent variables used. As shown in Table 5.4, with the different measures of performance applied, the model is able to

explain reasons for change in bank performance, the stronger being 64.5% (64.9%) when Tobin's Q was used as a measure for bank performance and weaker being 27% (38.6%) when ROE was used as performance measure. The *F*-values are significant signifying that there is a significant relationship between the set of independent variables included in the model and bank performance. Furthermore, the researcher controlled for the possibility of autocorrelation in the sample with Durbin-Watson statistic. As suggested by Alsaeed (2006), autocorrelation problem may occur where Durbin-Watson value is less than 1 or more than 3. This is well above 2 for Tobin's Q and approximately 2.5 for ROE, signifying that autocorrelation is well minimised in the model.

The results are consistent with mandatory disclosure theory, that it affects performance and voluntary disclosure theory, that it has a positive effect on performance. Table 5.5 shows that, consistent with H1, MRD is negatively and significantly related to both measures of bank performance in this research when other variables are fixed. This supports other findings in the existing literature (Hassan, 2009; Miihiknen, 2012; Elshandidy et al., 2015; Bischof et al., 2016) which typically indicate that banks tend to disclose less if there is a high volatility in future earnings and cost of disclosure tends to be higher for smaller banks (Oliveira et al., 2011). It seems logical that banks might disclose less if future earning are volatile, given that releasing news of anticipated risk in future profits could cause concern for stakeholders. However, in relation to the cost of disclosure being higher for smaller banks, the researcher argues that this reason may not always apply since the results for large banks alone were similar to the results when all banks were included, p=0.011 (0.002) and 0.019 (0.039) for Tobin's Q and ROE respectively. This may be because, generally, regulatory authorities tend to enforce requirements that may not be followed, unless otherwise recommended, due to the perceived negative effects on bank performance (Darrough, 1993). Hence, banks are compelled to comply with this disclosure which in-turn may negatively affect their performance. This issue may have been identified by the supervisory authority of the banks based on modification in recent regulatory act and recommendations. For example, the 2013 amendment to UK Companies Act (2006) stated in relation to disclosure of principal risks and uncertainties that: "Nothing in this section requires the disclosure of information about impending developments or matters in the course of negotiation if the disclosure would, in the opinion of the directors, be seriously prejudicial to the interests of the company" (414C, 14). Similarly, the FRC (2014e)'s *Guidance for Directors of Banks on Solvency and Liquidity Risk Management and the Going Concern Basis of Accounting* has recommended that banks that seek for emergency liquidity assistance or any form of liquidity insurance facilities from the Bank of England should

still make disclosures based on going concern unless it has been proven that the bank is insolvent or that repayment of such loan may affect the normal activities, (7,64).

From the regression results with ROE, the result show that the more banks provide risk information voluntarily, the better their performance in the following financial year (p=0.035; 0.006). This result is statistically significant and consistent with the prediction of H2. This result is also consistent with findings from existing literature on studies of non-financial firms (Lang and Lundholm, 1993) and banks (Nahar et al., 2016; Al-Maghzom, 2016). As expected, banks that follow recommendations on effective risk disclosure practice provide more information to investors which reflects positively on their performance. It may also be the case that these banks provided more risk information voluntarily because they have already assessed and forecast a favourable future performance (Healy and Palepu, 2001). This result disagrees with the studies of Linsley et al. (2006) and Oliveira et al. (2011) which showed no association between risk disclosure and performance. The difference in results may be as a result of observation period as this study took a longitudinal approach while the studies of Linsley et al. (2006) and Oliveira et al. (2011) covered one financial year.

The nature of relationship between ARD and bank performance is estimated to be negative for Tobin’s Q and positive for ROE. However, these results are not statistically significant. Therefore, the researcher cannot conclude that there is a relationship between minimal and indirect disclosure of risk information relating to negative events, and bank performance. The researcher highlights a cause for concern on adumbrative risk reporting practice. As shown in section 5.5.3, while VRD reduced, ARD remained steady especially towards the end of the observation period. Where VRD continues to decrease, reaching the level of ARD practice, the researcher suggests that this may affect the nature of relationship between VRD and bank performance. In essence, the ineffective and non- transparent risk disclosure practice may become conspicuous as risk information is constantly being secreted in other sections and incomplete, which may raise awareness of investors on this practice and affect their future market based performance or, at worst, lead to a bank run. Hence, the researcher suggests that banks should aim for transparency while reporting risks voluntarily.

Among the control variables, the negative relationship between *debt to assets ratio* (FL) and bank performance is statistically significant depicting that a decrease in debt to assets ratio will lead to a better performance. This is consistent with existing literature (Opler and Titman, 1994; Campello, 2006). Where a bank is able to maintain a low debt

to asset ratio, financial risk is low and, therefore, the bank is in a position to deliver a better performance. Among the corporate governance characteristics, there is a positive and statistically significant relationship between the *number of board subcommittees* (BSUB) and bank performance (ROE). This means that the higher the number of committees delegated with different functions towards practising effective corporate governance, the better the performance in the next financial period. This is consistent with the finding of García-Meca et al. (2015). However, *board size* (BS) and *number of board meetings* (BM) are not statistically related to bank performance. Also, consistent with the findings of Busch and Kick (2009), Köhler (2015) and Mergaerts and Vennet (2016, *income diversity* (ID) is statistically and positively related to bank performance. As expected, banks that are well diversified are less prone to risk, which should improve their performance. It is possible to attribute this good performance to larger banks as they have more resources to engage in different activities (Aebi et al., 2012). However, the results of the present research also indicate that there was no significant relationship between *income diversity* and *performance* when only large banks were included in the sample. A possible reason may be as a result of the level of risk of other activities the banks diversified into towards the financial crisis (Köhler, 2015).

In order to check for more robustness of the model on effect of risk disclosure on performance, the researcher grouped mandatory and voluntary disclosure to check if risk disclosure is related to future performance. The relationship was still significant at *p*-value=0.001 with Tobin's Q.

5.5.5 Limitations and Future Directions

Some limitations have been identified in this paper. First, the sample included in this study is small due to data availability. This research only investigated UK listed banks that were regulated by the Financial Services Authority, Bank of England and Her Majesty's Treasury until 2012[19]. Second, not all banks were observed in the same period due to their different dates of establishment as some were established after the financial crisis. Future research may include non-listed banks across different countries to identify if the impact of risk disclosure on bank performance is still significant. Third, although multicollinearity and autocorrelation issues were controlled for, endogeneity issues could not be eliminated completely. The mere fact that the level of risk disclosure is influenced

[19] The Financial Services Authority was replaced by the Financial Conduct Authority and Prudential Regulatory Authority in 2013.

by managers and directors, endogenous problems are bound to arise as a result of potential reasons for disclosure (Rogers, 2008). These issues include omitted variables and self-selection bias (Moore, 1989; Chenhall and Moers, 2007; Iyengar and Zampelli, 2009). Measures to solve the endogeneity problems include using propensity score matching to ensure balanced distribution of observed covariates between higher level risk disclosure and lower level risk disclosure to address selection bias (Rosenbaum and Rubin, 1983). To address omitted variables bias, yearly change in level of risk disclosure could be measured (An, Huang and Zhang, 2013). Another problem that could arise is the issue of reverse causality (i.e. future performance may have an effect on risk disclosure quality). The use of valid instrumental variables could be used to address this bias (Cheung et al., 2010). Fourth, in the analysis, adumbration was restricted to voluntary risk disclosures using the constructed risk disclosure index of official publications that have discussed risk disclosure. Disclosures not specified in the index may have been omitted. This may be the reason for not finding a significant effect of adumbration on performance and likewise the reason for finding different results from Paper 1 (Chapter 4) as it was found that the bank with more adumbrative risk disclosure practice did not survive the financial crisis. Future research may go beyond this restriction and conduct an event study to identify ARD practice by comparing risk disclosures relating to negative events of individual banks, and relating this to performance. Finally, the researcher only collected data on risk disclosure from annual reports of the banks. Other sources such as interim reports, analysts' reports and press releases could provide information on risk disclosure practice of banks. Future research may address this issue by including all available sources when collecting risk information of banks and possibly compare differences in degree of risk information released in each source.

5.6 Conclusion

This paper examined the effect of mandatory, voluntary and adumbrative risk disclosures on performance of banks during and after the financial crisis of 2007-2009. The main research question of this thesis is to assess the extent to which risk information in annual reports predict the future performance of banks. This chapter investigated risk disclosure in relation to market based and accounting based performance. The research analysed annual reports over a ten-year period of eleven banks registered and listed in the UK. The findings of this research support the need for moderation in regulations and encouragement of banks to disclose useful risk information voluntarily. The researcher arrived at these recommendations because the results showed that MRD practice was

negatively related to bank performance, while VRD practice was positively related to bank performance. The results showed that UK banks were more compliant with the CRD I (2006) than CRD III (2010) disclosure directives as the years progressed. This may be the case because some banks had reduced their involvement, or avoided securitisation activity completely after the financial crisis and, therefore, there was no need for disclosure. With regards to VRD, the results showed that some recommendations advised in later periods were already practiced by some banks prior to the publication of these recommendations. The result also showed that financial leverage was negatively related to bank performance while number of board subcommittees was positively related to bank performance. While ARD practice was found in banks, this practice decreased following the financial crisis. This is interesting because while banks demonstrated strong compliance with VRD, traces of obscure risk reporting were found. The regression results show no significant association between ARD and bank performance.

This paper contributes to limited existing literature on longitudinal study of the comparison of risk disclosure practices to bank performance. The research attempted to expand voluntary risk disclosure theories by including adumbration in risk disclosure. Based on the empirical findings, it is important to study risk disclosures when predicting bank performance. The more banks comply with regulations on risk disclosure the worse their future performance. Whereas providing risk information that is not required but recommended improves future performance. However, the researcher highlights a cause for concern. Assuming risk disclosure regulations remain unspecific, recommendations are moderated in their application, and banks continue to voluntarily report risks adumbratively as shown in the results of this research, this may affect the nature of relationship between VRD and bank performance. Possibly banks may become motivated to be more discrete with risk disclosure especially where the likelihood of a negative event is high. This could widen information asymmetry among investors and, finally, contribute to disastrous outcomes like the previous financial crisis. Additionally, with the relaxation of risk disclosure requirements, banks may see the need to disclose principal risks (only risks that affect the normal activities of the bank and the achievement of set objectives) but there is a risk of negative reaction from investors especially when this practice is not uniform across the industry.

Narrative bridge

Chapter 5 investigated the impact of mandatory, voluntary and adumbrative risk reporting practice on the performance of UK registered and listed banks during and after the global financial crisis of 2007 to 2009. The results led to the suggestion that risk disclosure requirements should be moderated because mandatory risk reporting was found to be negatively related to performance while voluntary risk reporting was positively related to performance. The results also showed that adumbration did not have a significant influence on performance.

While it has been established that national cultural differences affect the level of risk reporting across non-financial firms (Elshandidy et al., 2015; Dobler et al., 2016; Khlif and Hussainey, 2016), the level of transparency in terms of reporting risk information in line with actual occurrences across countries is yet to be investigated in the banking sector. Also, the direction of relationship between national culture and risk reporting has yielded mixed results in prior research. While the research has shown that firms supervised and regulated by the same authorities in the same country may still observe different practices (Hofstede, 1980), the researcher argues that it is important to investigate the risk reporting practice of banks on a broader perspective. This is necessary in order to understand whether and how banks across different countries being regulated by the same authority (e.g., European banks regulated by the European Banking Authority), practice risk reporting. Therefore national cultural differences are examined in line with informative risk reporting practice of banks across Europe in Chapter 6.

Chapter 6: Assessing the relationship between national culture and the risk reporting transparency of European banks

Abstract

Over the years, there have been conflicting views on the direction of the relationship between national cultural dimensions and risk reporting practices (Gray, 1988; Hofstede, 2001). However, no studies have investigated the relationship between national culture and risk disclosure in banks. To address this issue, the researcher examined the extent to which national cultural values affect risk reporting transparency in European banks. Using voluntary disclosure theory to explain differences in risk reporting transparency, a longitudinal analysis of risk information in the annual reports of 30 large European banks was conducted and these were compared to the negative events that actually occurred following the release of these annual reports. The researcher then examined how these risk reporting practices related to the national cultural dimensions of uncertainty avoidance, power distance and long-term orientation using weighted least square regression analysis. The results showed that uncertainty avoidance was negatively related to risk disclosure transparency and, surprisingly, that power distance was positively related to risk disclosure transparency. Among the control variables, it was found that listing on the New York Stock Exchange (NYSE) was positively related to transparent risk reporting. These findings show that when studying the risk reporting practices of banks, it is important to understand how national cultural traits can lead to differences in the way that banks report and predict negative future events. Hence, the study suggests that most countries would benefit from embracing non-categorised disclosure regulations that encourage banks to be more focused on managing and reporting risks of potential significance.

Keywords: Banking industry, National culture, Risk reporting, Transparency, Voluntary disclosure theory.

6.1 Introduction

In any given economy, large banks are vital to the financial state, which is one reason why the banking industry is highly regulated (Stern and Feldman, 2004; European Banking Authority, 2014). The importance of banks to national economies was revealed by the unfortunate events following the global financial crisis of 2007-2009 which resulted in a massive increase in unemployment rates and decrease in the gross domestic product in most European countries. This led to the need to recapitalise the banking system and to instigate government-backed bail-outs (Goddard, Molyneux and Wilson, 2009; Karanikolos et al., 2013). Research has also shown that the complexity and lack of understanding of banking operations, including the risk management procedures adopted by banks, substantially contributed to the financial crisis (Allen and Moessner, 2012; Acharya and Viswanathan, 2011). Immediately prior to the crisis, risk information supplied by many banks was rather convoluted and/or uninformative, making it difficult for external parties to effectively understand the bank's risk management activities (Jizi and Dixon, 2017). One cited reason for this deficiency is the ambiguous and strict regulations on risk reporting that banks were required to follow at that time (Pérignon and Smith, 2010). Hence, banks either provided their interpretations on risk disclosure or simply complied with disclosure regulations as a dutiful exercise rather than aiming to inform users on the risks that affect their activities (Pérignon and Smith, 2010; Oliveira, Rodrigues and Craig, 2011). Consequently, prior research has encouraged voluntary risk reporting because it is deemed to be more informative and to elicit disclosures that are specific to the bank's circumstance. By comparison, mandatory risk reporting tends to elicit compliance but can lead to uninformative or opaque disclosures concerning known risks (Cheung, Jiang and Tan, 2010; Oliveira et al., 2011)

When banks are transparent and report informatively on the risks that they actually face while carrying out their business activities, it can be of benefit to both the stakeholders and management. For stakeholders, it helps to reduce uncertainty and agency costs, evaluate the effectiveness and competency of the reporting bank's risk management system, and assist in determining the bank's success in both the short- and long-term (Linsmeier, Thornton, Venkatachalam and Welker, 2002; Jizi and Dixon, 2017). For the management, being transparent in risk disclosure builds investors' confidence and potentially has a lasting positive effect on the bank's stock price (Dobler, 2008; Campbell, Chen, Dhaliwal, Lu and Steele, 2014). Uninformative risk reporting practices can also have dire consequences. If the risk disclosure is mandatory, the bank may be penalised for non-disclosure.

In the case of voluntary disclosure, for example, a study conducted by Hutton, Marcus and Tehranian (2009) found that firms which practiced non-transparent disclosure or opaque disclosure, (measured by the non-disclosure of firm-specific information) were affected in the long-run. Specifically, Hutton et al. (2009) found that these firms were more likely to experience a 'stock price crash' because they had withheld small pieces of important information to a point where its non-disclosure was no longer viable. Consequently, when the consolidated information had to be released, it resulted in a price crash.

The impact of national culture, as a predictor, on risk reporting differences has already been established in a limited amount of research on non-financial firms. Elshandidy, Fraser and Hussainey (2015) investigated the impact of firm and country characteristics on mandatory and voluntary risk reporting using Germany, UK and US as case studies. Their sample included firms in materials, industrials, consumer goods, health care, consumer services, telecommunication, utilities and technology industries. They found significant associations between risk disclosure and national cultural dimensions. Specifically, they found that non-financial firms in societies with lower power distance (the degree to which a society accepts power inequality), uncertainty avoidance (the degree to which a society avoids uncertainty), individualism (the degree to which a society perceives that ties between individuals are loose) and long-term orientation (the degree to which a society plans for the future) are more likely to show less differences in voluntary disclosures. In terms of mandatory risk disclosures, they found that non-financial firms with higher uncertainty avoidance, long-term orientation and lower individualism are more likely to provide higher levels of mandatory risk disclosures. Similarly, Dobler, Lajili and Zeghal (2016) investigated the impact of national cultural values on the level of risk disclosure of manufacturing firms, using Canada, US, UK and Germany as case studies. They also found that risk disclosure is significantly associated with national cultural values. Specifically, they found that uncertainty avoidance, individualism, long-term orientation and power distance are positively associated with the level of risk disclosure.

Both studies measured risk disclosure by the number of risk-related sentences from the annual reports (using a list of risk keywords to identify the statements). This technique tends to omit the meaning of the risk information disclosed. Also, the risk information were not related to actual events that the reporting firms have experienced. To the best of the researcher's knowledge, no research has investigated national cultural differences on the risk reporting of banks. Perhaps the most closely related study was conducted by

Boussanni, Desrochers and Préfontaine (2008) who found that there were differences in the extent to which financial liquidity risk was disclosed by 21 Western European banks. However, their study did not address national cultural differences and was restricted to liquidity risk. The researcher argues that it is important to identify whether informative risk disclosures relate to the cultural characteristics of the countries where a bank is domestically resident. Additionally, the findings from prior research that there is a relationship between national cultural differences and risk reporting practices of non-financial firms provides a good cause to suspect that this relationship may also exist in the banking sector. Therefore, the main research question is: *To what extent does national culture affect the risk reporting quality of European banks?*

The findings of this research can inform on how social norms in different societies affect business activities and the extent of this impact. This research also provides a methodological contribution to the study of risk reporting and national culture due to the need to ascertain the nature and relevance of risk information portrayed to the public. While the suitability of identifying the extent of risk disclosure by counting the risk-related words or sentences is acknowledged, the researcher argues that the semantic disclosure as well as how the risk information actually relates to the activities of the reporting firm may be omitted (Abraham and Shrives, 2014). The researcher argues that measuring risk information based on actual experiences enables us access the credibility of the disclosed information. This also reveals how banks effectively engage with their risk management process and how effective the risk reporting is in terms of disclosing the impact and actions put in place to minimise the risks (Basel Committee on Banking Supervision, (BCBS), 1998; 2015). Hence, there is a need to adopt methods that overcome these limitations. A five-item disclosure index was applied relating risk disclosure to negative events in order to address this gap. This method captures steps for transparent disclosure of risk information specific to the bank. Also, this method aimed to reveal how future negative events were reported in the annual reports of the previous period as risks.

