

UNIVERSITY OF LIVERPOOL

**REGULATION AND CORPORATE
GOVERNANCE: A CASE STUDY OF
THE UK BANKING INDUSTRY**

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the University of Liverpool for the degree of Doctor in
Philosophy

by

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Abstract

Financial stability remains a key theme in UK financial regulation. This thesis investigates important issues of financial regulation revealed in the financial crisis of 2007-2009. It will analyse macro and micro prudential regulatory weaknesses in UK financial regulation in light of the financial crisis of 2007-2009. The structure of the new 'twin-peaks' model in the UK will be compared with the Australian 'twin-peaks' model. There are concerns that the Bank of England might have too much power and is thus a super single financial regulator in the 'twin-peaks' model. The author will compare the new 'twin-peaks' model with the German regulatory structure, where some similarities are found due to the sharing of supervisory responsibilities between the regulatory bodies in both jurisdictions. As far as the author is aware, there is a gap in the literature because the 'twin-peaks' model in the UK only came into existence in April 2013 and the literature in comparing this model with the Australian and German models is scarce. The thesis adopts a doctrinal, comparative case study approach, as well as a quantitative analysis of the important financial ratios of four major UK banks and four major Australian banks.

The thesis will reveal that the Financial Services Authority (FSA) failed to supervise banks such as Northern Rock, Bradford & Bingley and HBOS properly. The main regulatory and supervisory failures of the FSA are due to organisational and management problems. With regards to the statutory provisions on banking regulation, the Financial Services Markets Act (FSMA) 2000 is complicated, with standards and principles underpinning the FSA's statutory core objectives. The FSA's remit is too wide. It is responsible for regulating banks, deposit-taking institutions and insurance companies. With the development of complex products, increased use of securitisation and merging of financial services offered to customers, the tripartite system increasingly found it difficult to delineate their scope and responsibility. Overall, the FSA's passive, non-interventionist and laissez-faire regulatory approach led to criticisms that its measures were too late and too little. In comparison to the big four Australian banks, the thesis revealed that the big four UK banks had on average, higher cash ratio, higher leverage ratio, higher loan to deposit ratio, higher capital ratio, lower asset quality, lower return on assets but higher return on equity than the big four Australian banks.

There is gradual convergence between the UK and Australian prudential supervisory models although there are still some differences between the two models. Financial stability is enshrined in both countries' legislation and is a key priority after the financial crisis of 2007-2009. Both regulators reject a 'zero-failure' regulatory policy. The Prudential Regulatory Authority (PRA) shares the Australian Prudential Regulatory Authority's (APRA) opinion that it is impossible to prevent all bank failures. Therefore, with the Special Resolution Regime contained in the Banking Act 2009, the PRA's role is to minimise the systemic effect of any bank failure. The PRA's supervisory style is based on judgement; risks; forward-looking and early intervention. This is very similar to APRA's. PRA's risk assessment framework and its supervisory responses based on the Proactive Intervention Framework. Yet, there are differences between the prudential regulatory and supervisory systems between Australia and the UK. The UK legislative framework is more complex than the Australian framework. Further, the PRA has policy setting powers although the vertical integration of financial regulation at European level may suggest that the PRA is unlikely to exercise this power very often. APRA on the other hand, does not have such wide policy setting powers. The UK Risk Assessment Framework takes more mitigating factors into account. Its Proactive Intervention Framework has five stages and early intervention is clearly a priority for the PRA, since it can start planning for resolution of an organisation even at stage 1. This is in contrast to the Australian SOARS methodology, where there are only four stages and resolution of an organisation takes place in the later stages.

There are fears that the new structure within the Bank of England will make it a super single regulator. The thesis will compare the 'twin-peaks' model with the German regulatory structure since there are similarities in the sharing of supervisory responsibilities between the UK and German models. The thesis will then make several recommendations on how this concentration of power can be addressed.

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PREFACE

This thesis reflects the law and surrounding critical debate as it stood on the 1st March 2014.

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Table of Acroynms

ARROW	Advanced, Risk-Responsive Operating Framework
BaFin	German Federal Financial Authority
CAMELS	Capital, Asset quality, Management, Earnings, Liquidity and Sensitivity
COBS	Conduct of Business Obligations
ECB	European Central Bank
ESRB	European Systemic Risk Board
ESA	European Supervisory Authority
EBA	European Banking Authority
ESMA	European Securities and Markets Authority
EIOPA	European Insurance and Occupational Pensions Authority
FSA	Financial Services Authority
FCA	Financial Conduct Authority
HBOS	Halifax Bank of Scotland
IMF	International Monetary Fund
PAIRS	Probability and Impact Rating System
PRA	Prudential Regulation Authority
ROA	Return on assets
ROE	Return on equity
RBS	Royal Bank of Scotland
SEP	Supervisory Enhancement Programme
SOARS	Supervisory Oversight and Response System
SREP	Supervisory Review and Evaluation Process
SRR	Special Resolution Regime
SPV	Special Purpose Vehicles

Table of Legislation

United Kingdom

Banking Act 1979

Financial Services Act 1986

Banking Act 1987

Bank of England Act 1998

Financial Services and Markets Act 2000

Enterprise Act 2002

Companies Act 2006

Bank Special Provisions Act 2008

Banking Act 2009

Financial Services Act 2012

Enterprise and Regulatory Reform Act 2013

Financial Services (Banking Reform) Act 2013

Germany

Banking Act 1961

European Union

European Convention on Human Rights and Fundamental Freedoms 1950

Deposit Guarantee Schemes Directive (1994/21/EC)

Capital Requirements Directive (Council Directive 2006/48/EC)

Financial Conglomerates Directive (Council Directive 2002/87/EC)

Markets in Financial Instruments Directive (Council Directive 2004/39/EC)

Australia

Banking Act 1945

Banking Act 1959

Reserve Bank Act 1959

Insurance Act 1973

Commonwealth Authorities and Companies Act 1997

Australian Prudential Regulation Authority Act 1998

Superannuation Industry (Supervision) Act 1993

Payment Systems (Regulation) Act 1998

Payment Systems and Netting Act 1998

Corporations Act 2001

Financial Services Reform Act 2001

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Chapter One

Introduction

1.1 The financial crisis of 2007-2009

Seven years on from the financial crisis, issues about banking regulation are still broadcasted and debated in the media. The financial crisis has brought changes to the corporate, financial and regulatory scenes so the author believes that this is a critical moment to study the regulatory aspects of the banking sector.

The sub-prime mortgage crisis in the United States commencing in September 2007 was arguably the catalyst to the financial crisis. When borrowers of sub-prime mortgages failed to repay their loans, US banks faced a liquidity problem. Securitisation of loans, increased leverage and the development of complex financial products further exacerbated the liquidity problem. Globalisation meant that the financial crisis of 2007-2009 affected most western countries simultaneously. In the UK, the property market suffered due to the securitised credit model and liquidity strains. Sir Mervyn King is of the view that liquidity strains and poor asset quality led ultimately to a financial crisis of solvency (cited in Pimlott 2011). Indeed, he said that:

'Right through this crisis from the very beginning... an awful lot of people wanted to believe that it was a crisis of liquidity. It wasn't, it isn't. And until we accept that, we will never find an answer to it. It was a crisis based on solvency.' (King (2011) in Pimlott 2011)

Poole echoes King's assessment in the following quote:

'Throughout history, financial crises occur when liquidity dries up, usually because solvency concerns arise when risky assets decline in value. Why is it that the market seems to make the same basic mistake repeatedly? It is terribly important that we figure out the answer to this question, because we also know that markets and not government-run economies generate economic growth. This financial crisis [of 2007] was costly; if we cannot figure out how to make market economies more stable, we risk growing government involvement, which we can be certain will make economies grow more slowly.' (Poole 2010)

These quotes rebut the opinion of Tim Geithner, who believed that the financial crisis of 2007-2009 was one of liquidity:

'The growth in leverage and liquidity risk outside of banks made the system vulnerable to a sharp erosion in liquidity' and he recommended 'a system that is less vulnerable to margin spirals and a generalized pull-back in liquidity and funding' (Geithner 2008).

Paul Krugman criticised Geithner's opinion that the financial crisis was caused by leverage and liquidity:

*'At every stage, Geithner et al. have made it clear that they still have faith in the people who created the financial crisis—that they believe that all we have is a **liquidity crisis** that can be undone with a bit of financial engineering, that 'governments do a bad job of running banks' (as opposed, presumably, to the wonderful job the private bankers have done), that financial bailouts and guarantees should come with no strings attached. This was bad analysis, bad policy, and terrible politics.'* (Krugman 2009 cited in Crotty 2009)

The financial crisis itself triggered a plethora of debate and inquiry and therefore the UK government set up inquiries and commissioned reviews into the causes of the financial crisis. It also made recommendations on how to improve the banking system. For instance, since November 2008, the Treasury Select Committee Inquiry has called for both oral and written evidence to investigate the banking crisis. To date, a total of 17 oral evidence sessions have been held, where witnesses included the former Financial Services Authority (now divided into the Financial Conduct Authority and Prudential Regulation Authority), the Bank of England, HM Treasury; nationalised banks, hedge funds, auditors and credit rating agencies. Public interest in the inquiry was intense as a large proportion of the public were outraged by the behaviour of some senior bankers.

The Turner Review in March 2009 was a thorough investigation into the causes of the banking crisis and suggestions were made to improve the regulatory aspects of the banking system. Lord Turner believes that the cheap credit was widely available due to macro-economic balances between China and emerging Asian countries on the one

hand and western countries such as the US, UK, Spain and Ireland on the other (Turner 2009). The property boom and a lowering of credit standards made credit cheap. In the meantime, investors wanted as much yield with their bonds as possible above the risk-free rate to offset the declining risk-free interest rate. The demand for yield increase caused a growth in securitised credit, both in value and the complexity of the products (Turner 2009). The rationale for this is that better value would be given to investors due to better risk diversification in comparison with direct purchase of credit exposures. To the banks, securitisation meant fewer risks. In reality however, the risk holdings and losses were actually held by highly leveraged banks, not the end investors. Instead of ultimate investors buying the securitised products, other banks bought them or the selling banks retained some of the risks through credit derivatives (Turner 2009). The Turner Review thus recommended that fundamental changes be made to bank capital and liquidity regulations. Regulation of credit-rating agencies and hedge funds is required. In addition, the Financial Services Authority will focus on system-wide risks and business strategies. Finally a new, independent European regulator with increased national powers to constrain risky cross-border activities will be established.

The Turner Review focused solely on regulatory issues. The Walker Report of November 2009 thus reviewed the corporate governance issues in banks. In particular, Walker examined two issues:

- Whether changes in governance structure are required to increase the independence of risk management functions and
- The skill, level and time commitment required for non-executive directors of large complex banks to perform effective oversight of risks and provide challenge to executive strategies.

The Financial Services Authority (FSA), the Parliamentary Commission on Banking Standards and the House of Commons Treasury Select Committee have all produced reports into the failures of Northern Rock, the Royal Bank of Scotland and HBOS. These are valuable primary resources since access to the financial sector is very difficult to obtain due to its opaqueness.

1.2 Aim and objectives of the thesis

In light of the impact of the financial crisis 2007-2009, the author aims to investigate the regulatory aspects of the UK banking industry. She has four main research objectives in her thesis, namely: -

1. What are the main weaknesses of the tripartite regulatory system in the UK, in particular the FSA?
2. Why did the top four Australian banks performed better than the top four UK banks during the financial crisis of 2007-2009?
3. What are the similarities and differences between the UK and Australian 'twin-peaks' model?
4. What lessons can be learnt from the Australian 'twin-peaks' model in banking regulation?

In arriving at these four objectives, the author pursued a rigorous and thorough literature review to the best of her ability. She has identified several gaps in the extant literature which led her to investigate these issues. The gaps include a comparison of the UK financial regulatory model with the Australian system due to the move from a single regulatory model to the 'twin-peaks' model in the UK. Australia provides a good learning example for the UK since it made the transition from the single regulatory model to the 'twin-peaks' model in 1998 and it was hardly affected by the financial crisis of 2007-2009. The comparison of the banking regulation between these two countries is not extensive to date. Thirdly, the author will conduct a detailed, doctrinal analysis of the prudential regulatory and legislative frameworks between Australia and the UK. Finally, the most exciting part of the thesis is that the author reveals that the new structure within the Bank of England resembles the structure of the German banking regulatory system. She will therefore compare the two countries' regulatory structure and see if lessons can be learnt from the German regulatory model. To the best of the author's knowledge, she is not aware of any literature which compares the new UK macro and micro-prudential regulatory structure with the German regulatory structure.

1.3 Importance of the thesis

Systemic risks across the banking sector can be seismic and have a multiplier effect on the rest of the economy (Alexander 2006). Banking regulation is necessary because the regulator can assess stakeholders' interests and to balance those interests according to public interest. Regulation is not however, a substitute to corporate governance but it reduces the collective action problem in representing broader stakeholder interests to ensure that social costs of bank risk taking are mitigated.

This thesis is original, contributes to scholarship and is robust. It is original in methodology and content. The author has combined quantitative methods, comparative legal analysis and doctrinal methods. Quantitative methods are demonstrated by a comparison of the financial ratios of the top four UK and Australian banks. The interpretation and thorough analysis of legislation, codes, handbooks in Australian and UK law demonstrates the comparative and doctrinal aspects of the author's methodology. There is also some doctrinal analysis when the author examined German regulatory legislation. Regarding the originality in content, the author extends the work on global financial regulation. She has also chosen to discuss several gaps in banking regulation in light of the financial crisis of 2007-2009. An important theme running in the thesis is the balance of financial innovation with financial stability. Although the UK takes third place in the Financial Development Index, it scored very low in overall financial stability (41st). It is ranked 38 out of 60 in frequency of banking crises. Financial intermediation however, is still strong despite the challenging economic conditions (World Economic Forum 2011) The author investigates how five UK banks (Northern Rock, the Royal Bank of Scotland, Lloyds Banking Group, Barclays and HSBC) can improve their corporate governance practices. Financial innovation has created new ways for creating capital and investing. In theory, this enhances financial development which increases economic growth. However, complex financial products and processes have increased moral hazard since financial institutions took excessive risks in search of profits. Financial innovation has also decreased transparency through complicated products and confidentiality of transactions. Ample academic literature since the financial crisis (Acharya et al. 2009, Goodhart 2009) has shown that Collateralised Debt Obligations did not shift risks in the securitisation process and so the argument that securitisation

can diversify risks and thus enable financial markets to grow is flawed. Financial stability is thus an important factor in a country's economic growth. Sir Mervyn King called for greater disclosure of assets and more capital reserves to restore financial stability in the banking system (Pimlott 2011). The right amount of regulation is needed to balance financial development and financial stability.

This thesis will also have practical implications for policy makers worldwide. Reforms in financial regulation depend on local circumstances, political principles and country specific preferences. The right amount of regulation is needed to balance financial development and financial stability. This balance is of significance on a global scale, so this thesis will have important implications for academics and policy makers on an international dimension. The concentration of power in the Bank of England is a real issue. Studying the German regulatory model and adopting sensible recommendations would be of interest to policy makers.

The author believes that this thesis is robust because she reviewed a range of primary and secondary sources in the thesis, thus consistency through triangulation of data was achieved. Triangulation is useful in highlighting both consistencies and inconsistencies of results. An understanding of inconsistencies in findings across different kinds of data is beneficial. This allowed the author to corroborate the evidence. Finally, she has attended conferences in 2010 and 2011 to test her theories and arguments. Incorporating the feedback obtained from the various conferences, she has published several peer reviewed journal articles.

1.4 Summary

This thesis will analyse macro and micro prudential regulatory weaknesses in UK financial regulation in light of the financial crisis of 2007-2009. The structure of the new 'twin-peaks' model in the UK will be compared with the Australian 'twin-peaks' model. There are concerns that the Bank of England might have too much power and is thus a super single financial regulator in the 'twin-peaks' model. The author will compare the new 'twin-peaks' model with the German regulatory structure, where some similarities are found due to the sharing of supervisory responsibilities in both jurisdictions.

Following the introduction in chapter one, the author presents a critical review of literature in banking regulation in chapter two. Chapter three is a discussion on research methodology. Chapter four reviews the performance of four major UK banks and four major Australian banks. The author will also analyse the UK legislation on the nationalisation of Northern Rock and Bradford & Bingley. She will also provide an overview of the Australian rules and legislation on banking legislation and investigate why the Australian ‘twin-peaks’ model performed well in the financial crisis of 2007-2009. Chapter five reviews the performance of the FSA during the financial crisis of 2007-2009. In particular, she will examine the weaknesses revealed in the FSA Handbook and FSMA 2000. Chapter six provides a comprehensive discussion of how Australian’s prudential supervision regime developed and the legal framework of banking regulation. She will compare and contrast the regulatory aims and objectives of the UK and Australian banking regulators. Chapter seven is a discussion on what lessons can be learnt from the Australian ‘twin-peaks’ model. The author examines whether the Bank of England should have a regulator role as well and whether it will become a single super regulator. The German banking legislation and regulatory system will be studied. Chapter eight is the overall conclusion of this thesis.

Chapter Two

Literature Review

2.1 Introduction

A literature review is a critical appraisal of extant literature on the relevant topics. It is an important chapter in the author's thesis since it identifies the latest themes and trends in banking regulation, as well as highlighting the gaps and weaknesses in these topics. To the best of her ability, the author has conducted a comprehensive review of extant literature of banking regulation, subject to constraints such as time, access and resources. She has used key word searches and identified the major authors and journals in banking regulation. Academics, scholars and practitioners have written about banking regulation for many years. However, the author is focusing on recent literature on banking regulation in the UK. The author has used a combination of primary and secondary sources to gather information for her literature review. Primary publications such as the House of Commons Treasury Select Committee papers; Parliamentary Commission reports and FSA reports are invaluable since gaining access to bank directors and employees is very difficult.

The author will first discuss the rationale of banking regulation. She will then adopt a chronological order to her literature review, discussing the development of the UK banking regulatory regime. The literature review will identify the gaps in the existing literature on banking regulation and structure the thesis accordingly.

2.2 Literature review of the development of UK banking regulation

Banks are public corporations and as Berle and Means pointed out in 1932, the distinctive feature of the modern public corporation is the separation of ownership and control. In modern corporations, the managers decide how a corporation's capital is spent, how resources are allocated and what endeavours the corporation undertakes. They do not however, own the capital or resources. Those in control of the corporation,

“and therefore in a position to secure industrial efficiency and produce profits, are no longer, as owners, entitled to the bulk of such profits... The explosion of the atom of property destroys the basis of the old assumption that the quest for profits will spur the owner of industrial property to its effective use” (Berle and Means 1932 p.9).

Berle and Means believed this led to managers serving their own interests:

“[W]here the bulk of the profits of enterprise are scheduled to go to owners who are individuals other than those in control, the interests of the latter are as likely as not to be at variance with those of ownership and...the controlling group is in a position to serve its own interests.” (Berle and Means 1932 p.116)

Thus, the main tenet of Berle and Means’s theory is that capital in the U.S. has become heavily concentrated during the previous few decades. Certain corporations became very powerful. As these corporations grew, it became increasingly difficult for the original owners to maintain their majority shareholdings and shares became dispersed amongst many small shareholders. The consequence of this dispersal, as Berle and Means suggested, was that power became vested in the managers, who run the corporations. These managers have different interests to shareholders.

Jensen and Meckling (1976) developed Berle and Means’s concept of separation of ownership and control further. Under the principle of separation of ownership and control, shareholders own shares in a business whilst managers run a business. The principal-agent theory stems from the concern that managers (agents) will pursue their own interests and indulge in perks whilst bearing only a proportion of the costs. Imperfect information (hidden action) and misaligned incentives (hidden information) between principal and agent are the causes of this fear. Shareholders (principals) find it difficult to monitor the managers because of time and logistical constraints. Monitoring the managers will incur agency costs. To limit agency costs, Jensen and Meckling recommended that incentives should be enhanced whilst restrictions in the market to be removed. In their view, the focus of the principal-agent theory is determining the most efficient contract to align the interests of directors with shareholders’. The firm is regarded as a ‘*nexus of contracts*’ (Jensen and Meckling

1976) because stakeholders have contracts between themselves. Once these interests are aligned through contracts, directors should pursue the goal of maximising shareholder value.

Maximising profit and shareholder value are the principal aims for banks. Since the early 1980s, banks started to use a process called securitisation. Securitisation is defined by Deacon as:

‘the process of converting cash flows arising from underlying assets or debts (receivables) due to the originator (the entity which created the receivables) into a smoothed repayment stream, thus enabling the originator to raise asset-backed finance through a loan or an issue of debt securities - generically known as asset-backed securities or ABS - which is limited recourse in nature to the credit of the receivables rather than that of the originator as a whole, and with the finance being self-liquidating in nature’ (Deacon (2004) cited in Burns 2009).

Securitisation exacerbates agency conflicts (Gan and Mayer 2006). Berle and Means did not foresee the changes that technology and innovation have made to the banking sector. In search of greater yield and liquidity, banks have abandoned the traditional ‘originate-to-hold’ model to the ‘originate-to-distribute’ model. Securitisation has allowed banks to take on more risks and generate more profits. Ownership and responsibility of risks are lost in the process. Academic literature has revealed that securitisation is opaque and complex (Buiter 2007, Berndt and Gupta 2008, Fender and Mitchell 2009). Little research however, has been conducted into why securitisation is opaque and complex from a principal-agent angle. Ashcraft and Schuermann have provided an excellent account of the associated principal-agent problems in securitisation in seven stages (Ashcraft and Schuermann 2008). These include concepts such as moral hazard, information asymmetry and adverse selection.

Traditional principal-agent theorists advocate for market efficiency and reject any form of external intervention or regulation (Kirkbride and Letza 2004). Advocates of the principal/agent theory believe that external regulation has no place in corporate governance. Fama (1980) argued that the market is more efficient in regulating managers’ behaviour because directors are concerned about the threat of takeovers and are under pressure from the financial markets (Manne 1965). Hart argued that

intervention by the government or regulator should be banned because this would distort the free market framework (Hart 1995). Alexander argued that the traditional principal-agent model fails to take account of the important role that financial regulation can play in representing stakeholder interests in the economy (Alexander 2006). Financial regulation is necessary because of the multiplier effect that banking activities have on the rest of the economy. Supervisors and regulators are agents on behalf of broader stakeholder interests in the economy at large. It is therefore imperative that financial regulators ensure that banking and other financial institutions have strong governance structures. Alexander stated that the regulator should play an active role with bank management in designing internal control systems and risk management practices that seek to achieve an optimal level of protection for stakeholders and shareholders.

The two traditional approaches to regulation are the public interest and private interest views. The public interest or helping hand approach (Shleifer and Vishny 1998) assumes that there are market failures and the government has the incentives and abilities to rectify these market failures for the common good. In banking, the public interest would be best served if the banking system allocated resources in a socially efficient way. 'Socially efficient' means allocating resources in a way that maximises output and is 'distributionally preferred' (Mishan 1969). The private interest is also known as the 'regulatory capture' approach (Stigler 1971). Regulation is perceived as a product, enhancing the power of bankers and politicians. Competing interest groups such as bankers, politicians and consumers try to influence national policies towards banks in ways that favour themselves even if these policies do not maximise social welfare. Thus, the private interest approach relies heavily on the market and information disclosure. The collibratory and processual approach to corporate governance proposed by Kirkbride and Letza is an alternative to the public/private debate (Kirkbride and Letza 2004). Collibration was first applied by Dunsire in the early 1990s. (Dunsire 1990) It recognises that there are constant tensions between shareholders and stakeholders, as well as other interest groups such as bankers and politicians as mentioned in the private interest approach to regulation. It works well in regulating banks because it allows the government to intervene in the social tensions and tip the balance in the government's favour.

Barth, Levine and Caprio Junior carried out an extensive piece of research in the regulatory aspects of banks in 2006 (Barth et al. 2006). It offers the first comprehensive cross-country assessment of the impact of bank regulation on the operation of banks and assesses the validity of the Basel Committee's approach to bank regulation. Their book also provides an empirical evaluation of the proper role of government in the economy and the role of politics. Barth, Levine and Caprio Junior find that boosting capital standards or strengthening supervision do not lead to better banking efficiency. They call for more market discipline such as better disclosure; transparency and private sector monitoring of banks than on command and control regulations. The author believes that Barth et al's results should be re-examined in view of the financial crisis. Evidence has shown that inadequate capital levels and excessive leverage ratios led to the downfall of banks such as Lehman Brothers, Bear Stearns, Northern Rock and Bradford and Bingley. Innovative financial products and transactions created multiple agency relationships which led to less transparency. Numerous complicated financial products and risk shifting mechanisms have developed over the last decade. Regulators responded by blocking some products and practices. This then led to bankers finding other innovative ways of avoiding the regulators. Hence, the problem of 'regulatory dialectic'. Evidence is mounting to suggest that market discipline alone is insufficient in regulating banks. Markets will not function properly where there are externalities (Stiglitz 2006). Persaud agrees and states that market discipline is important in bank efficiency but 'it cannot be on the front line of defence against crises' (Persaud 2009). Blundell-Wignall and Atkinson said that 'the bubble at the root of the sub-prime crisis and crises before it suggest the systemic absence of informational efficiency' (Blundell-Wignall and Atkinson 2010). In view of the above, Barth et al's study on banking regulation thus needs to be re-examined. Regulations are thus necessary but there are various problems with regulations. Kane's 'regulatory dialectic' approach states that regulations change in response to market demands (Kane 2000). Regulations correct past financial misbehaviour, so they tend to lag behind. The banks find the regulations onerous, especially in a bull market. They circumvent the regulations by further innovations by adopting low-cost innovations (regulatory arbitrage) and the regulator has to respond again by re-regulating.

Regulatory arbitrage is a response to technological innovations and globalisation of banking. Banks have three main functions in a society: payment; intermediation and risk transfer (Davies and Richardson 2010). These functions are still very important in twenty-first century banking but the structure of the financial system has seen many changes. Banking regulation has thus evolved over the years to keep pace with financial innovation and globalisation. In the late twentieth century, two important phenomena changed the banking landscape. These are the Competition and Credit Control in 1971 and the Big Bang in 1986 (Davies and Richardson 2010). The Bank of England introduced Competition and Credit Control in 1971 to promote competition between banks on the one hand and fringe banks on the other. Fringe banks are non-bank intermediaries. 1971-1973 was a period of economic growth. Combining this growth with the objective of increasing competition, the boundaries between banking services and institutions became blurred. This can be seen as a prelude to the functional structure of financial regulatory agencies in regulating the banking system, where the regulator's focus is on regulating the business of a bank in comparison to the institutional structure where the emphasis is on regulating the legal status of a bank. One of the questions in modern banking regulation is whether a functional or institutional structure of the regulatory agencies will influence the efficiency in achieving their objectives. This is a question which will be addressed in this thesis. The author will compare the structure of the UK regulator with the Australian structure in light of the fact that both countries now operate the 'twin-peaks' model.

The secondary banking crisis of 1973-1975 put a halt to the economic growth and competition within the financial sector. A slump in the housing market following a period of growth in the 1960s and 1970s coupled with a sharp rise in oil prices, the stock market crash in 1973-1974, lack of informal banking regulation and poor risk management in banks led to the bail-out of a number of lending banks. Prior to the secondary banking crisis, banking regulation was the responsibility of the Bank of England. There was no formal statutory bestowment of regulatory powers. Rather, the authority of the Bank of England derived from custom and practice (Lee 1979). The secondary banking crisis led to a more formalised banking regulation regime in the UK. Parliament therefore passed the Banking Act 1979. This Act extended the Bank of England's regulatory powers over lenders and provided protections for their

depositors. The Act established two important principles. First, there is a distinction between ‘recognised banks’ and ‘licensed institutions’. Supervision of the former continues on an essentially non-statutory basis and only recognised banks have an absolute right to call themselves banks (Lee 1979). The Johnson Matthey Bank crisis in 1984 revealed weaknesses in the Banking Act 1979. The Act did not define a bank or “banking business” and its provisions were applicable only to deposit taking institutions. The 1979 Act was thus repealed and Banking Act 1987 was enacted. The 1987 Act increased the Bank of England’s supervisory rule which includes the power to vet shareholders of UK banks. Under the 1987 Act, the acceptance of deposits by a person in the course of carrying on a deposit-taking business is strictly forbidden, unless that person was an “authorised institution” according to sec 67(2) of the 1987 Act. A single system of authorisation was thus born and this applied to all institutions accepting deposits. The second important principle was the establishment of a deposit insurance fund, whereby depositors were assured that 75% of their deposits were protected. The fund was financed internally by recognised banks and licensed institutions. The establishment of a deposit insurance fund scheme is an indication of the Bank of England’s aim in protecting consumers. This later became an objective of the Financial Services Authority (FSA). A danger with the deposit insurance scheme is moral hazard. Moral hazard is a classical incentive problem (Mitnick 1992). It takes place when ‘the principal cannot observe the agent’s behaviour but can see the optimality of the behaviour’ (Mitnick 1992). Since the government is underwriting the risks of a bank failure, there is potential that bank managers will pursue their own interests and take excessive risks. Depositors will have less incentive to monitor the bank managers’ actions since they are comforted by the deposit insurance fund. Moral hazard is a risk in modern banking, as it is an associated problem linked to the principal-agent issue. To order to achieve the objective of consumer protection however, it appears that a deposit insurance scheme

Davies and Richardson (2010) viewed the Big Bang as the second important phenomenon that changed banking regulation in the UK. Big Bang sparked off a period of deregulation in the banking sector. The aim was to place the UK banking sector in a competitive position, certainly on the same level as the US. Deregulation blurred the lines of financial activities so a conglomeration of banks grew whereby banks started to offer multiple services. This provided consumers with more financial

products and competitive prices. Deregulation did not make the market more efficient, which was contrary to the original rationale of the Financial Services Act 1986 or the Banking Act 1987 (Singh 2007). Under the Financial Services Act 1986, the Securities and Investments Board had ultimate power to make and enforce rules. The Securities and Investments Board became a single financial regulator in the UK. Three self-regulatory organisations provided prudential and conduct of business rules in respect of their areas. They are the Personal Investment Authority, the Investment Management Regulatory Organisation and the Securities Futures Authority (Singh 2007).

This particular structure of the regulator gave rise to two concerns. First, the self-regulatory organisations adopted a functional structure to regulating banks but banking was still institutional in nature (MacNeil 1999). This led to problems in co-ordination and co-operation between the various organisations. This was seen in the collapse of BCCI in 1991 and Barings Bank in 1995. BCCI became insolvent as a result of internal fraud, mismanagement and failure of the regulator. In particular, the Bank of England was criticised for communicating poorly with its internal staff; the supervisory staff need to be more proactive and alert in detecting potential issues (Singh 2007). When BCCI went into insolvency, its liquidators sued the Bank of England for misfeasance. BCCI's liquidators alleged that the Bank of England failed as a supervisor and regulator for licensing BCCI and allowing it to carry on accepting deposits until it closed in 1991 (Gray 2008). The liquidators withdrew the claim in 2005 but this case highlighted that the 'risk-based' approach to regulation could not deal with uncertainties, which are different to risks. Gray (2008) submits that this particular inadequacy is seen again in the Financial Services Authority's failure in supervising Northern Rock. The Advanced risk responsive operating framework (ARROW) used by the Financial Services Authority in monitoring Northern Rock echoed the weaknesses of the 'rules-based' system. The ARROW risk assessment was very detailed by 'even the most sophisticated risk models and risk radar screens can still leave room for the wholly expected' (Gray 2008).

Arora opined that the BCCI saga exposed weaknesses in both national and international banking regulation (Arora 2006). BCCI was incorporated in Luxembourg but was a multi-national bank, with a branch in the UK. The Bank of England granted BCCI SA (a subsidiary of BCCI Holdings SA) a licence to act as a

deposit-taker under the Banking Act 1979. BCCI SA was trading mainly in the UK at that time but the Bank of England decided to rely on the Luxembourg regulator to supervise BCCI SA under the authority of section 3(5) Banking Act 1979. Officials of the Bank of England were aware that it was unsatisfactory to rely on the Luxembourg regulator to supervise BCCI SA in the UK and several proposals were made. These include the suggestion that the Bank of England supervises the entire BCCI group and the incorporation of BCCI Holdings in the UK to improve the effectiveness of monitoring BCCI's group activities in the UK (Arora 2006). Nevertheless, the Bank of England continued to rely on the Luxembourg regulator's opinion. This is problematic since BCCI's external auditors were concerned about serious financial losses from BCCI SA's activities but these were not reported to the Bank of England (Arora 2006). This episode revealed the regulatory difficulties when a bank is global. The financial crisis of 2007-2009 provided further examples of international regulatory failures in Lehman Brothers and Glitnir, Landsbanki and Kaupthing Banks.

Barings Bank collapsed due to its subsidiary of Barings Futures Singapore reporting a loss of more than £200 million. A rogue trader called Nick Leeson was responsible for the huge losses when he participated in unauthorised trading activities. The Board of Banking Supervision Inquiry into the collapse of Barings did not hold the Bank of England responsible for the ultimate collapse of Barings since this was the responsibility of Barings' board of directors. However, the Bank of England failed in its supervision of Barings. The Board of Banking Supervision Inquiry (1994) recommended the Bank of England to: -

1. Improve its communication with other supervisors and regulators
2. Improve its understanding and knowledge of financial services businesses
3. Rely more on the Bank of England's internal audits and meet regularly with the chairman of the audit committee to discuss internal control matters
4. Review the number of staff available for on-site visits and their skills

These recommendations are very interesting since they are similar to the recommendations with regards to the failures of the Financial Services Authority when HBOS merged with Lloyds TSB Bank to become Lloyds Banking Group in 2008. This observation has important consequences for the study of the functional structure of the regulator and how it impacts upon its efficiency in achieving its

objectives set out in sections 3-6 of the Financial Services and Markets Act 2000 (FSMA). The Financial Services Act 1986 introduced self-regulation to restore investor confidence after financial failures such as the collapse of BCCI, Barings Bank and the Maxwell affair in the 1980s-1990s. The Maxwell affair revealed that the UK regulatory regime had two main weaknesses. First, the financial services industry did not have clear objectives. Johnson Matthey Bank was given financial support because the government feared that its failure will affect the gold bullion market. As a member of the London Gold Fixing, the government feared that systemic risks would cause bank runs in the UK financial sector. Singh (2007) opined that the Financial Services Act 1986 and the Banking Act 1987 promoted competition and innovation. More importantly, the primary objective of the two Acts was to increase efficiency in the financial markets. The rescue of Johnson Matthey Bank negates the primary importance attached to efficiency in the market. Consumer protection and confidence in the financial system prevailed over efficiency. Secondly, regulatory capture was a problem because the main players in the financial industry were acceptable to both the government and the financial sector. For example, Sir David Walker was appointed to the board of the Securities Investment Board when he was also a non-executive director of the Bank of England. This enabled the interests of the financial industry and the regulator to complement each other (Singh 2007). Regulatory capture will continue to be a problem if a regulator acts in the interests of private parties such as individual banks. Baker (2010) submits that during the financial crisis of 2007-2009, there was a multi-level regulatory capture in the UK. An example is how the Treasury, Bank of England and the FSA adopted a number of deregulatory reforms which were extremely favourable to the biggest banks. The author will discuss whether the 'twin-peaks' model in the UK will have a regulatory capture issue or whether it has learnt from the financial crisis of 2007-2009.

Consumer protection remained a key objective of the regulator in the 1990s. When the UK labour government won the election in 1997, it changed the structure of the regulator and adopted the tripartite system. Under the tripartite system, the FSA supervised financial institutions; the Treasury was responsible for legislation and the Bank of England for financial stability. Legal instruments such as the Bank of England Act 1998 and the memorandum of understanding attempt to set out the boundaries and responsibilities of each organisation. The Bank of England Act 1998

established the principle that the FSA was the sole regulator and had banking supervision powers. The Bank of England had the right of sole decision and action with regards to interest rate matters. The memorandum of understanding prescribed how the three organisations should work together. However, the memorandum did not define the role of the lender of last resort function or ‘systemic damage’ (Singh 2007). Nor did it state when the lender of last resort function would operate. The absence of such definitions proved disastrous in the financial crisis of 2007-2009 since the failures of Northern Rock and HBOS demonstrated the confusion in the tripartite system as to their roles and responsibilities. The justification for a tripartite system was that the boundaries between financial institutions have blurred. Banking, insurance and securities overlap. Complex group structures, innovative financial products and processes such as securitisation have led to the phenomenon of ‘functional despecialisation’ (Taylor 2009a). Traditional banks adopted the ‘originate-to-distribute’ model in the late 1980s and boundaries between banks, insurance and securities companies have blurred. Banks and the shadow banking organisations have thus become increasingly interwoven. A single regulator would in theory, be better positioned to monitor modern financial institutions. Yet, the Equitable Life scandal demonstrated that the statutory objective of consumer protection, set out in the Financial Services Markets Act 2000, failed. New pension policyholders of Equitable Life lost a great deal of money due to management’s miscalculation of annuity rates and its failure to reduce the problems. Various reports such as the Baird Report (Baird Report 16 October 2001), the Penrose Report (Penrose Report 8 March 2004) and the Parliamentary Ombudsman’s Report (Parliamentary Ombudsman Report 2002/03) all criticised the FSA for not informing consumers properly about the problematic pensions at Equitable Life (Singh 2007). The reports recommended that the FSA should be more pro-active and improve its co-ordination of prudential and conduct-of-business issues. Caution should be exercised before the FSA is too heavily criticised. The FSA had not implemented the single regulatory regime yet at that point, so the institutional structure is not entirely at fault. Yet, the Equitable Life scandal revealed weaknesses in regulating the insurance sector and failure to protect consumers. Regulation alone would not protect consumers from every risk but when financial products became increasingly complex, the FSA failed in relation to its objective of conduct of business regulation contained in the FSA Handbook. The FSA Handbook sets out when the FSA will authorise regulated financial activities and how businesses

must be conducted. When interpreting the FSA Handbook, there are eleven principles of business which need to be adhered to, since breaching a principle ‘makes a firm liable to disciplinary sanctions’ (Principles for Business rulebook 1.1.7G). The principles include concepts such as integrity, skills and care, acting in consumers’ interests. The author will demonstrate in her thesis that some of these principles were breached in the financial crisis of 2007-2009 in the UK.

The FSMA’s statutory objectives are guided by several regulatory principles, namely efficiency and economy, role of management, proportionality, innovation, the competitiveness of the UK and competition (Financial Services Authority). Deregulation throughout the 1980s-1990s; financial innovation, greater geographical diversification and increased inter-connectedness of banks have pushed the UK to be a leading financial centre in the world. In 1970, the banking sector produced 38% of the UK’s gross domestic product. In 2010, the percentage is 45% of the UK’s gross domestic product (Davies and Richardson 2010). The UK has the second largest financial sector amongst the G20 countries, after Switzerland (Davies and Richardson 2010). Competition is thus important in the financial sector and the deregulatory, laissez-faire approach to supervision during the 1980s-1990s in the UK assisted in this growth. However, this regulatory style has been criticised after the financial crisis of 2007-2009 and so financial stability has been added to the FSMA 2000 in section 3A as an additional statutory objective of the FSA.

The bank run at Northern Rock towards the end of 2007 destabilised the financial system and exposed poor co-ordination between the tripartite authorities in Northern Rock. The FSA failed in the ARROW risk assessment. Gray (2009) submitted that the principles-based regulatory approach could not deal with unforeseen risks and uncertainty. Hudson (2009) agreed and stated that the FSA did not ‘stress-test’ Northern Rock properly. Northern Rock changed its banking model from relying on deposits to increased reliance on the wholesale and securitised markets. As a result of this ‘stress-test’ failure and a light-touch regulatory approach, the FSA relied on the information given by Northern Rock and did not exercise a more sceptical or investigatory style in regulating the bank. Much has since been written on both the regulatory and corporate governance failures of Northern Rock (Shin 2009, Bruni and Llewellyn 2009, Onado 2009, Choudhry 2011). The author provides originality in this

thesis by comparing the financial ratios such as capital, leverage, liquidity, asset quality, return on equity and return on assets between UK and Australian banks. A comparative legal analysis will benefit UK regulatory academics, scholars and practitioners since Australia has operated a ‘twin-peaks’ regulatory model since 1998. Lessons can be learnt from the Australian regulatory landscape. The right amount of regulation is needed to balance financial development and financial stability. Australian banks performed better than UK banks in the financial crisis of 2007-2009. No Australian bank needed a bail-out. Four of the nine AA-rated banks around the world are Australian banks, so the Australian regulation system worked well. Australia has also performed well in the Financial Development Index of the World Economic Forum 2011 (2011). They are ranked fifth out of sixty countries in the overall index and scored well in stability of its banking system. The Australian financial system is not perfect though. The World Economic Forum states that the Australia banks had low Tier 1 capital and had high levels of stress. Also, its commercial access to capital is weak. Although the UK takes third place in the Financial Development Index, it scored very low in overall financial stability (41st). It is ranked 38 out of 60 in frequency of banking crises compared to Australia’s top position. Financial intermediation however, is still strong despite the challenging economic conditions (World Economic Forum 2011). The author aims to fill a gap in the literature on banking regulation, financial development and financial stability. In particular, little research has been done comparing the financial ratios of UK and Australian banks between 2004-2009 and the implications arising from the ratios.

Liquidity, leverage and capital are all connected. Adrian and Shin (2010) submit that ‘aggregate liquidity is intimately tied to how hard the financial intermediaries search for borrowers’. In the sub-prime crisis, banks lent money to customers who had no realistic chance of repaying it. This is because banks had surplus capital which is costly to retain. During a boom, asset prices increase and balance sheets are stronger. Banks have to find ways to use their capital to increase leverage. Brunnermeier said that during the financial crisis there were two “liquidity spirals.” When asset prices drop, financial institutions’ capital erodes and, at the same time, lending standards and margins tighten (Brunnermeier 2009). Both effects cause ‘fire-sales, pushing down prices and tightening funding even further’ (Brunnermeier 2009). These liquidity spirals lead to banks protecting their funds so inter-bank lending decreases. Bank runs

then follow and capital levels deplete. Northern Rock in September 2007 is a prime example.

Hildebrand views excessive leverage as the main cause of financial fragility (Hildebrand 2008). Excessive leverage and over reliance on short-term borrowing from the wholesale market contributed to the crisis (Crotty et al. 2010). Research from Borio and Lowe (2002), Adalid and Detken (2007), Alessi and Detken (2009), Gerdesmeier et al (2009) show that almost all major crises are preceded by a combination of two factors: an increase in leverage, following excessive credit expansion and an unusual increase in asset prices. A higher leverage ratio *'indicates in general a lower capacity to absorb losses and hence greater fragility since it entails that many agents have issued promises to pay a certain nominal amount but do not have the resources to honour these promises'* (Hildebrand 2008). Moosa (2010) believes that *'liquidity and leverage are, as far as risk management is concerned more important than capital'*. He argues that Basel II fail to take liquidity and leverage into account. He welcomes Basel III but concludes by stating that one should abandon harmonisation of banking regulation. Each country should produce its own regulation. Whilst there is merit in this approach, the inter-connectedness of the global banking sector makes it hard to implement this.

Capital acts as an absorber of losses. Berger and Bouwman explore the relationship between bank capital and different aspects of bank performance in crises and calmer times for U.S. banks (Berger and Bouwman). According to their study, better capitalized banks performed better in the early 1990s but not in the recent crisis. Demirguc-Kunt et al's study finds that higher capital is associated with better share performance in larger banks. Their data consists of 381 banks in 12 economies between 2006-2009 (Demirgüç-Kunt et al. 2010). Banks which relied more on deposit funding than wholesale funding performed better. Leverage ratios and capital are important in large banks because they have a higher risk of regulatory dialectic. Greater importance should be given to tier 1 capital and equity. This author develops her research further by examining data from UK and Australian financial institutions.

Takáts and Tumbarello opine that the usual financial soundness indicators of capital, leverage, liquidity and profitability should be viewed alongside with asset quality (Takáts and Tumbarello 2009). Banks in Iceland had very strong leverage ratios but a

number of them failed in the financial crisis. According to Gudmundsson, the leverage ratio of Icelandic banks never exceeded 18% between 2003-2008 (Gudmundsson 2010). In fact, just before the financial crisis, Kaupthing Bank had a leverage ratio of 15.1%. Landsbanki Bank had a leverage ratio of 20% and Glitnir had a ratio of 19.3% (Gudmundsson 2010). Liquidity strains were only the prelude to the more serious problem, namely one of solvency. Liquidity strains and poor quality assets led to solvency problems in a number of banks in the UK such as the Royal Bank of Scotland and HBOS. The Parliamentary Commission on Banking Standards was clear in its report into HBOS's demise. It strongly believed that solvency was the fundamental problem at HBOS (The Parliamentary Commission on Banking Standards 2013). Therefore, asset quality and solvency are very important to financial soundness. Data from Wheelock and Wilson revealed that banks with little capital, low-quality and illiquid assets are more likely to fail (Wheelock and Wilson 2000). They also found that banks with relatively high non-performing loan ratios are less attractive takeover targets. Greater disclosure, transparency and capital reserves are required to restore financial stability. The Financial Reporting Council has launched revised guidelines for banks on solvency issues (Financial Reporting Council 2013).

Northern Rock experienced severe liquidity and capital issues prior to the financial crisis of 2007-2009. It went too far in favour of financial innovation and range of products at the expense of maintaining checks and balances. Liquidity is the main culprit at Northern Rock. Although it was solvent, its assets were mainly illiquid due to the reliance on wholesale funding. This view is confirmed by Ratnovski and Huang, who conducted empirical research into 72 of the largest commercial banks in OECD countries during the financial crisis of 2007 (Ratnovski and Huang 2009). Their research revealed that Northern Rock had very weak levels of capital and liquidity at the end of 2006. It was also 28.7% reliant on retail funding in the same year. The failure of Northern Rock exposed the inability of UK insolvency law to deal with the situation. As Lord Turner said: '*global banking institutions are global in life but national in death*' (Turner 2009). UK corporate insolvency law was inadequate in dealing with the financial crisis. Corporate insolvency law '*deals only with institutions that are already drained of economic value*' (Hupkes 2009). This is too late for banks. When banks are in financial distress, time is of the essence to minimise externalities. Government authorities need powers to rescue banks immediately to

avoid widespread panic. These powers were lacking under the UK corporate insolvency regime. The FSA were thus unable to take control of Northern Rock quickly when the latter was technically still solvent. This made it difficult for the FSA to sell Northern Rock since it had already lost franchise value (Bank of England 2011).

The UK government faced the choice of insolvency or nationalisation. The financial crisis of 2007-2009 has shown the spill over effect of banks so the UK government decided to nationalise Northern Rock and Bradford & Bingley, as well as injecting £850 million into the Royal Bank of Scotland and Lloyds Banking Group. The Bank Special Provisions Act 2008 was passed on 21st February 2008 to facilitate the nationalisation of Northern Rock and Bradford & Bingley. It was also used to resolve the UK entities of various Icelandic banks. The priority of the UK government during the financial crisis was to limit the costs of bank failures within the industry. The Banking Act 2009 on 21st February 2009 replaced the Bank Special Provisions Act 2008 and contains a Special Resolution Regime (SRR) to deal with distressed banks. To date, only Dunfermline Building Society has been resolved by the SRR. The Banking Act 2009 is divided into two parts. The first part deals with pre-insolvency 'stabilisation' and the second part deals with banking insolvency and administration (Ellinger et al. 2011). Under the first part of 'pre-insolvency stabilisation', there are three stabilisation mechanisms. First, one can transfer all or part of a bank to a buyer in the private sector. Secondly, one can transfer all or part of a bank to a 'bridge bank'. The Bank of England will set up the 'bridge bank'. Finally, a bank can be temporarily nationalised (section 1(3)(c) Banking Act 2009). The stabilisation mechanism applies if a bank fails to satisfy the 'threshold conditions' for FSA-authorisation regarding capital adequacy and suitability requirements (section 7 Banking Act 2009). The aim is to rescue a bank as soon as there are red flags regarding its financial position. The second part of the Banking Act 2009 includes a special banking insolvency procedure and a bank administration procedure. The former enables depositors to access their savings guaranteed under the Financial Services Compensation Scheme swiftly. The latter enables the 'good' part of the insolvent bank to carry on with its business activities. This is a new provision which was not possible under the corporate insolvency regime.

Apart from a new framework on rescuing banks, two major government reports were produced as a result of the financial crisis: the Turner Review (Turner 2009), the Walker Review (Walker 2009). The Turner Review identified three underlying causes of the crisis:

- (i) macro-economic imbalances;
- (ii) financial innovation of little social value and
- (iii) important deficiencies in key bank capital and liquidity regulations. These were underpinned by an exaggerated faith in rational and self-correcting markets. It stresses the importance of regulation and supervision being based on a system-wide macro-prudential approach rather than focussing solely on specific firms (Turner 2009).

The Review made the following proposals:

1. Fundamental changes to bank capital and liquidity regulations and to bank published accounts;
2. More and higher quality bank capital with several times as much capital required to support risky trading activity;
3. Build counter-cyclical capital buffers in good economic times so that they can be drawn on in downturns and reflected in published account estimates of future potential losses;
4. A central role for much tighter regulation of liquidity;
5. Regulation of 'shadow banking' activities on the basis of economic substance not legal form: increased reporting requirements for unregulated financial institutions such as hedge funds and regulatory powers to extend capital regulation;
6. Regulation of Credit Rating Agencies to limit conflicts of interest and inappropriate application of rating techniques;
7. Major changes in the FSA's supervisory approach, building on the existing Supervisory Enhancement Programme (SEP), with a focus on business strategies and system wide risks rather than internal processes and structures;

8. Major reforms in the regulation of the European banking market, combining a new, independent European regulatory authority with increased national powers to constrain risky cross-border activity.

9. Remuneration policies should be designed to avoid incentives for excessive risk-taking; risk management considerations should be closely integrated into remuneration decisions. This should be achieved through the development and enforcement of UK and global codes.

10. New capital and liquidity requirements should be designed to constrain commercial banks' role in risky proprietary trading activities. Lord Turner rejected the principle of the Glass-Steagall Act 1933, where retail banking was separated from investment banking. He said that banks have failed in the past simply due to on-balance sheet loans (US banks in 1929-30 and 1980s; Japanese and Swedish banks in 1990s), rather than the securitised credit model as seen in this financial crisis. He believes that the optimal financial system will include a controlled securitised credit model (Turner 2009).

Lord Turner also mentioned the controversial issue of bankers' remuneration. It was Lord Walker who developed this corporate governance problem further in this review. The Walker Report of November 2009 reviewed the corporate governance issues in banks (Walker 2009). In particular, Lord Walker examined two issues:

- Whether changes in governance structure are required to increase the independence of risk management functions and
- The skill, level and time commitment required for non-executive directors of large complex banks to perform effective oversight of risks and provide challenge to executive strategies.

The Walker Report made 39 recommendations to the corporate governance mechanisms of banks. In summary, the main recommendations are as follows: -

- (a) Increased role for institutional investors to challenge company directors. Institutional investors and fund managers will follow the Stewardship Code so that they engage more with the investee companies' strategies and policies.

- (b) Increased role for non-executive directors. The key change relates to the minimum expected time commitment from non-executive directors. Instead, the report calls for certain non-executive directors to commit 30 to 36 days, and for the time commitment to be agreed and made clear to shareholders on request. Non-executive directors should be encouraged to challenge strategy.
- (c) Risk management. The board of a FTSE 100-listed bank or life insurance company should establish a board risk committee separately from the audit committee, with the chief risk officer reporting in to the committee as well as the chief executive. In addition, the risk committee should be chaired by a non-executive director, who should carry out a due diligence appraisal of any strategic transaction as a matter of good practice.
- (d) Remuneration. The remuneration committee should be responsible for setting the overarching principles and parameters of remuneration policy on a firm wide basis, and should have oversight on remuneration policy in respect to all "high end" employees, which is defined as employees who earn more than the median income of the executive board. A new recommendation is that banks should disclose in banks the number of high end employees whose total expected remuneration is in the range of £1m to £2.5m, in a range £2.5m to £5m and in £5m bands thereafter. However, it stops short of naming the individual bankers.

No matter how strict a regulatory regime can be, ultimately, it is the board of directors who is responsible for any failure. MacNeil (2010) opined that several UK banks required bail-out and/or government assistance whilst other banks did not. This suggests that corporate governance was a contributing factor towards the financial crisis of 2007-2009. Although the FSA's mandate does not embrace governance issues, MacNeil is of the view that risk management is a common denominator in regulation and corporate governance. The FSA viewed excessive remuneration as a contributing (and not the primary) factor to the financial crisis. Yet, the FSA wanted to improve risk management and therefore made changes to the Senior Management Arrangements, Systems and Controls section of the FSA Handbook (now the FCA Handbook since April 2013). A new Remuneration Code needs to be inserted into that section. Although corporate governance played a role in the financial crisis of 2007-

2009, there is insufficient scope in this thesis to discuss corporate governance weaknesses. Rather, the focus of this thesis is on regulatory reforms. George Osborne, the current Chancellor of the Exchequer, announced on 16th June 2010 that the coalition government would reform the UK financial regulatory landscape. He recommended a shift from the single regulator to a 'twin-peaks' model on grounds that the tripartite system "failed spectacularly" in ensuring financial stability (BBC 2010). The HM Treasury document of 2010: 'A new approach to financial regulation: judgement, focus and stability' explained that "*The tripartite system of financial regulation failed to ensure financial stability - in particular by failing to identify the risk posed by the rapid and unsustainable increase in debt in the economy. This resulted in considerable economic costs in lost output and in a substantial deterioration in public finances. The regulatory system cannot be restructured without primary legislation*" (HM Treasury 2010). The HM Treasury consultation document has raised a number of macro-prudential failures of the Financial Services Authority. These include: -

1. Failure to identify the problems that were building up in the financial system;
2. Failure to take steps to mitigate the above problems; and
3. Failure to deal adequately with the crisis when it did break, especially during the first part of the crisis in the summer of 2007.

According to the HM Treasury consultation document 2010, the macro-prudential failures arose due to an 'underlap' of macro-prudential regulation. Whilst the rationale of the tripartite system is an 'overlap' of financial products and thus the phenomenon of 'functional despecialisation' (Taylor 2009a), in reality, the structure of the tripartite system was weak. The Financial Services Authority was given too much work and responsibility in relation to financial regulation. The Bank of England had nominal responsibility with little power or resources. The Treasury was ill prepared and equipped for crises. In addition to this dismal picture, the UK lacked a single institution which could deal with financial regulation as a whole. With an 'overlap' of financial products and an 'underlap' of macro-prudential regulation, it is little wonder that the balance tipped in favour of financial innovation than stability. Together with the micro-prudential failures mentioned earlier in this paper, the HM Treasury consultation document 2010 states that micro-prudential regulation failed because of

an over-reliance on a 'tick-box' compliance regime. There was a lack of thorough understanding of business models and risk analysis.

Against this backdrop, it is therefore necessary to consider whether the UK government would improve financial regulation under the twin-peaks model. Under Part 2 of the Financial Services Act 2012, the Financial Policy Committee (FPC) is responsible for macro-prudential regulation. It is a subsidiary of the Bank of England. The FPC comprises of bank executives and will have macro-prudential tools to regulate financial institutions. Micro-prudential regulation will be the responsibility of the new Prudential Regulation Authority (PRA) deals with prudential and financial regulation (section 6 Financial Services Act 2012). The PRA is a subsidiary of the Bank of England. Its statutory objectives are to promote the safety and soundness of the firms which they regulate (section 2B Part 2 Financial Services Act 2012). Its regulatory style has three elements: judgement-based approach; forward-looking approach and a focused approach. Andrew Bailey (Bailey 2013) from the Bank of England submits that this will combine judgement with evidence and analysis, rigorous analysis of the riskiest banks by the Board. The Board is comprised of the Governor of the Bank of England, Deputy Governor for Financial Stability, Chief Executive Officer of the PRA and non-executive members. The PRA's powers were further widened under Part 1 of the Financial Services Reform Act 2013. Under this Bill, the PRA can hold banks to account for the way they separate their retail and investment activities, giving it powers to enforce the full separation of individual banks. Meanwhile, the 'conduct' part of the FSA is given to the Financial Conduct Authority (FCA). It is responsible for regulating business conduct of all financial services firms, as well as prudential regulation of firms not regulated by the PRA (Bailey 2013). The FCA's objectives are to protect consumers, maintain integrity in the financial sector and promote competition within the industry (section 1B(3) Financial Services Act 2012). The aim is for the PRA and FCA to work closely together. However, due to the 'twin-peaks' model, the FSA Handbook is divided into two handbooks: the Financial Conduct Authority (FCA) Handbook and the Prudential Regulatory Authority (PRA) Handbook. Conduct of business regulation is mentioned in both FCA and PRA Handbooks and in this thesis, the PRA Handbook applies since the PRA regulates banks and financial institutions since April 2013.

The main advantage of ‘twin-peaks’ model is that both macro and micro-prudential regulation are brought under one institution—the Bank of England. Proponents of the twin-peaks model argued that the twin-peaks model is better in times of crises. Having the lender of last resort and information gathered as the banking regulator would accelerate the decision-making process (Taylor 2009a) Drawing on the Australian experience will assist policy makers in deciding the right regulatory structure and style for the UK.

The rest of the thesis is divided into the following chapters: Chapter four will compare and contrast the performance of four major UK and four major Australian banks are compared. The author will analyse the UK legislation on the nationalisation of Northern Rock and Bradford and Bingley. The author will also provide an overview of the Australian rules and legislation on banking regulation. She will investigate why the Australian ‘twin-peaks’ model is better. Chapter five will review the performance of the FSA during the financial crisis of 2007-2009. In particular, the author will examine the weaknesses revealed in the FSA Handbook and FSMA 2000. She will then link these weaknesses to the ‘twin-peaks’ model. Chapter six provides a comprehensive discussion of how Australian’s prudential supervision regime developed and the legal framework of banking regulation. The author will discuss the differences in regulatory aims and objectives between the UK and Australia. Is there convergence or divergence between the two regulatory systems? Finally, chapter seven is a discussion on what lessons can be learnt from the Australian ‘twin-peaks’ model. The author will examine whether the Bank of England has too much power under the new ‘twin-peaks model’ in the UK. The position of the UK central bank is different to the Australian central bank. The author will investigate whether there are indications that the Bank of England’s status will simply replace the FSA as a single super regulator (Hill 2012). These are the gaps in the extant literature in banking regulation and the author will address them in her thesis systematically.

Chapter Three

Research Methodology

3.1 Introduction

‘When methods decisions are based on some universal, political mandate rather than on situational merit, research offers no challenge, requires no subtlety, presents no risk, and allows for no accomplishment’ (Patton 1999).

Patton argues that advocacy for a single research method applicable to all research studies is futile. The challenge thus for researchers is to select the appropriate methodology to suit the empirical questions.

The role of research methodology is to guide the researcher to undertake his study in a system of procedures and logical study (Gould and Kolb 1964). *Methodology* refers to the process and procedures of research. It includes the theoretical and philosophical assumptions upon research are based and the implications of these for the methods used (Saunders et al. 2007). Positivists aim to use strict scientific methods and procedures in research. They will discard any personal values or beliefs and analyse data objectively. The goal of this approach is to ‘uncover and explain relationships among variables that will eventually lead to universal laws that form the foundation for prediction and control of phenomena’ (Ponterotto 2005). Positivists thus rely heavily on quantitative methods such as experiments and surveys which are standardised and detached.

Meanwhile, constructivists immerse themselves in the organisation or community they are studying. As there is a strong relationship between the researcher and the participant under investigation, qualitative research methods such as interviews, participant observation, ethnography and action research are adopted.