The aim of the present research was to investigate the impact of national cultural dimensions on the degree to which risk-related information is disclosed about anticipated negative events in the banking sector. Europe was considered a suitable context for this research due to the uniform standard requirements provided by the European Banking Authority. A focus on European banks also made it practicable to identify which disclosures were voluntary and which were tailored to suit the mandatory disclosure requirements. This research further aims to develop insights that could be used to inform

standards and guidance setting committees on the potential importance of voluntary risk reporting in aiding transparency and, therefore, performance in the banking sector.

The rest of this paper is structured as follows. The next section discusses European banking industry and risk reporting practices of the European banks, voluntary disclosure and national culture theories from which the hypotheses were developed. Section 6.3 discusses the methodology used to answer the research questions. Section 6.4 provides the empirical results, discussions, implication, limitations of this research and recommendations for future research. The final section provides the conclusion.

6.2 Literature review and hypotheses development

6.2.1 The European banking industry and risk reporting

The importance of transparency in risk reporting cannot be overemphasised. For example, the Association of Insurance and Risk Managers in Industry and Commerce (AIRMIC) and Institute of Chartered Secretaries and Administrators (ICSA, 2013)'s published a report on the risk reporting practices of FTSE350 companies. The report highlighted a positive relationship between the extent of reporting on risks that were directly related to the firm and the quality of the risk management activities carried out in a firm. Specifically, they mentioned that informative risk reporting enables users of such publications to determine the resilience of the firm to the risks faced and also to better assess its success or failure in the long-run. Similarly, in the report of the *High- Level Expert Group on reforming the structure of the EU banking sector*, which was published following the global financial crisis, emphasis was placed on risk disclosure as one of the benchmarks for reform (Liikanen, 2012). This was because of the professed need to transparently disclose risks and to highlight areas where the reporting bank has performed more/less well in order for banks to gain investors' trust (Liikanen, 2012).

Various regulations have been established to improve transparency in the European banking sector. While the European Banking Authority (EBA) issued capital requirements directive from 2006 to ensure the protection of consumers, enhance financial stability across Europe and improve the risk management systems of banks, major unprecedented events such as the financial crisis, have led to amendments of these directives over the years (e.g., CRD II, III, and IV). However, the directives issued made room for member countries to give their interpretations to the directives (EBA, 2018). In order to rectify this, the Single Rulebook was recently introduced by the EBA to foster uniformity in banking operations (in terms of methodologies adopted in calculation

requirements such as capital ratios) and to ensure transparency and efficiency of the banking sector (EBA, 2018). The aspects covered on risk reporting transparency in the Single Rulebook are the Capital Requirements Directive IV and Capital Requirements Regulations[20]. These aspects are in conformance to Basel III. Even though it is interesting that these requirements aim to ensure uniformity in risk reporting practice, these disclosures are sometimes rigid. For example, the Basel III provides templates and tables for Pillar 3 reports which is required by all international banks (BCBS, 2015). The qualitative commentary section to the tables, which is not in a pre-set format, may enable the reporting bank to provide (un)useful information to the reader. One significance of providing narratives is to enable the reporting bank to provide only important information about risks that are specific to their business activities, rather than following a tick-box exercise (Hermanson, 2000). Thus, the researcher argues that narratives such as this part of information, which may be termed voluntary, may be useful to market participants as it provides significant information specific to the bank to aid better decision making. As prior research (e.g. Bonsón, Escobar- Rodríguez and Flores-Munoz, 2006; Glaum, Schmidt, Street and Vogel, 2012) have found that due to cultural differences, different practices are still observed in non-financial firms in societies with uniform regulations and/or recommendations, it is important to identify whether this difference is also reflected in risk reporting transparency of banks across countries in relation to negative events.

6.2.2 Voluntary disclosure theory

When considering how national culture might influence risk disclosure practices, one theory of specific relevance is voluntary disclosure theory. Prior research has shown that national culture influences managerial values and behaviours on voluntary disclosure reporting such as internal control decisions (Hooghiemstra, Hermes and Emanuels., 2015) and risk disclosures (Elshandidy et al., 2015). Prior research has also shown that regulations on risk reporting have not succeeded in ensuring transparency (Oliveira et al., 2011; Greco, 2012). Because of this, dependence is placed on other information disclosed, termed voluntary disclosures (Oliveira, Rodrigues and Craig, 2013). Voluntary disclosure theory holds that useful disclosure which goes beyond requirements reduces

[20] The Capital Requirements Directive IV (EP, 2013) provides regulations on how the 'competent authority' should ensure that the risk management policies are implemented while the Capital Requirements Regulations (EP, 2013) provide methodologies for measurements of risks identified and how these should be disclosed.

information asymmetry and in turn reduces the reporting firm's cost of capital (Welker, 1995; Leuz and Verrecchia, 2000). This is because the information provided to the market participants should help in making effective and informed decisions. Cheung, Jiang and Tan (2010) in their study of company disclosure transparency and market valuation of Chinese firms found that there is a positive and significant relationship between company disclosure transparency and market valuation when these companies voluntarily disclosed information. They also found no relationship between company disclosure transparency and market valuation when the companies disclosed in accordance with regulatory requirements. Acknowledging the importance of mandatory disclosure, they identified that the relationship between market valuation and voluntary disclosure indicates that outsiders (in this case investors) are more interested in transparency rather than compliance even though non- compliance has its dire consequences.

A salient issue worth mentioning is the credibility of voluntary disclosure. This aspect has been questioned in prior research as to how accurate the information supplied is (e.g., Stocken, 2000; Healy and Palepu, 2001; Gu and Li, 2007). This is particularly worrisome when the information to be disclosed is perceived to be negative. One of the suggestions provided by Healy and Palepu (2001, p.425) on determining the credibility of voluntary disclosure is the verification of previous disclosure and the 'actual realisations'. In essence, pre-emptive disclosure of bad performance should lead to actual bad performance in the next financial period. In terms of risk disclosure, risk is defined by Hopkin (2013, p.1) as "those events with the potential to have a significant negative impact on the organisation." Therefore, risk disclosure consists of information that inform the reader of risks faced as a result of business activities carried out by the bank. This risk information needs to be reliable to aid transparency (BCBS, 1998). Although perfect risk disclosure may be impossible as there is some uncertainty involved which may not actualise (Linsley, Shrives and Crumpton, 2006), traces of links between the risk disclosed and future negative event depicts the quality of the reporting bank's risk reporting practice (Abraham and Shrives, 2014). The findings from Hutton et al. (2009)'s study also show that firms that have practiced opaque disclosure are more likely to witness a stock price crash because they withhold small series of important information up to a point where it is no longer controllable and by the time the consolidated information is released, it results in a price crash. This explains the necessity for effective risk management as well as transparent and timely risk reporting practice. This research aims to identify whether this form of risk reporting is different across banks in different countries. In view of this, the researcher argues that transparent voluntary risk

disclosure should be linked to actual events disclosed in later periods as this shows that the reporting bank has not only identified these risks but has actively engaged in actions to mitigate or manage the identified risks.

6.2.3 National culture and transparent risk disclosure

Hofstede (2001, p.9) defined culture as "the collective programming of the mind that distinguishes the members of one group or category of people from another". Simply put, an individual's perception reflects the culture in which they reside (Kwok and Tadesse, 2006). For example, individuals in cultures with higher uncertainty avoidance (UA) tend to be less corrupt and abide by the rules governing that society as opposed to individuals with lower UA (Seleim and Bontis, 2009). Similarly, people in eastern cultures tend to be more accustomed to longer and rigid decision making process compared to western cultures (Zhang, Guo, Chen and Chau, 2009). This explains how national culture affects and influences the social norms and behaviours of individuals in a society. In relating organisations and their institutional norm to national differences, Swidler (1986) and Li and Harrison (2008) noted that organisations are social entities in which their functions reflect their national culture. By this, it means national culture plays an important role in the structure and functions (i.e. managerial practice) of organisations and this may include decision making. For example, Chipulu et al. (2014) found that national culture influences the importance that individuals place in project success and failure factors. Similarly, Luthans, Welsh and Rosenkrantz (1993) and Schuler and Rogovsky (1998) found that national cultural values influence Human Resources Practice, with the later finding strong associations with organisation's compensation practice. Also, Chui, Lloyd and Kwok (2002) found that national cultural differences explain the debt ratio performance of organisations while Li, Griffin, Yue and Zhao (2013) in their study of risk taking behaviour of manufacturing firms in 35 countries found that national culture relates to the risk taking behaviour of organisations. While Li et al (2013) only used firm size as a country level effect, they found a negative relationship between size and firm risk taking behaviour meaning that countries with large firms on average are countries that are less risky on average.

Although Hofstede (1991; 2001) argued that organisational culture is completely different from national culture, he also acknowledges that similarities between both cultures may arise as a result of focus on practice rather than their underlying values. Hofstede (1980) also noted that the level of integration of national cultures may vary across organisations in a society, but the cultural characteristics are similar among organisations that reside in the same society. As the information relating to risk reporting evolves from interactions

of humans (and other resources), the discussion on culture cannot be avoided. Specifically, both Gray (1988) and Hofstede (1991) have argued that certain national cultural dimensions (such as power distance and uncertainty avoidance) undeniably shape the structure of organisations in their society.

Hofstede provides five dimensions in which cultures may portray their differences; power distance, uncertainty avoidance, masculinity, individualism and long-term orientation (Hofstede, 2001). This research focused on power distance, uncertainty avoidance and long-term orientation. These three cultural dimensions have been found to have strong correlations with organisation disclosure (e.g., Archambault and Archambault, 2003; Kwok and Tadesse, 2006; Elshandidy et al., 2015; Hooghiemstra et al., 2015; Khlif and Hussainey, 2016; Dobler et al., 2016)[21]. The following sections discuss uncertainty avoidance, power distance and long-term orientation in relation to transparent risk reporting.

6.2.3.1 Uncertainty avoidance

While some societies are comfortable with facing uncertainties, others may prefer to avoid uncertainty. Uncertainty avoidance (UA) measures the degree to which individuals prefer to proffer short term solutions to an uncertain event rather than suggesting a long-term strategic solution in order to avoid facing uncertainty as much as possible (Hofstede, 2001). Prior research has related UA scores of Hofstede to risk attitudes portrayed in organisations. For example, Frijns, Gilbert, Lehnert and Tourani-Rad (2013) related UA to risk tolerance by explaining that high UA CEOs have low risk tolerance and would prefer to receive higher compensation in takeover where the uncertainty of the firm's performance is high. Similarly, Li et al. (2013) related UA to risk-taking attitude of firms by explaining that high UA societies tend to avoid novel and ambiguous situations such as the market-based financial system while those with low UA are more likely to be comfortable dealing in equity markets. Prior literature has shown conflicting views regarding the direction of relationship between UA and transparency in disclosure. Gray (1988), Zarzeski (1996) and Khlif and Hussainey (2016) predicted and found that cultures with high UA report less risk information in order to reduce uncertainty while those with low UA report more risk-related information. Their reason for this is that firms in high UA cultures tend to avoid competition and conflicts and also because the firms

[21] Individualism and masculinity were excluded due to multicollinearity issues found during the analysis.

wish to protect themselves. Thus, high UA societies are prone to secrecy. This was empirically confirmed in the study of Hooi (2007) who investigated international banks' disclosure in line with mandatory regulations. However, Hofstede (2001) argued in theory that, people in high UA societies are likely to be more anxious about unknown situations and will seek means to prevent or reduce uncertainty through regulations, technology adoption and/or following a particular religion to bring hope.

Hofstede also mentioned that anxiety from UA leads to the desire to predict. Relatedly, risk is identified as measured, classified or estimated uncertainty (Miller, 1992; Mikes 2011). Risk management involves identification and management of risks that may affect future outcomes (Linsley et al., 2006). Hofstede's theory was evidenced by Dobler et al. (2016), who found that manufacturing firms with higher UA had a higher level of risk disclosure. This indicates that cultures with higher UA would be more likely to plan for and anticipate future adverse events. Therefore, cultures that seek to avoid uncertainty may be more likely to report risks transparently. This leads to the first hypothesis:

H1: Higher (lower) uncertainty avoidance is associated with higher (lower) levels of transparent risk reporting.

6.2.3.2 Power distance

Hofstede (2001, p.83) defined power distance (PD) as "a measure of the interpersonal power or influence between the B (boss) and S (subordinates) as perceived by the less powerful of the two, S". It measures the degree of contentment of junior staff in a society in disagreeing with the decision making style of their supervisors and how convenient it is to offer their opinion. Hence people in high PD societies perceive and accept that inequality is natural and cannot be questioned. Relating this to risk reporting, risks are identified at all levels of an organisation, and it is the responsibility of all employees to identify risks (Moeller, 2011). Dobler et al. (2016) proposed that high PD societies are more likely to be highly regulated. These regulations include those on risk disclosure where the subordinate (in this case the management) is expected to provide adequate information to shareholders on risks faced by the firm and avoid the cost of non-disclosure. They also argued that investors in high PD societies are likely to be more demanding in terms of information disclosure. However, Gray (1988), Zarzeski (1996) and Jain and Jain (2018) argued that the relationship between PD and disclosure is negative due to the desire to maintain power inequality. In line with this view, it can be argued that the decision to report to the board who makes the final decisions rests with the Chief Executive Officer (CEO). For example, in universal banks, the main

responsibility of risk identification and management of a division rests with the divisional head (e.g., HSBC, 2006, HBOS, 2006). Therefore, risks identified at lower levels of the organisational hierarchy are reported to the divisional head, who then reports to the CEO. Since not all employees are allowed to attend board meetings, they may be unable to decide what risk-related information is disclosed to the board or how the information is relayed to the board. Hence, the board may make decisions based on inadequate information, resulting in ineffective risk management and limited risk reporting.

It is noteworthy that most big banks have formalised risk management executives with titles such as Chief Risk Officer (CRO) or Head of Risk, whose responsibility is to identify risks in all levels of the bank (Lam, 2014). However, as was illustrated in the case of HBOS, such risk management executives can be ignored or sacked if they reported concerns about high levels of risk taking and other executives in the bank do not wish for such risk taking practice to stop or be reported (Skapinker, 2015). Hence, a CRO may identify principal risks and relay them to the board (if permitted to attend the board meetings) but it may not be well received. In particular, this may be the case if the CROs powers are limited in terms of deciding how this information is managed and disclosed to the public (Aebi, Sabato and Schmid, 2012). Hence, national cultures with higher PD may be characterised by the presence of subordinates' (in this case, the employees at the lower level, the divisional head or risk officers) who perceive themselves as having less influence in decision making. Consequently, this may have a negative effect on risk management process, including the degree of transparent risk reporting. This leads to the second hypothesis:

H2: Higher (lower) power distance is associated with lower (higher) levels of transparent risk reporting.

6.2.3.3 Long-term orientation

Long-term orientation (LTO) relates to different ways of thinking and planning. Some cultures focus and place importance on the past and present while others focus on the future. Short-term oriented cultures believe that success and failure are as a result of fate while long-term oriented cultures think of success as a product of effort (Hofstede, 2011). Relating this to risk reporting, Dobler et al. (2016) found a positive relationship between LTO and the level of risk disclosure of manufacturing firms in UK, US, Germany and Canada. The researcher argues that long-term oriented cultures may focus on identifying risks that may affect the achievement of set goals and objectives in the long-

run, provide responses to these risks and effectively report them. Whereas short-term oriented cultures are likely to focus on achieving immediate goals, continuing with extant operations, and attributing performance to luck. Therefore, the third hypothesis is as follows:

H3: Long- (short-) term orientation is associated with higher (lower) levels of transparent risk reporting.

6.3 Methodology

6.3.1 Sample

The researcher focused on 11 European countries with the highest GDP. This is because prior research has found significant associations between GDP and the level of corporate disclosures (e.g., El-Halaby and Hussainey, 2015). It is recognised that high level of corporate disclosure may not axiomatically mean a high level of risk disclosure transparency as prior research has found that banks may increase the content of their risk disclosures but the additional information may not necessarily be useful (Beretta and Bozzolan, 2008; Pérignon and Smith, 2010). However, prior studies also indicate that larger banks have stronger incentives to provide more useful risk information (Nier and Baumann, 2006; Oliveira et al., 2011; Barakat and Hussainey, 2013). The sample consists of 30 large listed banks from Germany, Russia, UK, France, Italy, Spain, Belgium, Turkey, Netherlands, Sweden and Switzerland. This includes universal banks (i.e., banks that carry out retail, investment and wholesale banking activities), investment banks and commercial banks. Annual reports of the banks were downloaded from their respective websites. Risk- related information data were collected from their annual reports from 2010 to 2016[22]. In total there are 209 bank-year observations as shown in Table 6.1.

6.3.2 Dependent variable measurement: Risk disclosure transparency

Prior researchers have used disclosure indices to measure the presence and absence of risk disclosure and the extent of risk information supplied in annual reports of banks

[22] Banks in certain countries such as Germany, France and the UK produced pillar 3 reports. This report contains qualitative and quantitative risk information. This data was excluded in order to avoid bias as not all banks produced this report (e.g., Turkish banks).

(e.g., Barakat and Hussainey, 2013; Ntim, Lindop and Thomas, 2013). However, when building the risk disclosure index, these researchers have not focused on relating the risk information to negative events. As much as other risk disclosures are important, complying with disclosure requirements may lead to a tick-box exercise and disclosing risk information generic manner rather than actually providing the useful information on principal risks faced by the bank (Pérignon and Smith, 2010). Certainly, not all risks turn into actual events and not all that turn into events turn into negative events due to the presence of uncertainty or the ability to proactively manage the risks without leading into events (Linsley et al., 2006). However, the researcher argues that negative events previously identified as risks by the board and reported in the annual report shows that the reporting board is well conversant with the bank's activities and has demonstrated effective risk reporting by identifying these risks and stating the information in annual reports based on their knowledge to show transparency. Therefore, risk disclosure transparency was measured in line with negative events in the following steps.

First, the risk reporting transparency disclosure index (RRTDI) was constructed from the Basel Committee on Banking Supervision guidance report of 1998 'Enhancing Bank Transparency'. The report (77;79;80) states that transparent risk disclosure involves the identification of the risk and how it arises (Item 1), the risk exposure (risk assessment) (Item 2), how the risk is managed and controlled (response) (Item3), and the monitoring process (effectiveness of previously identified risks) (Item 4). These stages are also supported by the Institute of Risk Management (2002) in its risk reporting guideline and risk management process framework while Abraham and Shrives (2014) mentioned that generic disclosures are distinguishable from specific disclosures when examining the risk identification and risk management process of the reporting bank. The identification of negative events of the banks is discussed in the next section. Also, British Bankers Association (BBA, 2010) and Financial Stability Board (FSB, 2012) have emphasised the importance of providing risk information in an organised form to enable the readers understand and have a full grasp of the information supplied by providing risk-related information in the risk management section of the annual report. FSB (2012) also stated that where risk information is provided in other sections, this should be cross-referenced in the risk management section of the report. Hence, item 5 was included for risk information (items 1-4) presented in the risk management section of the annual report. Second, the researcher checked if each of these items in the index are in the annual reports of each bank. Third, the researcher assigned scores to the items if disclosed (0 for non-disclosure and 1 if disclosed). For item 5, scores were assigned based on whether the information are all found in the risk management section or cross-

referenced from other sections (1) or only disclosed in other sections and not reiterated in the risk management section (0). Hence, the scores will be from 0-5. The sum of the scores show the extent of transparency by each bank.