Research methodology encompasses five branches: research purpose; research philosophy; research design; research ethics and data analysis. Diagram 1 illustrates these five branches and their sub-divisions:

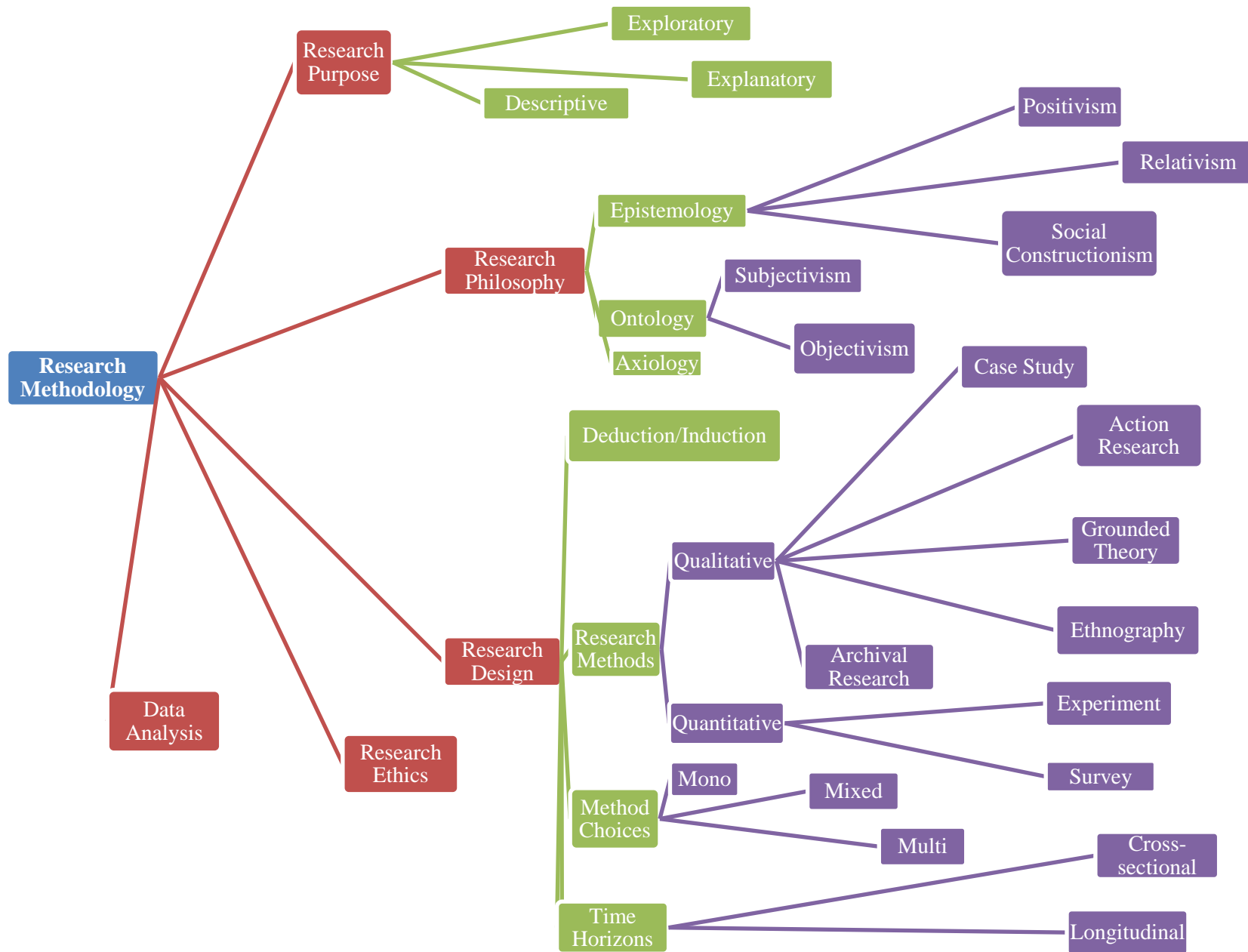


Diagram 1: Five branches and sub-divisions of research methodology
 Adapted from Saunders et al (2007)

3.2 Research Purpose

The purpose of research can be divided into three stances: exploratory, descriptive and explanatory. It is possible to have more than one purpose running concurrently or consecutively in a research study. Thus, a researcher can adopt an exploratory and descriptive manner throughout his study or commence with a descriptive manner in selecting the research question. Exploratory methods in literature review and data collection will then be pursued.

3.2.1 Exploratory study

According to Robson, an exploratory study is a valuable means of finding out ‘what is happening; to seek new insights; to ask questions and to assess phenomena in a new light’ (Robson 2002). There are three methods of conducting exploratory research:

- Studying and reviewing literature;
- Interviews with experts in the research area;
- Conducting focus group interviews.

Flexibility and adaptability are the benefits of an exploratory approach. It is important for a researcher to change his direction when he discovers new data. Such flexibility however, does not mean that there is an absence of direction. Adams and Schvaneveldt state that the focus in exploratory research is broad initially but this narrows throughout the research journey (Adams and Schvaneveldt 1991).

3.2.2 Descriptive study

The aim of descriptive study is to ‘*portray an accurate profile of persons, events of situations*’ (Robson 2002). It can be used before or after an exploratory or explanatory study. Descriptive studies are conducted at a specific point in time. They take the form of cross-sectional case studies. The advantage of descriptive studies is that they reveal patterns and connections. They do not however, establish causal links between variables. Moreover, pure description is of little value to the research and academic communities. Therefore, descriptive study is merely a means to an end.

3.2.3 Explanatory study

The desire to know ‘why’ is the purpose of explanatory research. Causal relationships are examined in an explanatory study. Researchers focus on studying a specific situation or problem and then establish the causal links between variables. It thus builds on exploratory and descriptive studies and identifies the reasons for a phenomenon. It is also capable of extending a theory or principle to new areas, new issues and new topics. Finally, it provides evidence to support or refute a hypothesis.

3.3 Research Philosophy

The researcher will have his own philosophical assumptions about the way in which he views the world. These assumptions will influence his research strategy and methodology. Practical considerations, the relationship between knowledge and the process by which it is developed will be the deciding factors as to which philosophical approach a researcher takes. The different types of philosophies include positivism; relativism; social constructionism; objectivism; subjectivism; pragmatism; functionalist; radical humanist and radical structuralist (Saunders et al. 2007).

There are three ways of thinking about research philosophies: epistemology; ontology and axiology.

3.3.1. Epistemology

Johnson and Duberly define epistemology as being the study of criteria by which ‘...we can know what does and what does not constitute warranted or scientific knowledge’ (Johnson and Duberly 2000). They continue by citing Rorty (in Johnson and Duberly 2000): ‘*It [epistemology] express the desire to find foundations to which one might cling, frameworks beyond which one must not stray, objects that which impose themselves, representations which must not be gainsaid*’. Epistemology thus provides the foundation for what is acceptable knowledge to the researcher and the framework for data interpretation. In social science, there are three types of epistemologies: positivism; relativism and social constructionism.

3.3.1.1 Positivism

To positivists, reality is external and objective. The observer must be independent and human interests should not be taken into account. Comte (in Saunders et al. 2007) thus said that: *'All good intellects have repeated, since Bacon's time, that there can be no real knowledge but that which is based on observed facts'*. Positivists make hypotheses during research and seek to confirm whether their hypotheses are true or not. The aim of positivist research is to establish the causal explanations which explain regularities in human behaviour. In order to generalise the results, positivists select samples of sufficient size from which inferences may be drawn about the population (Easterby-Smith et al. 2008).

3.3.1.2 Relativism

From a relativist's perspective, reality exists independently of the observer. Thus, the relativist's role is to identify the pre-existing reality. Relativists believe that observations will be more accurate if several perspectives are taken (Easterby-Smith et al. 2008). Triangulation is the strategy that relativists use in order to corroborate their results by using several sources of information about a phenomenon. The results will nevertheless only provide a probability that they are an accurate indication of the underlying situation (Easterby-Smith et al. 2008).

3.3.1.3 Social constructionism

The concept of social constructionism emerged from 1960 onwards with scholars such as Berger & Luckman advocating a new paradigm (Berger and Luckmann 1966). Social constructionists believe that reality is determined by people, not by external or objective factors. The focus is on what people (individually and collectively) think (Easterby-Smith et al. 2008). The ultimate aim of social constructionism is to gain a better understanding of the situation in question. Social constructionism is particularly useful when a researcher is pursuing studies regarding power and cultural differences (Anderson 1993, Cunliffe 2002).

The elements of the three epistemologies are summarised in table 1 below: -

Table 1: Summary of the three epistemologies used in social science

Social science epistemologies	Positivism	Relativism	Social constructionism
Elements of methodologies			
Aims	Discovery	Exposure	Invention
Starting points	Hypotheses	Propositions	Meanings
Designs	Experiment	Triangulation	Reflexibility
Techniques	Measurement	Survey	Conversation
Analysis/interpretation	Verification/ Falsification	Probability	Sense-making
Outcomes	Causality	Correlation	Understanding

Source: Easterby-Smith, Thorpe & Jackson (2008)

3.3.2. Ontology

Ontology concerns the nature of reality (Saunders et al. 2007). More specifically, ontology addresses the following question: What is the form and nature of reality and what can be known about reality (Ponterotto 2005)? Ontology concerns issues such as how a researcher views himself; others; of roles occupied; of organisations and their objectives (Zakus et al. 2007). There are two ontological positions: objective and subjective. Objectivists see reality as a concrete structure. Reality is hard, external to human beings and real. The social world is as concrete and real as the natural world (Morgan and Smircich 1980). Subjectivists see reality as a continuously changing process. Human beings are social actors who create social phenomena. Smircich noted that subjectivists would view the culture of an organisation as

something that the organisation 'is' as a result of continuous societal changes (Smircich 1983). Objectivists would view the culture of an organisation as something which an organisation 'has'.

Zakus, Malloy & Edwards believe that ontology is the lynchpin to truth (epistemology) and behaviour (axiology) (Zakus et al. 2007). Through participation and social interaction, individuals acquire and concurrently shape their ontological basis. Our personalities, knowledge and place in society will be developed through constant learning (Zakus et al. 2007). The knowledge that we learn and use in society will ultimately depend on the settings. Thus, we are able to use appropriate knowledge in different settings because of our ontological basis.

3.3.3. Axiology

Axiology is the philosophical branch that studies judgements about values (Saunders et al. 2007). Values act as guiding principles for individuals and organisations. To positivists, values; hopes; expectations and personal feelings have no role in the research process (Ponterotto 2005). The researcher adopts objective methods to control any influence it might have on the subjects under scrutiny or on the research process. Although positivist researchers separate their value biases during an investigation, values are reflected in their research areas. For example, a researcher's decision to study the disparity in wages between men and women would reflect his commitment to equality.

Constructivists maintain that their values and personal experience play an inevitable role in the research process. The researcher should 'acknowledge, describe and put aside his values, but not eliminate them' (Ponterotto 2005). The epistemological position of subjectivists is one of close researcher-participant relationship. Society is shaped by individuals and they in turn shape others. This dialectic interaction shapes the researcher's insight in his study. Therefore, biases in such an interactive relationship are sometimes difficult to be eradicated.

3.4. Research Design

3.4.1 Deductive/Inductive approach

Selecting a deductive or inductive approach is the researcher's next task. Deductive reasoning works from the more general to the more specific. Sometimes this is referred to as the 'top-down' approach. The researcher might begin with formulating a *theory* about his topic of interest. He then narrows it down into more specific *hypotheses* that he can test. Then he narrows it down even further when he collects *observations* to address the hypotheses. This ultimately leads him to test the hypotheses with specific data which would either *verify or falsify* the researcher's original theories.

Inductive reasoning works the other way, moving from specific observations to broader generalisations and theories. It is the 'bottom up' approach. In inductive reasoning, one begins with specific observations and measures; detects patterns and regularities; create tentative hypotheses that can be explored and finally end up developing some general conclusions or theories.

3.4.2 Research Methods

Rolfe believes that the qualitative/quantitative debate should be specifically restricted to how data is collated (Rolfe 2006). It is counter-productive to label all qualitative research methodologies as either positivist or constructionist since each study should be considered on its own merits. Others such as Holloway & Wheeler define qualitative research more generically (Holloway and Wheeler 2002). They believe that qualitative research is 'holistic, emic, contextualised, interpretative and immersed' (Holloway and Wheeler 2002). Approaches to qualitative research are diverse: the common research strategies are case study; interviews; action research; grounded theory; ethnography and archival research. Qualitative researchers analyse their data by using graphs, charts and statistics. Quantitative research methods include experiments, questionnaires and surveys. Quantitative researchers analyse their data by categorising data.

Scholars have been engaged in debating whether the qualitative or quantitative method is better for more than a century. As this thesis adopts the qualitative research method, the strengths and weaknesses of qualitative research are shown in diagram 2 below: -

Strengths

- The data are based on the participants' own categories of meaning.
- It is useful for studying a limited number of cases in depth.
- It is useful for describing complex phenomena.
- Provides individual case information.
- Can conduct cross-case comparisons and analysis.
- Provides understanding and description of people's personal experiences of phenomena (i.e. the emic or insider's viewpoint).
- Can describe, in rich detail, phenomena as they are situated and embedded in local contexts.
- The researcher identifies contextual and setting factors as they relate to the phenomenon of interest.
- The researcher can study dynamic processes (i.e. documenting sequential patterns and change).
- The researcher can use the primarily qualitative method of grounded theory to generate inductively a tentative but explanatory theory about a phenomenon.
- Can determine how participants interpret constructs
- Data are usually collected in naturalistic settings in qualitative research.
- Qualitative approaches are responsive to local situations, conditions and stakeholders' needs.
- Qualitative researchers are responsive to changes that occur during the conduct of a study

(especially during extended fieldwork) and may shift the focus of their studies as a result.

- Qualitative data in the words and categories of participants lend themselves to exploring how and why phenomena occur.
- One can use an important case to demonstrate vividly a phenomenon to the readers of a report.
- Determine idiographic causation (i.e. determination of causes of a particular event).

Weaknesses

- Knowledge produced may not generalise to other people or other settings (i.e. findings may be unique to the relatively few people included in the research study).
- It is difficult to make quantitative predictions.
- It is more difficult to test hypotheses and theories.
- It generally takes more time to collect the data when compared to quantitative research.
- Data analysis is often time consuming.
- The results are more easily influenced by the researcher's personal biases and idiosyncrasies.

Diagram 2: Strengths and weaknesses of qualitative research

Source: Johnson and Onwuegbuzie (2004)

Qualitative data has been criticised as being 'soft'. Kuhn said that quantitative predictions are preferable to qualitative predictions because maths and statistics provide concreteness and accuracy (Kuhn 1970). Patton refutes this claim by stating that qualitative methods are different (Patton 1999). They are not weaker or softer since triangulation would ensure

quality, validity and credibility of data. The important task for a researcher is to match the appropriate method for the phenomena being studied. A researcher can carry out his research using mono method when collecting and analysing data; mixed methods or multi-method. If a researcher adopts the mono method, he will combine either a quantitative or qualitative collection technique with qualitative data analysis procedure. Multi-method refers to the combinations where more than one data collection technique is used with associated analysis techniques, but this is restricted within either a quantitative or qualitative world view (Tashakkori and Teddlie 2003). Mixed methods occur when both quantitative and qualitative methods are used in the research paradigm. Mixed methods research uses both quantitative and qualitative data collection and analysis simultaneously or consequentially. Mixed methods research is useful when investigating inter-disciplinary or complex issues since it provides a more comprehensive understanding of research problems than solely relying on either qualitative or quantitative method. Finally, there is the multi method approach. Tashakkori and Teddlie believe that multi methods are beneficial if they provide better opportunities to answer the research questions and for better evaluation of the results (Tashakkori and Teddlie 2003). Multi methods are particularly helpful in that different methods can be used at various stages of the research, i.e. one can use interviews at an exploratory stage before using a questionnaire. Further, the use of various data collection techniques will give rise to triangulation, which reinforces the construct validity of results. Construct validity relates to whether the correct label is attached to a piece of research, i.e. when a researcher is measuring what is labelled as 'risk management', is that really what he is measuring? If one can make generalisations from his own measures, then construct validity has been achieved.

3.4.3 Methodology in thesis

Originality is key to a successful PhD thesis. In this thesis, originality is demonstrated by a mixed methods approach combining qualitative and quantitative research methods. The qualitative analysis involves doctrinal research, comparative law and a case study because the author is exploring a topical, contemporary phenomenon in the social world, namely the banking regulation systems of the UK and Australia. The quantitative analysis involves considering the financial ratios of banks to see if the various ratios such as leverage, capital and liquidity complied with banking regulations. These ratios are used to check the

correlation between leverage, capital and liquidity ratios with the performance of banks. The author calculated the ratios between 2004-2009. These ratios are cross-checked with data from Factiva, government publications such as Financial Stability Reports from the Bank of England; publications from the World Economic Forum and the Organisation for Economic Co-operation and Development. Quantitative research methods include interpreting financial ratios, graphs and charts from primary literature such as company annual reports and government publications. In order to achieve consistency, the author compared the financial ratios of four major high street UK and four Australian banks in chapter four. Northern Rock used to be a building society but it became a bank in 1997. Its business model is unusual since it combined a traditional reliance on illiquid long-term mortgage assets with a reliance on innovative sources such as securitisation and the wholesale market. Northern Rock was thus excluded in the quantitative analysis since it was difficult to find an Australian comparator. The author has chosen a combination of methods in her thesis since each type of method has its advantages and disadvantages. By offering a tailored and unique mixed methods approach to a critical analysis of UK and Australian banking regulation, the author believes that this thesis is original. The author commences her analysis by using doctrinal research stating what the law is on banking regulation in the UK and Australia, then uses a comparative case study to contrast the banking regulation regimes in the UK and Australia. Financial ratios of the top four UK and Australian banks are used in the case study to investigate regulatory weaknesses. The author now justifies her methodology by providing a deeper discussion of doctrinal research, comparative legal analysis and case study.

3.4.3.1 Doctrinal research

As an academic lawyer, the author uses doctrinal research when reading, interpreting and analysing legal sources. Doctrine is defined by Mann as ‘a synthesis of rules, principles, norms, interpretive guidelines and values’ which ‘explains, makes coherent or justifies a segment of the law as part of a larger system of law’ (Mann 2010). Doctrinal research involves two stages. First, a researcher locates the relevant sources of law. Secondly, the researcher interprets and analyses the sources. Therefore, doctrinal research involves deductive/inductive reasoning and hermeneutic/interpretive analysis of the law. A researcher carefully studies legal judgements in search of inconsistencies, ambiguities and reconciling such differences (Posner 1981). It has been argued that traditional doctrinal research still

plays an important role in academic law but interdisciplinary scholarship is growing at a fast pace (Posner 2002) Siems submits that pure interpretation of cases or statutes is insufficient to create originality (Siems 2008). For a thesis to be original, a new solution to a problem or a new method to interpreting cases and statutes is required Twining opines that doctrinal research can be narrow and isolated: ‘it takes as its starting point and its main focus of attention rules of law, without systematic or regular reference to the context of problems they are supposed to resolve, the purposes they were intended to serve or the effects they in fact have’ (Twining 1976). In brief, doctrinal law does not deal with how rules can be improved or reformed (Hutchinson 2013). Doctrinal research is narrow and isolated because it separates law from policy and politics. Yet, doctrinal research is still important in legal scholarship in this era because it solves legal problems. It reflects the analytical approach used by judges when deciding cases. More importantly, it is a useful starting point to research since it determines ‘what the law is’. The author thus commences her thesis with doctrinal research to determine ‘what the law is’ by analysing the development of UK and Australian banking regulation through various important pieces of legislation (for example: Financial Services and Markets Act 2000, Financial Services (Banking Reform) Act 2013 in the UK; Corporations Act 2001 in Australia) and case law. The author then supplements her methodology with comparative law and a case study.

3.4.3.2 Comparative law

Kahn-Freund describes comparative law as a method and not a topic (Kahn-Freund 1966). Advocates of comparative law submit that there are four elements of distinctiveness. First, comparative law provides originality because when making comparisons between two or more legal systems, it is possible to make policy recommendations (Siems 2008). A researcher can thus create research of impact and of use in practice. Secondly, comparative law provides a new perspective to legal research (Legrand 1995). Thirdly, when using comparative legal analysis, a researcher needs to be committed to theory. Finally, the researcher also needs a commitment to inter-disciplinarity (Legrand 1996). The author is keen to produce policy recommendations of use in practice, therefore she believes that by adopting a comparative legal analysis, she can produce new knowledge by comparing the banking regulation regimes in the UK and Australia. By comparing the similarities and differences between these two legal regimes, as well as the weaknesses exposed by the

regulators in these countries, she can make policy recommendations on banking regulation. The UK and Australia are both common law countries and the regulatory systems share many similarities. Yet, after the financial crisis of 2007-2009, the regulatory systems of both countries revealed different issues. More importantly, lessons can be learnt from Australia's 'twin-peaks' regulatory model as the UK has switched from a tripartite regulatory model to the 'twin-peaks' model in 2013. The comparative method gives the researcher a new perspective to her research. Studying the UK regulatory model alone is useful but the Australian experience with the 'twin-peaks' model adds another dimension to her research. For example, the role of the Central Bank is different between the two countries under the 'twin-peaks' model. This merits further discussion in the author's thesis and will have policy implications in banking regulation. Legrand's emphasis on commitment to theory and inter-disciplinarity refers to the hermeneutic/interpretative approach in comparative legal analysis. Legal texts are not mere objects. Comparative lawyers interpret legal texts in a social context; 'deconstruct the law 'object' as an object in itself and reconstructing it in an interdisciplinary context which will reveal its cultural complexity' (Legrand 2009). This hermeneutic/interpretative approach is used in doctrinal law and case study within the author's thesis. Throughout the research process, the author interpreted legal texts as well as financial ratios and statistics in analysing the data on financial regulation. Her policy recommendations are based on the findings after rigorous data interpretation and analysis. Comparative law is therefore, not just another positivistic subject in that lawyers are merely concerned with the rules of a legal system. It is a more complex and interesting research method of comparing legal systems, unravelling the law and rebuilding it in an interdisciplinary subject. Banking regulation is a fundamental part in a society. Banks have a wide stakeholder interest and regulating the financial sector well is essential to a healthy and financially sound economy. It is with this social context that a case study approach enhances the originality and robustness of the author's thesis.

3.4.3.3 Case Studies

Positivists were the first to use case studies in their research. Nevertheless, case studies can be adapted so that they are consistent with relativist and constructionist perspectives (Easterby-Smith et al. 2008). Positivists and relativists generally use multiple cases whilst constructionists tend to adopt single cases.

According to Robson, a case study is ‘a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence’ (Robson 2002) . It is particularly suitable when the phenomenon being studied has no distinct boundaries with the context under scrutiny (Yin 2003). Examples of recent case studies used in the field of social science include Ozcan & Eisenhardt’s study on strategy and financial performance in the wireless gaming industry (Ozcan and Eisenhardt 2009) and the study by Faems, Janssens et al (2008) on alliance governance (Faems et al. 2008).

Case studies provide descriptions of phenomena, develop and test theory (Darke et al. 1998). It provides evidence for hypothesis generation and for investigating areas where little is known (Darke et al. 1998). Grounded theory advocates, where data is first collected and hypotheses generated later, use case studies to develop their theories (Glaser and Strauss 1967). Eisenhardt builds on the existing literature in qualitative method (Eisenhardt 1989, Miles and Huberman 1988), case study design (Yin 1981) and grounded theory (Glaser and Strauss 1967) by creating a ‘roadmap’ for building theories in case study research. She inserts concepts such as multiple investigators and a priori specification of concepts to the existing process of case study to create a fuller framework for generating and building theories from case study research. Her relativist stance has been widely adopted by researchers using case studies, especially in North America.

Adopting the case study methodology would lead to an exploratory and explanatory journey. Questions beginning with ‘how and why?’ would be answered. Direct causal links in social science are difficult to establish because links are strongly influenced by the context (Perry 2000). The complex causal links in the context of a situation are known as ‘causal tendencies’ or powers (Bhaksar 2008). Case study research is thus an in-depth qualitative research strategy used to investigate causal links and generate theory.

The unit of analysis, or what constitutes a case, is very important in the case study. The case can focus on an individual but case studies are more suitable for complex situations. Thus, a case would usually involve two or more individuals and/or their organisations (Perry 2000). Yin has identified four case study strategies based upon two dimensions (Yin 2003):

- Single case v multiple case;
- Holistic v embedded case.

Single case studies are justifiable if they meet at least one of the three criteria set by Yin (2003):

- The case is *critical* in confirming, challenging or extending a theory since it is the only one that meets all the conditions of the theory. A critical case study is one of strategic importance in relation to the general problem (Flyvberg 2006);
- The case is rare or extreme and finding other cases is so unlikely that research about the situation cannot be carried out if the single case was not investigated (i.e. Freud's Wolf-Man);
- The case provides unusual access for academic research.

An example of single-case studies within social science is of Graham Allison in *Essence of Decision Making: Explaining the Cuban Missile Crisis* (Allison 1971). The single case is the confrontation between the United States and the Soviet Union over the placement of offensive missiles in Cuba. Allison has three competing organisational models. By comparing each theory with the actual events, Allison shows how one can provide the best explanation for this type of crisis (Perry 2000). A more recent example is of Derek Matthews's study into London & County Securities Bank, where he examined the audit and regulatory failures of the bank. By focusing on one of the most significant UK corporate fraud scandals and regulatory failures in recent decades, Matthews has provided an in-depth analysis into the insufficiency of self-regulation (Matthews 2005).

Multiple case studies allow cross-case analysis and comparison, as well as the investigation of a particular phenomenon in diverse settings (Darke et al. 1998). Multiple cases can be used to predict similar results (literal replication) or to produce contrasting results for predictable reasons (theoretical replication) (Yin 2003). Examples of multiple case studies in social science include those of Banfield and Knoff's study into the legislative and judicial rights in Canada and Australia (Banfield and Knopff 2009) and Wise & Mahboob's study on corporate governance and corporate social responsibility in Bangladesh (Wise and Mahboob 2008).

Holistic cases are used when one wishes to study an organisation as a whole. Embedded cases concern studies of parts of an organisation. Each sub-case is embedded in the bigger unit of analysis. Researchers using embedded cases should analyse each sub-case and compare with

other sub-cases before examining the big cases. Further, researchers should always consider whether the findings are practical since some observations can be quite abstract (Perry 2000).

Case study research normally combines theory building (induction) with theory testing (deduction). The balance of induction versus deduction is a moot point in case study research. Prior theory is not utilised in a pure inductive approach. Dyer and Wilkins focus on the rich descriptions of the context within the social events occur (Dyer and Wilkins 1991). They believe that case studies should be more stories and theories should not be used. Pure induction is open-ended and exploratory but without prior theory, the researcher might not benefit from existing theory (Perry 2000). Pure deduction is narrower in nature and is concerned with testing or confirming hypotheses. The disadvantage of pure deduction is that a researcher might not benefit from the development of new and useful theory (Perry 2000). Thus, Parkhe said that 'both extremes [of induction and deduction] are untenable and unnecessary' and 'continuous interplay' is required to advance theories (Parkhe 1993).

The classic barometer test for quality research is validity and reliability (Perry 2000). Validity includes construct, internal and external validity (Yin 2003). Construct validity concerns whether the right labels have been used for the concepts being measured in the investigation. Yin suggested using triangulation, i.e. multiple sources of evidence such as interviews, observations and surveys, to achieve construct validity (Yin 2003). A common misunderstanding about triangulation is that its aim is to demonstrate that different data sources or inquiry approaches give the same result. The aim of triangulation is really to test for *consistency*. According to Patton, 'different sources of data may yield somewhat different results because different types of inquiry are sensitive to different real world nuances' (Patton 1999). Thus, an understanding of inconsistencies in findings across different kinds of data can be beneficial. The discovery of such inconsistencies offers further opportunities for studying the relationship between the research method and phenomenon in question.

Internal validity refers to the accuracy of cause and effect relationships discovered (Perry 2000). It is achieved by using prior theory, probing questions and in-depth listening techniques in interviews (Perry 2000). External validity is whether the results of the research can be generalised to other settings or contexts. A frequent criticism faced by case study researchers is '*how can one generalise when x=1?*' Yin distinguishes analytic from statistical generalisation (Yin 2003). He said that: '*in analytic generalisation, previously developed theory is used as a template against which to compare the empirical results of the case study*'

(Yin 2003). In essence, case studies are in-depth investigations of a single phenomenon. Thus, it is difficult to generalise from a single event. Simons said that she welcomes the paradox between the study of the singularity and the search for generalisation (Simons 1996):

*‘One of the advantages cited for case study research is its uniqueness, its capacity for understanding complexity in particular contexts. A corresponding disadvantage often cited is **the difficulty of generalising from a single case**. Such an observation assumes a polarity and stems from a particular view of research. Looked at differently, from within a holistic perspective and direct perception, there is no disjunction. What we have is a paradox, which if acknowledged and explored in depth, yields both unique and universal understanding.*

*[We need to] embrace the paradoxes inherent in the people, events and sites we study and explore rather than try to resolve the tensions embedded in them. ... Paradox for me is the point of case study. Living with paradox is crucial to understanding. **The tension between the study of the unique and the need to generalise is necessary to reveal both the unique and the universal and the unity of that understanding.** To live with ambiguity, to challenge certainty, to creatively encounter, is to arrive, eventually, at ‘seeing’ anew.’*

Statistical generalisation is therefore not applicable to case studies. Single case studies can, according to Yin, generalise if it is a critical case; extreme or unique or if it is revelatory (Yin 2003). Multiple case studies are according to Yin, generalised on replication logic (Yin 2003). Multiple cases are to be chosen so that they either predict similar results (literal replication) or contrary results but for predictable reasons (theoretical replication).

Reliability is the final test for good quality research. It refers to the consistency of the techniques used in the research. It is achieved through maintaining clear and structured processes for collecting and analysing data (Perry 2000). Additional reliability can be achieved by having a group of colleagues to design and monitor the research project. Such a group would bring objectivity to the research.

Validity and reliability of data are of importance to this thesis. The author reviewed a range of primary and secondary sources in the case study, thus consistency through triangulation of data was achieved. Triangulation is useful in highlighting both consistencies and

inconsistencies of results. An understanding of inconsistencies in findings across different kinds of data is beneficial.

The author achieved internal validity by combining prior theory with hypotheses testing. External validity concerns whether the results can be generalised into another setting or context. Since the case study in this thesis is a multiple case study, it can be used to predict similar results or contrary results but for predictable reasons. The caveat is regulation of banks is a study of a social phenomenon, since banking is an integral part of most societies. Therefore, it is extremely difficult to predict with precision or to generalise the author's results in another setting with exact consequences. Nonetheless, as long as the reader is aware, this is acceptable.

Reliability is the final test for good quality research. The author achieved consistency and maintained clear and structured processes for collecting and analysing data. Further, she has attended conferences, presented papers and published papers whilst writing this thesis. This has enabled her to improve the validity and reliability of her data. Between 2010-2011, she attended the following conferences: -

- | | |
|----------------|---|
| October 2011 | Presented paper at the INSEAD/EABIS 10 th Annual Colloquium 2011 in Fontainebleau, Paris |
| June 2011 | Guest speaker at Warwick University's conference on 'Sovereign Debt and the Banking Crisis'. |
| April 2011 | Presented paper at the Second Corporate Governance and Finance Conference in Melbourne, Australia |
| September 2010 | Presented paper at the Corporate Governance & Global Financial Crisis Conference at the Wharton School, University of Pennsylvania, Philadelphia. |
| May 2010 | Co-ordinated PhD Colloquium and presented paper at Poznan University of Economics, Poland |

After the conferences, the author incorporated the feedback and generated new ideas into her thesis. She has published three papers in the following academic journals: -

1. Turmoil in the financial world: Financial innovation, multiple principal-agent problems and regulatory dialectic', Poznan University of Economics Review (2011), Vol. 11 (2), pp. 47-72
2. Macro and micro prudential regulatory failures amongst financial institutions in the United Kingdom: Lessons from Australia, Journal of Financial Regulation and Compliance (2013), Vo. 21(3)
3. Single or twin? The UK financial regulatory landscape after the financial crisis of 2007-2009. Journal of Banking Regulation (2011), Vol. 13(1), 24-35.

The author found it beneficial to test and present her research materials at conferences which became good training grounds for herself in the pursuit of new dimensions in banking regulation. Publication in the journals mentioned above is a rigorous process, where the author received constructive feedback from the reviewers.

3.4.4 Time horizons

Phenomena can either be studied at a particular time or over a period of time. Cross-sectional studies study the former whilst longitudinal studies study the latter. Case studies and surveys are often used for cross-sectional studies. The main advantage of longitudinal studies is the ability to study changes and developments over time. Adams and Schvaneveldt said that a researcher can have control over variables being studied in longitudinal studies (Adams and Schvaneveldt 1991). It is possible to bring in a longitudinal element into research even if there are time constraints. One can re-analyse published data collected over time to achieve this longitudinal element.

3.5. Research Ethics

Social science involves the study of human beings and societies. In view of this, a researcher will encounter ethical issues during his research process. Ethics are 'moral principles, norms or standards of behaviour that guide moral choices about our behaviour and our relationships with others' (Blumberg et al. 2008). A researcher's responsibility is to ensure that his research paradigm is methodologically sound and morally defensible. Views on what is

morally defensible vary as social norms differ between countries and societies. Further, philosophical stances on ethics differ. The deontological view states that unethical means will never justify the research results even if it was necessary to breach ethical codes during research (Saunders et al. 2007). In contrast, advocates of teleology argue that the results justify the means even though a researcher engaged in unethical conduct.

Researchers are guided by a code of ethics. The Economic and Social Research Council have identified the following six key principles which should be followed whenever applicable:

- Research should be designed, reviewed and undertaken to ensure integrity and quality (quality of research);
- Research staff and subjects must be informed fully about the purpose, methods and intended possible uses of the research, what their participation in the research entails and what risks, if any, are involved. Some variation is allowed in very specific and exceptional research contexts for which detailed guidance is provided (consent);
- The confidentiality of information supplied by research subjects and the anonymity of respondents must be respected (confidentiality);
- Research participants must participate in a voluntary way, free from any coercion (voluntary nature);
- Harm to research participants must be avoided (non-maleficence);
- The independence of research must be clear, and any conflicts of interest or partiality must be explicit (objectivity).

3.5.1 Ethical issues during design and gaining access

In the early stage of research design, the availability of primary and secondary data to a researcher will depend on his access to sources. Access to data should be granted freely and voluntarily, without the participant feeling oppressed (Robson 2002).

An important issue in the design stage is the non-maleficence principle, Saunders submits that the non-maleficence principle is the *'cornerstone of ethical issues that confront those who undertake research'* (Saunders et al. 2007). To comply with this principle, consent from participants must be obtained and confidentiality upheld. When designing data collection methods, participants must understand their rights and that they have the option to refuse.

3.5.2 Ethical issues during data collection

Irrespective of the data collection technique, there are two important ethical principles that should be followed: objectivity and confidentiality. Objectivity applies to data collection because this affects the validity and reliability of data. Hence, any fabrication of data is totally unacceptable and unethical (Saunders et al. 2007).

Great caution should be exercised to protect each participant's right to anonymity (Saunders et al. 2007). Easterby-Smith et al. reinforce this point when interviewing participants in an organisation (Easterby-Smith et al. 2008). The initial participant who discloses something of interest or significance may lead the researcher to interview others. Care must be taken not to reveal the identity of the initial participant who aided the researcher. Otherwise, the non-maleficence principle would be breached.

3.5.3 Ethical issues associated with data processing and storage

Having obtained relevant data for the research work, one needs to consider the stages of data processing and storage. The Data Protection Act 1998 ('the Act') applies to all individuals and organisations that process, store and move personal data. The Act works in two ways. Firstly, it states that anyone who processes personal information must comply with eight principles, which make sure that personal information is:

- (1) Fairly and lawfully processed;
- (2) Processed for limited purposes;
- (3) Adequate, relevant and not excessive;
- (4) Accurate and up to date;
- (5) Not kept for longer than is necessary;
- (6) Processed in line with rights granted to the data subjects by the Act;
- (7) Secure;
- (8) Not transferred to other countries without adequate protection

The second area covered by the Act provides individuals with important rights, including the right to find out what personal information is held.

Research projects would seem to contravene some of the above principles. The provision of the 'Research, history and statistics' exemption in section 33 of the Act however, allows personal data to be stored indefinitely for research purposes provided that relevant conditions are met:

- Data is not processed to support measures or decisions relating to particular individuals.
- Data is not processed in such a way that substantial damage or substantial distress, is or is likely to be, caused to any data subject. (section 31(1)) of the Act)

Finally, personal data may contain sensitive information such as the data subject's ethnic origin, religious or other similar beliefs. Sensitive data can only be processed if at least one of the conditions in Schedule 3 of the Act is satisfied. Explicit consent from the data subject would meet the condition in Schedule 3.

3.5.4 Ethical issues related to analysis and reporting

Maintenance of objectivity is essential during the analysis stage. Lack of it would distort the researcher's conclusions. Care must be taken to protect names of participants, as reporting data attributable to a particular individual may cause embarrassment and even harm (Blumberg et al. 2008).

3.6. Data collection and analysis

This thesis uses both quantitative and qualitative data although the focus of the thesis is on qualitative data collection and analysis. The goal of data collection in qualitative research is to provide evidence for the experience it is investigating (Polkinghorne 2005). The evidence gives people's accounts of their experiences. The researcher analyses the evidence to produce a description of the experience. When drafting the research report, the researcher reports the evidence in the data to the readers. Qualitative data are collected primarily in the form of non-numerical sources. Transcripts of interviews are then produced as records of evidence. The ideas and their interpretations are the evidence. As Polkinghorne adds, '*the textual evidence is indirect evidence*' (Polkinghorne 2005). Qualitative data analysis is the study of patterns and themes within the available data (Patton 1999). There is a wide range of

literature on the underlying assumptions and procedures associated with analysing qualitative data. Many of these are associated with specific approaches such as grounded theory (Strauss and Corbin 1998), phenomenology (Van Manen 1990), discourse analysis (Potter and Wetherall 1994) and narrative analysis (Lieblich et al. 1998). However, some analytic approaches are generic and do not fall within the distinctive branches of qualitative research (Ezzy 2002). Thematic approach is such an example and can be applied across a range of epistemological and theoretical theories (Braun and Clarke 2006).

This thesis uses an interpretist case study approach. Walsham recommends that several methodological issues should be discussed in interpretive case studies (Walsham 1995). Interpretists should elucidate whether theory is used as an initial guide for data collection; as part of an iterative process of data collection and analysis or as a final product of the research. Researchers are further advised to discuss their etic/emic position. Furthermore, Walsham recommends that precise details on data sources, collection and analysis techniques should be given. Klein et al. propose a set of principles to conduct and evaluate interpretive case research (see diagram 3) which are based on the philosophical perspective of hermeneutics and which mostly apply to studies of this nature (Klein and Myers 1999). They use the word ‘principles’ to emphasise that researchers should decide whether and how these principles should be applied in their research studies.

<i>1. The fundamental principle of hermeneutic circle</i>
<i>2. The principle of conceptualisation</i>
<i>3. The principle of interaction between researchers and subjects</i>
<i>4. The principle of abstractions and generalisation</i>
<i>5. The principle of dialogical reasoning</i>
<i>6. The principle of multiple interpretations</i>
<i>7. The principle of suspicion</i>

Diagram 3: Seven principles for interpretive case research (Klein et al., 1999)

Grounded analysis is suitable for interpretive case studies. Suddaby asserted that grounded analysis is *'suited to efforts to understand the process by which actors construct meaning out of inter-subjective experience'* (Suddaby 2006). Grounded analysis should also be used in a logical manner consistent with *'key assumptions about social reality and how that reality is known'* (Suddaby 2006). Glaser and Strauss proposed grounded analysis as a practical method for conducting re-search that focuses on the interpretive process by analysing the *'the actual production of meanings and concepts used by social actors in real settings'* (Gephardt 2004). They argued that new theory could be developed by paying attention to the contrast between *'the daily realities'* and the interpretations of those activities made by the participants. Grounded analysis relies heavily on two concepts: constant comparison and theoretical sampling. The iterative nature of constant comparison of data between the collection and analysis stage and theoretical sampling would ensure that the data is fully comprehensive. It also provides flexibility to the researcher since the research design can be changed easily due to the continuous changing nature of the theory (Glaser and Strauss 1967, Strauss and Corbin 1998).

3.7 Summary

This chapter focused first on general research methodology and then the methodology utilised by the author in her thesis. A mixed-methods methodology is used whereby doctrinal research, comparative legal analysis and case study are adopted for qualitative results. Doctrinal research was used to provide an analysis of the development of banking regulation in the UK and Australia. It also enabled the author to focus on what the current law on banking regulation is in both countries. By using a multiple, comparative case study of the period 2004-2009, the author utilised financial ratios in her financial regulation chapters and obtained generally reliable results. This is because she believes that it is only through analysing a comparison of fundamental financial ratios between the relevant banks that problems can be identified and recommendations can be made. This is the quantitative aspect of her thesis. The qualitative aspect of her methodology involved examining primary and secondary sources. This enabled her to identify why the UK regulator failed in its role and how the UK can learn from the Australian *'twin-peaks model'*. Triangulation of a range of primary and secondary sources, presenting papers at conferences and publication of papers in academic journals all improved the validity and reliability of the author's results. These all

prove that the author's work was accepted, enriched and tested before an international audience of academics and practitioners. The author is thus confident that her thesis is rigorous, robust, as well as original.

Chapter Four

Macro and micro prudential regulatory failures between banks in the United Kingdom and Australia 2004-2009

4.1 Introduction

The purpose of this chapter is to compare the performance of banks in the United Kingdom (UK) and Australia between the period 2004-2009. Data from the Financial Development Report of the World Economic Forum (World Economic Forum 2011) as well as liquidity, debt, capital, asset quality and profitability ratios from four UK banks and four Australian banks will be examined. The data highlights macro prudential weaknesses in contemporary banking such as high leverage and debt ratios, poor liquidity and systemic risks. This chapter analyses why UK banks were more vulnerable than Australian banks in the financial crisis. Northern Rock and Bradford and Bingley had to be nationalised in 2008. The chapter analyses the UK legislation regarding the nationalisation of these banks and discuss whether Basel III's recommendations solve the problems raised by the crisis. Finally, the chapter via a comparative legal analysis will give an overview of the Australian legal framework to banking regulation and investigate why the Australian 'twin-peaks' model is better than the current UK model.

The financial crisis of 2007-2009 provides a valuable opportunity to study the corporate governance and regulatory aspects of the banking sector, a critical moment in the development of regulation in the financial sector. The chapter aims to fill a gap in the literature on banking regulation, financial development and financial stability. In particular, little research has been done comparing the financial ratios of UK and Australian banks between 2004-2009 and the implications arising from the ratios.

The financial crisis has exposed serious regulatory failures in the UK financial sector. The UK government had to nationalise Northern Rock and Bradford & Bingley, injecting £850 billion into banks such as the Royal Bank of Scotland and Lloyds Banking Group to stabilise the banking system. The UK sees a shift from the universal regulator (the Financial Services Authority) to a 'twin-peaks' model. This gives the Bank of England banking supervisory powers and its subsidiary, the Prudential Regulation Authority will deal with prudential and financial regulation. The Financial Conduct Authority promotes confidence, maintains

integrity in the financial sector and promotes competition within the industry (section 1B(3) Financial Services Act 2012).

Australian banks have withstood the financial crisis better than UK banks. Australia did not have any bank runs. Four of the nine AA-rated banks around the world are Australian banks, so the Australian regulation system worked well. Australia has also performed well in the Financial Development Index of the World Economic Forum 2011 (World Economic Forum 2011). They are ranked fifth out of 60 countries in the overall index and scored well in stability of its banking system. However, the Australian financial system is not perfect though. The World Economic Forum states that the Australia banks had low Tier 1 capital and had high levels of stress. Also, its commercial access to capital is weak. Although the UK takes third place in the Financial Development Index, it scored very low in overall financial stability (41st). It is ranked 38 out of 60 in frequency of banking crises compared to Australia's top position. However, financial intermediation is still strong despite the challenging economic conditions (World Economic Forum 2011).

This study extends the academic literature on regulation of banks. The most extensive piece of research in the regulatory aspects of banks was carried out by Barth *et al* in 2006 (Barth *et al.* 2006). It offers the first comprehensive cross-country assessment of the impact of bank regulation on the operation of banks and assesses the validity of the Basel Committee's approach to bank regulation. Barth *et al* find that boosting capital standards or strengthening supervision do not lead to better banking efficiency. They call for more market discipline such as better disclosure; transparency and private sector monitoring of banks than on command and control regulations (Barth *et al.* 2006).

Barth *et al's* results should be re-examined in view of the current financial crisis. The author combines a comparative approach with empirical findings to investigate how UK banks can improve their financial performance. Financial innovation has created new ways for creating capital and investing. In theory, this enhances financial development which increases economic growth. However, complex financial products and processes have increased moral hazard since financial institutions took excessive risks in search of profits. Financial innovation has also decreased transparency through complicated products and confidentiality of transactions. Ample academic literature since the financial crisis (Acharya *et al.* 2009, Goodhart 2009) has shown that Collateralised Debt Obligations did not shift risks in the securitisation process and so the argument that securitisation can diversify risks and thus

enable financial markets to grow is flawed. Financial stability is thus an important factor in a country's economic growth. The right amount of regulation is needed to balance financial development and financial stability.

This study will have practical implications for policy makers worldwide, especially in the UK and Australia. Although both the UK and Australia are common law countries, they are different in terms of population, economy and culture. Reforms in financial regulation depend on local circumstances, political principles and country specific preferences. Basel III's 'one-size fits all' approach does not treat banks and other financial institutions equally. Financial institutions such as hedge funds which operate in the shadow banking sector are not as tightly regulated as banks. 'Shadow banks' raise 'short-term funds in the money markets and use those funds to buy assets with longer-term maturities' (Kodres 2013). They are not regulated like commercial banks. The question whether the shadow banking industry should be brought into the remit of Basel III will be discussed. Australian banks rely more on intermediation than securitisation. Is it fair to apply stricter capital, liquidity and leverage requirements to Australian banks? The Australian government is currently reviewing its liquidity requirements, along with other G20 countries. Australian banks seem capable of meeting the proposed Basel III capital standards, but application of the proposed new liquidity level in Australia is hard due to the low level of domestic government debt for banks to hold as liquid assets.

Ranciere *et al* suggests that countries that have experienced occasional financial crisis have, on average, demonstrated higher economic growth than countries that have shown more stable financial conditions (Ranciere et al. 2008). Whilst Ranciere et al are not suggesting that financial crises are good for economic growth, they suggest that the systemic risk-taking that overcomes financial hindrances to economic growth is associated with occasional financial crises. The right amount of regulation is needed to balance financial development and financial stability. This balance is of significance on a global scale, so this chapter will have important implications for academics and policy makers on an international dimension.

Therefore, the chapter examines four UK banks and four Australian banks. The UK banks are HSBC, Barclays, the Royal Bank of Scotland and HBOS (part of Lloyds Banking Group from January 2009). The thesis concentrates on HBOS rather than Lloyds TSB since the literature review revealed that HBOS's business model was too risky. The Australian banks are Westpac Banking Corporation, Commonwealth Bank of Australia, ANZ and National Bank of Australia. These independent retail banks play a vital role in the economies of the UK and Australia respectively. These banks also have complex balance sheets and are exposed to securitisation in the wholesale funding market. The author has taken the 'big four' Australian banks for comparison with the 'big four' in the UK to maintain consistency. Northern Rock is not included in the quantitative analysis because its business model is different to the other four UK banks.

Variables affecting bank profitability can be divided into internal and external determinants (Athanasoglou et al. 2005). This chapter focuses on the internal determinants. The data for this study comprises liquidity, debt, capital, asset quality and profitability ratios. These financial ratios are used by regulators to evaluate banks. These ratios are used to check the correlation between the former four with the performance of banks. The author calculated the ratios over a five year period, namely between 2004-2009. The period of 2004-2009 was particularly volatile and the author would have liked to analyse data from 1999-2003 to provide a more balanced set of data.

The cash ratio is the figure for cash and cash equivalent divided by current liabilities. It refines the current and quick ratios to reveal the most liquid of assets, cash. Two types of debt ratios are used: bank leverage (total debts divided by shareholder equity) and loan to deposit. Tier 1 capital divided by risk-weighted assets gives the tier 1 capital ratio. Asset quality is the ratio of non-performing loans to total loans. This is important in light of the solvency problem encountered by several UK banks. Finally, profitability is measured by return on assets (ROA) and return on equity (ROE) ratios. The ROA ratio indicates the capital intensity of banks. This is useful in light of the debate of whether more capital would benefit banks. The ROE measures the efficiency of banks in generating profits. A weakness of the ROE ratio is that it does not take debt into account. If a bank can issue debt at a lower interest rate than the rate of return on its investments, it could increase its return on equity. However, higher debt also increases the risk of failure for a bank. The data thus includes ROA ratios. The ROA and ROE ratios are considered by Sinkey (Sinkey 2002) as the best measures of a bank's overall performance (Ho and Wu 2006, Beck et al. 2005) although the ROA appears

to be the key ratio for measuring bank performance (Sundararajan et al. 2002). Calculations are checked against market data and secondary sources where possible to ensure robustness.

4.2 Descriptive results

Bank	Country	Cash ratio 5 year average (%)	Debt-to-Equity ratio 5 year average (%)	Loan to deposit ratio 5 year average (%)	Tier 1 Capital ratio 5 year average (%)	Asset quality (impaired loans to total loans %) 5 year average	Return on equity ratio 5 year average (%)	Return on assets 5 year average (%)
Royal Bank of Scotland	UK	16.68	21.1	115.22	8	2.11	9.26	-0.3
HSBC	UK	44.67	16.07	96.64	8.8	2.21	7.26	0.66
Barclays	UK	55.72	25.9	93.28	8.8	2.72	20.96	0.35
HBOS	UK	5.1	38.98	179.24	7.2	2.06	0.23	0.04
Average		30.54	25.51	121.1	8.2	2.28	9.43	0.19
Standard deviation		23.61	9.83	39.95	0.77	0.30	8.61	0.41
Co-efficient of variation		0.77	0.39	0.33	0.09	0.13	0.91	2.19

Table 2a: Liquidity, Debt, Capital, Asset Quality and Profitability Ratios of UK Banks between 2004-2009

Source: Published annual reports; Factiva and Financial Times

Bank	Country	Cash ratio 5 year average (%)	Debt-to-Equity ratio 5 year average (%)	Loan to deposit ratio 5 year average (%)	Tier 1 Capital ratio 5 year average (%)	Asset quality (impaired loans to total loans %) 5 year average	Return on equity ratio 5 year average (%)	Return on assets 5 year average (%)
Westpac Banking Corporation	Australia	22.68	20.02	135	7.3	0.25	19.57	0.95
Commonwealth Bank of Australia	Australia	24.12	16.8	134.22	7.68	0.17	17.64	0.98
ANZ	Australia	26.49	15.09	124.34	7.74	0.23	14.54	0.89
National Australia Bank	Australia	43.92	17.24	116.92	7.65	0.21	12.26	0.75
SD		9.87	2.04	8.63	0.20	0.03	6.88	0.66
Average		26.76	18.81	105.1	7.59	0.18	10.97	0.65
Coefficient of variation		0.37	0.11	0.08	0.26	0.19	0.63	1.01

Table 2b: Liquidity, Debt, Capital, Asset Quality and Profitability Ratios of Australian banks between 2004-2009

Source: Published annual reports; Factiva and Financial Times

4.3 Discussion of results

(1) Liquidity

Tables 2a and 2b revealed that UK banks had on average higher cash ratio, higher leverage ratio, higher loan to deposit ratio, higher capital ratio, lower asset quality, lower ROA but higher ROE than the Australian banks. These results are revealing because despite the high cash ratio and higher capital ratio amongst top four UK banks, their performance was worse than the top four Australian banks. It is surprising to note that UK banks had higher cash and capital ratios than Australian banks. Table 3 provides a clear comparison of the liquidity ratios between UK and Australian banks during the period of 2004-2009.

Bank	Cash ratio 5 year average in %
Royal Bank of Scotland	16.68
HSBC	44.67
Barclays	55.72
HBOS	5.1
Average	30.54
Standard deviation	23.61
Westpac	22.68
Commonwealth Bank of Australia	24.12
ANZ	26.49
NAB	43.92
Average	26.76
Standard deviation	9.87

Table 3: Liquidity ratios of UK and Australian banks between 2004-2009

Source: Published annual reports; Factiva and Financial Times

Amongst the UK banks, HSBC and Barclays had the highest cash ratios. HSBC and Barclays did not receive financial help from the UK government during the financial crisis of 2007-2009. In November 2007, HSBC spent \$45 billion bailing out its Special Investment Vehicle. After the bail-out, HSBC weathered the financial crisis and focused on expansion in the

emerging markets such as China (Doherty 2008). Following the collapse of Lehman Brothers on 14th September 2008, Barclays bought the investment bank and capital markets branches of Lehman Brothers two days later (Doherty 2008). This deal boosted the US investment banking branch of Barclays. Some argue that Barclays were fortunate in the financial crisis due to the financial assistance from the Middle East, failed attempt to purchase ABN Amro and their purchase of part of Lehman Brothers (Jenkins 2010). Barclays had to raise £4.5 billion in September 2008 to strengthen its balance sheet. The strong cash ratio of Barclays certainly boosts its financial position to withstand the financial crisis.

National Australia Bank had a very high cash ratio. According to market data provided by the Financial Times (Financial Times 2011), National Australia Bank increased its cash reserves by 6.33% in 2010. Further, it used very little or no debt in their capital structure. This is reflected in the low debt-to-equity and loan to deposit ratios. Overall, Australian banks had a healthy cash ratio. It is worth noting from the standard deviation that Australian banks are more uniform and consistent than UK banks in their liquidity ratio.

(2) Debt-(Leverage ratio and loan-to-deposit ratio)

The high leverage ratio amongst UK banks is expected. Diagram 4 below illustrates that the average leverage ratio amongst UK banks between 2005-2009 is approximately 20%. Apart from HSBC, all the UK banks had a higher than average leverage ratio. The author's data shown in table 4 includes data from 2004 as well, which explains the average leverage ratio of 25.51 amongst UK banks.

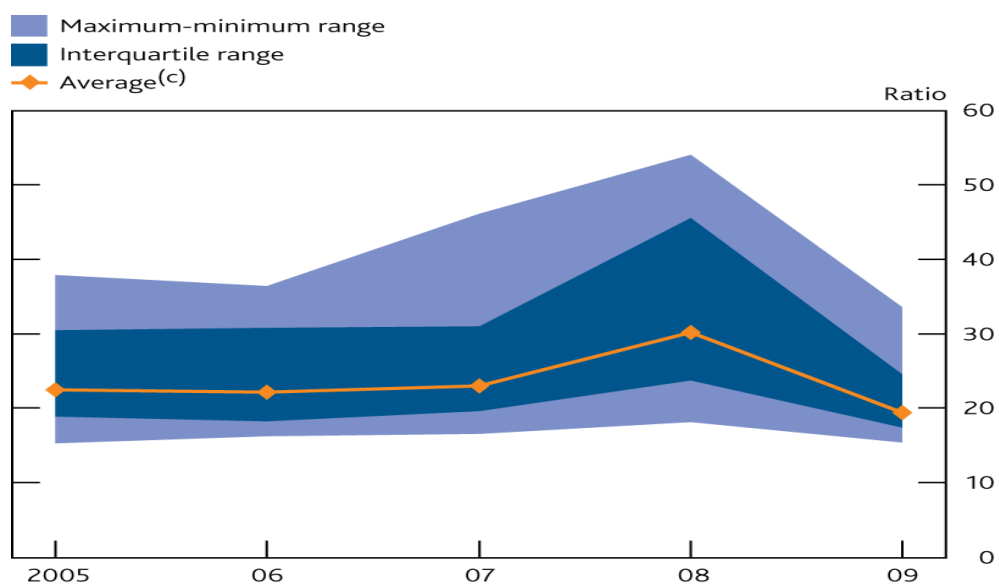


Diagram 4: Leverage ratios of major UK banks

Source: Bank of England Financial Stability Report (2010)

(a) Excludes Northern Rock. (b) Asset weighted.

Bank	Leverage ratio 5 year average in %	Loans-to-Deposits ratio 5 year average in %
Royal Bank of Scotland	21.1	115.22
HSBC	16.07	96.64
Barclays	25.9	93.28
HBOS	38.98	179.24
Average	25.51	121.1
Standard deviation	9.83	39.95
Westpac	20.02	135
Commonwealth Bank of Australia	16.8	134.22
ANZ	15.09	124.34
NAB	17.24	116.92

Average	18.81	105.1
Standard deviation	2.04	8.63

Table 4: Debt ratios of UK and Australian banks between 2004-2009

Source: Published annual reports; Factiva and Financial Times

The high leverage ratio of HBOS is one of the indicators of poor performances: Lloyds TSB took over HBOS in 2009. Lending in the wholesale market dried up when the sub-prime mortgage crisis hit banks, especially HBOS. Paul Moore, the ex Head of Regulatory Risk at HBOS explained that excessive exposure of HBOS to the wholesale market led to huge losses. HBOS pursued a ‘sales driven’ policy, putting profits before ethics (Moore 2009b). It is the ‘search for yield’ argument that banks moved from the ‘originate-to-hold’ model to ‘originate-to-distribute’ model in the late 1980s.

The ‘originate-to-distribute’ model relies on securitisation. Two schools of thought on securitisation have since emerged. According Greenlaw *et al* (2008), securitisation is to be celebrated because it reduces default risk by dispersing risks along the process and thus strengthens the financial system (Greenlaw *et al* (2008) cited in Shin 2009). However, Acharya *et al* rebut this argument and counterclaim that the securitisation market collapsed in early 2007 due to banks ignoring their own model of securitisation and failed to transfer credit risks (Acharya *et al.* 2009). Banks moved from the ‘originate-to-hold’ model to ‘originate-to-distribute’ model because in theory, securitisation would give greater liquidity; more borrowing capacity and ability to transfer credit risks to ultimate investors. In reality, the latter was not achieved (Acharya *et al.* 2009, Goodhart 2009). Acharya *et al* (2009) believe that between 2003-2007, banks utilised securitisation to avoid Basel II Accord on capital requirements. Regulatory dialectic thus became the aim of banks, not transferring credit risks to investors. The term ‘originate-to-pretend-to-distribute’ model should be more accurate to describe securitisation (Goodhart 2009).

The second school of thought on securitisation is one of misalignment of incentives (Paligorova 2009). Securitisation contributed to the collapse of the financial system because incentives were distorted in all the stages of the securitisation process. The end result is that the ultimate investors at the end of the process will end up with the ‘hot potato of bad loans’ (Shin 2009). In Shin’s view, the ultimate investors did not end up with the bad loans. He argues that the financial crisis was severe because the bad loans were not all passed on to

final investors. Instead, the bad loans remained in the securitisation process, on the balance sheet of financial intermediaries or special purpose vehicles that sponsored them (Shin 2009).

Therefore, the thesis supports the second school of thought on securitisation. UK banks with high leverage ratios performed badly in comparison to the other banks because of excessive risks which were not shifted from the banks in the securitisation process. Diagram 5 shows that HBOS had a high percentage of securitised mortgage stock. These banks performed poorly in the financial crisis. Australian banks on the other hand, relied more on intermediation than on securitisation (Hawtrey 2009). In fact, less than 10% of bank funding was from securitisation between 2006-2010 (RBA, 2010). Australian banks had a more conservative and controlled approach to banking because risks were better monitored. Further, only 18% of Australia’s housing loans were securitised (International Monetary Fund 2008), so Australian banks suffered less direct losses.

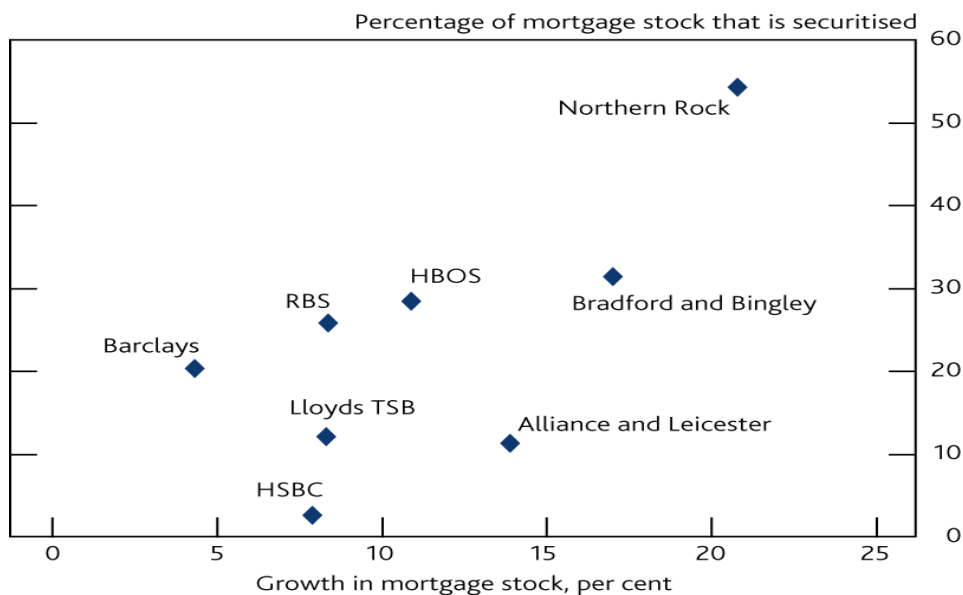


Diagram 5: Share of UK mortgages securitised by UK banks versus growth in stock of mortgages

Average annual growth in mortgage stock from end of 2004 to end of 2007

Source: Bank of England (2009)

The loan to deposit ratio reveals how heavily a bank is reliant on borrowing. HBOS stands out with a very high borrowing ratio. According to Sir Victor Blank, the former Chairman of Lloyds Banking Group: *'HBOS was borrowing too much from the wholesale markets. HBOS's problem was really about the model, it was about the dependence on the inter bank markets'* (Randall 2009). This heavy reliance proved to be a dangerous model when the short-term and interbank markets froze (Shin 2009). HBOS became insolvent due to its maturity mismatch of balance sheets and the inter-connectedness of banks.

HSBC and Barclays all had lower loan to deposit ratios. In particular, it can be argued that because HSBC have a strong presence in Asia, they are more conservative in their banking models. They performed better because their leverage and liquidity ratios were controlled. HSBC's Chief Executive believes that HSBC performed better than other banks because of its 'subsidiarised' banking model. Each business division controls the amount of capital and liquidity. These two items can be easily separated by a crisis hits the bank (Ahmed 2010). Jaspal Bindra, Asia CEO at Standard Chartered, disagrees and claims that the notion of subsidiarisation is a safer banking model *"may be illusory in practice"*. Empirical evidence on the contrary needs to be collated to prove that subsidiarisation is not a viable option. The Independent Commission on Banking has considered subsidiarisation (Vickers 2011a). The Independent Commission discussed the advantages and disadvantages of various types of subsidiarisation. Retail ring-fencing is considered a compromise since full subsidiarisation is too costly and operational subsidiarisation is too minimal. The Independent Commission of Banking published its final report on 12th September 2011. They recommended ring-fencing retail banking and a 10% equity baseline. In December 2012, the Parliamentary Commission on Banking led by Andrew Tyrie proposed to 'electrify' ring-fencing of banks. This gives the regulator more enforcement powers (Jenkins 2012). The government has since adopted retail ring-fencing and electrified it. The Financial Services (Banking Reform) Act came into force in December 2013 and incorporates the 'electrification' of retail ring-fencing in Part 1, clause 4 of the Financial Services (Banking Reform) Act 2013.