The researcher used Cronbach's alpha to check the internal consistency (reliability) of the five-item scale (Cormier and Magnan, 2015). The Cronbach's alpha for the five items was 80.5%, indicating high internal consistency.

6.3.3 Abnormal stock return for negative events

Share prices of the banks were used as a metric to identify negative news that were announced in the media. Various studies have employed the use of share prices in relation to market evaluation of bank performance (e.g., Berger, Davies and Flannery, 2000), and bank disclosure (e.g., Penas and Tümer-Alkan, 2010; Fernandes, Igan and Pinheiro, 2017). The essence of using this metric was to collect negative news of the banks reported in media news articles and check whether the news content relates to risk information disclosed in the previous year's annual report of the banks. Share prices to an extent reflect information knowledge of market players (Conrad, Cornell and Landsman, 2002; Ng, Tuna and Verdi, 2013). In essence, it presumably reflects the knowledge that external stakeholders may have about a bank. This information may be obtained from media news articles (Abraham and Shrives, 2014). Local market index in each country was used as a proxy for the market portfolio. Daily actual return and expected return with which the researcher computed the abnormal stock return were collected from Datastream from 2011 to 2017. Following Abraham and Shrives (2014) and Grullon, Michenaud and Weston (2015), the researcher computed the monthly mean and standard deviation of abnormal stock returns and chose important dates as those dates where it was outside two standard deviations from the mean. Therefore, dates with extreme negative share price movements in each year were checked in the news. The use of extreme changes was necessary in order to minimise the possibility of selecting dates where share price only changed as a result of noise or random market activity (Ryan and Taffler, 2004). A five-day window was used, two days before and after the event, including the event date, to identify whether there was a specific negative news that may have affected the share price.

Furthermore, the researcher searched for the news articles using the name of the bank on Nexis database. Nexis database provides full content of a variety of news articles published worldwide. In total, 109 negative news articles were found for the 30 banks from 2011 to 2017. As shown in Table 6.1, abnormal return related to negative news

mostly in UK banks and least in Russia. In addition, Table 6.2 shows the distribution of the news found by category. The news content range from political events such as the impact of Eurozone sovereign debt crisis and the impact of Brexit votes to specific banks' events such as customer reaction as a result of a bank reneging on a promise regarding the opening of customer accounts. Consistent with best practice in prior research and from initial investigation that was performed on the first sample of negative events and annual reports, it was expected that the risk information related to the negative events will be presented in the previous year's annual report as shown in Figure 6.1 (Mantecon, 2008; Lee, Park and Klassen, 2015).

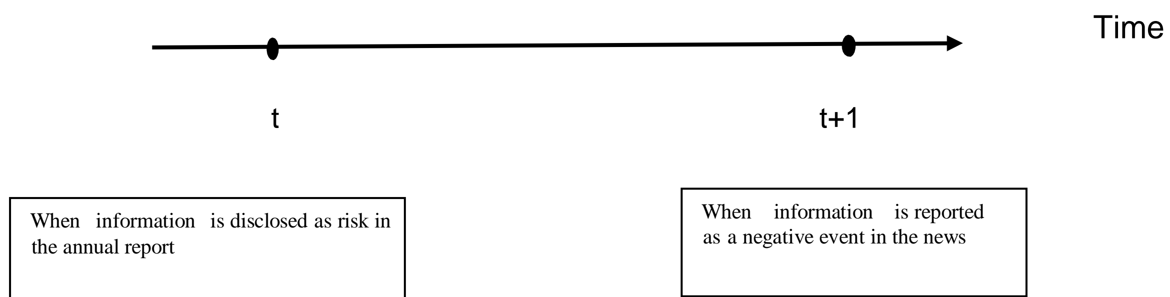


Figure 6. 1 Time period between disclosure of risk and negative event.

Table 6. 1 Number of negative news from Nexis and number of annual reports of European Banks used in analysis by country

Bank	Number of negative	Country	Years of Annual
Commerz Bank	2	Germany	7
Deutsche Bank	6	Germany	7
Deutsche PFA	2	Germany	7
Rosbank PAO	1	Russia	7
Bank VTB	2	Russia	7
Sberbank Rosii	1	Russia	7
HSBC Holdings	7	UK	7
Barclays PLC	7	UK	7
Lloyds Banking Group	6	UK	7
Credit Agricole	3	France	7
BNP Paribas	3	France	7
Natixis	2	France	7
Banca Monte Paschi	5	Italy	7
Unicredit Spa	3	Italy	7
Intesa Sanpaolo Spa	4	Italy	7
Akbank Tas	3	Turkey	7
Turkiye Garanti Bank	2	Turkey	7
Turkiye Is Bankasi	2	Turkey	7
Banco Santander Sa	5	Spain	7
Caixabank	4	Spain	6
Banco Bilbao Vizcaya	4	Spain	7
Van Lanschot	2	Netherlands	7
Dexia SA	3	Belgium	7
KBC Group NV	3	Belgium	7
SV. Handelsbanken AB	1	Sweden	7
Nordea Bank	4	Sweden	7
Skandinaviska Ensk	4	Sweden	7
Julius Baer	5	Switzerland	7
UBS Group AG	6	Switzerland	7
Credit Suisse Group	7	Switzerland	7
Total	**109**		**209**

Table 6. 2 Frequency of news reported and related to the banks by category

News categories	Frequency
Political	16
Operational loss	14
Litigation	12
Macro-economic	11
Regulatory action	8
Bad loans/bond issue	6
Plans to reduce stake in bank	5
Inadequate capital	4
Closure of branches/disposal of division	4
Taxation	3
Lower credit rating	3
Competition	3
High volatility	3
Earnings lower than expected	2
LIBOR scandal	2
Reorganisation/Integration	2
Acquisition plan	2
Reckless securitisation activity	1
Cyber attack	1
Darkpool fraud	1
Decrease in firm value	1
Ineffective risk management	1
Government bailout	1
Change in offer to customers	1
Exposing client information to WikiLeaks	1
Prolonged adverse impact of dependence on short term wholesale	1
Total	**109**

6.3.4 Independent variables: National cultural dimensions

National cultural attributes were measured using Hofstede's cultural dimensions. Hofstede (2001)'s cultural dimensions measure cultural attributes of societies rather than the individuals. Hofstede's scores for each dimension except LTO were obtained from the analysis of survey questionnaires collected from employees of IBM, a multinational company, from 1967 to 1973. About 116,000 questionnaires were administered and received from the employees across different levels of the company in 72 countries with different languages (Hofstede, 2001). The suitability of Hofstede's scores emanates from the fact that throughout the observation period, IBM mostly recruited employees who were nationals of the country where the branch was located, with the exception of new branches (Hofstede, 2001). Hofstede's scores for LTO were obtained from Minkov (2007)'s analysis of World Values Survey (WVS) data in 93 countries from 1995 to 2004

(Hofstede, Hofstede and Minkov, 2010). While Hofstede's scores have been widely used as national culture measures in management and organisation research (e.g., Li et al., 2013; Hooghiemstra et al., 2015; Boubakri, Mirzaei and Samet, 2017; Griffin, Guedhami, Kwok, Li and Shao, 2017), the use of these scores have attracted criticisms due to the fact that the study was conducted in a single company and that this study may be out of date. However, Griffin et al. (2017) recently utilised Hofstede's scores in their analysis of national culture and corporate governance, arguing that the scores are still applicable in current research because national culture is expected to slowly evolve over time. Hence, Hofstede's cultural dimension scores are highly applicable to the present research as a result of the significant correlations between these dimensions and country indicators in prior research.

6.3.5 Control variables

The researcher controlled for bank level characteristics as in prior research. First, the researcher controlled for bank size and measured this as natural logarithm of bank's total assets at year-end (Dobler, Lajili and Zeghal., 2011; Barakat and Hussainey, 2013; Al- Hadi, Hasan and Habib, 2016). Second, a measure for operational efficiency and profitability was included as prior research has shown an association between operational efficiency or profitability and risk disclosure (Barakat and Hussainey, 2013; Elbannan and Elbannan, 2015). The researcher used cost-income ratio and natural logarithm of return on equity as measures for operational efficiency and profitability respectively. Third, since prior research has found that there is an association between the level of risk of a firm and the quality of disclosure (Elshandidy et al., 2015; Albassam and Ntim, 2017), the researcher controlled for level of risk measured as total debt to total assets (Abraham and Cox, 2007). Fourth, prior research have also found a positive effect of being audited by one of 'The Big 4' accounting firms on disclosure quality of the reporting firm (Deumes and Knechel, 2008; Hooghiemstra et al., 2015). Hence the researcher controlled for Big 4 audit firms by assigning 1 if the bank is audited by a Big 4 (i.e., KPMG, Deloitte, Ernst & Young or PricewaterhouseCoopers) and 0 if otherwise. Fifth, the researcher controlled for cross- listing of the banks. Prior research show that cross-listing may have an effect on disclosure quality depending on the level of strict regulations introduced in the other country where they are listed, e.g the US (Ntim, Opong and Danbolt, 2012; Hooghiemstra et al., 2015). Hence where the bank is listed on New York Stock Exchange, 1 was assigned and 0 if otherwise. In addition, the researcher controlled for the effect of regulation using overall capital stringency as a proxy (Barth, Caprio and Levine, 2013; Kara, 2016). Finally, the researcher controlled for

time fixed effect using dummy for each year (Barakat and Hussainey, 2013).

The researcher also controlled for the economic growth size of the countries where these banks are primarily resident. This is measured as natural log of annual gross domestic product (GDP). In addition, corporate governance characteristics were included in the control variables as prior research has shown that corporate governance characteristics affect risk disclosure (e.g., Elshandidy and Neri, 2015). These include board size, governance system and CEO duality (please see Appendix D for definitions of the variables).

6.3.6 Empirical model

Due to data availability and suitability, this research had an unbalanced data. The thirty banks are from 11 countries. Weighted least square regression analysis was used to minimise bias of uneven representation (Jog, Zhu and Dutta, 2010; Hooghiemstra et al., 2015). Additionally, analysis of the data showed that constant variance in errors for the variables included in the model was violated indicating heteroscedasticity (see Fig 6.2). Therefore, weighted least square regression was more appropriate to analyse the data (Schwert and Seguin, 1990; Hooghiemstra et al., 2015). The empirical model which aimed to analyse the association between the level of risk disclosure transparency related to negative events and national culture is as follows:

$$RRTDIS = \beta_0 + \beta 1UA + \beta_2 LTO + \beta_3 PD + \beta_4 SIZE + \beta_5 CIR + \beta_6 LEV + \beta_7 PROF + \beta_8 ONETIER + \beta_9 BS + \beta_{10} CD + \beta_{11} BIG4 + \beta_{12} USLST + \beta_{13} GDP + \beta_{14} CAPSTRING + \beta_{15} COUNTRY + \beta_{16} YEAR + \varepsilon$$

$RRTDIS_{itj}$ represents risk reporting transparency for bank. β represents the slope and ε is the error term. All other variables are defined in Appendix D.

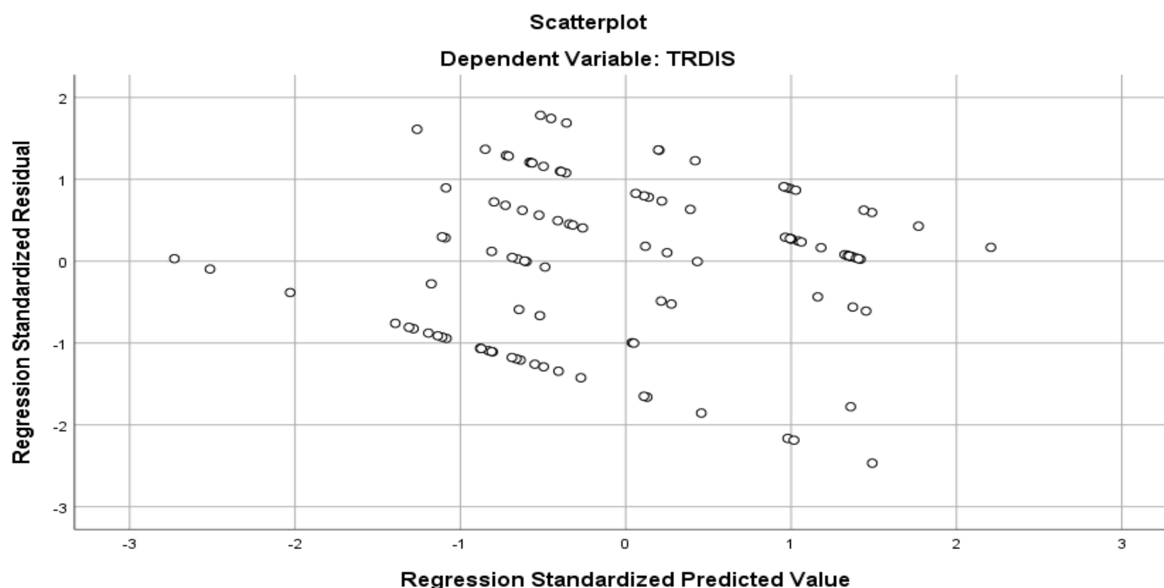


Figure 6. 2 Scatterplot of variables included in the model. An indication of heteroscedasticity

6.3.6.1 Multicollinearity

To minimise the possibility of bias in the analysis, independent variables that are highly correlated were excluded. According to prior studies (e.g., Hassan, 2009; Tan, Zhu, Zeng and Gao, 2014), variables with correlations of 70% and above may pose a bias in the analysis. From the correlation matrix in Table 6.3, the governance system (OneTier) has a high negative correlation to LTO. Thus based on the interest of this research, which is to examine the impact of national culture on transparency in risk reporting, the researcher excluded governance system in the regression analysis. Another test that was conducted for multicollinearity was the Variance Inflation Factor (VIF). According to Hassan (2009), a VIF higher than 10 signifies serious multicollinearity problem. Based on the VIF results, the main explanatory variables were highly correlated. However, when the researcher excluded IDV, the VIFs for all variables were minimised. Therefore, IDV was excluded from the main regression analysis. Masculinity was also excluded due to its effect on the significance of the other explanatory variables as the researcher found that other variables lose their significance when it was included in the analysis. The revised model is as follows:

$$RRTDIS = \beta_0 + \beta 1UA + \beta_2 LTO + \beta_3 PD + \beta_4 CIR + \beta_5 LEV + \beta_6 PROF + \beta_7 BS + \beta_8 CD + \beta_9 USLST + \beta_{10} CAPSTRING + \beta_{11} COUNTRY + \beta_{12} YEAR + \varepsilon$$

Table 6. 3 Correlation matrix

	RRTDIS	IDV	UA	LTO	PD	CIR	LEV	BS	CD	PROF	OneTier	USLST	CapString
RRTDIS	1	.401**	-.357**	-0.121	-0.118	0.029	-0.122	0.034	0.049	-0.057	0.042	441**	0.039
IDV	.401**	1	-.661**	0.007	-.238*	-0.018	-0.187	-0.023	-.231*	-0.138	0.132	.398**	-0.018
UA	-.357**	-.661**	1	.246**	.614**	0.044	.198*	0.105	.193*	-0.152	-0.024	-.450**	.429**
LTO	-0.121	0.007	.246**	1	-.282**	0.057	0.091	.605**	-.215*	-0.181	-.742**	-0.154	0.120
PD	-0.118	-.238*	.614**	-.282**	1	-0.048	0.071	-.289**	0.172	-0.140	.525**	-.296**	.215*
CIR	0.029	-0.018	0.044	0.057	-0.048	1	0.042	0.103	-0.015	0.043	-0.059	0.001	0.024
LEV	-0.122	-0.187	.198*	0.091	0.071	0.042	1	-.198*	0.068	-.226*	0.020	-.410**	-0.137
BS	0.034	-0.023	0.105	.605**	-.289**	0.103	-.198*	1	-0.110	0.014	-.611**	.196*	0.148
CD	0.049	-.231*	.193*	-.215*	0.172	-0.015	0.068	-0.110	1	0.033	0.140	-0.140	0.045
PROF	-0.057	-0.138	-0.152	-0.181	-0.140	0.043	-.226*	0.014	0.033	1	-0.079	0.088	-0.066
OneTier	0.042	0.132	-0.024	-.742**	.525**	-0.059	0.020	-.611**	0.140	-0.079	1	0.023	-.215*
USLST	.441**	.398**	-.450**	-0.154	-.296**	0.001	-.410**	.196*	-0.140	0.088	0.023	1	0.166
CapString	0.039	-0.018	.429**	0.120	.215*	0.024	-0.137	0.148	0.045	-0.066	-.215*	0.166	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

6.4 Results, Discussion, Implications and Limitations

6.4.1 Descriptive statistics

Table 6.4 shows the descriptive statistics of the continuous variables used in the analysis. For risk reporting transparency disclosure index scores (RRTDIS), the table shows that while some annual reports disclosed full risk information (risk identification, risk assessment, risk response, risk monitoring) preceding the negative events reported in the news, some did not report any risk information regarding negative events. On average, the banks reported some aspects (about half) of their risk management pertaining to the event (see Appendix E for an example of full risk information disclosed related to a negative event). Figure 6.2 shows that most of the risk information relating to negative events were presented in the risk management section of the annual reports (69%). Risk information were also found in other sections (e.g., 'Prospects and Outlook on operations', 'Strategy and Markets', 'Chairman's report', 'Chief Executive's review', 'Notes to the financial statements', 'Operational and financial information' and 'Other information'), of which 'Other information' section had the least number of risk information presented in the annual reports (0.84%). This suggests that readers may still need to scrutinise other sections of the annual report of banks apart from the risk management section in order to obtain maximum information pertaining to relevant risks faced by banks. Further analysis of each item in the RRTDIS is provided in section 6.4.2.

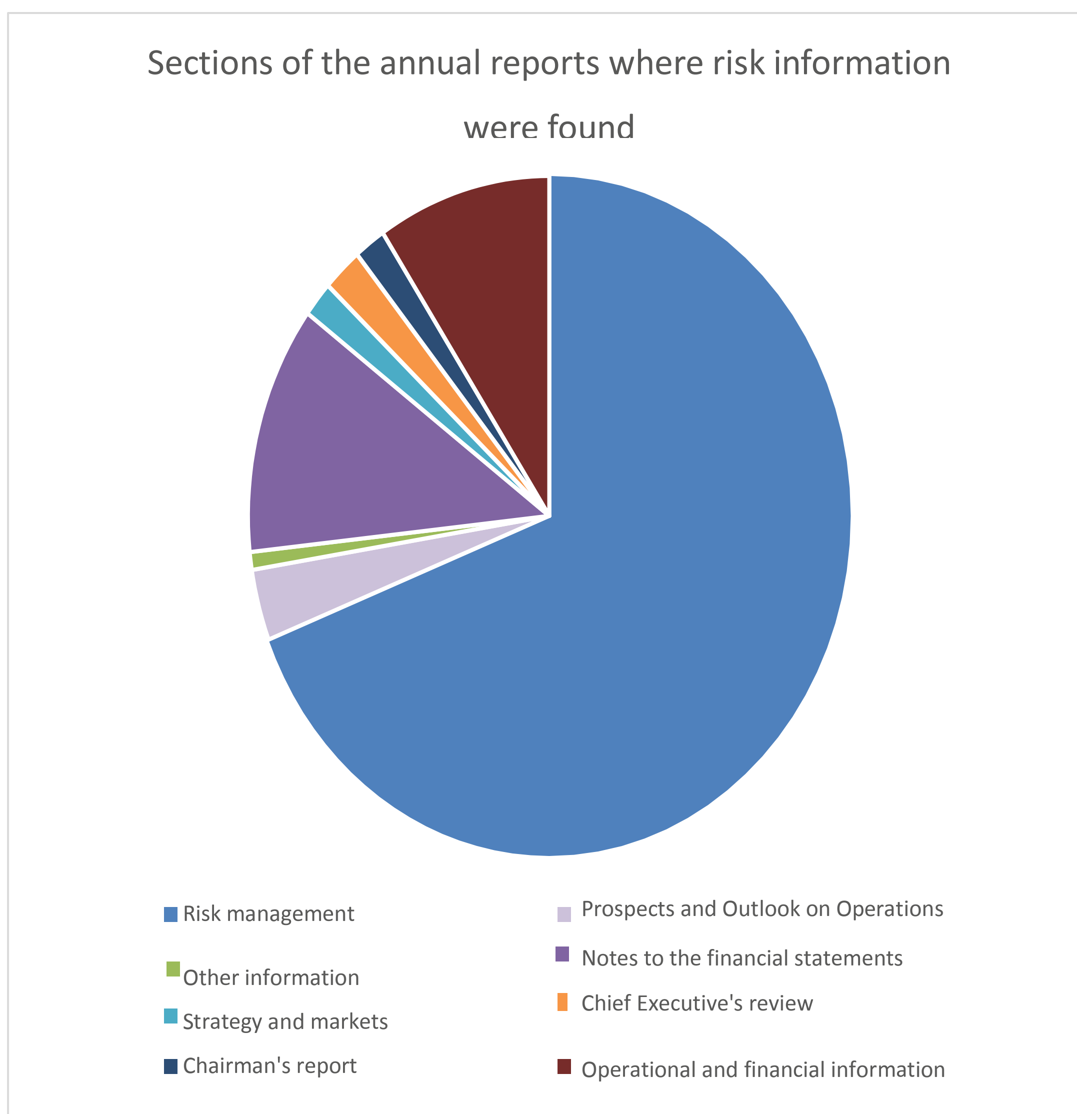


Figure 6. 3 Risk information related to negative events extracted from annual reports

In regard to the cultural dimensions, Table 6.4 shows that although some societies have low scores, Hofstede's score for uncertainty avoidance (UA), power distance (PD) and long-term orientation (LTO) are, on average closer to their maximum scores for the countries investigated. Table 6.4 also shows that profitability (PROF) for the banks is, on average, negative. The disparity between the minimum and maximum values for cost income ratio (CIR) could be as a result of the different economic developments of the countries investigated. The table also shows that the banks investigated have low risk level (LEV) on average. The mean overall capital stringency (CAPSTRING) standard was above average.

On corporate governance variables, Table 6.4 shows that, on average, the banks had 18 members on the board (BS). On the corporate governance system, Table 6.5 shows that 66% of the sample operate a unitary board structure (OneTier) where part of the board is involved in the day to day activities of the bank while the other is involved in planning and monitoring for the benefit of the stakeholders. The other thirty-four per cent operate a two tier corporate governance system where the board comprises both the supervisory board and the management board. Also, most of the observations in the sample do not have the CEO carrying out dual function of also being the Chairman of the bank (CD). All banks in the sample have their financial statements audited by one of the Big4 audit firms, (BIG4). Therefore, BIG4 was excluded from the regression analyses as the result is constant on average across the observations. The asset size of the banks (SIZE) and gross domestic product per capita (GDP) are also widely spread. Asset size and GDP were excluded from the main regression analysis because of the issue of redundancy as the sample was selected based on size and GDP. In essence, the sample comprised largest banks in countries with the highest GDP. Thirty-four percent of the observations were from banks that are listed on the New York Stock Exchange.

Table 6. 4 Descriptive statistics for dependent, independent and control continuous variables

	N	Minimum	Maximum	Mean	Std. Deviation
RRTDIS	109	0.00	5.00	2.5413	1.85359
UA	109	29.00	95.00	64.2752	22.08648
LTO	109	46.00	83.00	62.3028	13.05083
PD	109	9.00	68.00	43.9450	14.90515
CAPSTRING	109	0.00	5.00	3.7248	1.19313
CIR	109	-144.76	243.85	9.2363	34.42590
LEV	109	0.09	0.71	0.2830	0.11973
BS	108	9.00	46.00	18.5000	7.13488
PROF	108	-3.361	0.241	-0.00196	0.352688
SIZE	109	15,445,938	15,089,900,000	1,428,755,622	2,154,967,944
GDP	109	9329.30	88415.63	44705.2912	20351.08122

Table 6. 5 Frequency table for categorical variables

Variable	Yes	No	Total
CD	105	4	109
BIG4	109	0	109
USLST	37	72	109
OneTier	72	37	109
Country	Dummy variable		
Year	Dummy variable		

Note: CD represents CEO duality; BIG4 indicates whether the banks are audited by one of the Big4 audit firms; USLST indicates whether the bank in listed on the NYSE; OneTier indicates the governance system of the banks.

6.4.2 Descriptive statistics for RRTDIS by country

As shown in Figures 6.4-6.7, with the exception of Netherlands and the UK, not all negative events were identified as risks in the annual reports of the preceding year. In particular, the researcher found no evidence of disclosure of risk information by the Russian banks investigated for negative events. The countries represented by their banks found with the least risk identification reporting were Belgium and Turkey. The same results were found for information regarding risk response or actions taken to manage or mitigate the risks related to the negative events. In regard to risk assessment, the researcher found no evidence for Russian and Turkish banks of information regarding the possible impact of the risks relating to negative events that were reported in the news. It is not clear whether the reason for more identification of risks by Netherlands and the UK is as a result of being more involved in the risk management and risk reporting practices to the extent that they are able to alert investors of likely future events. On another hand, it may be the case that some banks encountered more negative events than were published in the media news articles. For the large banks in Belgium, France, Germany, Italy, Spain, Sweden, Switzerland and Turkey, the reason for non-disclosure may be as a result of the risks not being identified before the annual reports were published due to uncertainty (Linsley et al., 2006). Alternatively, the risks may have been identified but not disclosed for the obvious reason of the disclosure cost. This reflects the proposition of Dobler (2008) and Guay et al. (2016) that when the directors are not absolutely confident that the risks would be properly managed or mitigated, they are more likely to apply discretion in disclosure. For risk assessment disclosure, it may be the case that these banks actually assessed the risks but did not disclose the resultant effects due to the likely negative impact of such disclosures or due to uncertainty regarding the extent of the effects. Risk reporting with regards to monitoring was generally low across the countries. This may have been the case because the risks related to one-time events as opposed to a recurring event that would have required continuous monitoring and reporting.

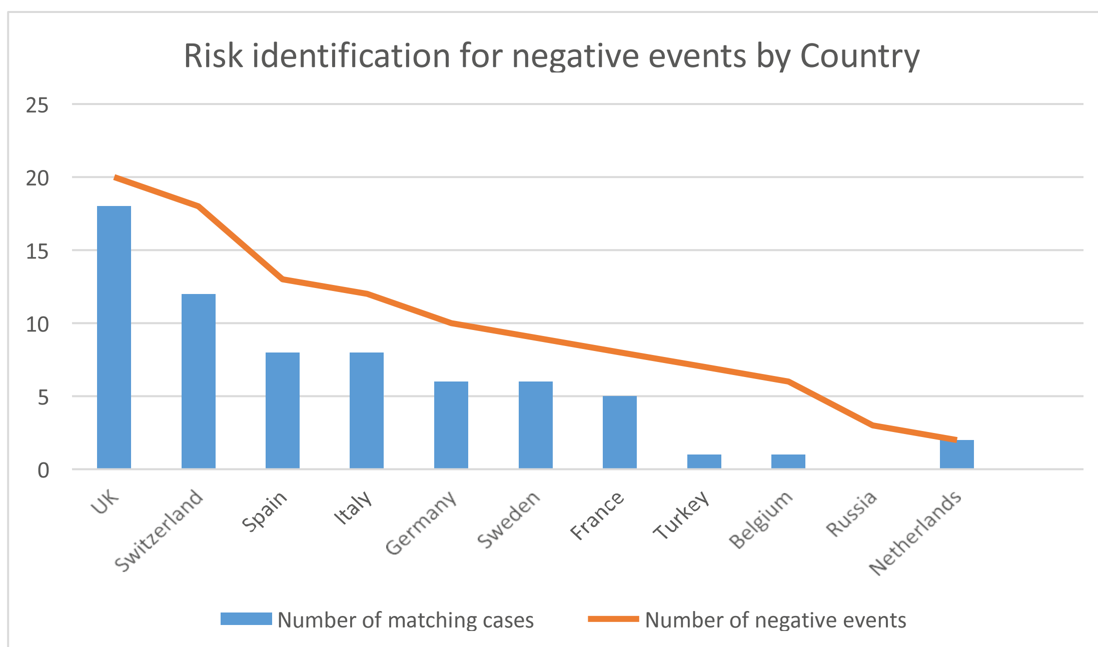


Figure 6. 4 Risk identification disclosure related to negative events by country

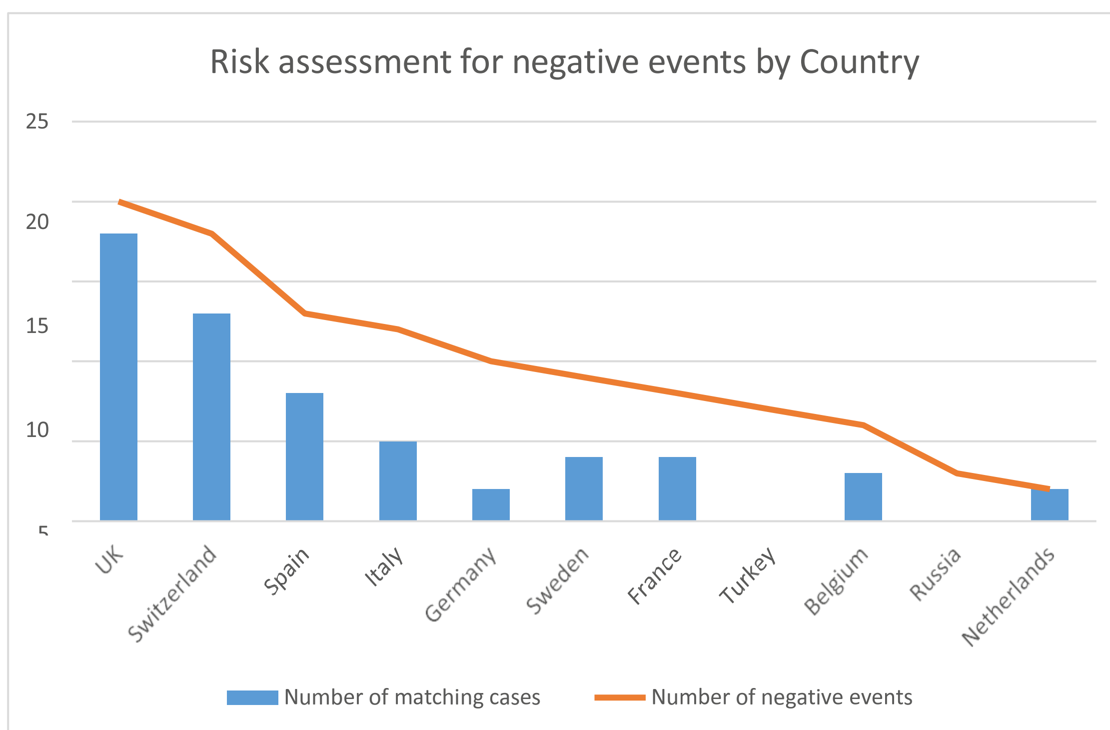


Figure 6. 5 Risk assessment disclosure related to negative events by country.

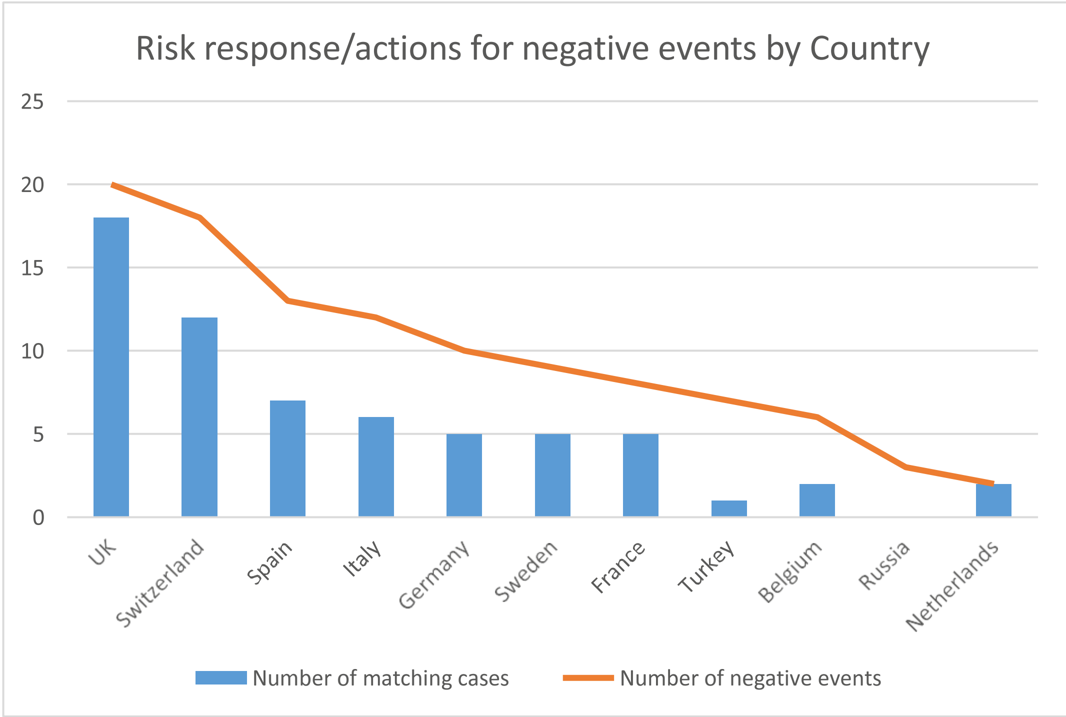


Figure 6. 6 Risk response disclosure related to negative events by country

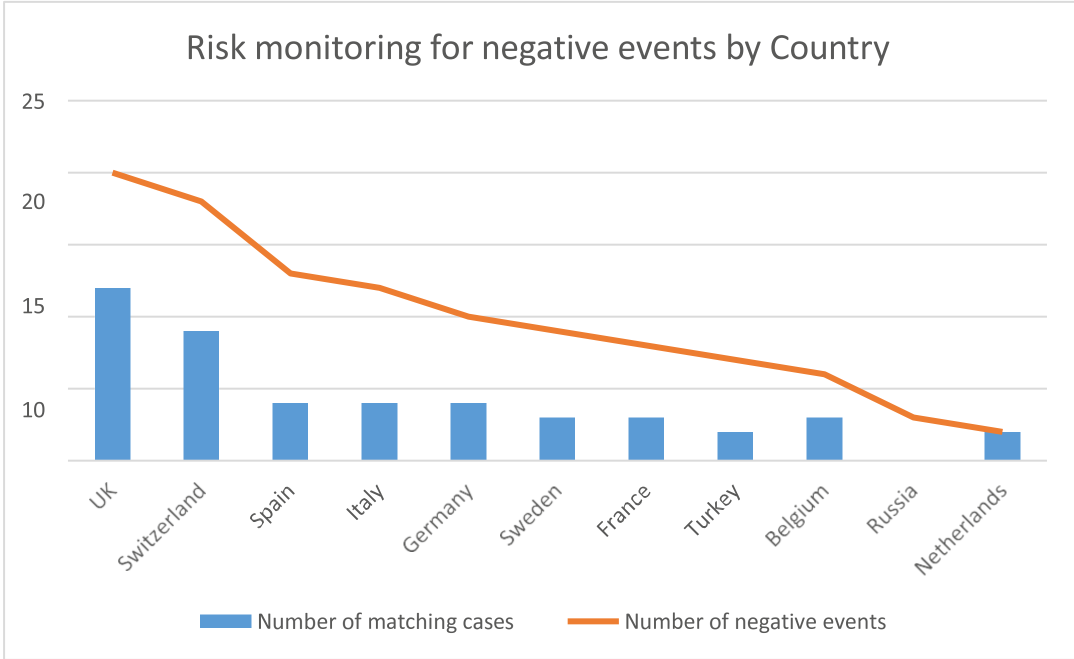


Figure 6. 7 Risk monitoring disclosure related to negative events by country

6.4.3 Regression Results and Discussion

6.4.3.1 Results for Hypothesis 1

This section addresses the impact of the degree of uncertainty avoidance (UA) to the level of risk disclosure transparency. The regression result as shown in Table 6.6 suggests that UA is negatively and significantly ($p < 0.001$), related to transparency in risk reporting with adjusted R^2 of 63.8%. This means the higher the UA, the less likely banks in these societies will report risk information transparently. This contradicts the prediction of this research that banks in countries with high UA are more likely adopt measures to reduce uncertainty and disclose more risk information. However, the result is consistent with Gray's theory and the empirical results of Hooi (2007) and Khlif and Hussainey (2016) who affirm that cultures with high UA will be secretive in disclosure of risk information. There are a number of possible reasons for this result. First, as highlighted by Gray (1988) and Zarzeski (1996), banks in high UA cultures prefer to be more cautious and reduce the likely event of competition within the industry, or avoid conflict with market participants. Second, following Hofstede (2001)'s argument on the perception of legislation, it may be the case that even though high UA societies are characterised by strict regulations, it does not necessarily imply that these regulations are trusted and this may be reflected in the banks' risk reporting practices. This is often the case where the UA society perceives that these regulations are not to their advantage (Hofstede, 2001). Third, in light of the prior evidence showing that high UA societies adopt strict regulations (Dobler et al., 2016), it may be the case that banks domestically resident in low UA societies have effective self-regulations and rely more on audit judgment (Gray, 1988; Salter and Niswander, 1995; Solomon, Solomon and Norton, 2000). Specifically, Salter and Niswander (1995) found in their study of cultural influence on accounting values and systems in major stock markets across twenty nine countries, that UA is positively related to secrecy in financial statement disclosures. They suggested that this was possibly as a result of strong independent auditing professionalism practiced in low UA societies.