The author believes that this is positive news since depositors will receive more protection under the new recommendation. The author's descriptive data from table 2a shows that HBOS has an unusually high loan to deposit ratio. There is empirical evidence that there is a negative relationship between profitability and debt ratios (Kester 1986, Titman and Wessels 1988, Rajan and Zingales 1995). However, Long and Malitz (1985) do not find such a relationship between leverage and profitability. Whilst the results show that there is a

relationship between the two variables, the strength was not as stark as envisaged. Naturally, profitability of banks is affected by a range of factors, both external and internal. Therefore, leverage is only one factor which affects profitability. Nonetheless, it appears that the high leverage ratios amongst UK banks question the view of Myers & Majluf (1984). Myers & Majluf (1984) state that firms have a hierarchy of financing. First, firms prefer to use retained earnings. Secondly, firms use debt financing. Finally, firms issue new shares. Their view is somewhat dated in modern finance. Over the past 20 years, it became apparent that banks relied more and more on debt financing, especially in the wholesale market. The hierarchy of financing has thus changed in banking and perhaps the pendulum should swing back towards retained earnings. Since the financial crisis, UK banks have reduced their dependence on wholesale markets for funding. Just 15% of customer loans are now funded through the wholesale markets, a level not seen since 2003. Australian banks have reduced their short-term borrowing from just above 30% in 2006 to just above 20% in 2010 (Reserve Bank of Australia 2010). They have also increased their liquid assets to improve the liquidity position (Reserve Bank of Australia 2010).

(3) Capital

In relation to the capital ratios, the difference between Australian and UK banks is slight. Both countries had ratios very close to the 8% as laid down by the Basel II Accord. Diagram 6 shows that the average core tier 1 ratio of major UK banks hovers around the Basel II requirement of holding 8% capital of total risk-weighted assets. The diagram also triangulates with the author's data in table 5.

Table 5: Capital ratios of UK and Australian banks between 2004-2009

Bank	Tier 1 capital ratio 5 year average in %
Royal Bank of Scotland	8
HSBC	8.8
Barclays	8.8
HBOS	7.2
Average	8.2
Standard deviation	0.77

Westpac	7.3
Commonwealth Bank of Australia	7.68
ANZ	7.74
NAB	7.65
Average	7.59
Standard deviation	0.20

Source: Published annual reports; Factiva and Financial Times

Basel II Accord is an international agreement that sets guidelines for bank regulation. Under the Accord, banks must hold at least 4% in Tier 1 capital. Apart from HBOS, all the UK banks from the author's table had healthy Tier 1 capital ratios. Basel II Accord has been in force in Australia since 1st January 2008. Australian banks held capital just below 8% (Reserve Bank of Australia 2010).

Capital, especially equity, is viewed as a shock absorber, protecting a bank from externalities. A drop in asset price combined with an increase chance of default by banks means that in difficult times, banks have to sell their assets at market price. More capital is required in such a case (Powell and Allen 2011). However, some banking professionals argue that high levels of capital would not have prevented the recent financial crisis (Financial Services Authority 2010). Higher capital retention alone would not be the solution. Better quality of capital is the key to better absorption of shock. Blundell-Wignall & Atkinson (2010) have produced a table which shows that some US and European banks' losses would have absorbed all or most of their capital during the crisis. Their calculation is based on the new leverage ratio (equity less goodwill) under Basel III. The author's results are supported by the IMF's data of 2010. Australian banks had a 0.2% non-performing loans to total loans between 2004-2007, rising to 0.8% in 2008 and 1.1% in 2010. UK banks hovered at 1% between 2002-2006, rising to 1.6% in 2009 and 3.3% in 2010 (IMF, 2010). Better quality of assets is thus important to absorb losses.

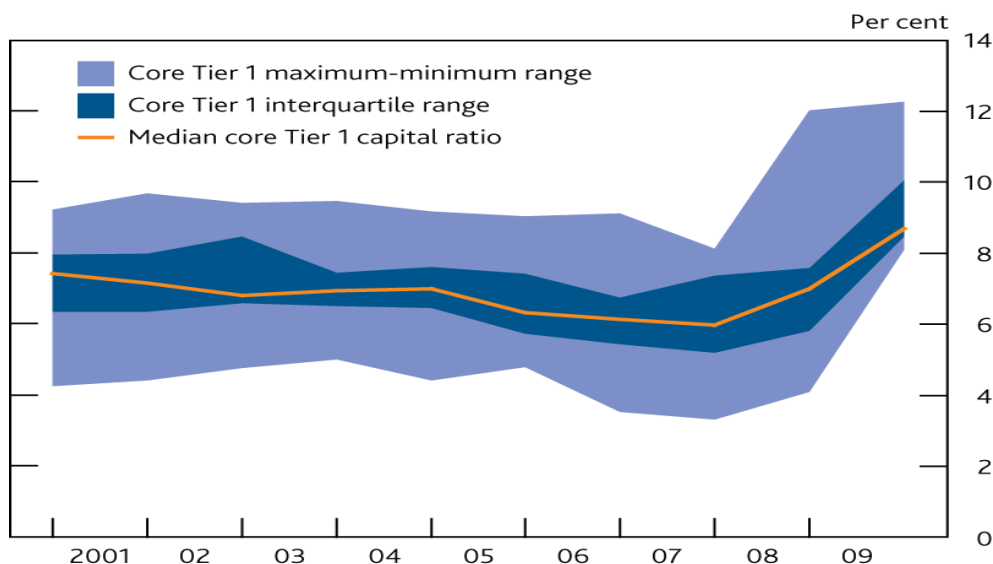


Diagram 6: Core Tier 1 ratios of major UK banks

Source: Bank of England Financial Stability Report (2010)

(4) Asset quality

Oshinsky and Olin (2006) submit that the combination of low capital ratios and risky assets lead to bank failures. Jin *et al* (2011) conducted research into the factors leading to bank failures during the financial crisis of 2007. They obtained data from the Federal Reserve Bank of Chicago's Bank Holding Company. The author is particularly interested in their research into loan quality. They used several variables such as proportion of securitised assets to total assets, level of non-performing loans, growth in various loan categories and loan portfolio mix in predicting bank failure. Data about non-performing loans are found in annual reports and are a useful source of information about loan default (Liu and Ryan 2006). Their results show that non-performing loans have a positive correlation with bank failures. Due to difficult in obtaining data, the author has only managed to obtain information on non-performing loans in UK and Australian banks. Table 6 shows that Australian banks have a better asset quality ratio, with an average of 0.18% of impaired loans compared to an average of 2.28% impaired loans among UK banks.

Bank	Asset quality ratio 5 year average in %
Royal Bank of Scotland	2.11
HSBC	2.21
Barclays	2.72
HBOS	2.06
Average	2.28
Standard deviation	0.30
Westpac	0.25
Commonwealth Bank of Australia	0.17
ANZ	0.23
NAB	0.21
Average	0.18
Standard deviation	0.03

Table 6: Asset quality ratios of UK and Australian banks between 2004-2009

Source: Published annual reports; Factiva and Financial Times

(5) Profitability

Bank	ROE 5 year average %	ROA 5 year average %
Royal Bank of Scotland	9.26	-0.3
HSBC	7.26	0.66
Barclays	20.96	0.35
HBOS	0.23	0.4
Average	9.43	0.19
Standard deviation	8.61	0.41
Westpac	19.57	0.95
Commonwealth Bank of Australia	17.64	0.98
ANZ	14.54	0.89

NAB	12.26	0.75
Average	10.97	0.65
Standard deviation	6.88	0.66

Table 7: Profitability ratios of UK and Australian banks between 2004-2009

Source: Published annual reports; Factiva and Financial Times

Profitability is measured by return on assets (ROA) and return on equity (ROE) ratios. The ROA ratio indicates the capital intensity of banks. The ROE measures the efficiency of banks in generating profits. A weakness of the ROE ratio is that it does not take debt into account. If a bank can issue debt at a lower interest rate than the rate of return on its investments, it could increase its return on equity. However, higher debt also increases the risk of failure for bank. The author thus included ROA ratio in her data. Beltratti & Stulz (2009) conducted research at cross-country and bank levels as to why some banks performed better than others in the financial crisis of 2007. Focusing at a bank-level, they found that banks with more Tier 1 capital and more deposit at the end of 2006 had higher returns during the crisis. Banks with more loans and more liquid assets performed better during the month following the Lehman bankruptcy. Beltratti & Stulz's study has a limitation in that they only studied the return regressions during 2007-2008. The author's study spans across five years and shows that Australian banks had a higher profitability ratio both in terms of ROE and ROA. Australian banks are more efficient since they have a higher ROE. A paper by Vu and Turnell (2011) reveals that the big four Australian banks were efficient before the financial crisis of 2007. Profit efficiency fell during the financial crisis but recovered towards the end of 2009. This phenomenon supports Blejer's research in 2006 that efficient financial systems are better insulated from externalities (Blejer 2006). ROA is a more accurate measure of productivity since it takes debt into account. ROA is flat in the UK whilst ROE increased during the financial crisis due to higher leverage ratios.

4.4 Basel III reforms

In light of the correlation between capital/liquidity; capital/loan to deposit ratio and capital/asset quality, it is only justifiable to examine whether the Basel III proposals will address the problems manifested in the financial crisis. Basel III recommendations include

higher and better quality capital, counter-cyclical buffer of 0-2.5%, tier 1 leverage ratio (ratio of book capital to assets) of 3% and maintenance of minimum liquidity. Tier 1 capital ratio will increase from 4% to 6% but the overall capital ratio remains at 8%. There is some flexibility for national differences in adoption and implementation by way of a 'comply or explain' provision. Changes will be implemented gradually until 2019. Basel III recommendations are necessary to address the problems encountered by several UK banks during the crisis. Problems however, exist.

Basel III fails to address the problem of regulatory dialectic in the shadow banking sector. Basel III only applies to banks, not the shadow banking sector. Thus, many banks will continue circumventing Basel III rules by relying on securitisation, a way to create apparently risk-free assets out of risky pools. Northern Rock is an example. Northern Rock was a building society but has gradually become a commercial bank in the UK. Northern Rock was adequately capitalised but illiquid prior to its collapse. It utilised a Structured Investment Vehicle called Granite which had £50 billion worth of mortgages. Mortgages are considered by Basel II as low risk assets. Granite was an off-shore vehicle and is thus unregulated for capital purposes. The Financial Services Authority (FSA) failed to notice that Northern Rock had only a 2% capital-to-assets ratio in June 2007. Until the definition of capital includes the shadow banking sector, an increased capital ratio will not be sufficient to counter externalities.

Australian regulators have recently increased regulation of the shadow banking institutions. The Australian Securities and Investments Commission now grants licences and imposes certain obligations on these institutions. The regulatory coverage of credit products under the National Consumer Credit Code has been expanded to include investor-housing mortgages. The UK government needs to adopt similar measures. It is encouraging to note that on an international dimension, several advanced economies are working towards increased regulation of hedge funds and credit rating agencies.

Hildebrand supports a leverage ratio because it acts as '*a complementary instrument to risk-weighted requirements when assessing banks' capital adequacy*' (Hildebrand 2008). Recent empirical evidence reveals that when asset growth is controlled by several instruments, banks performed better (U.S Securities and Exchange Commission 2008). Canadian banks are governed by a leverage ratio and there have been no bank bail outs in the financial crisis. The governor of the Bank of Canada believes that lower leverage leads to better performance in

banks (Carney 2008). Hildebrand mentions that a leverage ratio *'does not address credit concentration, excessive maturity mismatch or undue reliance on asset market liquidity'* (Hildebrand 2008). Nonetheless, a leverage ratio should be introduced to curb excessive leverage. Bank directors must then review the funding position of its bank to ensure that liquidity is adequate.

4.5 UK legislative framework for nationalisation of Northern Rock and Bradford and Bingley

Having reviewed the Basel III reforms, the chapter examines the reforms introduced in the UK with regards to rescuing banks during the financial crisis of 2007-2009. The financial crisis of 2007-2009 has shown the spill-over effect of banks when the UK government had to nationalise Northern Rock and part of Bradford & Bingley, as well as injecting £850 million into the Royal Bank of Scotland and Lloyds Banking Group. With the former two banks, the UK government faced the choices of insolvency or nationalisation. The existing UK insolvency law did not provide a mechanism to resolve a financially distressed bank. The Bank Special Provisions Act 2008 was passed on 21st February 2008 to facilitate the nationalisation of Northern Rock and part of Bradford & Bingley. The priority of the UK government during the financial crisis was to limit the costs of bank failures within the industry.

The Banking Act 2009 on 21st February 2009 replaced the Bank Special Provisions Act 2008 and contains a Special Resolution Regime (SRR) to deal with distressed banks. There are five objectives under the Banking Act 2009. The objectives are: promoting and enhancing financial stability in the UK; promoting and enhancing public confidence in the UK; protecting depositors; protecting public funds and not to interfere with property rights which will contravene the European Convention of Human Rights (sections 4(4)- 4(8) Banking Act 2009.)

The Banking Act 2009 is divided into two parts. The first part deals with pre-insolvency 'stabilisation' and the second part deals with banking insolvency and administration (Ellinger et al. 2011). Under the first part of 'pre-insolvency stabilisation', there are three stabilisation mechanisms. First, one can transfer all or part of a bank to a buyer in the private sector. Secondly, one can transfer all or part of a bank to a 'bridge bank'. The Bank of England will

set up the 'bridge bank'. Finally, a bank can be temporarily nationalised (section 1(3)(c) Banking Act 2009). The stabilisation mechanism applies if a bank fails to satisfy the 'threshold conditions' for FSA-authorisation regarding capital adequacy and suitability requirements (section 7 Banking Act 2009). The aim is to rescue a bank as soon as there are red flags regarding its financial position. The second part of the Banking Act 2009 includes a special banking insolvency procedure and a bank administration procedure. The former enables depositors to access their savings guaranteed under the Financial Services Compensation Scheme swiftly. The latter enables the 'good' part of the insolvent bank to carry on with its business activities. This is a new provision which was not possible under the corporate insolvency regime.

Northern Rock was nationalised in February 2008. The stabilisation mechanism applied because the Treasury wanted to reduce the threat of financial instability (section 9(2) Banking Act 2009) and it was in the public's interest for the Treasury to exercise the power of stabilisation (section 9(3) Banking Act 2009). Depositors of Northern Rock were given 100% guarantee from the Treasury (Singh 2011). Bradford & Bingley was partly nationalised: Santander bought the 'good' part of the bank, comprising of savings and branch network. The 'bad' part of Bradford & Bingley, comprising of loans and mortgages, was placed in public ownership. The positive consequence of this partial nationalisation means that customers of Bradford & Bingley continued to have access to their accounts. However, the problem with the partial nationalisation is that the 'bad' debts are in public ownership, creating a financial burden to the state (Singh 2011). The government's interests in Northern Rock and Bradford & Bingley were managed by UK Financial Investments Limited (UKFI) until 2010. UKFI was responsible for managing the Government's entire shareholding and loans in UK Asset Resolution Ltd ("UKAR") and its subsidiaries. UKAR was established in November 2010 to combine the activities of Northern Rock (Asset Management) Plc and Bradford & Bingley Plc. UKFI managed the government's entire shareholding in Northern Rock Plc until its sale to Virgin Money on 1 January 2012. The creation of UKFI and subsequently UKAR has the aim of separating the public interest from the private interest of the relevant banks. Operation at arm's length is important to avoid regulatory capture and conflict of interest. UKFI and UKAR should not be influenced by the private interests of banks which needed financial assistance from the government.

4.6 Legal framework of Australian banking regulation

It is clear from the tables in this chapter that Australian banks were more conservative and performed better than UK banks in the financial crisis of 2007-2009. The legal framework of Australian banking regulation plays a role to its banking philosophy. The Banking Act 1945 refers only to 'banks' so the Commonwealth Bank, the Australian Central Bank at the time, only had regulatory powers to 'banks'. This was the first legislative support for prudential supervision of banks (Thomson and Abbott 2000). Section 11 in Division 2 of the 1945 Act sets out that the protection of depositors is in the public's interest and the Commonwealth Bank should rescue any failing bank. This shows that depositor protection and financial stability are key aims of the Australian legislature. Indeed, the strong emphasis on depositor protection and division between banks and non-bank financial institutions explains the prevailing dominance of the institutional approach to regulatory structure in Australia. Under the 1945 Act, only one bank failed in 1979 so the period of 1945-1981 was one of relative calm and stability. The Bank of Adelaide failed because its wholly owned subsidiary made substantial losses by lending too much money without appropriate securities (Thomson and Abbott 2000). The Banking Act 1959 continues to enshrine the principle of depositor protection. The 1959 Act governs how authorised deposit-taking institutions in Australia operate (Bhati 2009). Sections 7-9 of the 1959 Act set out who can carry out banking businesses and conditions attached to the banking licences. The 1959 Act introduces competition amongst banks, so it has provisions concerning the way subsidiaries and branches of foreign authorised deposit institutions are governed. Finally, Part II Division 2 of the 1959 Act sets out the provisions on depositor protection and gives the regulator, the Reserve Bank of Australia, several powers. These powers are found in sections 13-16 and include: the power to obtain information from the authorised deposit institutions; the power to appoint an investigator or administrator to run the authorised deposit institution; the power to receive information from the auditors of the authorised deposit institutions. The auditors are under a duty to inform the Reserve Bank of Australia if they suspect that an authorised deposit institution is insolvent or if it failed to comply with any regulations or conditions of the regulator (Bhati 2009).

Deregulation in the 1980s enabled the consolidation of banks in Australia. Regulations imposed on non-bank financial institutions were more onerous than banks, so a number of building societies converted to banks. In the 1990s, several pieces of legislation in banking regulation were passed. First, the Reserve Bank Act was amended to create a new Payments

System Board. This promoted the safety and efficiency of the Australian payments system. The Reserve Bank's obligations regarding the formulation and implementation of monetary policy are found in the Reserve Bank Act 1959. Section 10(2) of the 1959 Act is often referred to as the regulator's 'charter'. It states that:

‘It is the duty of the Reserve Bank Board, within the limits of its powers, to ensure that the monetary and banking policy of the Bank is directed to the greatest advantage of the people of Australia and that the powers of the Bank ... are exercised in such a manner as, in the opinion of the Reserve Bank Board, will best contribute to:

- (a) the stability of the currency of Australia;
- (b) the maintenance of full employment in Australia; and
- (c) the economic prosperity and welfare of the people of Australia.’

Financial stability and economic growth are thus pursued as twin goals. Further pieces of legislation such as the Payment Systems (Regulation) Act 1998 and the Payment Systems and Netting Act 1998 gave the Reserve Bank of Australia relevant powers in controlling payment systems. Finally, the Financial Sector (Shareholdings) Act 1998 promoted competition further. It also tried to prevent abuse of power by majority shareholders. Therefore, section 10(A) of the 1998 Act prevents anyone holding more than 15% shares in a financial institution either on their own or with associates unless the Australian treasurer approves. Approval is given if the treasurer believes that a shareholding of more than 15% is in the public's interest.

Apart from statutory authority, Australia has several soft codes and self-regulatory schemes on banking regulation. First, there is the Code of Banking Practice 2013 which sets out good practice and standards for banks when dealing with customers and their guarantors. These include giving information to customers about their rights, changes in terms and conditions and other issues in plain language (Australian Bankers' Association 2013). It has a specific provision for customers living in remote indigenous areas. The Code is thus a tailored guidance for bankers on how to deal with a range of customers. Secondly, the National Credit Code standardises the credit practice in Australia. The National Consumer Credit Protection Act 2009 combined the Consumer Credit Code and Uniform Consumer Credit Code so that there is only one code for consumer credit. The National Credit Code applies to credit contracts entered into on or after 1 July 2010 where: the lender is in the business of providing

credit; a charge is made for providing the credit; the debtor is a natural person or corporation; the credit is provided for personal, domestic or household purposes, or to purchase, renovate or improve residential property for investment purposes, or to refinance credit previously provided for this purpose (Australian Securities and Investments Commission 2013a). Criticisms against the former Uniform Consumer Credit Code have been raised by Bhati (2009). In his view, the enforcement of the Universal Consumer Credit Code was weak. Further, the remedy of compensation under section 114 of the Universal Consumer Credit Code was neither an effective remedy for consumers nor a sufficient deterrent for the offenders (Bhati 2009). The National Consumer Credit Protection Act 2009 tries to rectify these issues. Under the 2009 Act, the Australian Securities and Investments Commission (ASIC) have enhanced enforcement powers under Part 4 of the Act. These enhanced powers have been achieved by extending the range of penalties and sanctions available to ASIC that can be responsive to the gravity of a contravention. Sanctions now include criminal and civil. Criminal sanctions are aimed at offences which are serious and morally culpable actions regarding consumer credit. The maximum civil penalty is \$1,100,000 for corporations and \$220,000 for individuals. It is hoped that the enhanced enforcement powers will lead to better enforcement of breaches of the National Consumer Credit Code. Finally, the Financial Ombudsman Service provides dispute resolution services between banks (which are members of the Financial Ombudsman Service) and customers. Customers are encouraged to solve disputes internally with banks first before lodging a complaint with the Financial Ombudsman Service. Depositor protection is a fundamental concept in the jurisprudence of Australian banking. Soft law in the form of banking codes supplement the statutory provisions to protect consumers.

4.7 The ‘twin-peaks’ model

The strong emphasis on ‘banks’ and protecting depositors in Australian legislation has influenced the regulatory structure in Australia. The Wallis Committee’s Financial System Inquiry (‘Wallis Report’) of 1998 introduced the ‘twin-peaks’ model in Australia. Prior to the Wallis Report, the structure of the Australian regulator was ‘complex, segmented and institutionally based’ (Hill 2012). Since Australia operates a federal legal system, there was an overlap of federal and state regulators trying to regulate an increasingly complex and deregulated financial market. The Wallis Report was therefore guided by the principles of

regulation of ‘competitive neutrality, cost effectiveness, transparency, flexibility and accountability’ (Commonwealth of Australia 1997). Usually, governments call for an inquiry after a major crisis or scandal. In Australia, the Wallis Inquiry was not called as a result of a major financial crisis. The Inquiry took place in the middle of the deregulatory period and before the financial crisis of 2007-2009. Therefore, the Wallis Inquiry was not influenced by any political party or agenda (Cooper 2006). The Wallis Inquiry was aware of the opposing financial regulatory aims of promoting competition and maintaining financial integrity. It knew that there are multiple layers of integration in the global market. It also realised the importance of preventing market failure due to information asymmetry and moral hazard at the same time (Hill 2012). After balancing these opposing financial regulatory aims, the Wallis Inquiry decided that it was best to have a single agency for regulation, despite the blurring of financial services and products. A ‘twin-peaks’ model would be more consistent with the developing market structure and would avoid regulatory inefficiencies.

The ‘twin-peaks’ model was born in Australia in July 1998. The Australian Prudential Regulation Authority (APRA) is responsible for prudential regulation of banks and aims to reduce the risk of institutional failure. The Australian Securities and Investments Commission (ASIC) has responsibility for conduct of business regulation. It promotes consumer confidence, ensures that standards for market conduct and disclosure are complied by the banks. The central bank, Reserve Bank of Australia is responsible for the soundness and stability of the financial sector as a whole. The final regulatory agency is the Australian Competition and Consumer Commission, which protects competition in the financial system. Diagram 7 below illustrates the Australian ‘twin-peaks’ model.

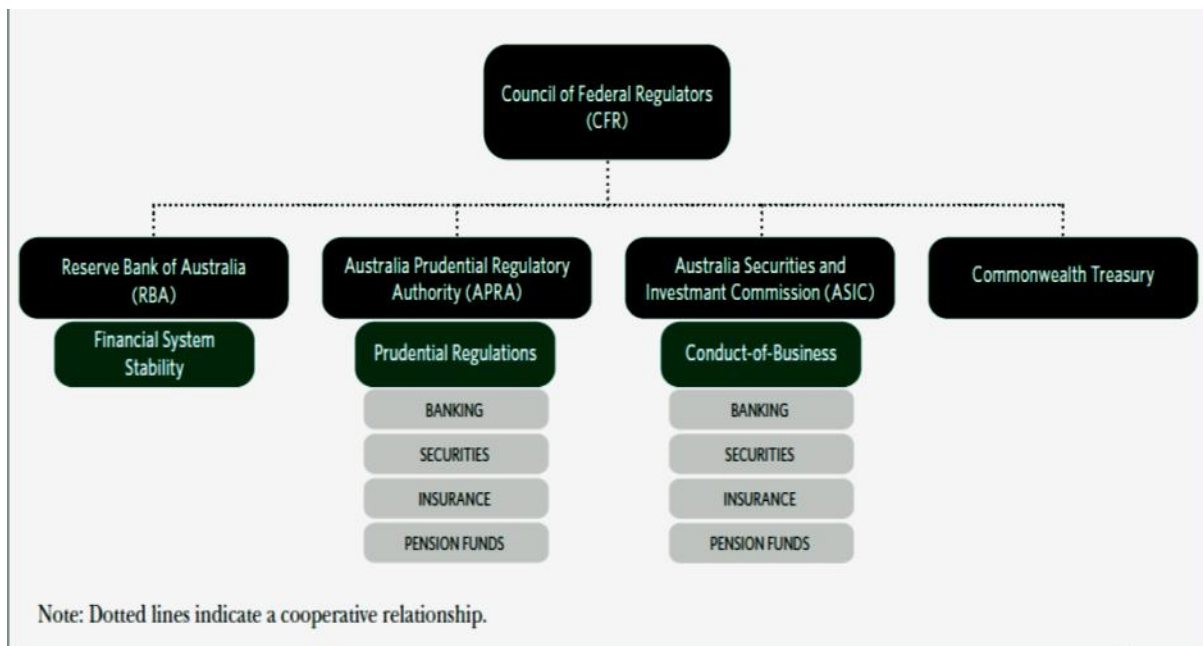


Diagram 7: 'Twin-peaks' model in Australia

Source: Group of Thirty (2008)

After the financial crisis of 2007-2009, both the US and the UK looked towards the 'twin-peaks' model to see if improvements could be made to their fragile regulatory regimes. The 'twin-peaks' model focuses on the pursuance of regulatory objectives. As seen above, the twin objectives under this model are prudential supervision with the enhancement of safety and soundness whilst balancing the conduct of business regulation with consumer protection issues. Naturally, there will be the possibility that there is a conflict between these opposing objectives. Deciding which one prevails is ultimately a subjective matter depending on the institutional position of the regulatory agencies (Group of Thirty 2008).

Is the 'twin-peaks' model better than the single regulatory regime? The success of a regulator will depend on whether it has achieved its regulatory objectives. If one focuses on the Australian regulatory objectives of prudential regulation and conduct of business, the author submits that APRA and ASIC were successful in the financial crisis of 2007-2009 in achieving these objectives. APRA initiates supervision and regulation of financial institutions. APRA is a regulator with policy-making powers. It decides its regulatory policies. However, it must comply with government policy and objectives. Therefore, although APRA has specific powers under the Commonwealth Authorities and Companies

Act 1997, the Australian Prudential Regulation Authority Act 1998, the Insurance Act 1973 and the Superannuation Industry (Supervision) Act 1993 over reporting and accountability of officers, its powers are fettered. The government can question the APRA's actions and render them void. Therefore, APRA's powers are under supervision and the possibility of a super regulator is minimised. Secondly, APRA is under a duty to collect and publish financial information about the financial institutions under its regulation. Further, it monitors the capital adequacy and financial management of financial institutions. The aim of such monitoring is to protect depositors. Although the capital ratios of the four UK banks were slightly better than the four Australian banks, it is evident that the other financial ratios are better in the Australian banks than UK banks. Macro and micro prudential successes can contribute to this. Charles Littrell, Executive General Manager of APRA said that APRA was well-prepared for the financial crisis of 2007-2009:

'When the crisis became most acute during 2008, neither APRA nor anyone else could predict where it was going. We could say to the Government and other interested parties, however, that Australian prudentially regulated entities were generally well capitalised, well managed, and understood the risks they were taking. This was not completely the case for every single entity, but was close enough to complete to give confidence that the Australian financial system would survive the global financial crisis in reasonably good shape' (Littrell 2011).

APRA monitored Australian banks well in general and most importantly, it was confident about their financial positions. It is this confidence which is vital in maintaining public confidence and financial stability. Meanwhile, the other branch of the 'twin-peaks' model also proved to be successful. Tony D'Alonsio, Chairman of ASIC, explained that the objective of conduct of business regulation worked for four reasons. First, the Financial Services Reform Act 2001 provided a strong regulatory and licensing framework for financial sales and advice. Market integrity was thus possible under the 2001 Act. Secondly, the Product Disclosure Statement provided useful information to consumers about risky products. Better disclosure and transparency led to more informed decisions by customers. Thirdly, Ponzi-type schemes had to be registered and faced more risk management hurdles before they were offered to consumers. Finally, regulatory oversight for auditors protected important protection (D'Alonsio 2010). During the financial crisis of 2007-2009, ASIC responded efficiently and made good judgements. This was made possible by recruiting senior positions

at leadership level; better resources; better disclosure and better research ability to assess industry impact by the creation of the Office of the Chief Economist (D'Alonso 2010).

It is clear that both the APRA and ASIC developed good strategies prior and during the financial crisis of 2007-2009 to cope with an unexpected financial crisis of huge magnitude. Chapter six of this thesis contains a more detailed analysis of the Australian legal framework for prudential regulation of banks and a comparison of the 'twin-peaks' model between Australia and the UK. The author will discuss potential issues arising from the 'twin-peaks' model in the UK.

4.8 Conclusion

In comparison to the big four Australian banks, this chapter has revealed that the big four UK banks had on average, higher cash ratio, higher leverage ratio, higher loan to deposit ratio, higher capital ratio, lower asset quality, lower ROA but higher ROE than the big four Australian banks. Interestingly, the core 1 capital ratio was slightly higher amongst UK banks than Australian banks although the difference is slight. Australian banks did not require any government assistance during the financial crisis. Four UK banks required significant financial assistance from the UK government during the financial crisis. Macro-prudential regulatory changes are inevitable for the UK financial sector. UK financial institutions should rely less on short-term wholesale funding and more on cash, deposits and equity. Solvency and good quality assets are important. One must balance financial innovation with financial stability. Whilst forecast growth by the International Monetary Fund for the UK economy is positive, the UK cannot afford to continue with the insatiable quest for innovation and profits.