However, the researcher highlights that risks, if not properly managed by banks in countries with high UA may result in negative events or missed opportunity which could have an adverse impact in the long-run. Regression results in Table 6.6 also show that, when country and year dummy variables were included in the analysis, UA was significantly and negatively related to risk disclosure transparency, $p < 0.001$. Therefore, H1 is rejected and the researcher concludes that higher UA relates to lower risk disclosure transparency in the European banking sector.

6.4.3.2 Results for Hypothesis 2

This section addresses the impact of power distance (PD) on the level of risk disclosure transparency. Surprisingly, as shown in Table 6.6, the result shows that PD is positively and significantly related to risk disclosure transparency, $p = 0.001$. Although national culture may be completely different from organisational culture, Swidler (1986) and Li and Harrison (2008) have agreed that organisational cultures are social entities whose behaviour and practice reflects their national culture. The result suggests that the lower the influence of the middle and junior management in organisational decision making, the higher the level of risk disclosure transparency. This is in contrast to the prediction of this research that banks in countries with cultures that are characterised with low PD, and involve all employees in decision making, are more likely to disclose risk information transparently than banks in countries with high PD. However, this result is consistent with the findings of Dobler et al. (2016) that societies with higher PD will disclose more risk information since these societies are characterised by strict regulations and firms are compelled to disclose risks as required by the regulations. Dobler et al. (2016) also mentioned that investors in high PD societies are likely to be more demanding in regard to information disclosure. This suggests the need for stricter regulations in lower PD societies as banks are likely to disclose less in this system. When year dummy variable was included, the result also showed that PD is significantly and positively related to risk disclosure transparency at p-values of 0.001 but marginally significant when country dummy was included. Therefore, H2 is rejected and the researcher concludes that higher PD relates to higher risk disclosure transparency in the European banks.

6.4.3.3 Results for Hypothesis 3

The result from Table 6.6 shows that long-term orientation (LTO) is positively related to risk disclosure transparency but this is marginally significant ($p = 0.075$). When year dummy variable was included, the relationship remained positive and marginally significant ($p=0.076$). Therefore H3 is rejected. The positive direction of relationship is consistent with the findings of Dobler et al. (2016)'s study of manufacturing banks indicating that banks in societies that have a LTO are likely to identify, manage and disclose information risks that may affect the achievement of set goals and objectives, leading to risk disclosure transparency.

With regard to the control variables, the result shows that listing on NYSE is positively and significantly related to risk disclosure transparency, $p < 0.001$. This is consistent with the findings of Ntim et al. (2012) and Hooghiemstra et al. (2015) that firms listed on

NYSE disclose more information. The researcher suggests that this may be the case because of the strict regulations on disclosures (such as the disclosure of risk factors) for banks listed on US stock exchange which must be complied with in order to carry out their operations. The results show that there is no significant relationship between risk disclosure transparency and the other control variables (Cost income ratio, leverage, profitability, board size and CEO duality) when other variables are fixed.

When country dummy variable was included in the regression analysis, the results showed that country and overall capital stringency are positively and statistically related to risk disclosure transparency at *p*-values of 0.010 and $p < 0.001$ respectively. Listing on NYSE and cost-income ratio were positive and marginally significant. When year dummy variable was included in the regression analysis, the results also showed that all control variables, except for listing on NYSE, were not statistically significant.

Table 6. 6 Results of a weighted least squares regression examining the impact of national culture on risk reporting transparency

Dependent variable: Risk reporting transparency disclosure index scores (RRTDIS)			
	Without years and countries dummy	With years dummy	With countries dummy
Independent variables:			
(Constant)	0.003 0.998	0.049 0.970	0.220 0.857
UA	-0.041*** (0.000)	-0.041*** (0.000)	-0.040*** (0.000)
LTO	0.033* (0.075)	0.033* (0.076)	0.013 (0.521)
PD	0.038*** (0.001)	0.038*** (0.001)	0.022* (0.063)
CIR	0.002 (0.207)	0.002 (0.221)	0.003* (0.068)
LEV	1.857 (0.207)	1.825 (0.221)	1.655 (0.247)
PROF	-0.224 (0.405)	-0.222 (0.411)	-0.360 (0.177)
BS	-0.013 (0.700)	-0.013 (0.688)	0.008 (0.804)
CD	1.377 (0.223)	1.392 (0.221)	1.137 (0.301)
USLST	1.888*** (0.000)	1.885*** (0.000)	1.739* (0.054)
CAPSTRING	0.137 (0.398)	0.140 (0.392)	0.340*** (0.000)
Year		-0.012 (0.858)	
Country			0.133** (0.010)
N	107	107	107
Adjusted R^2	0.638	0.634	0.659
Durbin-Watson statistic	1.861	1.862	1.958
Model F	19.694***	17.726***	19.635***

Figures in parenthesis are *p*-values. ***,**,* significant at 0.01, 0.05 and 0.10 respectively

6.4.3.4 Robustness checks

Robustness checks were conducted to ensure the validity of the model. The researcher included a variable for legal system to examine the relationship and statistical significance of the explanatory variables. The results show that the behaviour of relationship remained the same. UA was still significantly and negatively related to transparent risk reporting at $p<0.001$, PD was positively and significantly related to transparent risk reporting at $p<0.001$ while LTO was positively and significantly related to transparent risk reporting at *p*-value of 0.011 with adjusted R^2 58.5%. Listing on NYSE remained positively and significantly related to transparent risk reporting at $p<0.001$. Crossland and Hambrick (2007) found that CEOs from certain nationalities (such as American CEOs) tend to have more effect on the functions and outcome of a bank. The nationality of the CEO (CEON) was also included to examine the impact of CEOs from other nationalities on the behaviour of the relationship between the national cultural dimensions and the risk reporting transparency of the banks. The relationship remained the same with UA negatively related to transparent risk reporting, $p<0.001$, PD positively related to transparent risk reporting, $p<0.001$ and LTO positively related to transparent risk reporting, $p=0.010$ with adjusted R^2 57.9%. Listing on NYSE also remained positively related to transparent risk reporting, $p<0.001$.

Table 6. 7 Robustness test (1)

Dependent variable: Risk reporting transparency disclosure index scores (RRTDIS)		
	With legal system	With CEO's nationality
Independent variables		
(Constant)	-0.422	-0.510
	(0.691)	(0.633)
UA	-0.047***	-0.042***
	(0.000)	(0.000)
LTO	0.041**	0.043***
	(0.011)	(0.010)
PD	0.042***	0.044***
	(0.000)	(0.000)
CIR	0.003*	0.002
	(0.075)	(0.169)
LEV	1.728	1.960
	(0.248)	(0.192)
BS	-0.036	-0.023
	(0.296)	(0.485)
CD	1.124	1.182
	(0.256)	(0.236)
USLST	1.993***	1.867***
	(0.000)	(0.000)
CAPSTRING	0.182	0.108
	(0.293)	(0.524)
LS	0.667	
	(0.214)	
CEON		0.041
		(0.886)
N	107	107
Adjusted R^2	0.585	0.579
Durbin-Watson statistic	1.886	1.847
Model F	15.964***	15.559***

Figures in parenthesis are *p*-values. ***,**,* significant at 0.01, 0.05 and 0.10 respectively

In addition, alternative measures for the cultural dimensions were applied using the Global Leadership and Organisational Behavior Effectiveness (GLOBE) scores in place of Hofstede's scores. Due to the multicollinearity issues found among the main dependent variables, LTO was excluded. Without year and country dummy variables, the researcher found that UA was significantly and positively related to transparent risk reporting at $p<0.001$ with adjusted R^2 of 38.1%. The opposite direction of relationship for UA is expected as the GLOBE score for UA has been found to have a negative correlation with Hofstede's UA scores (House et al., 2004; Hooghiemstra et al., 2015). Listing on NYSE was significantly and positively related to transparent risk reporting while profitability was significantly and negatively related to transparent risk reporting[23]. Also, when year and country dummy variables were included, the researcher found that UA, listing on NYSE, profitability and board size were significantly related to transparent risk reporting with adjusted R^2 of 37.7% and 39.8% respectively. However, PD was negative and not significantly related to transparent risk reporting. House et al. (2004) found that GLOBE's score for PD is strongly and positively related to Hofstede's PD score. However, the reason for the different direction of relationship and insignificance may be, as highlighted by Hofstede (2006), as a result of the type of respondents where both authors derived their scores and the issues put into consideration when designing the questionnaires for the respondents. For instance, Hofstede's study investigated employees at both senior and junior levels while GLOBE's respondents were mainly managers (Hofstede, 2006). Another reason for the direction of relationship may be the countries investigated by both authors.

[23] The GLOBE study does not provide scores for certain countries. Two Belgian banks included in this study were not assigned any scores when carrying out the robustness tests.

Table 6. 8 Robustness test (2)

Dependent variable: Risk reporting transparency disclosure index scores (RRTDIS)

	Without years and countries dummy	With years dummy	With countries dummy
Independent variables:			
(Constant)	-2.649	-2.352	-2.285
	(0.193)	(0.261)	(0.257)
UA	1.299***	1.289***	1.095***
	(0.000)	(0.000)	(0.002)
PD	-0.280	-0.282	-0.272
	(0.275)	(0.272)	(0.283)
CIR	0.000	0.000	0.000
	(0.936)	(0.930)	(0.926)
LEV	0.282	0.047	-0.311
	(0.872)	(0.979)	(0.860)
PROF	-1.760	-1.933	-2.142*
	(0.129)	(0.106)	(0.066)
BS	-0.041*	-0.041*	-0.035
	(0.063)	(0.061)	(0.112)
CD	1.435	1.512	1.357
	(0.166)	(0.149)	(0.184)
USLST	1.465***	1.451***	1.637***
	(0.000)	(0.000)	(0.000)
CAPSTRING	0.290	0.286	0.297
	(0.204)	(0.212)	(0.188)
Year		-0.047	
		(0.532)	
Country			0.096*
			(0.065)
N	107	107	107
Adjusted R2	0.381	0.377	0.398
Durbin-Watson statistic	1.962	1.962	2.042
Model F	7.839***	7.047***	7.598***

Figures in parenthesis are *p*-values. ***,**,* significant at 0.01, 0.05 and 0.10 respectively

6.4.3.5 Implication and contribution

The results of this research are consistent with voluntary disclosure theory in terms of reducing information asymmetry (Welker, 1995; Leuz and Verrecchia, 2000). The results are also consistent with national culture theory that national cultural differences are reflected in decisions made by the resident banks (Hofstede, 1991, 2001; Kwok and Tadesse, 2006). The results showed that UA and PD were significantly related to risk disclosure transparency. Specifically, the results showed a negative relationship for UA and a positive relationship for PD with regard to risk disclosure transparency. The direction of relationship between LTO and risk disclosure transparency was positive but this was only marginally significant. Based on the results for UA, the researcher suggests that self-regulation mechanisms such as voluntary risk reporting should be encouraged in high UA societies. This may encourage banks to be more focused on potential risks, i.e., specific and generic risks that may affect their activities, rather than following a form of risk categorisation and disclosure based on the requirements. Although high UA and high PD societies tend to adopt regulations in order to minimise uncertainty, it may be the case that risk disclosure regulations in these societies are rigid and specific, possibly not leaving room for the banks that are domestically resident in these societies to provide other information that may be useful. The positive significant relationship of regulations when country dummy variable was included further supports this reasoning. Also, as the results showed that listing on NYSE is positively related to risk disclosure transparency, it is most likely that banks listed on the NYSE provide information on specific risks that affect their activities (Miihkinen, 2012). As an example, the form 20-F report (a type of annual report that foreign companies listed on the NYSE must file) stipulates that these companies should discuss risk factors that may affect their activities but does not specify details and whereabouts they must be disclosed (Item 3,D- SEC, 2017). This differs from the requirements of the European Banking Authority on risk disclosure which requires more specific details on risk categories.

The suggestion for enforcement of self-regulation in risk reporting (i.e. voluntary risk reporting) is supported by Oliveira et al. (2011) who argue that enforcement is essential in order to achieve effective voluntary risk disclosures. This may be achieved through monitoring role of strong and independent external auditors (Salter and Niswander, 1995; Power, 1997). Additionally, when risk disclosure regulations are primarily concentrated on one particular risk category, banks tend to comply and focus more on disclosing information pertaining to that category and reduce risk disclosures for other risk categories, which may be crucial (Bischof, 2009). Hence, the researcher suggests

that when banks are compelled to report risks and discuss their likely impact, these banks may not only be more transparent in reporting the risks that may affect their operations but may also be more engaged in the risk management process. This is because they may aim to avoid repetitive risk disclosures and to improve the risk management actions that they undertake (Abraham and Shrives, 2014). Although it is extremely difficult for banks to identify all risks, poor risk management could be deemed as conspicuous in banks that disclose little or no risks but consistently encounter negative events. Also, as certain cultural dimensions explain the degree of transparent risk reporting, the researcher suggests that there is a need for all societies to embrace a long-term orientation by focusing more on the future than the present. More efforts could be placed on confronting and managing risks which may become negative events or missed opportunities as the extent of information disclosed indicates how well the uncertainty has been identified and managed. Furthermore, there should be more transparency in the disclosure of negative events that each bank faces and that these disclosures should be made publicly available.

From this research, it may be deduced that banks are indirectly compelled to report some negative events because they know it is highly likely that these events will be reported/exposed by the national media. This was echoed by Frolov (2006) that banks are likely to disclose more if they are concerned about reputational damage when the media discloses before they do. Hence, in countries where the media more (less) readily report such events, one would expect greater (lesser) levels of disclosures. For example, in Russia where media is more tightly controlled by the state in the form of 'soft censorship' (Simons, 2015), the researcher found less news reports and no related risk disclosures unlike the UK where media is relatively less restricted, more risk disclosures and more negative events were found.

6.4.4 Limitations and suggestions for future research

There are a number of limitations in this research. First, the sample size used in this study may be considered small. However, it was only practicable to use a small sample because of the need to perform lengthy manual and automated analysis of the risk information in the annual reports and to identify how the information related to the negative events and the quality of risk information disclosed. Second, Hofstede's cultural dimensions scores have been criticised for being out of date. However, the use of these scores in recently published research has been justified on the basis that the scores remain reliable because culture evolves so slowly over time. Third, the negative events for the countries investigated were disparate. This issue is common with 'event studies'

as not all abnormal return dates and event windows often reflect the disclosure of news due to random activity. However, future research could investigate a larger number of events against risk disclosures of a larger sample size by country to identify if the same results are found. Fourth, the investigation was restricted to annual reports as this is an acknowledged source through which banks communicate to the public (Stanton and Stanton, 2002; Hellmann, Yeow and Mello, 2017). However, future research could include other sources of information such as reports from analysts, conference calls and/or minutes of annual general meetings.

6.5 Conclusion

The main research question is to assess the extent to which risk information in annual reports can predict the future performance of banks. This chapter assessed the extent to which risk information in annual reports of banks predicting future negative events may be driven by national cultural differences. The results of the research showed that the national cultural traits of uncertainty avoidance and power distance are significantly related to the degree of information supplied by banks. In contrast to the prediction of this research, it was found that cultures with higher uncertainty avoidance are likely to provide little or no risk disclosure relating to future negative events. Similarly, in contrast to the prediction of this research, the results showed a positive relationship between power distance and the degree of transparent risk reporting. Among the control variables, a strong predictor of transparent risk reporting was the listing of banks on NYSE. When country dummy variable was included, the results showed that banks with higher cost-income ratio and overall capital stringency are more likely to generate higher level of risk information reported by the banks.

By specifically focusing on the banking sector, this research makes a novel contribution to the limited literature on national culture theory and risk disclosure. This study shows that there is a need to better understand how banks in different cultures report risk information and select which risk-related information (in terms of relationship to negative events) is relevant to report. This research also contributes to the literature on risk disclosure and actual realisations by investigating risk disclosures in relation to future negative events.

Based on the findings, the researcher suggests an enforcement of voluntary risk reporting for banks by the implementation of self-regulations to avoid specifying which categories of risks to report. As found in previous research, enforcing voluntary risk reporting through monitoring by strong independent external auditors may not only

improve transparency in risk reporting but improve the risk management practice of the banks as they are more likely to be engaged in the risk management process. Also regulations that do not specify which risk categories to disclose (e.g., capital risk or credit risk) may encourage avoidance of boilerplate risk reporting and increase the reporting of risks that are of relevance to future events. Although it may not be possible to identify all risks, poor risk management would be conspicuous when banks disclose little or no information while, within the same period of time, the media indicate that such banks have encountered numerous negative events. Finally, the researcher suggests that there should be greater transparency regarding the disclosure of actual negative events faced by banks, particularly because this can contribute towards maintaining a good reputation for the banks.

The next chapter gives the summary of the overall thesis.

Chapter 7: Conclusion

7.0 Introduction

The aim of this thesis was to assess the extent to which the risk reporting practices of banks were transparent (in relation to future performance) and to develop evidence-informed recommendations for better risk disclosure practices. This was addressed by exploring adumbrative risk reporting in two UK banks that performed differently in terms of funding during the financial crisis of 2007 to 2009 based on aggregated risk reporting (Chapter 4-Paper 1). Thereafter, the researcher further examined the impact of mandatory, voluntary and adumbrative risk reporting on the performance of all UK registered and listed banks during and after the financial crisis in order to examine the impact of separate risk reporting systems on bank performance (Chapter 5- Paper 2). Based on the findings, the researcher extended the context and investigated the impact of national cultural differences on the risk reporting transparency of 30 banks from 11 European countries with the highest GDP (Chapter 6-Paper 3). This thesis took the view of critical realism as it was important to observe the risk reporting practices and relate this to transparency based on events that occurred after the annual reports were published. The three papers are independent but all focus on the investigation of transparent risk reporting practices. The following sections discuss the research aim and objectives and how they were addressed, the theoretical and practical contribution of the thesis and opportunities for future research.

7.1 Research objective 1

In assessing the extent to which banks were transparent in reporting risks, the first research objective was to identify the possibility of adumbrative risk disclosure practices by analysing the annual reports of UK banks before the global financial crisis. To achieve this, the researcher conducted an in-depth examination of annual reports of HBOS and HSBC from 2002 to 2006. These banks were chosen specifically due to their liquidity and funding performance during the financial crisis. While HSBC experienced financial stability, HBOS experienced a sharp fall in share prices and funding difficulty to the extent that it sought Emergency Liquidity Assistance from the Bank of England as a result of undue reliance on wholesale funding while maintaining a higher loan to deposit ratio and a lower Tier 1 capital ratio than its peers. As the financial crisis presented a number of negative events, both general to the banking industry and specific to the banks, it was important to investigate how these negative events were reported as risks

before their occurrence. Hence, qualitative content analysis was suitable for this research. First, using institutional theory and the adumbration concept developed to understand risk reporting practices, the annual reports were examined for changes made to risk statements of both banks. This was done in order to identify how engaged these banks were in their risk reporting practices. Although boilerplate risk reporting was found in both banks, this was higher in HBOS. Second, the researcher checked if actual experiences (negative events) were reported as risk in the annual reports of both banks. The data for these events were collected from media news articles and annual reports of the banks. The results showed that both banks reported some of the negative events as actual risks in their annual reports. Third, the researcher examined how these actual experiences were reported as risks in the reports based on the developed adumbrative risk disclosure criteria. The results showed that HSBC was more transparent in terms of disclosing how the risk was identified, how they were assessed and the impact as well as the responses put in place to mitigate or manage the risks. In some cases, it was found that HBOS disclosed a negative event in the previous period's annual report as an opportunity rather than a threat.