The pendulum should shift towards financial stability but without jeopardising economic growth. Better regulation and risk management are required. A leverage ratio and minimum liquidity requirements are welcomed. Good quality capital is necessary to absorb externalities. Basel III has laid down suitable recommendations but they are insufficient. In particular, the shadow banking sector should be subject to the same rules and regulations as the banking sector to create a level playing field. Flavius Vegetius Renatus (375AD) once said: *'If you want peace, prepare for war'*. A counter-cyclical buffer of 0-2.5% should thus prepare banks for unexpected losses in the next financial crisis.

Reforms in UK corporate insolvency law took place when Northern Rock and Bradford & Bingley had to be nationalised. The Special Resolution Regime contained in the Banking Act 2009 provided swift rescue measures for banks. This is important to minimise systemic risks in the banking sector. On the other side of the world, Australia did not have any bank failures in the financial crisis of 2007. No Australian bank required financial assistance from the government. Financial stability was achieved through prudential regulation and conduct of business regulation. Both the APRA and ASIC prepared well before the financial crisis and made sound judgements during the financial crisis. The ‘twin-peaks’ model worked well in Australia where the objectives of transparency, financial stability and consumer protection were achieved. In comparison, the UK regulator failed in regulating and supervising a number of banks such as Northern Rock, Bradford & Bingley, the Royal Bank of Scotland and HBOS. In the next chapter, the author will discuss the regulator’s failures in Northern Rock and HBOS, the weaknesses revealed in the FSA Handbook and FSMA 2000 and link them to the ‘twin-peaks’ model.

Chapter Five

Single or twin? The UK financial regulatory landscape after the financial crisis of 2007-2009

5.1 Introduction

The author aims to analyse the weaknesses of the Financial Services Authority (FSA) and the Bank of England during the financial crisis of 2007-2009. An evaluation of the FSMA 2000 and FSA Handbook will be conducted to see what weaknesses there are to the legal framework of UK banking regulation and supervision. The focus of this chapter is on micro-prudential regulatory failures in the UK. A comparison will be made with the twin-peaks regulatory model in Australia where there were no bank failures. This chapter is based upon an analysis of recent papers and reports. Descriptive statistics are used to provide an insight into the financial ratios of the biggest independent retail banks in the UK and Australia. A comparative legal analysis between the UK and Australia is used to reflect the common law system used by both.

The main regulatory and supervisory failures of the FSA are due to organisational and management problems. There needs to be better information flow, co-ordination, co-operation, engagement with banks and stricter internal controls. The new UK regulator also needs to be prepared for the changes on the European dimension, following the de Larosière report. With regards to the statutory provisions on banking regulation, the FSMA 2000 is complicated, with standards and principles underpinning the FSA's statutory core objectives. The FSA's remit is too wide. It is responsible for regulating banks, deposit-taking institutions and insurance companies. With the development of complex products, increased use of securitisation and merging of financial services offered to customers, the tripartite system increasingly found it difficult to delineate their scope and responsibility. Overall, the FSA's passive, non-interventionist and laissez-faire regulatory approach led to criticisms that its measures were too late and too little.

This chapter will have policy implications for practitioners and policy makers on national, European and international dimensions. Changes in the European regulatory structure will see an emphasis on vertical regulatory co-operation. By first reviewing the weaknesses of the FSA in light of Northern Rock and HBOS and then comparing the FSA with the Australian regulatory model, this chapter provides a new insight into financial regulation.

The UK was ranked third in the overall Financial Development Index of the World Economic Forum 2011. However, it was ranked 41st in financial stability. The World Economic Forum has recommended improvements in regulation and oversight, including official supervisory power in the UK (World Economic Forum 2011). The regulatory and supervisory framework of the UK financial regulator is thus of importance. Regulation refers to the rules which govern the behaviour of banks. Supervision focuses on the oversight by the regulator to ensure that banks adhere to the rules (Barth et al. 2006). Regulation can be divided into macro and micro-prudential regulation. Macro-prudential regulation concerns the stability of the entire financial system. Micro-prudential regulation focuses on the regulation of individual organisations. In the United Kingdom, the Bank of England is responsible for macro-prudential regulation from 1997 till April 2013. Responsibility for micro-prudential regulation is primarily the responsibility of the Financial Services Authority but individual organisations are also responsible for implementing the rules. In practice, regulation and supervision are often intertwined. Therefore, although this author tries to separate the two in the chapter it is necessary to assess them together at times. Whilst this chapter will include a discussion on the Bank of England as the macro-prudential regulator, the focus is on the FSA's role as the micro-prudential regulator and supervisor.

Ineffective micro-prudential regulation could lead to problems such as poor risk management, regulation and supervision; high leverage; insufficient liquidity and capital within banks. Liquidity, leverage and capital are all connected. Adrian and Shin submit that *'aggregate liquidity is intimately tied to how hard the financial intermediaries search for borrowers'* (Adrian and Shin 2010). In the sub-prime crisis, banks lent money to customers who had no realistic chance of repaying it. This is because banks had surplus capital which is costly to retain. During a boom, asset prices increase and balance sheets are stronger. Banks have to find ways to use their capital to increase leverage. According to Brunnermeier, there were two *"liquidity spirals"* during the financial crisis (Brunnermeier 2009). When *'asset prices drop, financial institutions capital erodes and, at the same time, lending standards and margins tighten. Both effects cause fire-sales, pushing down prices and tightening funding even further'* (Brunnermeier 2009). These liquidity spirals lead to banks protecting their funds so inter-bank lending decreases. Bank runs then follow and capital levels deplete. Northern Rock is a prime example.

Much has been written on the demise of Northern Rock (Yorulmazer 2008, Bruni and Llewellyn 2009, Milne and Wood 2008). There is a gap in the literature in that little has been

written on HBOS. The author will review the roles of the Bank of England and the FSA in section 5.2. Section 5.3 consists of an analysis of HBOS. In section 5.4, the author will analyse whether the twin-peaks model will address problems such as regulatory coordination; information sharing and conflict of interests. The chapter will draw comparison from the Australian experience. Section 5.5 is a discussion on what changes the FSA has made since the financial crisis. Section 5.6 evaluates the 'twin-peaks' model in Australia. Section 5.7 discusses the results and makes recommendations. Section 5.8 concludes the chapter.

5.2 Northern Rock

The UK labour government adopted the tripartite system in 1997. Under the tripartite system, the FSA supervised financial institutions; the Treasury was responsible for legislation and the Bank of England for financial stability. The justification for a tripartite system was that the boundaries between financial institutions have blurred. Banking, insurance and securities overlap. Complex group structures, innovative financial products and processes such as securitisation have led to the phenomenon of 'functional despecialisation' (Taylor 2009a). Traditional banks adopted the 'originate-to-distribute' model in the late 1980s and boundaries between banks, insurance and securities companies have blurred. Banks and the shadow banking organisations have thus become increasingly interwoven. A single regulator would be better positioned to monitor modern financial institutions.

Northern Rock is an example of 'functional despecialisation' and the tripartite system has revealed weaknesses of the FSA and the relationship between the FSA and the Bank of England. Northern Rock was formerly a building society. In 1997, it became a bank when it was listed on the London Stock Exchange. However, Northern Rock had a very unusual business model. It combined a traditional reliance on illiquid long-term mortgage assets with a reliance on innovative sources such as securitisation and the wholesale market (Milne and Wood 2008). Mortgages constituted 77% of Northern Rock's assets. At the end of 2006, Northern Rock issued asset-backed securities through its 'Granite' securitisation vehicles and obtained 40% of funding (Milne and Wood 2008). Wholesale funding constituted 68% of Northern Rock's liabilities whilst deposits only made up 27% of its liabilities (Goldsmith-Pinkham and Yorulmazer 2009).

Poor financial ratios at Northern Rock between 2003-2009 should have alerted the FSA. Table 7 below reveals the liquidity, debt, capital and profitability ratios amongst the biggest independent retail UK and Australian banks by asset size. The list is taken from Global Finance magazine 2009 (Keeler 2009). The author has also added Northern Rock because she discusses the FSA's supervisory role in Northern Rock. She included Bradford & Bingley, Alliance & Leicester and Nationwide Building Society because they act as useful comparators to Northern Rock, where they share similar business models. The ratios in Table 8 are a five year average between the years of 2004-2009. Northern Rock had the highest loans to deposits ratio; second highest debt to equity ratio, a poor capital ratio and negative profitability ratios.

Name of bank	Country	Cash ratio 5 year average (%)	Debt-to-Equity ratio 5 year average (%)	Loans to deposits ratio 5 year average (%)	Tier 1 Capital ratio 5 year average (%)	Return on equity ratio 5 year average (%)	Return on assets 5 year average (%)
Royal Bank of Scotland	United Kingdom	16.68	21.10	115.22	8	9.26	-0.30
HSBC	United Kingdom	44.67	16.07	96.64	8.8	7.26	0.66
Barclays	United Kingdom	55.72	25.90	93.28	8.8	20.96	0.35
Lloyds TSB	United Kingdom	27.14	29.85	113.86	8.5	19.15	0.60
HBOS	United Kingdom	5.10	38.98	179.24	7.2	0.23	0.04
Standard Chartered	United Kingdom	17.27	10.79	89.80	9.2	14.51	0.92
Northern Rock	United	8.14	76.54	242.86	-18.7	-75.46	-0.60

	Kingdom						
Bradford & Bingley	United Kingdom	6.07	85.52	132.56	8.3	25.12	0.14
Alliance & Leicester	United Kingdom	6.93	38.42	145.90	7.6	14.25	0.94
Nationwide Building Society	United Kingdom	4.52	32.02	115.72	10.0	7.42	0.22
Westpac Banking Corporation	Australia	22.68	20.02	135.00	7.3	19.57	0.95
Commonwealth Bank of Australia	Australia	24.12	16.80	134.22	7.68	17.64	0.98
ANZ	Australia	26.49	15.09	124.34	7.74	14.54	0.89
National Australia Bank	Australia	43.92	17.24	116.92	7.65	12.26	0.75

Table 8: Liquidity, Debt, Capital and Profitability Ratios of UK and Australian Banks between 2004-2009

Source: Annual reports and author's calculations

The poor financial ratios are a reflection of weak corporate governance by Northern Rock and regulation/supervision by the FSA. They ultimately led to a liquidity problem and bank run at Northern Rock.

The House of Commons Treasury Committee was critical of the FSA in both its roles as regulator and supervisor (House of Commons Treasury Committee 2008). As a supervisor, the FSA failed to allocate sufficient resources to monitor Northern Rock where its business model was unusual. It failed to supervise Northern Rock properly when it adopted an ambitious expansion policy and when its share price fell sharply in late 2007. With regards to human resources, the FSA should not have approved the Chairman and CEO of Northern

Rock, as they were not qualified bankers. They have significant experience but running a big bank without suitable qualifications is a hazard.

The FSA labelled Northern Rock as a *'high impact bank, under close and continuous supervision'* (House of Commons Treasury Committee 2008). However, the FSA only carried out an ARROW risk (Advanced Risk Responsive Operating Framework) assessment every three years. It acknowledged that the interval between assessments was *'inadequate'* (House of Commons Treasury Committee 2008). The FSA defended its position by stating that it maintained a close relationship with Northern Rock through *'very regular dialogues...on a full range of supervisory issues'* (House of Commons Treasury Committee 2008).

Although the main problem at Northern Rock was one of liquidity, the FSA weakened Northern Rock's capital position by approving the Basel II waiver. This meant that Northern Rock was able to increase its dividends and so its balance sheet was weakened. Before the FSA approved the Basel II waiver, FSA reviewed Northern Rock's stress-testing scenarios. The FSA was unhappy with the scenarios but it failed to relay that message to the directors of Northern Rock. It also failed to rectify the scenarios.

The House of Commons Treasury Committee concluded that the tripartite system (Bank of England, FSA and HM Treasury) failed to work well. Northern Rock had to ask the Bank of England for emergency relief, since it was the lender of last resort. By separating the roles of banking supervision/regulation from lender of last resort, decision-making was slow and inefficient. The Bank of England was criticised for taking a reactive approach in the Northern Rock episode (Buitter (2008) cited in House of Commons Treasury Committee 2008). In comparison to the Federal Reserve and the European Central Bank (ECB), the Bank of England was slow to act, arguing that injecting liquidity would create a risk of moral hazard (House of Commons Treasury Committee). Several banks asked the Bank of England for additional liquidity at no penalty rate in August 2007. The Bank of England was reluctant to provide more liquidity at different maturity dates against weaker collateral (House of Commons Treasury Committee 2008). It refused to engage in liquidity transformation. It was in mid-September 2007 when the Bank of England created a Liquidity Lending Facility for Northern Rock. Wood ((2008) cited in House of Commons Treasury Committee 2008) supports the Bank of England's approach. In his view, the ECB and the Federal Reserve were

wrong to adopt such a proactive policy and that it would lead to problems in the future. The House of Commons Treasury Committee concluded that whilst it was hard to tell whether the liquidity facility could have saved Northern Rock, the Bank of England should have broadened its range of collateral earlier in the crisis. The Bank of England did not take any contingency measures when the ECB and the Federal Reserve did. Overall, its conclusion was that rather than restructuring the tripartite system, the House of Commons Treasury Committee wanted to keep it but with clearer leadership and stronger powers.

The FSA published its own review on Northern Rock in March 2008. According to the report, the extent of the problems at Northern Rock was a surprise to them. In the FSA's view, Northern Rock was '*at the extreme end of the spectrum*' that they observed. In terms of supervision, there was a lack of resources and experience in monitoring Northern Rock. Northern Rock was supervised by the insurance group of the Major Retail Groups Division until 2006. Three Heads of Departments were responsible for Northern Rock, although one of them was in practice for only three months (Financial Services Authority 2008). There was however, continuity in the manager and lead associate for supervising Northern Rock. The lead associate's account clearly revealed that staff at the FSA were stretched during a busy period of takeovers, bids and demutualisation. The FSA pursued a policy of '*fewer and better staff*' (Financial Services Authority 2008). It reduced its staff by about 20 between 2004 - 2008. As a result, Northern Rock was poorly supervised. The specific supervisory failures include: failure to update the internal risk database; no Risk Mitigation Plan for Northern Rock; insufficient engagement with the bank and long gaps between meetings.

Regulatory failures at Northern Rock are revealed in capital, liquidity and stress testing. When Northern Rock breached its capital position in March 2007, FSA took action to rectify the problem. However, there was no written record of a meeting between the FSA and Northern Rock representatives on the reasons of the breach. Lack of rigour and internal controls appear to have affected the FSA's performance. These problems are manifested in regulating liquidity as well. When the FSA made an Advanced, Risk-Responsive Operating Framework (ARROW) visit to Northern Rock in February 2006, they did not carry out a stress test even though liquidity was included on the agenda. Although there were no material weaknesses in the liquidity management framework, the FSA admitted that more frequent checks on the data are required. The FSA has drawn up 39 lessons it had learnt from the Northern Rock episode. The seven high level recommendations include improvements to the

rigour of day-to-day supervision; senior management to increase engagement with high impact firms; increase its focus on prudential supervision (including liquidity and stress testing); improve resources; improve the quality and resources of its financial and sectoral analysis and senior managers should increase their oversight of supervision. No dates have been set for these recommendations but the FSA will implement them as part of a wider programme.

5.3 HBOS

HBOS was formed in 2001 when Halifax Plc. and the Governor and Company of the Bank of Scotland merged. At the end of 2006, HBOS was the fourth largest UK bank in terms of assets (Milne & Wood, 2009). According to the 2007 HBOS Annual Report, HBOS held 20% of the mortgage market and 16% of the savings market (HBOS Plc 2007). Like many other banks, HBOS experienced rapid growth between 2003-2008. Debt increased from £112 billion in 2003 to £231 billion in 2007 and total assets increased from £408 billion in 2003 to £667 billion in 2007 (HBOS Plc 2007). HBOS experienced liquidity problems during the financial crisis. The Chief Executive of HBOS, Andy Hornby, admitted that *'it is clear with the benefit of hindsight that, over many years of reliance on wholesale funding, that left us in a vulnerable position'* (House of Commons Treasury Committee 2007). The poor liquidity ratios revealed in Table 1 further corroborates the liquidity problem at HBOS. HBOS's share price fell sharply in March 2008 after rumours of short-selling in the bank. FSA carried out a market rumours investigation. In August 2008, it confirmed that it did not find any evidence that rumours was spread as part of a concerted attempt by individuals to profit by manipulating the HBOS share price. It is commendable that the FSA took action as soon as possible.

Despite the false allegation of short-selling, HBOS's share price fell a further 18% on 15th September 2008 when Lehman Brothers filed for bankruptcy. Despite reassurance from HBOS that it has a strong capital base by Shane O'Riordain, the Group Communications Director of HBOS, the shareholders were not convinced and share price fell a further 22%. Emergency talks took place on 17th September 2008 between HBOS and Lloyds TSB. The Labour government was keen to avoid another Northern Rock scenario. It therefore relied on the argument of public interest, waived European competition law rules and approved the

deal between Lloyds TSB and HBOS. On 18th September 2008, Lloyds TSB and HBOS announced that the latter would be takeover by Lloyds for £12.2 billion.

HBOS failed due to a combination of weak corporate governance and poor regulation. The FSA first raised its concerns about HBOS back in 2003. They carried out a full ARROW risk of HBOS's Retail, Corporate, Treasury and Group Functions. Due to limited resources at the FSA, they could only carry out a limited risk review in each division. They would then produce a 'Risk Mitigation Plan' for HBOS to follow (Moore 2009a). Moore explained that if the FSA suspects that there are key risks, they would ask HBOS or an external expert to carry out additional work and assess the risks. If the bank carries out the additional work, this will normally be assigned to one of the two Group Risk functions that existed at the bank, either Group Regulatory Risk or Group Financial and Operational Risk (Moore 2009a). In November 2003, the FSA's report was published. The report contains evidence that '*...the risk posed by the HBOS Group to the FSA's four regulatory objectives is higher than it was perceived*' (Moore 2009a). In relation to HBOS's retail side at the Halifax, '*there has been evidence that development of the control function in Retail Division has not kept pace with the increasingly sales driven operation...*' and '*there is a risk that the balance of experience amongst senior management could lead to a culture which is overly sales focused and gives inadequate priority to risk issues*' (Moore 2009a).

The FSA's ARROW visit in 2003 identified the key risks. Moore believed that '*the operational staff at the FSA had done a good job on the ARROW visit they had conducted and that they almost certainly had identified the key risks at the bank at that stage in its development*' (Moore 2009b). He added that '*staff [at the FSA] at that level would not be accountable for what happened at HBOS*'. Nevertheless, Moore (2009b) stated that the FSA failed to supervise properly because it adopted a 'light-touch' approach to regulation and supervision. It failed in their statutory duties, which were to maintain market confidence, protect retail customers, fight financial crime and ensure proper consumer education. According to Moore (2009b), the main failure of the FSA was that it failed to act upon the red flags.

The FSA has not commissioned a report on HBOS. Instead, it issued a statement on 11th February 2009 in response to Moore's allegations regarding HBOS's regulatory failures in December 2004. According to the statement, the FSA conducted a full ARROW risk

assessment in late 2002. It subsequently asked PricewaterhouseCoopers to carry out a 'skilled persons report' in accordance with section 166 of the Financial Services and Markets Act 2000. The 'skilled persons report' revealed that HBOS needs to improve its risk management system. The FSA conducted another risk assessment of the entire HBOS Group, formally recording the assessment in December 2004. HBOS has made improvements in addressing the risks highlighted in the previous assessment. Nevertheless, the FSA was of the view that HBOS's group risk functions needed to *'enhance their ability to influence the business'* (Financial Services Authority 2009). It continued to monitor HBOS and wrote to HBOS again on 29th June 2006, expressing their concerns about control issues and the bank's growth strategy. With regards to Moore's allegation that the new group risk director was not 'fit and proper' for the job, HBOS commissioned KPMG to investigate. The FSA only appointed the new director when KPMG's results showed that there was no evidence to suggest that the new group risk director was not 'fit and proper'. The FSA also had a separate meeting with Moore to discuss this issue. The FSA concluded its statement by emphasising that it had already raised concerns about HBOS's regulatory framework prior to Moore's allegations.

The Parliamentary Commission on Banking Standards Report of 2013 shed further light on the failings of the FSA. It asserted that:

"From 2004 until the latter part of 2007 the FSA was not so much the dog that did not bark as a dog barking up the wrong tree"(The Parliamentary Commission on Banking Standards 2013).

The FSA's regulation of HBOS was 'inadequate'. Although it identified that HBOS's business strategy was too aggressive and risky with weak internal controls, the FSA was too easily reassured. The supervisory style was bottom-heavy in that too much supervision was done at the lower level. The supervisory approach was 'box-ticking' and a great deal of the FSA's actions were 'too little, too late' (The Parliamentary Commission on Banking Standards 2013). The FSA thus missed a number of opportunities to prevent HBOS's demise. The FSA did not act as an independent source of guidance to HBOS. Instead, it proved to be a hindrance and interference to HBOS. The Report thus corroborates a great deal with Paul Moore's evidence.

5. 4 Regulatory and supervisory weaknesses in the UK legislative framework

The structure of the tripartite system clearly failed in the UK during the financial crisis of 2007-2009. In particular, the FSA was passive and was poor in its regulatory and supervisory roles. It is now important to examine how the UK legislative framework contributed towards this failure. Part 10 of the Financial Services and Markets Act 2000 (FSMA) gave the Treasury and the FSA powers to make regulations and guidance. Sections 138-147 provide rule making powers and section 156 gives general supplementary powers to make rules for specific cases. The FSA's rules and guidance are consolidated into its Handbook of Rules and Guidance. It consists of several sourcebooks and manuals. Hudson (2009) submits that there are six tiers of regulation in the FSA Handbook. The six tiers are: high level standards; business standards; prudential standards; regulatory processes; redress and specialist sourcebooks. This chapter will demonstrate the weaknesses in the FSA Handbook and FSMA 2000 and use Northern Rock and HBOS as examples.

Under section 2(1) of the FSMA 2000, the FSA has a number of general functions which are subject to regulatory objectives. The functions of the FSA include making rules, preparing and issuing codes, give general guidance and determine general policy and principles by reference to its functions (section 2(4) FSMA 2000). Underpinning these functions are the regulatory objectives of: market confidence; public awareness (which was later moved by the Financial Services Act 2010 from an objective to section 2(3)(h) as a principle); consumer protection and reduction of financial crime (section 2(2) FSMA 2000). The Financial Services Act 2010 inserted a new regulatory objective of financial stability as section 2(2)(a)(b) FSMA 2000. Finally, in discharging its objectives and functions, the FSA must pay attention to the principles stated in section 2(3) such as using its resources in the most efficient way; facilitating financial innovation and competition.

The legal structure of the FSMA 2000 is complicated and conflicting. In pursuing a function, the FSA must consider its objectives and principles as well. The objective of consumer protection conflicts with the principles of the FSA facilitating financial innovation and competition. The use of innovative, securitised products combined with a risky business model and sales culture at Northern Rock and HBOS illustrate that customers were treated as products and not individuals. Bruni and Llewellyn explained that Northern Rock's demise was due to a combination of factors such as the bank's reliance on securitisation and

management of low-probability high-impact risks; the supervisory and regulatory regimes and insolvency resolution procedure (Bruni and Llewellyn 2009). Northern Rock's mission statement up till 2006 was to deliver value for customers and shareholder through excellent products, efficiency and growth. From the bank run and subsequent nationalisation of the bank, it is clear that Northern Rock went too far in favour of financial innovation and range of products at the expense of maintaining checks and balances. Liquidity is the main culprit at Northern Rock. Although it was solvent, its assets were mainly illiquid due to the reliance on wholesale funding. HBOS's customers suffered because of its prevalent sales culture. Ellis and Taylor provides an interesting account of the culture at HBOS from Margaret Taylor, an ex-employee of HBOS who is also a political activist (Ellis and Taylor 2010). Taylor has three reasons on why HBOS went wrong: first, the incentive structure has changed from a simple pay package to individualised, performance driven pay. Secondly, deregulation in the 1980s encouraged retail organisations to expand into banking. This led to a more sales driven approach in banking and increased emphasis on marketing. Gardener, Howcroft et al (1999) concur with this view. In their paper, they conducted a case study into the evolution of retail banking in the UK. They found that since the mid-1970s, banks became more market-orientated. Promotion and marketing became more important (Gardener et al. 1999). Finally, technological advances have replaced human labour (Ellis and Taylor 2010). Paul Moore, ex-Head of Regulatory Risk at HBOS between 2002-2005 described that HBOS staff were *'being forced to sell things; sell credit; sell mortgages; sell insurance products that were simply not in the best interests of the customer'*. The Head of Risk in the division said to Paul that: *'they [HBOS directors] pay no attention to risk management here at all. The only thing that counts is sales and you know, they are animals around here'* (Moore 2009a). From 2004, there is evidence that at HBOS, *'leadership and focus on risk matters has had no priority'*; *'sales regarded as more important than anything else'* and *"risk not seen as a core business imperative or competency"* (Moore 2009a).

Wisskirchen, Vater et al (2006) support the argument that HBOS pursued a sales policy. Their main submission is that many retail banks adopted an innovative and short-term sales approach since long-term growth and profitability were difficult to attract new customers. They mentioned in particular, the innovative approach HBOS adopted. In order to compete with the other major UK retail banks, HBOS advertised heavily their simple yet innovative products. An example is an interest-bearing current account which paid more interest on deposits than any other account on the market. HBOS trained all its customer

assistants on helping new customers to transfer their bank details and accounts. HBOS then rewarded its customer assistants who achieved their sales targets (Wisskirchen et al. 2006). HBOS managed to increase its overall share of current accounts from 9% to 14% between 2002-2006 (Wisskirchen et al. 2006).

Wisskirchen, Vater et al's article revealed that most retail banks are aware that developing a strong customer relationship is very important. The authors used a study in 2004 by Bain & Company which showed that UK banks performed worst in customer relationships. There is therefore, significant area for improvement in this field. Although Wisskirchen, Vater et al provide a more sympathetic view of HBOS's sales policy than Paul Moore, the fact that customer assistants are rewarded for hitting their sales targets correspond with Ellis and Taylor's submission that individualised, performance driven pay is one of the reasons why HBOS failed (Ellis and Taylor 2010).

It has been submitted that the true reason for the failure of HBOS was its corporate division's lending on the wholesale market (Ellis and Taylor 2010). The takeover of HBOS (the weaker bank) by Lloyds has been described as a 'shotgun marriage' by Paul Moore (2009b). The government chose Lloyds TSB as the purchaser for two reasons. First, Lloyds was financially robust in comparison to other banks during the financial crisis. Secondly, merging with Lloyds would not have a European dimension so it is strictly subject to UK merger legislation (Stephan 2011). The new Lloyds Banking Group own 30% of the current account market and 33% of the mortgage account (Stephan 2011). Competition rules were waived in the takeover of HBOS by Lloyds due to the need to restore public confidence. Sir John Vickers, the author of the Vickers' report on banking reforms, is of the view that the waiver was a 'policy mistake' (Vickers 2008). The takeover of HBOS by Lloyds TSB created a new public interest ground for competition rules to be waived. In normal circumstances, a merger of new major banks would breach competition rules. Although HBOS was solvent, it had severe liquidity problems. Fear and lack of confidence in the financial sector also contributed to the establishment of the public interest ground. On 16th September 2008, the share price of HBOS fell by 40% after Lehman Brothers collapsed. Therefore two days later, the takeover was agreed. Parliament had to revise the Enterprise Act 2002 to include a new public interest consideration of 'the interest of maintaining the stability of the UK financial system.' (Section 58(2)(D) Enterprise Act 2002). The FSMA 2000 was inadequate in this incident. The principles of promoting financial innovation and competition had to give way to public

interest. Further, a new regulatory objective of financial stability was inserted by the Financial Services Act 2010 as section 2(2)(a)(b) FSMA 2000 after it became clear that financial stability had to prevail over financial innovation. Finally, section 2(3)(d)-(f) FSMA 2000 emphasise the importance of promoting financial innovation and competition. Yet, there is neither a provision on minimising the negative impact which competition within can produce nor is there a provision giving the FSA powers to act when financial institutions have to merge due to public interest. The FSMA 2000 once again demonstrated that it was not fit for purpose in maintaining its overall purpose of market confidence. The objectives, functions and principles are too vague and unable to equip the FSA to act in an emergency.

Was the forced merger the right decision? It is important to remember that the background to this forced merger was one of serious panic in the financial sector. The UK government nationalised Northern Rock in February 2008 and Bradford & Bingley in September 2008. In the US, the Federal Reserve Bank bailed out Bear Stearns but Lehman Brothers collapsed, sending seismic shockwaves across the financial sector. Due to the inter-connectedness of banks; fear of systemic risks and fear of lack of confidence in the economy, it can be argued that the forced merger between HBOS and Lloyds TSB was necessary and in the public's interest. On the other hand, Sir John Vickers argued that the forced merger was a policy mistake (Vickers 2008). His submission is that the merger only temporarily restored public confidence. Lloyds Banking Group announced a pre-tax loss of £10.8 billion for HBOS. In August 2009, it announced a further £4 million loss. The UK government had to inject £21 billion to bail out HBOS (Jenkins and Jones 2011). In light of the costs, Sir John argued that the government should have nationalised HBOS. In short, the forced merger was short-sighted. Nationalisation was not possible under the existing legal framework in 2007 since the corporate rescue mechanism was not aimed at banks. When banks are in financial distress, time is of the essence to minimise externalities. Government authorities need powers to rescue banks immediately to avoid widespread panic. These powers were lacking under the UK corporate insolvency regime. The FSA were thus unable to take control of Northern Rock quickly when the latter was technically still solvent. This made it difficult for the FSA to sell Northern Rock since it had already lost franchise value (Bank of England 2011). The nationalisation of Northern Rock under the Banking Act 2009 and the forced merger of Lloyds TSB and HBOS demonstrated the inadequacy and problems of the UK legislative framework.

The author opines that it is a mistake to move the regulatory objective of public awareness to a guiding principle under section 2(3)(h) FSMA 2000. First, with workers retiring later and the range and amount of welfare benefits being cut, the public are more reliant on private pensions and other financial products for their retirement (Hudson 2009). Financial products have become more complicated through the process of securitisation. Complex structures and products meant that few understood who owned what assets or risks. The process of securitisation resembles a cooking recipe: it involves slicing, dicing, tranching, bundling and re-packaging. Bank assets are often intangible and stakeholders do not realise there is a problem until late in the transaction. The public need to be educated about the financial system, financial products and how they can protect themselves from risks. It is also beneficial for the UK economy when more people purchase financial investments. Secondly, taxpayers still own 40% of shares in Lloyds Banking Group and 100% in Northern Rock through UK Financial Investments Limited (UKFI Limited) and UK Asset Resolution Limited. The primary objective of UKFI Limited is to protect share value for taxpayers, while considering financial stability and competition at the same time. HM Treasury is the sole shareholder of UKFI Limited so decisions are made on behalf of taxpayers. However, UKFI Limited is keen to engage with other investors and market players and obtain their views. In order to have a meaningful dialogue, the author believes that the public need to be educated and can make informed decisions. Otherwise, there is the danger of democracy deficit, as identified by Peston (2010). In a democratic society, taxpayers should have a voice in how society should be run. The government rescued banks without consulting the public. Arguably, this was necessary because of the urgency and complexity of the matter. However, it was the players in the financial industry who made the mistakes and wreaked havoc to the economy. They are now rebuilding the banking system through the public's unconscious delegation. The public elect members of parliament to voice their opinions in democratic societies. However, members of parliament are not financial or banking experts. Hence, there is a limit as to how much they can help in the redesign of the banking system.