7.2 Research objective 2

The second research objective was to identify if there was a relationship between the work experience and professional qualification of the bank directors, and the extent of risk disclosure in the annual reports. This was also addressed in Paper 1. Based on the recommendations of Walker (2009), risk management would have been effectively practiced if executive and non- executive directors had relevant skills and work experience in banking and/or other financial services sector. Using upper echelons theory to demonstrate that background characteristics of directors influence the decisions made and how a bank is run, data on work experience of the bank directors in banking and other financial services sector was collected, including their banking related professional qualifications prior to their appointment. This was then related to their risk reporting practice. The results of the analysis showed that more executive directors in HSBC had extensive experience working in banks or other financial services companies such as audit firms prior to being appointed to the board and had relevant banking-related professional qualifications while this was not the case in HBOS.

7.3 Research objective 3

The third research objective was to identify the impact of mandatory, voluntary and adumbrative risk disclosures on performance of UK banks. As Chapter 4 investigated risk reporting in line with aggregation, it was necessary to examine the impact of the separated mandatory and voluntary disclosures on bank performance. Also, as voluntary risk disclosure was more likely to relate to the bank's specific circumstance, adumbration was included in voluntary risk reporting to examine the level and impact of adumbration on the performance of the investigated banks. This was addressed in Paper 2. Using theories of mandatory and voluntary disclosure and the concept of adumbration, this objective was achieved by examining the annual reports of all UK registered and listed banks from 2007 to 2016. This is because of the need to understand the differences in risk disclosures of banks that are regulated and supervised by the same authorities and to identify how this practice affects their financial performance. A risk disclosure index was developed from the disclosure regulations and official recommendations for mandatory and voluntary risk disclosures respectively to identify the extent to which these banks reported risks. Using a dichotomous scoring technique to identify if the risk information relating to an item in the index was disclosed and relating this to both market based and accounting based performance of the banks, the results showed that mandatory risk disclosure was negatively related to bank performance while voluntary risk reporting was positively related to bank performance. In addition, while adumbration scores were drawn from voluntary risk reporting, there was no significant relationship between adumbration and both measures of performance.

7.4 Research objective 4

Based on the findings of Paper 2 (Chapter 5), it was necessary to examine informative risk reporting practice on a broader perspective by examining banks across different countries being regulated by the same authority. The fourth objective was to identify the impact of national cultural differences on the risk reporting transparency of European banks. This was addressed in Paper 3 by investigating annual reports of European banks from 2010 to 2016 with the negative events that occurred following the release of the annual reports. Using Hofstede's cultural dimensions to demonstrate the differences between societies (in this case countries), the researcher explored the risk reporting practices of the banks that were domestically resident in societies within the context. In this research, the risk reporting transparency was examined based on the actual experiences of the banks. In essence, the annual reports of the banks were investigated to identify whether negative events published in the news were disclosed as

risks prior to the occurrence of the events and how the risk information was reported. Transparency was then measured based on the information supplied as risk pertaining to the negative event. Thereafter, the risk disclosure transparency scores were compared to the cultural dimension scores of the countries where these banks are domestically resident. The results showed that while uncertainty avoidance was negatively related to risk reporting transparency, power distance had a positive relationship with risk reporting transparency. Long-term orientation was positively related to risk reporting transparency, but this relationship was marginally significant.

7.5 Theoretical contribution and practical implications

This thesis contributes to research on risk reporting of banks. Specifically, the study shows that currently, risk information are still sometimes circuitously disclosed in annual reports. By relating risk information to negative events, the study shows that banks were not completely ignorant of the risks that eventually led to the global financial crisis. Hence, adumbration was practiced before the financial crisis as negative events were foreshadowed as risks and presented circuitously in other sections of the annual reports. Identifying the limitation of quantitative content analysis predominantly used in research, this thesis took the qualitative content analysis approach to examine and understand how risk information was disclosed in the annual reports of banks. This thesis also contributes to the limited research on linking risk disclosure to actual occurrences to understand through their disclosures, whether banks were actually conversant with the negative events before they eventually occurred. Although perfect forecast of future occurrences is impossible and the impact may be misjudged, this research shows how those events known to the banks were disclosed as risks to the public. Also, the thesis provides empirical evidence that suggests that lack of relevant work experience and education in banking related fields may lead to adumbrative risk reporting. Furthermore, the thesis contributes to the limited existing literature by examining the relationship between risk reporting systems and bank performance. It further contributes to the school of thought that mandatory risk reporting negatively affects performance while the information voluntarily disclosed has a positive effect on performance. Finally, the thesis demonstrates that it is important to study national culture where banks are domestically resident in order to better understand their differences in risk reporting practices and how transparent they are in reporting their risks.

With regard to the practical implications, this research supports that it is essential for all directors appointed to bank boards to have prior experience working in a bank or other firms in the financial services sector as well as possess relevant banking-related

professional qualifications in order to ensure effective risk management and risk reporting practice. The researcher proposes that while monitoring policies should be enforced by regulators to ensure transparent risk reporting, banks should be encouraged to disclose risks that are relevant to their activities during the financial reporting period rather than having to follow strictly detailed disclosure regulations. This is because it is possible in this case for the banks to focus on the disclosure of items in the detailed regulations and omit or not be equally attentive to other risks that are not required in the regulations but are vital to their business activities. Finally, as transparency in risk reporting has not been achieved, the readers of bank annual reports are advised not to only focus on risk management sections if maximum knowledge on risk information reported by banks is intended to be achieved.

7.6 Opportunities for future research

This thesis is not without limitations. First, it was difficult to gain access to information pertaining to the level of professional development of the bank directors. The researcher was only able to collect data on their membership status, i.e., as an associate or fellow member of the institutional body. It is also possible that other members apart from the board of directors were involved in risk management duties which may have had an impact on the risk reporting practices of the banks. Future research may conduct interviews to include members of the board and other key officials that are involved in risk management process to further investigate risk reporting transparency of these banks.

Furthermore, the sample size may be considered small due to limited time available for the research. Paper 1 was a qualitative study with the use of content analysis which involved manual assessment of risk disclosures so as not to omit risk information through word search. Also, the two banks investigated in Paper 1 were arguably representative of the UK banking industry in terms of extreme differences in liquidity and funding performance during the global financial crisis. This limitation was partly addressed in Paper 2 where all UK registered and listed banks were included in the research. However, due to data availability, non-listed UK banks were excluded from the study. Future research may include all firms in the financial services sector such as building societies and insurance companies to investigate their risk reporting practices. Additionally, the examination of risk reporting was restricted to annual reports. The reason for this is that it has been established in research that annual report is the main tool through which companies communicate their activities to the public (Hellmann, Yeow and Mello, 2017). However, future research may include other sources such as

interim reports, analysts' reports, conference calls, minutes of annual general meetings and press releases to further examine the risk reporting transparency of banks.

One common finding from the three papers of this thesis is that there are differences in risk reporting practices of banks and transparency has not been fully achieved. Paper 1 provided results that suggest that banks may provide risk information but this may be disclosed obscurely to the extent that the information may be easily missed. Paper 2 provided results that suggest that banks should not be compelled to disclose risk information but should be encouraged to disclose risk information voluntarily. However, the items of the disclosure index for voluntary disclosure were mainly from recommendations that were later embedded to the 'Corporate Governance Code'. This corporate governance code observes the 'comply' or 'explain' principle where the directors are required to comply or explain why they have not complied with a principle in the Code. The results of Paper 3 then suggest that banks may be compelled to disclose risks but they tend to be more transparent when listed on the NYSE. The risk disclosure regulations for NYSE do not specifically include all items to be disclosed enabling banks to control the disclosure of only risks that are important to their activities and the volume to be disclosed; this is unlike the European Banking Authority regulations on risk disclosure which specify the items to be disclosed by the banks. This indicates that strict regulations that allow bank directors to disclose risks without specifying which risks to disclose is likely to promote risk reporting transparency than regulations that specify categories and exact content to be disclosed. This presents a further question as to how directors perceive disclosure regulations and how these regulations enhance transparent risk reporting. Thus, future research may conduct interviews with bank directors and key personnel involved in risk management activities to understand the perception of directors on risk disclosure regulations and how this affects the transparency of risk reporting practices.

7.7 Chapter summary

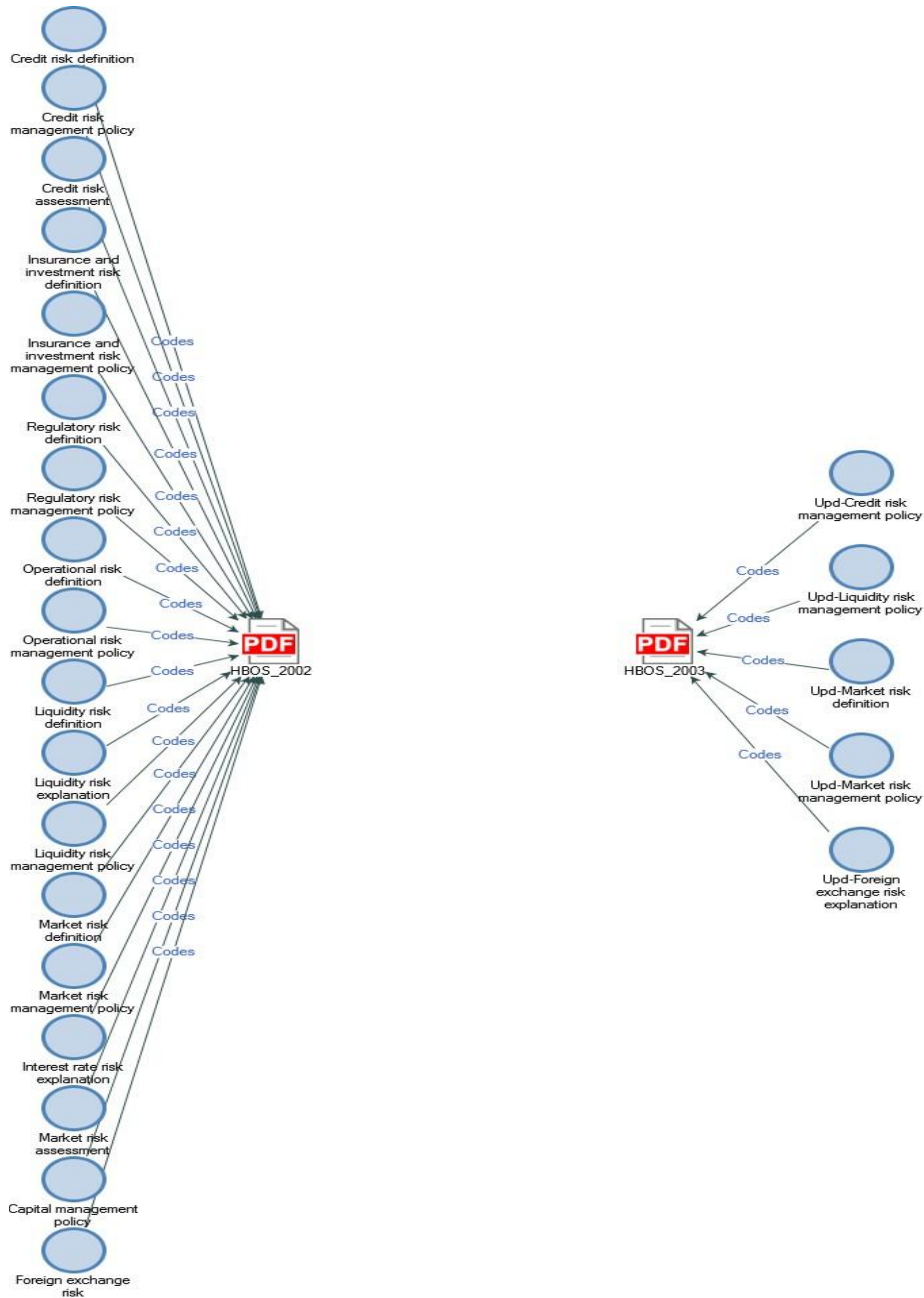
This chapter gave a summary of the research aim and objectives, research questions, methodologies, results, theoretical contributions, practical implications and opportunities for future research based on this thesis. The thesis aimed to assess the extent to which the risk reporting practices of banks were transparent. The first paper revealed that while adumbration was practiced in risk disclosure by banks examined in the pre-crisis period, the poorly performing bank was more involved in this practice. It highlighted how lack of caution in appointment of key personnel on the bank board may relate to poor risk reporting practice. The investigation showed that banks were not completely ignorant of

the negative events that occurred during the crisis by their risk disclosures. The second paper revealed that compliance with risk disclosure regulations had a negative effect on the performance of banks while voluntary risk reporting had a positive effect. It revealed that while adumbration was practiced during and after the financial crisis, this practice reduced after the financial crisis. The third paper revealed that national cultural differences of resident banks affect the extent to which banks report risks transparently. The results of the three papers of this thesis provided numerous implications and contributions. The research attempted to expand risk disclosure literature. This thesis highlighted the need to understand adumbrative risk reporting in order to have a full grasp of risk information supplied in annual reports and the dangers of excessive risk reporting practice as evidenced in the global financial crisis. It further provided supporting evidence on the relationship between risk reporting systems and bank performance. As a methodological contribution, this thesis made use of qualitative content analysis to demonstrate that useful information related to bank's actual occurrences may be neglected and/or omitted with the use of quantitative content analysis. Although risk disclosures may not be transparent, this thesis provided concrete evidence to demonstrate that beneath the shadow of compliance with regulations, banks provide risk information that may indicate future experiences.

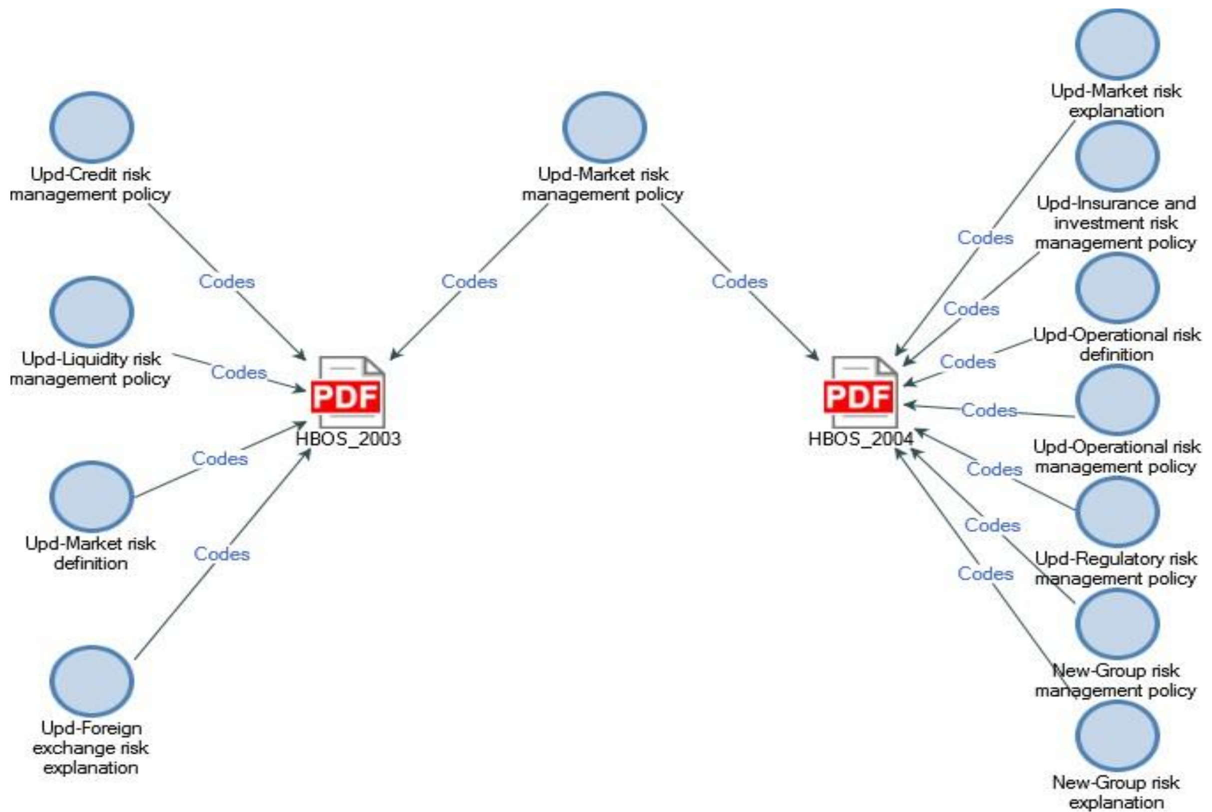
Appendices

Appendix A: Extent of risk disclosure (excludes boilerplate information)