After analysing the weaknesses with FSA's statutory objectives and functions, it is necessary to examine its rule-making powers and the content in the FSA Handbook. In particular, this chapter will focus on the high-level standards, business standards, prudential standards and supervisory rules during the financial crisis of 2007-2009. Principle 3 of the Principles for Businesses under high level standards says that: 'A firm must take reasonable care to organise and control its affairs responsibly and effectively, with adequate risk management

systems'. In March 2012, the FSA has taken enforcement action and censured HBOS's corporate division for 'very serious misconduct' during 2006-2008 (Financial Services Authority 2012). This is because HBOS failed to comply with Principle 3 of the FSA's Principles for Businesses. HBOS pursued an aggressive growth strategy even in the period of 2006-2008 when the other UK banks scaled back their lending to corporate borrowers. More importantly, the FSA held that HBOS had a culture of focusing on profit at the expense of assessing risks properly. The FSA's censure of HBOS is a public one. It wanted to 'name and shame' the bank and act as a lesson on risk management failures. In 2013, Lloyds Banking Group was fined £28,038,800 for serious failures in their incentive schemes. Sales advisors at Lloyds were selling products to customers that they did not require or want because advisors were under pressure to hit targets (Financial Conduct Authority 2013). The Financial Conduct Authority increased the fine by 10% because the Financial Services Authority had given several warnings to Lloyds Banking Group in the past of poorly managed incentive schemes. Lloyds also had a previous fine from the FSA for unsuitable sale of bonds in 2003 which was caused partly by the sales targets. It appears that Lloyds Banking Group has not learnt from its previous mistakes and therefore the hefty fine in 2013 would hopefully act as a deterrent. Credit goes to both the FSA and FCA for taking enforcement action against Lloyds for breach of the FSMA's objective of consumer protection and Principle 3 of the Principles of Businesses.

Another major UK bank, the Royal Bank of Scotland (RBS) was fined £87.5 million in February 2013 for breaching section 206 of the Financial Services and Markets Act 2000 in the LIBOR scandal (Financial Services Authority 2013). LIBOR is the London inter-bank lending rate. It is a benchmark rate at which banks lend to each other in the overnight market. The Royal Bank of Scotland (RBS) also breached Principle 3 of the FSA's Principles for Business by failing to have adequate risk management systems and controls in place in relation to its LIBOR submissions process. RBS committed a number of breaches. Individual traders colluded with other firms and panels in manipulating the Japanese and Swiss franc LIBOR submissions between 2006-2010 (Financial Services Authority 2013). At company level, RBS did not have adequate internal controls and processes to monitor risks associated with derivatives trading. Further, RBS attested in 2011 that they had adequate systems in place when they did not. RBS also breached Principle 5 of the Principles for Businesses by failing to observe proper standards of market conduct between October 2006 and November

2010. RBS manipulated the interest rate by taking the trading positions of its interest rate when making Swiss and Japanese LIBOR submissions.

Lord Turner (2009) is of the opinion that the FSA paid too much attention on conduct of business regulation than prudential regulation during the financial crisis of 2007-2009. The FSA spent a great deal of time on conduct of business initiatives such as the Retail Distribution Review and the Treating Customers Fairly Initiative (MacNeil 2010). The Retail Distribution Review raises professional standards in the financial advisory industry and provides clearer information to clients about costs and services. The Treating Customers Fairly Initiative protects consumers by highlighting the benefits and risks of the products that they are buying. These are both attempts to uphold the principle of acting in the clients' best interests in COBS 2.1 of the Conduct of Business Obligations. Although no amount of regulation can fully protect consumers, MacNeil disagrees with Lord Turner and argues that it is right to focus on conduct of business regulation. This is because with increased pressure on banks to raise capital and boost profits, this may lead to unfair treatment of customers. If such logic applies, customers are always in a vulnerable situation. In the deregulatory, laissez-faire period, banks pursued high-risk, aggressive models to maximise profits. The combination of greed, recklessness and manipulation of the LIBOR scandal demonstrated in the financial crisis left customers very vulnerable. After the financial crisis, financial stability is the key aim of the regulator. Banks are under pressure to increase their capital positions and profits. Will this lead to inferior treatment of customers? If banks implement the counter-cyclical buffer of 0-2.5% as recommended under the Basel III Accord and the regulator supervises accordingly, then banks should be financially sound and robust to withstand any externalities. This should not come at the cost of inferior consumer protection.

The second reason why MacNeil thinks that consumer protection should continue to be important is because since the FSA's Retail Distribution Review is implemented, financial advisers have to charge upfront and not by commission (MacNeil 2010). This may deter some customers from seeking investment advice (Collinson 2012). Another concern is that financial advisers will circumvent this ban on commission by selling medical and life insurance policies, since they are not caught under the Retail Distribution Review (Collinson 2012). Consumers of financial products need protection because of information asymmetry and moral hazard. Markets alone will not protect consumers and therefore the regulator should pursue the objective of consumer protection. Nevertheless, this pursuance should not

come at the cost of poor prudential regulation and supervision. The financial crisis of 2007-2009 revealed some serious prudential regulatory and supervisory failures of the FSA.

The Prudential Standards contained in the General Prudential Sourcebook set out regulations on the financial robustness of regulated firms. Solvency, liquidity and capital positions are regulated via risk models. The supervision manual in the FSA Handbook sets out how the risk models are formed. Under section 1.3 of the supervision manual, the FSA uses a 'risk based approach'. The risk models are based on an 'impact and probability' risk assessment. The models consider how each firm's strategy and risks will contravene the FSA's core regulatory objectives. The FSA will then grade the bank from high risk to low risk. This risk assessment approach is dependent on assumptions, reactions and the willingness of the FSA to rely upon the regulated bank's provision of information (Hudson 2009). Hudson provided the example of Northern Rock. In this scenario, the FSA admitted that it did not 'stress test' the bank properly. As a result of this omission, it did not reflect the change in Northern Rock's business model and anticipate the increased risk in securitisation and the sub-prime market. Together with a light-touch regulatory approach, the FSA relied too much on Northern Rock providing information, rather than challenging the information given to the FSA. Hudson (2009) opines that FSA was not proactive enough in supervising Northern Rock. Therefore, the FSA could not accurately predict the risks that Northern Rock would face. The FSA's approach to supervision of banking is 'not fit for purpose' (Hudson 2009).

A similar trend can be found in the FSA's regulation and supervision of HBOS. Initially, the FSA regulated HBOS well between 2002-2004. It identified a number of serious concerns about the control functions at HBOS including its over-reliance on wholesale funding. Several reviews were carried out consequently and the turning point of the FSA's regulatory approach was the 'skilled persons review' under section 166 of the FSMA 2000 on HBOS's control framework and risk management processes. Although the first report made some suggestions for change, the second report reported everything was fine. The FSA was more relaxed from regulating HBOS after this review and reversed the increase in the capital requirement in December 2004 (Parliamentary Commission on Banking Standards 2013). Further, the FSA's emphasis switched from prudential regulation to conduct of business regulation. It spent a great deal of time on implementing Basel II and the FSA's Treating Customers Fairly scheme. The FSA was comfortable for senior management at HBOS to identify and mitigate business and control risks (Parliamentary Commission on Banking

Standards 2013). The period of 2004-2007 showed that the FSA adopted the wrong regulatory approach to HBOS. When the FSA gave the Basel II waiver to HBOS, the latter was able to calculate its own risk-weightings. This also distracted the supervisors from regulating and supervising the liquidity and credit positions. Few members of senior management at FSA supervised HBOS and when a stress test took place, challenges would be passed down (Parliamentary Commission on Banking Standards 2013). According to a FSA official, the FSA were more interested in the composition of HBOS's wholesale funding portfolio rather than setting prescriptive levels or amounts. Ultimately, the biggest failure of the FSA was on neglecting HBOS's liquidity status, since liquidity 'kills a firm first' (Parliamentary Commission on Banking Standards 2013).

To improve financial stability, under Part 1 of the Financial Services Banking Reform Act 2013 ('the 2013 Act'), retail banks are separated from investment banks through the use of subsidiaries. The 2013 Act does not ban proprietary trading so it does not go as far as the Volcker rule in the United States where proprietary trading is banned. Section 11(2) of the 2013 Act defines proprietary trading as 'trading in commodities or financial instruments as principal'. Under section 9 of the 2013 Act, the PRA will conduct a review of proprietary trading within five years of the 2013 Act coming into force. It will then pass its findings to HM Treasury to see if any change needs to be made. The most important implication of the 2013 Act is that both the PRA and FCA have a continuity objective of maintaining financial stability under clauses 1 and 2 of the 2013 Act. They do so by monitoring the risks which the ring-fenced banks are taking and minimise any adverse effects of the failure of a ring-fenced bank. The scope of 'financial stability' in section 2(2)(a)(b) FSMA 2000 has thus been broadened. Another implication of the 2013 Act is that the PRA and FCA have more powers to make rules for ring-fenced banks. For example, under the new section 142H FSMA 2000, the PRA and FCA must make rules to ensure that the ring-fenced banks have restricted powers to enter into contracts with other members of its groups otherwise than on arm's length; they must provide information to the regulators of transactions between a ring-fenced bank and other members of its group and that the board of directors of a ring-fenced bank is independent from other members of the group. The board will also need non-executive directors.

5.5 Changes on the horizon since the financial crisis

The previous sections highlighted the weaknesses and failures of the tripartite system, in particular the FSA, the FSMA 2000 and FSA Handbook. Hector Sants, Chief Executive of the FSA, admitted that the FSA failed in both roles as regulator and supervisor. In his speech at the Annual Lubbock Lecture in Management Studies, Sants announced the changes that the FSA has made since the financial crisis (Sants 2010). He stressed that the FSA is an ‘influencer’ of prudential roles, not a decision-maker. The majority of decision-making is set at the European and international levels, so he appealed that the FSA should be judged according to the effectiveness of its supervision rather than the quality of the prudential regulations. On capital and liquidity, the FSA has put in place a liquidity and ‘interim’ capital regime. This is consistent with the Basel Committee. On supervision, the FSA has shifted from a reactive ‘principles-based’ approach to a proactive ‘outcomes-based’ approach. The new approach is more intensive. It focuses on stress-testing and on the future. Hence the forward-looking approach to capital for banks recently adopted by the FSA improved the capital positions of banks because a challenging stress test was used. The FSA will conduct annual stress test with all major financial institutions. This would involve reviews of their portfolios, projections and strategies. The UK regulator’s role in regulation will be restricted in the future since future regulatory policy and rules will be decided on the European level under the new European regulatory framework. This is an interesting point which deserves closer examination.

On 1 January 2011, the European financial supervisory framework came into force. The key features of the reform are the creation of a European Systemic Risk Board (‘ESRB’) and three European Supervisory Authorities (‘ESAs’), the European Banking Authority (‘EBA’), the European Securities and Markets Authority (‘ESMA’) and the European Insurance and Occupational Pensions Authority (‘EIOPA’). The ESRB is in charge of macro-prudential supervision. The ESRB will work with national authorities such as the Financial Policy Committee in the UK, which is the proposed new institution responsible for macro-prudential regulation. The three ESAs will work under the European System of Financial Supervision (‘ESFS’) together with the existing national supervisory authorities. They are responsible for micro-prudential supervision. The Prudential Regulatory Authority (‘PRA’) will represent the UK in the new ESAs for banking and insurance, whilst the Financial Conduct Authority (FCA) will represent the UK in the ESMA. The ESAs have wide-ranging powers which include: drafting specific rules and guidelines for national authorities and financial

institutions in the form of technical standards, guidelines and recommendations; and monitor how rules are being enforced by national regulators (they will in some circumstances be able to give binding instructions to national regulators and financial institutions); take action in emergencies, including the banning of certain products; mediate and settle disputes between national supervisors.

Member states can decline to comply with a recommendation or guideline but technical standards will be binding as an EU regulation or decision. The regulatory paradigm will shift from the national to European level. The theoretical paradigm will become increasingly focused on vertical rather than horizontal regulatory co-operation. Horizontal regulatory co-operation between the tripartite authorities failed under the UK single regulator. The first step that the UK government should take is to rectify the problems mentioned earlier in the chapter before considering the overall structure of the regulator. Structure alone will not solve everything. The second step is to consider whether the Australian twin-peaks model is better for the UK. The European regulatory changes call for more vertical regulatory co-operation between the national and European regulatory bodies. With the Bank of England and PRA reporting to the ESRB and ESFS, the twin-peaks model should in theory, be more aligned to the European level.

5.6 The ‘twin-peaks’ model in Australia

Australia adopted the twin-peaks model in 1998 following the Wallis Inquiry of 1997 (Financial System Inquiry Final Report 1997). The Wallis Inquiry was not a consequence of a scandal or crisis. Therefore, it can be argued that the Wallis Inquiry was free from political pressure when reviewing the regulatory structure (Cooper 2006). Australia withstood the financial crisis of 2007-2009 better than the UK. No Australian bank failed. There were no mergers or acquisitions of weaker banks. The G30 Report on the Structure of Financial Supervision of 2008 revealed that both Australia and the Netherlands are amongst the best and most effectively regulated regimes in the world (Group 30 2008). It would appear that the twin-peaks model works very well in Australia. However, the failure of HIH Insurance Limited in 2001 illustrates the failures and weaknesses of the Australian Prudential Regulatory Authority (APRA). HIH Insurance Limited was the second largest general insurance company in Australia. It collapsed with a debt in the region of \$3.6 - \$5.3 billion (Clark 2007). The Royal Commission into HIH’s collapse found that the APRA was reluctant to intervene in HIH when the latter was in trouble. APRA was formed on 1st July 1998 and it

was inexperienced in understanding the extent of HIH's problems (Clark 2007). The fundamental problem with HIH Insurance Limited offered insurance too cheaply without enough capital to absorb any potential losses. This was exacerbated by corporate governance and management failures at HIH Insurance Limited leading to HIH Insurance Limited buying troubled insurance business at too high a cost (Wilkins 2011).

Justice Owen of the Royal Commission held that APRA *'did not cause or contribute to the collapse of HIH'* (HIH Royal Commission 2003). However, APRA *'missed many warning signs, was slow to act, and made misjudgements about some vital matters'* (HIH Royal Commission 2003) Justice Owen said that APRA was weak in a number of areas. First, APRA did not have staff with the relevant skills or experience. Resources were inadequate. Secondly, there was a lack of information flow upwards to APRA's board and managers. They were not properly informed on lack of resources or on HIH's financial performance. Thirdly, like the FSA, APRA adopted a *'laissez-faire'* approach to regulation. Although HIH's collapse was ultimately due to corporate governance failures, this episode reveals that APRA could have dealt with the problem better.

To rectify the weaknesses, Justice Owen made three recommendations. First, he recommended that the CEO and executive commissioners should replace the non-executive board of APRA. This should improve the information flow to the senior level. Secondly, he called for a restructuring of the APRA. Reorganisation is required to improve accountability. He also urged the creation of a specialist team of staff to supervise insurers. Finally, the APRA should be more firm and aggressive in its style of prudential regulation and supervision.

APRA learnt from the experience and in October 2002, it introduced new risk assessment and supervisory response tools known as the Probability and Impact Rating System (PAIRS) and the Supervisory Oversight and Response System (SOARS). The HIH Insurance scenario illustrates that the APRA experienced teething problems in both regulation and supervision. Nevertheless, it has learnt from its experience and made the necessary changes. With no bank failure during the financial crisis of 2007-2009, it seems that the problems of regulatory co-ordination, information sharing and conflict of interests have not troubled the APRA again. The UK government could learn from this episode. The PRA needs to be well-organised and has skilled experts. There must be clear co-ordination and co-operation both within the

regulatory bodies and outside. Transparency and accountability should be encouraged with good information flow upwards and downwards. It is encouraging to note that the coalition government will give the Treasury power to set out in secondary legislation the exact macro-prudential tools available to the Financial Policy Committee (HM Treasury 2010). These tools are vital to detect risks and improve regulation and supervision.

5.7 Findings and recommendations

This chapter has extended the literature on financial regulation by examining the macro and micro-prudential failures of the tripartite authorities, especially the FSA during the financial crisis of 2007. It also examined the weaknesses of the FSMA 2000 and FSA Handbook. It is important to emphasise that Northern Rock and HBOS failed due to a combination of corporate governance and regulatory failures. However, this chapter focuses on the latter, especially the micro-prudential failures and weaknesses of the FSA. The purpose of this approach is to identify whether the weaknesses and failures are due to the structure of the FSA or other reasons. This will have important implications for the future of UK financial regulation. The author has found that there are weaknesses with the tripartite authorities.

The Northern Rock demise has revealed that FSA failed in both regulating and supervising the bank. By waiving Basel II regulations on capital, Northern Rock was able to pay dividends to its shareholders and further weakening its capital position. The FSA was aware of the capital situation before it waived the Basel II requirements. However, it failed to channel that information to the board of Northern Rock and did not rectify the problem. It did not regulate the bank's liquidity well. As a supervisor, it failed to monitor the bank properly when it was evident that Northern Rock's business model was unusual. It carried out ARROW risk assessments every three years when it identified the bank as 'a high impact bank, under close and continuous supervision' (House of Commons Treasury Committee 2008). The admission by the FSA that Northern Rock was 'at the extreme end of the spectrum' is a clear indication that there were serious failures in both regulation and supervision by the FSA.

Moore's evidence from the Parliamentary Commission on Banking Standards revealed that the operational staff at the FSA performed well (Moore 2009a, Parliamentary Commission on Banking Standards 2013). They had identified the major risks at HBOS. It was at the senior

management level where problems emerged. The FSA failed to notice the warning signals and became too reliant on the senior management at HBOS to assess its risks. Ultimately, the biggest failure of the FSA was on neglecting HBOS's liquidity status. Arguably, the FSA could and should have focused more on prudential regulation than on conduct of business regulation.

The studies into the role of FSA in both Northern Rock and HBOS revealed similar weaknesses and failures. It is apparent that common supervisory weaknesses include: insufficient engagement with the banks; lax information recording systems; failure at the senior management level and poor monitoring of the banks. Lack of resources and poor information flow were noticeable in both banks. Regulatory and supervisory failures include capital, liquidity and stress testing. The FSA has been perceived as focusing more on capital and solvency rather than liquidity (Buiters (2008) cited in House of Commons Treasury Committee 2008). Both Northern Rock and HBOS ultimately needed government assistance because of liquidity problems. Therefore, the primary regulatory failure is in liquidity and stress testing.

The FSA's regulatory and supervisory powers derive from the FSMA 2000 and FSA Handbook. There are three problems with the current legal framework in banking regulation. First, the legal structure of the FSMA 2000 is complicated and conflicting. In pursuing a function, the FSA must consider its objectives and principles as well. The objective of consumer protection conflicts with the principles of the FSA facilitating financial innovation and competition. Customers of Northern Rock and HBOS suffered in the financial crisis of 2007-2009 since the banks pursued high-risk, aggressive growth models at the expense of consumer protection. The FSA as a single regulator was unable to decide which principle had priority. Secondly, the principles-based regulatory approach combined with the supervisory powers under the Regulatory Processes of the FSA Handbook proved to be disastrous. In theory, the risk-based supervisory approach using individual bank business models and strategies to predict tailored risks for each bank sound admirable. In practice, the use of assumptions, light-touch regulatory approach and the FSA's over-reliance on the regulated banks' supply of information meant that the risk model failed. Gray (2009) argues that this combination is unable to deal with unexpected shocks and externalities in the banking system. The FSA does not have policy-making powers and cannot shape the financial system. This is in contrast to the Australian Prudential Regulation Authority where it has policy-

making powers and can combine prudential regulation with policy making. Thirdly, the FSA's remit is simply too wide. It is a super-regulator which oversees banks, licensed deposit-taking institutions, insurance and investments firms. The FSA had more powers than the powers given to any single Australian financial regulatory body (Primikiris 2004). It performed functions equivalent to three out of four regulatory agencies in Australia. With 'functional despecialisation' of products, the boundaries of financial services blurred and the FSA was overwhelmed by changes in the financial market and technology. Financial innovation gave way to financial stability at a serious cost to the UK financial system. The FSA was a watchdog which failed to detect risks prior to the financial crisis and was too slow to deal with the financial crisis.

The demise of HIH Insurance Limited exposed initial problems of the twin peaks model in Australia. The APRA lacked skilled staff and resources. It failed to notice warning signals and was slow to act. There was poor communication and information flow. The APRA adopted a 'light-touch' approach to regulation. These weaknesses are similar to the FSA. Therefore, the structural difference between the two regulators is not a key factor to their regulatory and supervisory failures. Rather, the regulators failed in both countries due to organisational and management weaknesses, especially at the senior management level. Proximity between the Bank of England and the PRA should assist with preventative measures. When macro and micro-prudential regulation/supervision is vested within one umbrella organisation, the PRA can in theory, react quicker to market volatility and provide liquidity where necessary. Macro and micro-prudential regulation/supervision are closely connected: 'Macro-prudential supervision cannot be meaningful unless it can somehow impact on supervision at the micro-level; whilst micro-prudential supervision cannot effectively safeguard financial stability without adequately taking account of macro-level developments' (De Larosiere 2009). Further, the PRA is investing in more senior and experienced staff in banking supervision (Bank of England 2013b). It is recruiting internally and externally to ensure that the mistakes made in the financial crisis will not be repeated. To avoid the criticism that the FSA was too slow to detect risks and deal with the crisis, the PRA is under a statutory duty to avoid significant disruption to 'the continuity of the supply of financial services' (Chapter 2, section 2B(3) and (4) Financial Services Act 2012). It operates a Proactive Intervention Framework in regulation and supervision of banks. Essentially, the PRA aims to identify risks early and requires firms to tackle the problems. The PRA's supervisory powers are enhanced under the Financial Services Act 2012 since it has legal

powers to require information from firms and commission a report by a third party into particular areas of interest (Part XI of FSMA 2000). The PRA also has disciplinary powers to impose sanctions and ‘name and shame’ banks. If used early to detect risks, these powers should reduce the reliance on enforcement actions (Part XIV of FSMA 2000). Meanwhile, there is evidence already that the FCA is taking a more interventionist style to regulating conduct of business matters. In 2013, the FCA has imposed £472 million of fines against several UK banks who were involved in the LIBOR scandal (Binham 2013). Communication and co-operation between the regulatory bodies should be improved under the ‘twin-peaks model’ since there are extensive provisions in Part 2 section 3 of the Financial Services Act 2012 governing this area. The sections set out the boundaries of each regulatory body and when the PRA can require the FCA to refrain from acting.

The PRA, FCA, HM Treasury and the Bank of England will enter into a memorandum of understanding to co-ordinate its relationships with the European regulators (Part 2, section 3E(3)(a) Financial Services Act 2012). The proposed changes to the European regulatory framework suggest a regulatory emphasis on vertical co-operation. Lord Turner and de Larosière both stressed the importance of good regulation on a global scale in their reports (Turner 2009, De Larosiere 2009). After all, Mervyn King said that global banks are ‘global in life but national in death’ (King (2009) cited in Turner 2009). Effective global financial regulation starts at home. Until the UK government has fully learnt and implemented the changes, the question of the structure of the regulator is of secondary importance. The structure only provides the outer shell of an organisation. It requires the necessary tools, equipment, resources, information and co-ordination to perform properly. It is evident from this chapter that it is exactly these concerns that the UK regulator should address. The Australian experience further supports the fact that the twin-peaks model does not resolve all the problems.

5.8 Conclusion

“New structures do not guarantee better regulation...Any country that thinks that tinkering with the structure of agencies will, by itself, fix past shortcomings is doomed to relive its past crises” (Carmichael 2003).

Moving to the twin-peaks model *per se* will not solve the failures and weaknesses of the FSA and the Bank of England. Rather, the UK government must learn from the experiences of Northern Rock, HBOS and Australia. It needs to rectify the problems revealed in the financial crisis. The proximity of the Bank of England and the PRA and FPC under the twin-peaks model is attractive, this is of no benefit if the bodies differ in their opinions on rescuing banks. We do not know whether the FSA supported additional liquidity in the Northern Rock episode since they relied on the principle of confidentiality (House of Commons Treasury Committee 2008). The delay in granting liquidity support to Northern Rock seems to suggest that there were differences in opinion between the tripartite authorities. The new 'twin-peaks' model in the UK and the measures taken by both the PRA and FCA to date offer a glimmer of hope towards better regulation and supervision. The legislative framework sets out better communication and co-operation between the regulatory bodies. The 'twin-peaks' model and new legislation should provide better regulatory co-ordination; information sharing and avoid potential conflict of interests. It remains to be seen whether the regulatory structure and framework will work in times of crises.

Chapter 6- APRA v PRA: Divergence or convergence in banking supervision?

6.1 Introduction

From chapters four and five, the author demonstrated that the Financial Services Authority (FSA) failed in its roles of prudential supervision of banks and consumer protection during the financial crisis of 2007-2009. In this chapter, the author will focus on the development of the Australian regulatory and supervisory framework, then move on to analyse the risk-based regulatory approach adopted by the Australian Prudential Regulatory Authority (APRA). Various academics (Gray 2009, Hudson 2009) have been critical about the risk-based model used by the FSA during the financial crisis of 2007-2009, and it seems therefore appropriate to study the Australian model in this chapter to draw out points of interest. The chapter will then discuss whether there is convergence or divergence between the Australian and United Kingdom (UK) prudential supervisory models.

6.2 Development of the Australian prudential regulatory and supervisory framework

Section 8 of the Australian Prudential Regulatory Authority Act 1998 sets out the statutory objectives of the Australian prudential supervisory system. These are: 'financial safety and efficiency, competition, contestability and competitive neutrality'. These objectives are in relation to prudential soundness and are relatively simple in comparison to the FSA's statutory objectives in the UK. The legal framework of the Financial Services Markets Act (FSMA) 2000 is complicated and conflicting. In pursuing a function, the FSA must consider its objectives and principles as well. Under section 2(1) of the FSMA 2000, the FSA had a number of general functions which are subject to regulatory objectives. The Financial Services Act 2012 replaced the FSA with the Prudential Regulatory Authority (PRA), the Financial Conduct Authority (FCA) and the Bank of England. The UK regulatory structure has changed from a single regulator to a 'twin-peaks' model, where the PRA is responsible for micro-prudential regulation and the Bank of England (together with the Financial Policy Committee, are responsible for macro-prudential regulation. The FCA is responsible for conduct regulation as well as being the micro-prudential regulator for other financial services firms. The functions of the FSA include making rules, preparing and issuing codes, give general guidance and determine general policy and principles by reference to its functions

(section 2(4) FSMA 2000). Underpinning these functions are the regulatory objectives of: market confidence; public awareness (which was later moved by the Financial Services Act 2010 from an objective to section 2(3)(h) as a principle); consumer protection and reduction of financial crime (section 2(2) FSMA 2000). The Financial Services Act 2010 inserted a new regulatory objective of financial stability as section 2(2)(a)(b) FSMA 2000. Finally, in discharging its objectives and functions, the FSA must pay attention to the principles stated in section 2(3) such as using its resources in the most efficient way; facilitating financial innovation and competition. The APRA has three main types of powers: authorisation or licensing powers; supervision and monitoring powers and powers to help financial distressed banks to protect depositors (Cooper 2006). The FSA on the other hand, has greater powers under sections 138-176 FSMA 2000. In particular, the FSA has rule-making and investigative powers. Such powers include the ability to make rules regarding price stability, money-laundering and financial promotion (sections 144-147 FSMA 2000). The FSA can ask authorised bodies for information which might be relevant to the financial stability of the UK system and appoint investigators to carry out relevant investigations (sections 165-168 FSMA 2000). The statutory objectives in the FSMA 2000 are also wider. The legal framework in the UK is used to 'set the strategic direction of the regulator, not just to allocate supervisory resources' (Black 2004). In comparison, the Australian legal framework is restricted to allocating supervisory resources and limited degrees of formulating a supervisory strategy.

The Banking Act 1945 is the first piece of legislation to support prudential supervision of banks in Australia and restricts Australian central bank's regulation to banks only (Thomson and Abbott 2000). Division 2 section 11 of the 1945 Banking Act states that the Australian central bank should take control of any bank which could not meet its obligations, thus protecting depositors (Thomson and Abbott 2000). Section 12 of the 1945 Banking Act also gave the central bank the power to obtain the requisite information from banks that they can meet the claims of depositors. If a bank is unable to meet such claims, the Australian central bank could, under section 13 of the 1945 Banking Act, appoint an officer to run the bank. The Banking Act of 1959 further consolidated the importance of protecting depositors. Financial stability and the aim of protecting depositors are clearly outlined in section 12 of the 1959 Banking Act. Sections 13A of the 1959 Banking Act imposes penalties on banks if they cannot meet their obligations such as providing information to the central bank. The period of 1945-1981 was one of relative financial stability as there was only one bank failure in Australia. The Bank of Adelaide's demise in 1979 was due to the insolvency of its wholly

owned subsidiary, the Finance Corporation of Australia. The Finance Corporation of Australia managed to amass debts greater than the entire capital of the Bank of Adelaide (Thomson and Abbott 2000, Sykes 1998). In the end, the Bank of Adelaide took over ANZ Bank.

Prior to World War Two, Australia's banking system was largely unregulated (Thomson and Abbott 2000). Deregulation prevailed in the period of 1950-1980s. Australia witnessed rapid economic growth and its financial sector metamorphosed into a multi-faceted and more complicated sector. In light of these developments, Hogan and Sharpe (1990) submit that financial stability, rather than depositor protection, should be the primary aim of prudential regulation and supervision especially when the market became more competitive. It can be argued that subsequent pieces of legislation such as the Reserve Bank Act 1959, the Payment Systems (Regulation) Act 1998 and the Payment Systems and Netting Act 1998 promoted financial stability. Section 10A of the Reserve Bank Act 1959 established the Payments System Board within the Reserve Bank of Australia to ensure that the financial system runs safely and efficiently. In particular, section 10(B)(3) of the Reserve Bank Act 1959, which is known as the 'Charter' of the Payments System Board states that:

'It is the duty of the Payments System Board to ensure, within the limits of its powers, that:

the Bank's payments system policy is directed to the greatest advantage of the people of Australia; and the powers of the Bank under the Payment Systems (Regulation) Act 1998 and the Payment Systems and Netting Act 1998 are exercised in a way that, in the Board's opinion, will best contribute to:

controlling risk in the financial system;

promoting the efficiency of payments system; and

promoting competition in the market for payment services, consistent with the overall stability of the financial system; and the powers and functions of the Bank under Part 7.3 of the Corporations Act 2001 are exercised in a way that, in the Board's opinion, will best contribute to the overall stability of the financial system.'