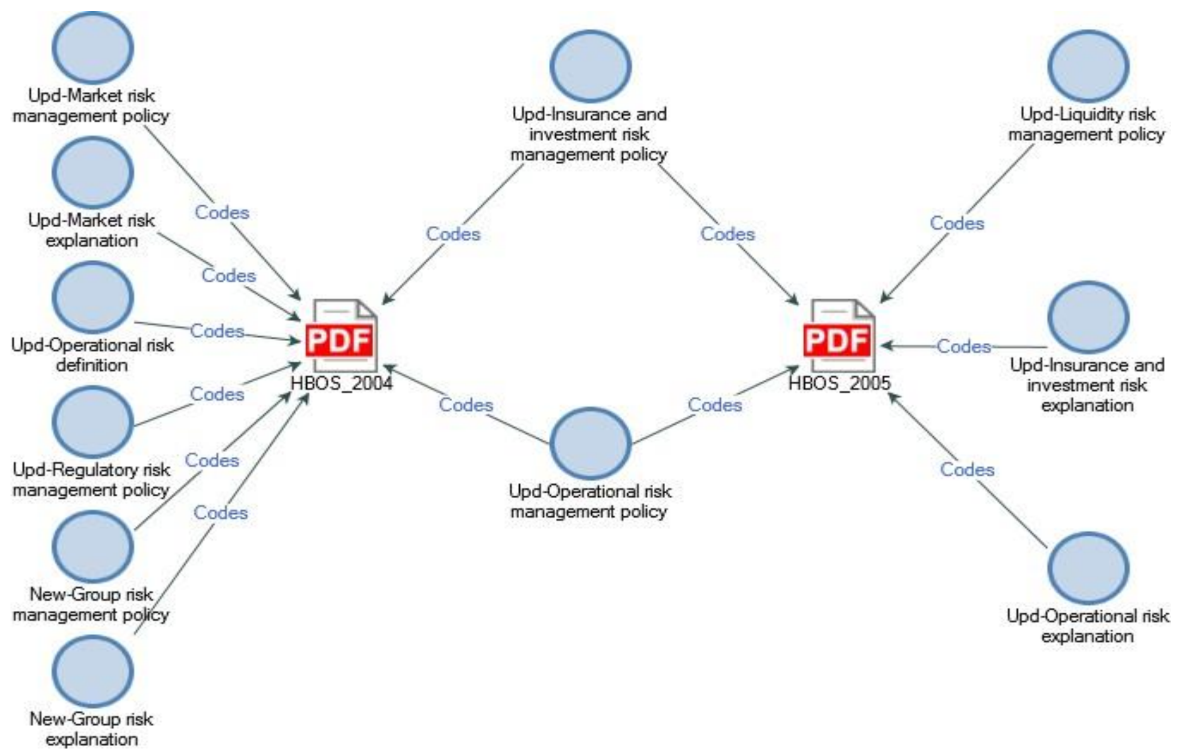
HBOS: 2002 to 2003



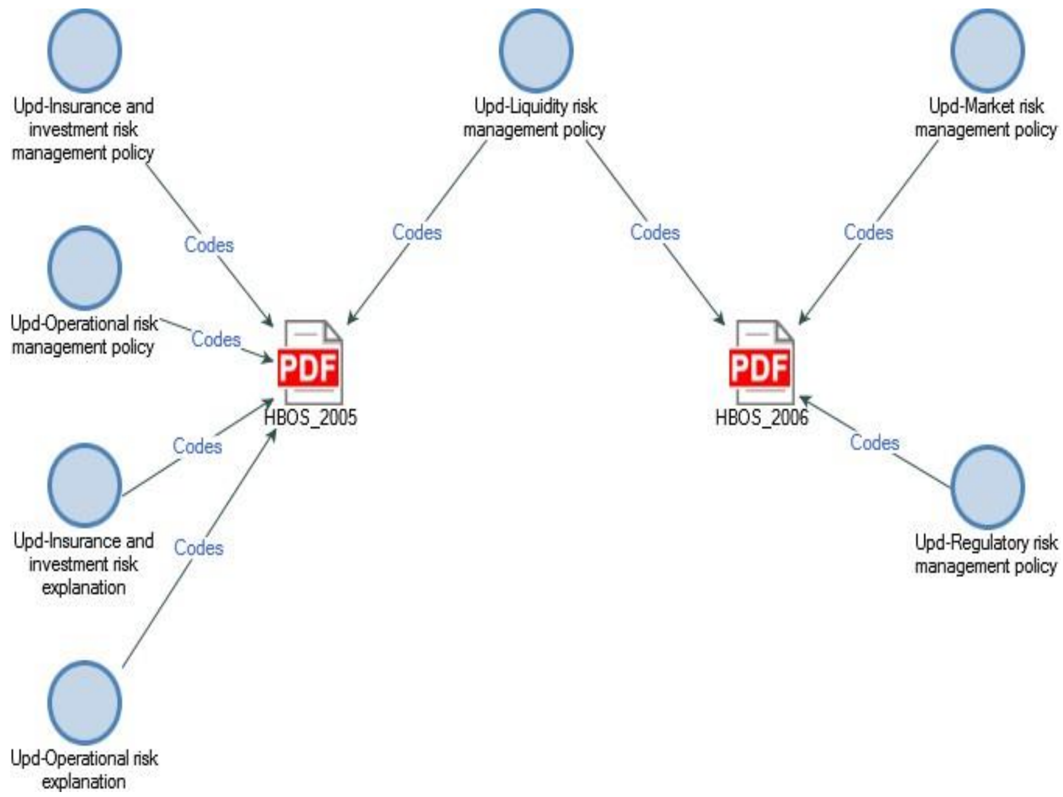
HBOS 2003 to 2004



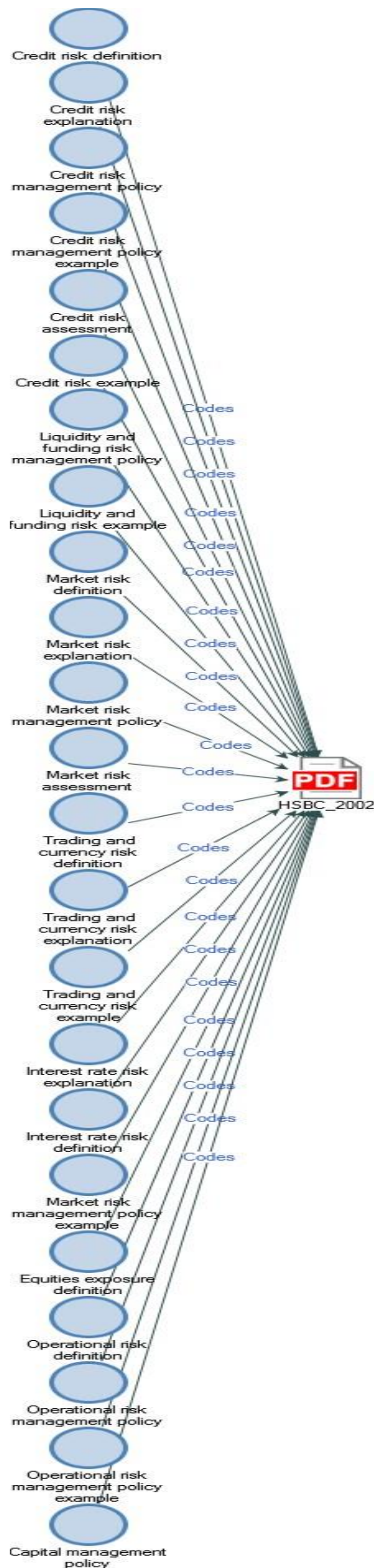
HBOS 2004 to 2005

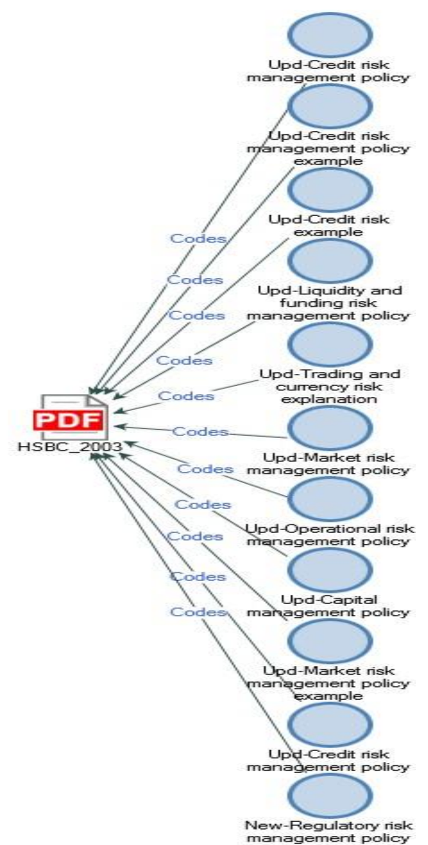


HBOS 2005 to 2006

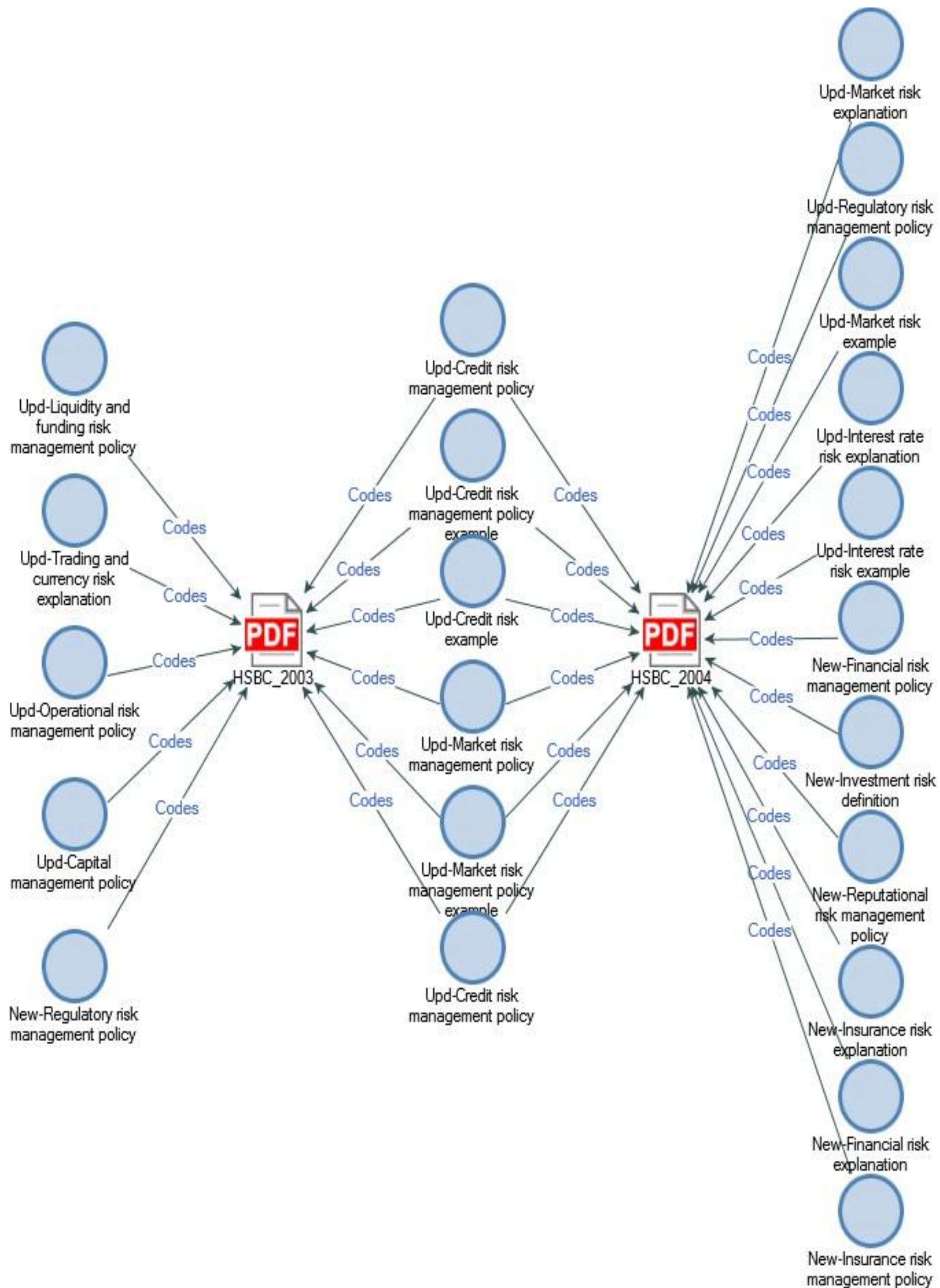


HSBC 2002 to 2003

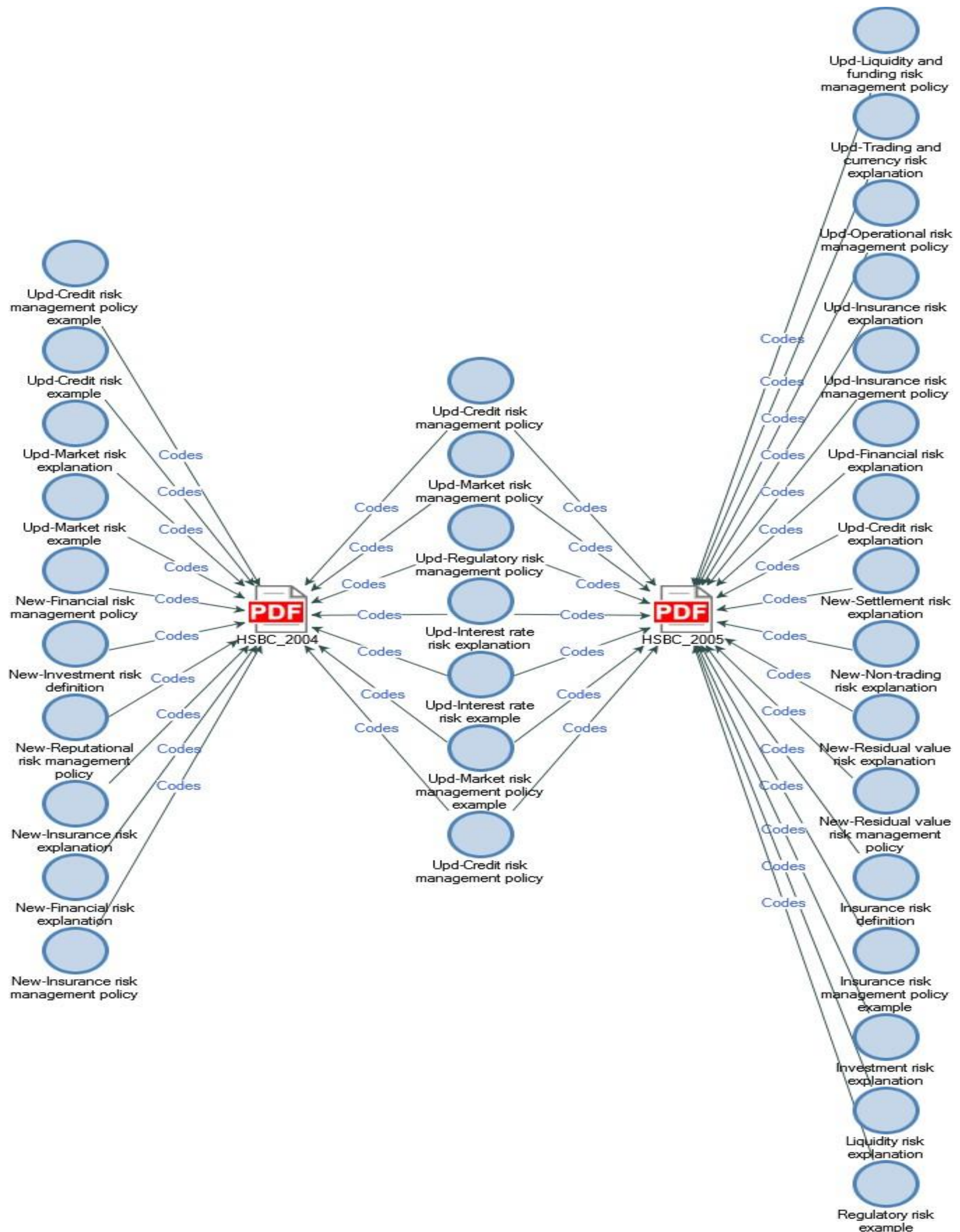




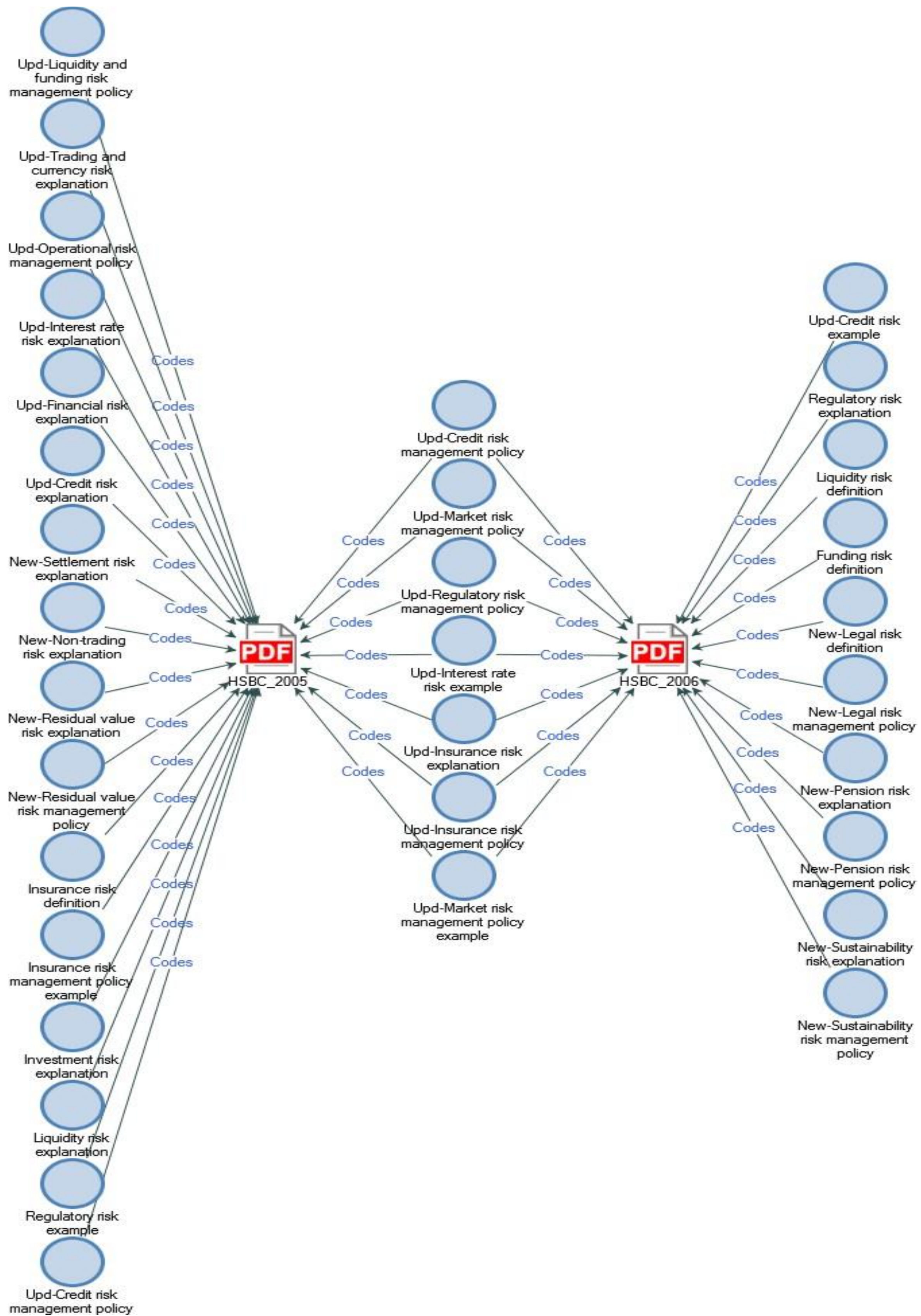
HSBC 2003 to 2004



HSBC 2004 to 2005



HSBC 2005 to 2006



Appendix B: Relevant experience and Number of professional qualifications of Directors

HBOS

	Experience in Banking (Years)	**Experience in Financial**	**Number of Professional**
ED1	2	14	1
ED2	27	0	2
ED3	29	5	1
ED4	0	3	0
ED5	0	10	0
ED6	8	0	0
ED7	32	0	1
ED8	0	34	1
ED9	33	0	1
ED10	8	14	2
ED11	3	19	0
NED1	0	4	1
NED2	0	24	1
NED3	0	5	0
NED4	3	0	0
NED5	0	29	0
NED6	0	6	0
NED7	0	0	0
NED8	1	0	0
NED9	7	0	0
NED10	5	0	1
NED11	12	14	0
NED12	0	23	1
NED13	0	0	0
NED14	0	0	0
NED15	2	34	1

HSBC

	Experience in Banking (Years)	Experience in Financial	Number of Professional
ED1	27	0	1
ED2	26	1	2
ED3	38	0	2
ED4	12	3	0
ED5	16	5	0
ED6	22	0	1
ED7	31	0	1
ED8	29	0	0
ED9	30	0	0
ED10	11	22	2
NED1	0	0	0
NED2	0	7	1
NED3	0	3	0
NED4	0	0	0
NED5	0	0	0
NED6	0	0	0
NED7	0	40	0
NED8	0	0	0
NED9	0	0	0
NED10	5	0	0
NED11	0	3	0
NED12	0	0	0
NED13	0	37	1
NED14	0	5	0
NED15	0	16	1
NED16	0	0	1
NED17	19	0	0
NED18	0	0	0

Appendix C: MRD and VRD index

Risk category	Disclosure information	Score	MRD/VRD	References
All risks	strategies and processes to manage risks	1	MRD	EP (2006), annex xii, part 2, point 1, p. 186
	structure and organisation of relevant risk management function	1	MRD	EP (2006), annex xii, part 2, point 1, p. 186
	risk measurement systems	1	MRD	EP (2006), annex xii, part 2, point 1, p. 186
	policies for hedging and mitigating risks	1	MRD	EP (2006), annex xii, part 2, point 1, p. 186
	types of risks of underlying securitisation in order of seniority and assets	1	MRD	EP (2010), annex xii, part 2, point 14, p. 23
	Specific examples of likelihood of risk	1	VRD	FRC (2009b, 2014d, 2014c)
	Examples of possible financial/economic impact	1	VRD	BBA (2010); FSB (2012), FRC (2009b, 2014d, 2014c)
	Specific examples of how risks are mitigated or managed	1	VRD	FRC (2009b, 2014d, 2014e)
	Current state of recurrent risks	1	VRD	FRC (2010a); BBA (2010)
	Specific description of how risks common to the banking industry affect the bank	1	VRD	FRC (2014e)
	Viability statement	1	VRD	FRC (2015), FRC (2016)
	Qualitative description of quantitative data	1	VRD	BBA (2010); FRC (2011)
	Qualitative description of objectives, policies and	1	VRD	FRC (2011)

	processes			
Capital risk	Definition	1	MRD	EP (2006)
	approach used in assessing adequacy of internal capital	1	MRD	EP (2006), annex xii, part 2, point 4, p. 187
	minimum capital requirements	1	MRD	EP (2006), annex xii, part 2, point 4, p. 187
Counterparty credit risk	Definition	1	MRD	EP (2006)
	methodology used to assign internal capital	1	MRD	EP (2006), annex xii, part 2, point 5, p. 188
	credit limits for counterparty exposures	1	MRD	EP (2006), annex xii, part 2, point 5, p. 188
	policies for securing collateral and establishing credit reserves	1	MRD	EP (2006), annex xii, part 2, point 5, p. 188
	policies on wrong-way risk exposures	1	MRD	EP (2006), annex xii, part 2, point 5, p. 188
	measures for exposure value	1	MRD	EP (2006), annex xii, part 2, point 5, p. 188
	credit derivative transactions	1	MRD	EP (2006), annex xii, part 2, point 5, p. 188
	impact of collateral needed to be provided	1	MRD	EP (2006), annex xii, part 2, point 5, p. 188
	Gross positive fair value of contracts, netting benefits, netted current credit exposure, collateral held and net derivatives credit exposure	1	MRD	EP (2006), annex xii, part 2, point 5, p. 188
	types of credit exposure:	1	MRD	EP (2006), annex

	notional value of credit derivative hedges and current credit exposure			xii, part 2, point 5, p. 188
Credit and dilution risk	Definition	1	MRD	EP (2006)
	definitions of 'past due' and 'impaired'	1	MRD	EP (2006), annex xii, part 2, point 6, p. 188
	approaches used to determine value adjustments and provisions	1	MRD	EP (2006), annex xii, part 2, point 6, p. 188
	Total amount of exposure	1	MRD	EP (2006), annex xii, part 2, point 6, p. 188
	geographic distribution of exposures based on materiality	1	MRD	EP (2006), annex xii, part 2, point 6, p. 188
	distribution of exposure based on industry/counterparty type	1	MRD	EP (2006), annex xii, part 2, point 6, p. 188
	residual maturity breakdown of all exposures	1	MRD	EP (2006), annex xii, part 2, point 6, p. 188
	amount of impaired exposures, past due exposures, value adjustments and provisions	1	MRD	EP (2006), annex xii, part 2, point 6, p. 188
	charges for value adjustments and provisions during the period based on industry type/counterparty type	1	MRD	EP (2006), annex xii, part 2, point 6, p. 188
	impaired exposures and past due exposures based on geographical areas	1	MRD	EP (2006), annex xii, part 2, point 6, p. 188
	reconciliation of changes in value adjustments and provisions for impaired exposures	1	MRD	EP (2006), annex xii, part 2, point 6, p. 189

	description of impact of credit risk on securitisation exposure and difference for re-securitisation exposures	1	MRD	EP (2010), annex xii, part 2, point 14, p. 23
Credit risk mitigation	types of collateral taken	1	MRD	EP (2006), annex xii, part 3, point 2, p. 192
	policies and processes for collateral valuation and management	1	MRD	EP (2006), annex xii, part 3, point 2, p. 192
	types of guarantor and credit derivative counterparty and credit worthiness	1	MRD	EP (2006), annex xii, part 3, point 2, p. 192
	market and credit risk that may arise as a result of credit mitigation taken	1	MRD	EP (2006), annex xii, part 3, point 2, p. 192
	description of process in monitoring changes in credit risk of securitisation exposures	1	MRD	EP (2010), annex xii, part 2, point 14, p. 23
Market risk	Definition	1	MRD	EP (2006)
	description of impact of market risk on securitisation exposure and difference for re-securitisation exposures	1	MRD	EP (2010), annex xii, part 2, point 14, p. 23
	description of process in monitoring changes in market risk of securitisation exposures	1	MRD	EP (2010), annex xii, part 2, point 14, p. 23
Liquidity risk	Definition	1	MRD	EP (2006)
	nature of liquidity risk in securitised assets	1	MRD	EP (2010), annex xii, part 2, point 14, p. 23
Operational risk	Definition			EP (2006)
	approaches used for assessment of own funds requirement for operational risk	1	MRD	EP (2006), annex xii, part 2, point 11, p. 190
	methodology, internal and	1	MRD	EP (2006), annex

	external factors considered in measurement			xii, part 2, point 11, p. 190
Equity risk not included in trading book	Definition			EP (2006)
	Differentiation between exposures based on objectives, capital gains relationship, strategic reasons, accounting techniques, valuation, methodologies used, key assumptions, practices affecting valuation, changes in practices	1	MRD	EP (2006), annex xii, part 2, point 12, p. 190
	balance sheet value, fair value	1	MRD	EP (2006), annex xii, part 2, point 12, p. 190
	cumulative realised gains/losses from sales and liquidations in the period	1	MRD	EP (2006), annex xii, part 2, point 12, p. 190
	total unrealised gains/losses, total revaluation gains/losses	1	MRD	EP (2006), annex xii, part 2, point 12, p. 190
	nature, types and amounts of exchange-traded exposures	1	MRD	EP (2006), annex xii, part 2, point 12, p. 190
Interest rate risk not included in trading book	Definition	1	MRD	EP (2006)
	nature of interest rate risk, key assumptions and frequency of measurement of interest rate risk	1	MRD	EP (2006), annex xii, part 2, point 13, p. 190
	variation in earnings, economic value, other measures for rate shocks based on currency	1	MRD	EP (2006), annex xii, part 2, point 13, p. 190
Securitisation risk	Definition	1	MRD	EP (2006)
	names of ECAIs used for securitisation	1	MRD	EP (2006), annex xii, part 2, point 14, p. 191
	total amount of outstanding	1	MRD	EP (2006), annex

	exposures securitised			xii, part 2, point 14, p. 191
	explanation of significant changes to quantitative disclosures of total amount of outstanding exposures	1	MRD	EP (2010), annex xii, part 2, point 14, p. 24
	amount of impaired and past due exposures securitised and losses during the period by exposure type	1	MRD	EP (2006), annex xii, part 2, point 14, p. 191
	explanation of significant changes to quantitative disclosures of impaired and past due exposures and losses	1	MRD	EP (2010), annex xii, part 2, point 14, p. 24
	aggregate amount of securitisation positions retained/purchased by exposure type	1	MRD	EP (2006), annex xii, part 2, point 14, p. 191
	aggregate amount of securitisation positions retained/purchased by risk weight bands	1	MRD	EP (2006), annex xii, part 2, point 14, p. 191
	explanation of significant changes to quantitative disclosures of securitisation positions retained/purchased	1	MRD	EP (2010), annex xii, part 2, point 14, p. 24
	aggregate amount of securitised revolving exposures by originator's interest and investor's interest	1	MRD	EP (2006), annex xii, part 2, point 14, p. 191
	explanation of significant changes to quantitative disclosures of securitised revolving exposures by originator's interest and investor's interest	1	MRD	EP (2010), annex xii, part 2, point 14, p. 24

	securitisation activity in the period; amount of exposures securitised and recognised gain/loss on sale by exposure type	1	MRD	EP (2006), annex xii, part 2, point 14, p. 191
	explanation of significant changes to quantitative disclosures of securitisation activity in the period	1	MRD	EP (2010), annex xii, part 2, point 14, p. 24
	use of hedging and unfunded protection to mitigate risks	1	MRD	EP (2010), annex xii, part 2, point 14, p. 23
	identification of material hedge counterparties by type of risk exposure	1	MRD	EP (2010), annex xii, part 2, point 14, p. 23
	securitisation of third-party exposures	1	MRD	EP (2010), annex xii, part 2, point 14, p. 23
	objectives on securitisation activity	1	MRD	EP (2006), annex xii, part 2, point 14, p. 190
	roles played in securitisation process	1	MRD	EP (2006), annex xii, part 2, point 14, p. 190
	extent of involvement in each securitisation activity	1	MRD	EP (2006), annex xii, part 2, point 14, p. 190
	method used to calculate risk weighted exposure	1	MRD	EP (2006), annex xii, part 2, point 14, p. 190
Policies on securitisation activities	recognition of gains on sales	1	MRD	EP (2006), annex xii, part 2, point 14, p. 190
	assumptions for valuing retained interests	1	MRD	EP (2006), annex xii, part 2, point 14, p. 190

	transactions treated as sales/financings	1	MRD	EP (2006), annex xii, part 2, point 14, p. 190
	treatment of synthetic securitisations	1	MRD	EP (2006), annex xii, part 2, point 14, p. 190
	amount of securitisation positions purchased/ retained based on type	1	MRD	EP (2006), annex xii, part 2, point 14, p. 190
	valuation of assets awaiting securitisation	1	MRD	EP (2010), annex xii, part 2, point 14, p. 24
	recording assets awaiting securitisation in trading/non-trading book	1	MRD	EP (2010), annex xii, part 2, point 14, p. 24
	recognition of liabilities on balance sheet for securitised assets	1	MRD	EP (2010), annex xii, part 2, point 14, p. 24
	Maximum score	**88**		
	Minimum score	**0**		

Appendix D: Definition and measurement of variables

Variables	Definition	Measurement
UA	Uncertainty Avoidance. This measures the extent to which a society avoids or embraces uncertainty. A high uncertainty avoidance score indicates that such culture prefers to avoid uncertainty rather than proffering a long- term strategic solution to it.	Hofstede's cultural dimension score.
LTO	Long Term Orientation. This measures the extent to which a culture focuses on a phenomenon. High long-term orientation score suggests that the culture prefers to focus on long-term objective rather than focus on the past and immediate objective.	Hofstede's cultural dimension score.
PD	Power Distance. This measures the distance between the most powerful and less powerful in organisations. High PD suggests that the culture does not support the involvement of subordinates in decision making process.	Hofstede's cultural dimension score.
SIZE	Asset size. This is measures as the natural logarithm of the bank's assets.	This is measured as the natural logarithm of the bank's assets.
CIR	Cost-Income ratio. This measures operational efficiency of the banks.	measured as operating expenses divided by operating
LEV	Leverage	measured as total debt divided by total
PROF	Profitability	Measured as natural logarithm of return on equity
OneTier	Governance system. Some countries practice One tier board system which comprises executive and non-executive directors while other practice the two tier board system which	1 if the bank operates a one tier governance system. 0 if otherwise
	comprises the supervisory board and management board	

BS	Board size	Number of directors
CD	CEO duality	Dummy variable. 1 if the Chairman is also the CEO, 0 is
BIG4	This indicates whether the banks are audited by any of the big 4 audit firms; Ernst & Young, KPMG, Deloitte and PricewaterhouseCoopers.	1 if audited by any of the big 4, 0 if otherwise.
USLST	This indicates whether the bank is listed on the New York Stock Exchange (NYSE).	1 if listed on NYSE, 0 if otherwise.
GDP	Gross Domestic Product	measured as natural logarithm of gross domestic product per capita from world bank
Year	Dummy variable. For example, 1 for 2010 and 0 for 2011 to 2016	
CEON	Nationality of CEO	Dummy variable. 1 if the CEO is an indigene of the country where the bank is
LS	Legal system of the country	Dummy variable. 1, if the country adopts civil law, 0, if the
CAPSTRING	Overall capital stringency	Measured based on data from World Bank survey (2011) related to capital stringency (Section1.4.2, 1.4.3, 1.5, 3.1a, 3.183d, and 3.2a. 1 is assigned if answer is “yes” and 0 if “no”. Higher scores indicate greater capital stringency. Maximum

Appendix E: Example of risk information disclosure related a negative event

Negative event reported in the news- Decrease in Credit Suisse's shares due to worsening Eurozone sovereign debt crisis- Financial Times, June, 2012.

Risk disclosure examples	**Category**
"Currently gross margins are under pressure due to continued low interest rates and cautious investor behavior resulting from the sovereign debt crisis and economic uncertainty, and we expect this environment to last for some time." (Credit Suisse, 2011, p.13) "Concerns about defaults by and failures of many financial institutions, particularly those with significant exposure to the eurozone, continued in 2011 and could continue to lead to losses or defaults by financial institutions and financial intermediaries with which we interact on a daily basis, such as clearing agencies, clearing houses, banks, securities firms and exchanges." (Credit Suisse, 2011, p.A8)	Risk identification
"On a gross basis, before taking into account risk mitigation, our risk-based sovereign credit risk exposure to Greece, Ireland, Italy, Portugal and Spain as of December 31, 2011 was EUR 3.8 billion. Our net exposure to these sovereigns was EUR 0.6 billion. Our sovereign bond holdings in these countries were entirely offset by short positions in such bonds. Our nonsovereign risk-based credit risk exposure in these countries as of December 31, 2011 included net exposure to financial institutions of EUR 2.3 billion and to corporates and other counterparties of EUR 2.5 billion. A significant majority of the purchased credit protection is transacted with banks outside of the disclosed countries; otherwise such credit risk is reflected in the gross and net exposure to each relevant country." (Credit Suisse, 2011, p.125)	Risk assessment
"The Group makes use of country limits and performs scenario analyses on a regular basis, which include analyses on our indirect sovereign credit risk exposures from our exposures to selected European financial institutions." (Credit Suisse, 2011, p. 124)	Risk response
"The global economy began 2011 showing signs of recovery, with	Risk Monitoring

manufacturing gains in most major economies and unemployment levels declining in the US and Europe… Significant causes included political unrest in the Middle East and North Africa, the European sovereign debt crisis, economic disruptions resulting from the natural disaster in Japan and US political gridlock and the related downgrading of US sovereign debt. The situation culminated in a summer equity market selloff… Fears that the global economy could re-enter a recession eased somewhat towards the end of the year as indicators of economic growth in the US began to strengthen and major central banks continued to support loose monetary policies." (Credit Suisse, 2011, p.38)	

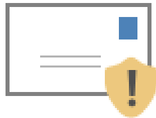
Appendix F: ERGO Approval

ERGO Approval (Paper 1)

Your Ethics Submission (Ethics ID:23807) has been reviewed and approved

E

ERGO <ergo@soton.ac.uk>



Reply all

Thu 20/10/2016, 18:56

Fapohunda O.

Submission Number: 23807
Submission Name: Adumbrative risk disclosure in the UK banking indusry (SDA)
This is email is to let you know your submission was approved by the Ethics Committee.

You can begin your research unless you are still awaiting specific Health and Safety approval (e.g. for a Genetic or Biological Materials Risk Assessment)

Comments
None
Click here to view your submission
Coordinator: Oluwaseun Fapohunda

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ERGO Approval (Paper 2)

Your Ethics Submission (Ethics ID:27559) has been reviewed and approved

E

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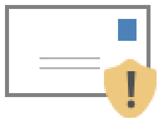

Reply all|

Fri 23/06/2017, 09:34

Osituyo O.

Submission Number: 27559
Submission Name: The impact of adumbrative risk disclosure on performance of UK banks during and after the financial crisis of 2007 to 2009
This is email is to let you know your submission was approved by the Ethics Committee.

You can begin your research unless you are still awaiting specific Health and Safety approval (e.g. for a Genetic or Biological Materials Risk Assessment)

Comments
1.Approved on behalf of reviewer in order to prevent delay. Risethics team

Click here to view your submission
Coordinator: Oluwaseun Osituyo

ERGO : Ethics and Research Governance Online
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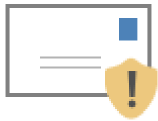
ERGO Approval (Paper 3)

Approved by Supervisor - Submission logged- ERGO II 40225

E

ERGOII



Reply all

Mon 05/02/2018, 09:47

Osituyo O.

You forwarded this message on 05/02/2018 10:26

Approved by Supervisor - Submission logged- ERGO II 40225

UNIVERSITY OF Southampton

ERGO II – Ethics and Research Governance Online https://www.ergo2.soton.ac.uk

Submission ID: 40225
Submission Title: The impact of national culture on risk reporting transparency; A case study of EU banks (SDA)
Submitter Name: Oluwaseun Osituyo

Your submission has been approved by your supervisor and has now been logged in the ERGO II system.

Based on your answers to the Submission Questionnaire your project does not require any further review.   Please note that if this

information changes at any point you will be required to submit an amendment on ERGO II to ensure appropriate review takes place.

Click here to view the submission

TId: 23087_Cat_R_Supervisort_Approved_and_logged Id: 4312 oo1g13@soton.ac.uk coordinator

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List of supplementary materials

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