It is thus clear from section 10(B)(3) of the Reserve Bank Act 1959 gives the Payments System Board powers which should be exercised to promote financial stability. The Payment Systems (Regulation) Act 1998 and the Payment Systems and Netting Act 1998 n 1998 gave

the Reserve Bank further powers in payment systems (Group 30 2008). The twin-peaks model was established on 1 July 1998 under the Australian Prudential Regulation Authority Act 1998 after the recommendation of the Wallis Inquiry in 1997 (Financial System Inquiry Final Report 1997). Under the 'twin-peaks' model, the Australian Prudential Regulation Authority (APRA) is the micro-prudential regulator of financial institutions. The Australian Securities and Investments Commission (ASIC) is the regulator for consumer protection (Hill 2012). Chapter five of the Wallis Inquiry provides the regulatory principles which guide the Australian prudential supervisory regime. The principles are: competitive neutrality; cost effectiveness; transparency; flexibility and accountability. Competitive neutrality means that no financial institution in Australia is at an advantage or disadvantage. It has been argued that prudential supervision based on the financial products rather than the institutions is more effective, efficient and provides a level-playing field (Hogan and Sharpe 1990). Cost effectiveness requires minimal state intervention unless there is a reason for increased participation from the state. It also tries to avoid duplicates and overlaps of responsibilities amongst the regulators. Under the principle of transparency, it is important that all communication, promises and duties of the regulators, the regulated and buyers of financial products and services. Since the financial market evolves with time and technological developments, flexibility is key to the Australian financial regulatory regime. Finally, the principle of accountability demands that the Australian regulators to be appropriately equipped with skilled staff; that the regulators are answerable to stakeholders and subject to regular reviews.

The five regulatory principles are important in shaping the Australian regulatory model. The Wallis Inquiry decided that the main purpose of financial regulation is to counteract market failure. Markets become inefficient for four main reasons: anti-competitive behaviour; market misconduct; information asymmetry and systemic instability (Carmichael 2004). Having carefully considered these reasons, the Wallis Inquiry decided that having four separate regulatory agencies is most suitable for Australian banking regulation. Each of these four regulators is responsible for dealing with one source of market failure. The Australian Competition and Consumer Commission (ACCC) is responsible for competition (Hill 2012). The Reserve Bank of Australia (RBA) is responsible for overseeing systemic stability (Hill 2012). APRA became the sole prudential regulator of financial institutions, having taken control from eleven state regulators (Thomson and Abbott 2000). Other pieces of legislation governing APRA include the Insurance Act 1973 and the Life Insurance Act 1995 conferred

the duty on APRA to protect insurance policyholders. The Insurance Act 1973 was later amended by the General Insurance Reform Act 2001, which provided more flexibility in setting tougher standards on capital adequacy and risk management. APRA also became responsible for registering financial corporations under the Financial Sector (Collection of Data) Act 2001. Financial corporations encompass a wide group of organisations such as finance companies and money market corporations (Group 30 2008). However, the APRA does not have the power to supervise the activities of the financial corporations. The Australian Securities and Investments Commission Act 2001 the Australian Securities and Investments Commission (ASIC), which is the fourth regulatory agency. It looks after business conduct and consumer protection and regulation of financial products. Provision of financial services was consolidated under the Financial Services Reform Act 2001. The 2001 Act also provided ASIC and APRA to issue standards and guidance. APRA can issue Prudential Standards and Prudential Practice Guides. The former sets out regulatory standards for the regulated and the latter provides guidance for the relevant organisations. APRA can also issue a ‘direction’ to licensed institutions demanding them to comply with Prudential Standards and/or Prudential Practice Guides. Meanwhile, ASIC produces guidance notes, approves codes of conduct and interprets the laws (Thomson and Abbott 2000, Thomson and Abbott 2001).

Australian banks are subject to money-laundering and financial crime legislation as well. The Financial Transaction Reports Act 1998 set up the Australian Transaction Reports and Analysis Centre, which had responsibility for preventing money-laundering and other financial crimes. The Anti-Money Laundering and Counter-Terrorism Financing Act 2006 repealed the 1998 Act and adopted a risk- based regulatory style (Sathye and Islam 2011, Ross and Hannan 2007, Geary 2009). This means that banks will conduct a risk analysis of the probability of the client committing a financial crime and adjust their services accordingly. Risk-based regulation has been criticised in the UK by various academics (Gray 2009, Hudson 2009, Morris and Shin 2008) so it is pertinent to consider the risk-based regulatory style in Australia.

6.3 Risk-based financial regulation in Australia

Risk-based financial regulation involves developing a regulatory framework which deals with regulatory or institutional risks contravening the regulator’s objectives (Black 2004). The

Australian experience and use of risk-based financial regulation offer an interesting case study to the UK. It is somewhat ironic that the UK are now learning from the success of the Australian's response to the financial crisis of 2007-2009 when the Australians studied and adopted parts of the UK financial regulatory framework in 2001. The aim of this section is to examine in depth the Australian prudential regulatory structure and methodology. The twin-peaks model in Australia was not an initial success. It had its own teething problems. However, the important lesson is that the Australians learnt from previous mistakes, made changes and learnt from other common law jurisdictions such as Canada, the United States and the United Kingdom. The Australian regulatory framework is by no means perfect. Nevertheless, the aim of prudential regulation is not to prevent total financial disasters since this is impossible. 'Zero-failure' regulatory policy is not part of the Australian regulatory philosophy (Black 2006, Cooper 2006). Regulating human behaviour is an extremely difficult task and no amount of legislation or regulation will provide an absolute water-tight system due to regulatory arbitrage by the perpetrator. Rather, the rationale of the Australian regulatory regime is to minimise the impact of any potential financial crisis. Initially, the risk management model did not work well. APRA was divided into three sections in 1999: the Diversified Institutions Division (DID), which was responsible for complicated groups; the Specialised Institutions Division (SID), which was responsible for the remaining firms and the Policy, Research and Consulting Division (PRC), which was in charge of developing policy and providing specialist consulting services to the DID and SID supervisory teams (Black 2004). In the same year, the DID and SID both developed their own risk-based supervisory frameworks (Black 2006). The rationale for this integrated risk model is to have a consistent, functional regulatory framework within APRA which could deal with the increasingly complex financial world efficiently and without overlaps. Whilst this is commendable and well-intentioned in theory, problems surfaced in practice. The DID and SID pursued completely different methodologies and risk-based supervisory models. The risk categories and the supervisory responses used between the DID and SID were dissimilar. The DID used eight different headings in assessing the risk ranking of an organisation. The SID had fifteen separate risks, although the types of risks were similar to the DID. With the supervisory responses however, the DID preferred high level meetings of one or two hours and site visits were rare. With the SID, there was a wider range of supervisory response and greater use of on-site visits, as well as scrutiny of internal documents (Black 2004). The divergent and inconsistent supervisory styles of the DID and SID defeated the original philosophy of a single integrated supervisory regime. Indeed, both the HIH Royal

Commission (HIH Royal Commission 2003) and the Palmer Report (Palmer 2002) criticised APRA's supervisory style. The Palmer Report was written by the lawyers of APRA as part of the evidence they submitted to the HIH Royal Commission. The collapse of HIH Insurance in 2001 highlighted weaknesses of APRA: 'the manner in which APRA exercised its powers and discharged its responsibilities under the Insurance Act fell short of that which the community was entitled to expect from the prudential regulator of the insurance industry' (HIH Royal Commission 2003). APRA's failed in that it relied too much on HIH's solvency position and did not conduct an independent inquiry when it realised that HIH's annual returns were late. HIH engaged in improper accounting practice by allowing inter-company loans to be counted as assets for solvency reasons. APRA ignored warnings that HIH was in financial trouble in 1999 and 2000. In September 2000, APRA assessed HIH to be a 'high risk' but did not take further action (Rankin 2003). More importantly, both the HIH Royal Commission and the Palmer Report criticised DID's risk-based supervisory model on several grounds. First, the DID placed too much faith on the regulated institutions and assumed (wrongly) that minimal supervision was required due to the institutions having the requisite internal controls and systems (Palmer 2002, HIH Royal Commission 2003). Secondly, the supervisory style was inadequate, too conceptual and too passive. DID was unable to give useful, practical, tailored advice to officers of the regulated institutions (Palmer 2002, HIH Royal Commission 2003). Thirdly, the DID was sometimes careless in filing statutory returns and failed to provide guidance to senior members of staff (Palmer 2002, HIH Royal Commission 2003). Fourthly, the DID's methodology was flawed in that it did not pay sufficient attention to the opinions of specialist experts in APRA and did not provide an internal dispute resolution mechanism (Palmer 2002, HIH Royal Commission 2003). The DID failed to critically analyse the information they received (Black 2004).

6.4 A new Australian risk-based framework

The above criticisms acted as triggers for change in APRA's supervisory style. It moved away from a consultative and passive stance to a more interventionist and proactive supervisory style. It also realised that it was important to have skilled staff with the relevant training to deal with prudential supervision, especially those of high risk institutions. APRA thus adopted a single, integrated risk-based framework, having carefully considered the risk models of the US, Canada and the UK. The US uses a CAMELS risk framework, which

stands for Capital, Asset quality, Management, Earnings, Liquidity, and Sensitivity to market risk. Each element is given a rating of 1-5 with 1 being the best. The average rating of the six elements is called the composite rating. Banks with an average rating of 5 are of greatest supervisory concern (Coleman 2008). The Supervisory Framework assesses inherent risks of significant activities carried out by banks in Canada. Inherent risks can be divided into six different types: credit risk; market risk; insurance risk; operational risk; regulatory compliance risk; and strategic risk. Each risk is given a level: low, moderate, above average, or high. The level of risk will then influence how much control and supervision the supervisor has over a bank (Office of the Superintendent of Financial Institutions 2010). The ARROW II risk framework in the UK is more detailed than the US or Canadian framework in that it divides risks into 52 elements and 10 risks groups. Each risk is given a level: low, medium low, medium high and high. Banks with medium high and high levels are visited regularly by the supervisor (Petch 2011).

APRA's new risk-based supervisory model consists of PAIRS and SOARS. PAIRS stands for the Probability and Impact Ratings System and SOARS stands for the Supervisory Oversight and Response System. PAIRS and SOARS were influenced by the Canadian financial regulator, Office of the Superintendent of Financial Institutions (OSFI) and the UK financial regulator, the FSA. Yet, APRA created its own risk-based model and there are three main differences between APRA's model and the OSFI's model. First, PAIRS is more radical than the Canadian model because the former goes further and links the concept of 'overall risk of failure' with APRA's statutory objectives (Black 2004). Secondly, PAIRS produces an overall rating of risks by relying on a formal system of weighted risk assessments (Black 2004). Finally, influenced by the UK risk-based model, APRA incorporated the requirement of an impact assessment (Black 2004, Laker 2007). It considers the overall economic consequence if a regulated institution fails.

The overriding principle of PAIRS is to provide a rating for the likelihood of a regulated institution being unable to meet its financial obligations and the implications of the institutions' failure on the overall economic system. The higher the rating, the more resources APRA needs to allocate to supervise the organisation. To arrive at a rating, the two-staged formula below is used:

Inherent risk – Management and control = Net Risk

Net risk – Capital support = Overall risk of failure

Inherent risks are risks to an organisation's financial position arising from the daily operation of the business. There are eight inherent risks: credit risk; balance sheet and market risk; insurance risk; operational risk; liquidity risk; legal and regulatory risk; strategic risk and contagion risk (Black 2004, Coleman 2008). These risks are assessed using a range of data collected from site visits; rating agencies; auditors' reports and information from whistle-blowers. A rating of 0-4 is then given to inherent risks. The firm's rating is then compared to other similar organisations in the same field. It is then weighted and aggregated to give an overall rating. An organisation's management and controls are examined and rated to see how well they cope with inherent risks. There are six elements of management and control: operational management; the board of directors/trustees; senior management; management information systems/financial control; risk management; compliance and independent review. Each element is given a rating of 0-4, which is then compared to industry comparables. Again, each element is weighted and aggregated. Once the net risk is calculated, the organisation's capital level is assessed. Capital acts as a buffer to externalities and absorbs financial losses. Weightings are given to three categories: 50% to current balance sheet amount and quality of capital; 25% to earnings strength and 25% to access to new capital (Black 2004, Australian Prudential Regulatory Authority 2013b).

The overall risk of failure is calculated using an exponential relationship between the risk score and probability rating. A risk rating of one leads to a probability rating of four that an organisation will fail. Similarly, a rating of four leads to a probability rating of 256 ($4^4 = 256$) that an organisation will fail. The exponential nature reflects the underlying philosophy of Australian prudential supervision since the magnifying effect of this exponential relationship highlights the urgency of the issue and a suitable supervisory response. This in turn leads to a more proactive and intrusive form of supervision, which was the recommendation of the HIH Royal Commission (HIH Royal Commission 2003) and the Palmer Report (Palmer 2002). The final stage of the risk assessment is to compare APRA's rating with external reports from ratings agencies and media sources. An interesting element of PAIRS is the impact assessment, since this originates from the FSA in the UK. The impact assessment aims to measure the overall financial costs on the economic system if an organisation collapses. The assessment considers both direct costs to consumers and indirect costs due to systemic risks across the financial system (Black 2004). The impact is rated one of the following: extreme, high, medium or low. The impact assessment is important because it shapes the supervisory relationship with the organisation and the amount of resources that is required to supervise

the risks. A potential problem with risk-based regulation is that too much emphasis is paid to detecting the risks than rectifying them. The impact assessment is therefore crucial to link the diagnosis of the problem with the supervisory response.

SOARS constitutes a supervisory attention index and a supervisory stance. The index indicates how much resources an organisation needs to reduce the risks identified by PAIRS. The supervisory stance is APRA's response to dealing with the overall risk of failure of an organisation and is divided into four levels: normal, oversight, mandated improvement and restructure. Organisations with a 'normal' SOARS stance require basic supervisory measures such as onsite visits and filing the requisite documents. An index of 'oversight' requires closer supervision by APRA. This involves more onsite visits, reporting requirements; independent auditors' reports and possibly raising the capital level. Organisations with the index 'mandated improvement' will need to increase their capital level and respond with a specific list of actions within 90 days to APRA. The index label of 'restructure' is the most serious form of supervisory response. APRA will advise the organisation to merge or sell the business. It will also require the organisation to protect itself from further losses such as increasing its capital level or removing a member of senior management (Australian Prudential Regulatory Authority 2013b, Coleman 2008).

PAIRS and SOARS have improved the organisational and cultural dimensions of Australian prudential regulation and supervision. From an organisational perspective, PAIRS and SOARS provided a more coherent and unified risk-based model. Although SID and DID still co-exist, there is more consistency and better resource allocation. Resources are spent more on larger, high impact firms which are under the watchful eye of DID. PAIRS and SOARS involved staff from specialist units and enabled senior management to supervise staff, thus improving the internal culture and support systems. Supervisors had to develop new skills to understand and use PAIRS and SOARS. The regulatory and supervisory style has swung from a co-operative, passive approach to a more proactive and interventionist style. Officials at APRA are there to identify risks and provide solutions, not to sit back and be nice to the regulated organisations. Since PAIRS and SOARS have been implemented, APRA became more proactive, intervened earlier and the number of onsite visits increased by 20% (Black 2004, Parliament of Australia Department of Parliamentary Services 2005). The proactive supervisory style has led APRA to using a wider interpretation of its statutory powers under section 8 of the Australian Prudential Regulatory Authority Act 1998. In the HIH Royal Commission report, APRA submitted that it felt that it could only use its formal legal powers

unless an organisation is on the verge of financial failure. Since PAIRS and SOARS have been used, APRA has adopted a more robust and wider interpretation of statutes. A senior official of APRA said: 'You could have a literal reading of the legislation that says unless it's more likely than not that an institution will not be able to pay beneficiaries we can't intervene, but that would be ridiculous—it's the ultimate in javelin catching. We've moved from a 50-50 risk of failure to a 97%. I cannot really see someone taking us to court as to whether there has been a 50-50 risk or whether it can be lower' (Black 2004). It has acted as a sword to a broader style of interpreting the law. Finally, the risk-based model of PAIRS and SOARS provide a useful shield to the criticisms against APRA for rogue trading in National Australia Bank in 2004. This incident led to a loss of around \$360 million Australian dollars. APRA was able to defend its position by explaining that it used a consistent, logical risk-based model in deciding which organisations are high risks and therefore more resources were allocated to such organisations.

6.5 APRA's Framework for Prudential Supervision

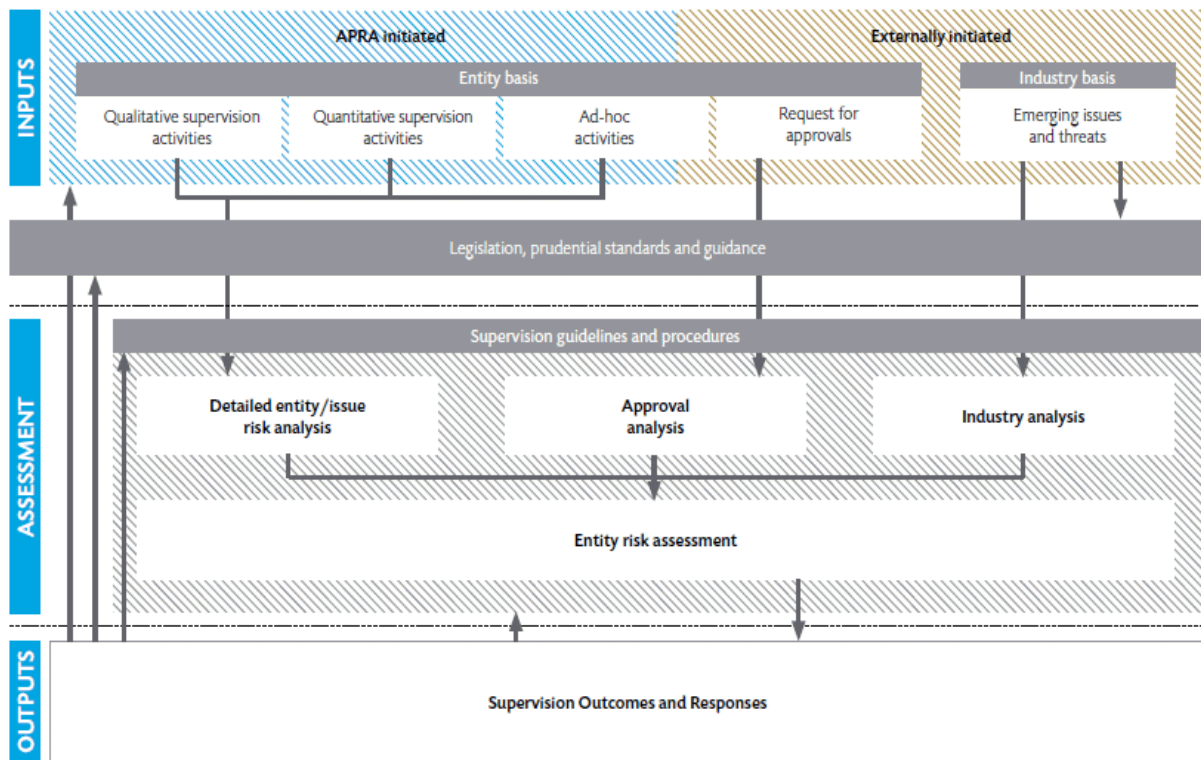
Having examined the Australian risk-based model at a micro level, it is appropriate to analyse the wider Australian prudential supervisory framework at a macro level. APRA's mission is to 'establish and enforce prudential standards and practices designed to ensure that, under all reasonable circumstances, financial promises made by the institutions APRA supervises are met within a stable, efficient and competitive financial system' (Australian Prudential Regulatory Authority 2013b). This mission statement underpins the principle that the boards of directors of the regulated organisations are ultimately responsible for their financial failures. APRA uses a risk-based, principles-based and outcomes-focussed style of regulation. Such a combination means that APRA can allocate resources effectively to high risks organisations and concentrate on the end results and tailored outcomes rather than the processes used. The unique regulatory style is an affirmation of APRA's values. APRA's Framework for Prudential Supervision contains five important values: foresight, accountability, collaboration, integrity and professionalism (Australian Prudential Regulatory Authority 2013b). In pursuing these values, APRA is committed to provide consistent, high-quality supervision in a fair and balanced manner.

There are three principal stages of prudential supervision in Australia. They are: licensing, ongoing supervision and enforcement (Australian Prudential Regulatory Authority 2013b).

The first stage of licensing ensures that potential organisations can meet the prudential standards as well as having the ability to operate in Australia. Licensing is a robust process where APRA's supervisory and risk specialists review applications from potential organisations. APRA tries to achieve consistency in its licensing process by setting up a cross-divisional licensing committee. Ongoing supervision takes up most of APRA's time because APRA monitors the regulated organisations in the long-term to ensure that they are financially viable. PAIRS and SOARS provide APRA with a good set of risk analysis and supervisory response. As soon as APRA identifies the risks, it will act and provide appropriate supervisory solutions. APRA only uses enforcement measures when a regulated organisation encounters serious financial problems. If APRA issues an enforcement measure, the regulated organisation will either try to carry on trading under the ongoing supervision of APRA or if the financial problems are too grave, then APRA will supervise the winding-up of the regulated organisation (Coleman 2008).

APRA's framework for prudential supervision is guided by three principles: flexibility; efficiency and effectiveness. APRA as the financial regulator has to adapt to changes in financial services and technology, so flexibility is important to the survival and reputation of the regulator. Flexibility is often combined with consistency when APRA decides whether it gives its approval to certain activities to be carried out by the regulated organisations. In addition, diagram 8 shows that APRA will construe legislation, prudential standards and guidance when conducting a risk assessment of the supervised organisation. APRA can make structural or prudential approvals. Structural changes can arise through a merger, a sale of business or internal restructuring. Structural changes can affect the staffing and the future financial viability of the business. Prudential approvals are given by APRA to supervised organisations in areas such as capital adequacy and operational risks.

Diagram 8: APRA’s Framework for Prudential Supervision (2013)



The principle of efficiency is to avoid any overlaps, which was a problem for DID and SID within the APRA initially when there was no common language or consistent risk-based supervisory framework. Efficiency is one of the key words mentioned in APRA’s mission statement. It fits in with APRA’s regulatory style based on risks, principles and outcomes because high risks organisations are given more resources and supervision so that risks are better managed and contained. APRA’s supervisory style and framework received positive feedback in the APRA Stakeholder Survey 2013. The survey was distributed to 312 regulated organisations and contains 45 rated items. Respondents had to give a rating of 1-5, where 1 means ‘strongly disagree’ and 5 means ‘strongly agree’. The response rate was 57.4% (Australian Prudential Regulatory Authority 2013a). From the survey, 24/40 items had 75% or more positive responses. Diagram 9 shows that the best scores were given to staff’s attitude at APRA; the single supervisory team for group companies; communication methods; prudential framework and enforcement of prudential requirements. These high scores confirm that APRA has addressed the weaknesses of structure, staff, resources and prudential regulation highlighted in the HIH Royal Commission Report and the Palmer Report. It is encouraging to see that the APRA framework for prudential supervision is considered as effective in achieving its mission.

Diagram 9: Strengths of APRA

Source: APRA Stakeholder Survey 2013

*Scale legend: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree; while * items used a 5 point never-always scale*

HIGHEST SCORING ITEMS	MEAN
APRA staff demonstrate the value of integrity*	4.5
APRA staff demonstrate the value of professionalism*	4.4
A single supervisory team responsible for all group companies is an appropriate way to supervise groups	4.3
APRA's guidance material (including PPGs, letters and FAQs) is of value to your organisation	4.3
APRA is effective in communicating the findings of supervisory visits to your organisation	4.2
APRA's prudential framework is effective in achieving APRA's mission	4.2
APRA staff demonstrate the value of collaboration	4.2
APRA's enforcement of its prudential requirements has had an impact on your industry	4.2
The APRA supervisory team responsible for your organisation has a good understanding of your organisation	4.2

Diagram 10: Weaknesses of APRA

Source: APRA Stakeholder Survey 2013

LOWEST SCORING ITEMS	MEAN
APRA meets its stated approach of being consistent in its supervision	3.7
APRA's harmonisation of the prudential framework across its regulated industries is important for your organisation	3.7
APRA considers issues relevant to industry and other stakeholders when developing its prudential standards and guidance material	3.7
The instructions to APRA's statistical forms are helpful	3.7
The effort required of your organisation during APRA's prudential reviews is appropriate	3.6
Prudential standards and guidance material clearly communicate requirements	3.6
D2A is easy to use when lodging data with APRA	3.6
During supervisory visits to your organisation, APRA supervisors focus on principles rather than detailed prescription	3.6
APRA has successfully harmonised its prudential framework across the industries it regulates	3.4
Changes to APRA's prudential framework consider the costs of regulation imposed on industry	2.6

Conversely, weaknesses of the APRA are highlighted in diagram 10. The main weaknesses are first, the lack of consistency in supervision. Consistency is important to achieve effective enforcement. Secondly, the respondents did not think that there was successful harmonisation of the prudential framework across the regulated industries. Finally, the cost of regulating the industry seems to have been neglected by APRA. This does not pursue the principle of efficiency or the APRA's regulatory style based on risks, principles and outcomes. With regards to the APRA prudential framework, the respondents in general, believed that PAIRS provided a good reflection of their organisation's risk profile. This criterion achieved a mean average of 3.8. With supervision, the respondents provided good scores for the risk-based and forward-looking supervisory approach. However, some respondents felt that APRA was more prescriptive than relying on principles in their supervision. A comparison between the results of 2011 and 2013 illustrate that APRA should focus on the following areas: improvements to a single supervisory team for group companies; more on principles than on prescription; better harmonisation of prudential standards across the regulated industries and be cost-effective (Australian Prudential Regulatory Authority 2013a). Diagram 11 illustrates these points:

Diagram 11: Comparison of APRA stakeholder results between 2011 and 2013

Source: APRA Stakeholder Survey (2013)

2013-2011 - SIGNIFICANTLY DIFFERENT ITEMS	2011 n=369	2013 n=312
A single supervisory team responsible for all group companies is an appropriate way to supervise groups	4.6	4.3
APRA is effective in communicating the findings of supervisory visits to your organisation	4.1	4.2
APRA is effective in identifying risks across your industry in general	3.9	4.1
APRA's reports of prudential reviews provided to your organisation have the appropriate level of detail	4.0	4.1
APRA provides sufficient opportunity for consultation with industry about proposed changes to prudential standards and guidance material	3.9	4.0
APRA is effective in identifying risks and problems in that part of your organisation that APRA regulates	3.8	4.0
APRA meets its stated approach of being consultative in its supervision	3.9	4.0
During supervisory visits to your organisation, APRA supervisors focus on major risks or controls	3.9	4.0
APRA's consultation packages are readily comprehensible and create a good base for consultation for industry	3.8	3.9
APRA's prudential standards are based on principles rather than detailed prescription	3.9	3.8
APRA's PAIRS rating reflects your organisation's view of its risk profile	3.6	3.8
APRA's harmonisation of the prudential framework across its regulated industries is important for your organisation	4.2	3.7
APRA meets its stated approach of being consistent in its supervision	3.6	3.7
The instructions to APRA's statistical forms are helpful	3.6	3.7
APRA has successfully harmonised its prudential framework across the industries it regulates	2.8	3.4
Changes to APRA's prudential framework consider the costs of regulation imposed on industry	2.8	2.6

Overall, it is submitted that APRA has made significant improvements to its regulatory and supervisory structure as well as framework. The generally positive results from the APRA Stakeholder Survey 2013 confirms that APRA is doing its job and is well-received by the regulated organisations. APRA is able to identify risks and its PAIRS model has been identified as generally accurate. APRA's supervisory responses are well supported by its single supervisory team, although APRA can focus more on principles than prescription. The eternal conundrum of balancing costs with effective regulation and supervision remains to be solved by APRA. Many respondents mentioned that the implementation of Basel III created

additional costs on banks to comply with such regulation (Australian Prudential Regulatory Authority 2013a). Banks argue that increasing capital levels also add to additional compliance costs. However, Admati *et al* submits that bank equity is not expensive. This is because banks, which are better capitalised, have fewer incentives to take excessive risks and are less affected by distortions created by ‘debt overhang’ (Admati et al. 2010). ‘Debt overhang’ refers to the condition that banks have so much debt that they have to decline further debt even though it may be profitable enough to decrease its overall indebtedness. Admati *et al* (2010) also argued that ‘better capitalised banks suffer fewer distortions in lending decisions and would perform better’. Yet, looking at the UK banking scene of 2013 provides some clues of the impact of regulation. Increasing the amount of liquidity and capital of banks make lending to business more expensive, since banks have to increase the amount of assets to hold against the loans. This is particularly difficult for smaller banks, where the Co-operative Bank had to stop lending to businesses and Nationwide are delaying business lending until 2016 (Ahmed 2013) It has been suggested that to reduce lending costs, banks should increase contestability and search for alternative financing models (Ahmed 2013). Contestability involves measures such as making it easier for customers to change accounts whilst alternative funding models include peer-to-peer lending. This will be analysed in greater detail in Chapter seven.

6.6 Divergence or convergence between the UK and Australian prudential supervisory models?

It is argued that there is gradual convergence between the UK and Australian prudential supervisory models although there are still some differences between the two models. Under the UK twin-peaks model, the PRA is responsible for micro-prudential regulation and supervision of financial organisations. It derives its responsibilities and powers from section 2 of the FSMA 2000. The Financial Services Act 2010 inserted a new regulatory objective of financial stability as section 2(2)(a)(b) FSMA 2000. European legislation such as the Capital Requirements Directive (Council Directive 2006/48/EC), the Financial Conglomerates Directive (Council Directive 2002/87/EC), the Markets in Financial Instruments Directive (Council Directive 2004/39/EC) and the Deposit Guarantee Schemes Directive (1994/21/EC) also provide powers to the PRA. As mentioned in the introduction, in pursuing a function, the PRA must consider its objectives and principles as well. Under section 2(1) of the FSMA

2000, the FSA has a number of general functions which are subject to regulatory objectives. The functions of the FSA include making rules, preparing and issuing codes, give general guidance and determine general policy and principles by reference to its functions (section 2(4) FSMA 2000).

Underpinning these functions are the regulatory objectives of: market confidence; public awareness (which was later moved by the Financial Services Act 2010 from an objective to section 2(3)(h) as a principle); consumer protection and reduction of financial crime (section 2(2) FSMA 2000). The Financial Services Act 2010 inserted a new regulatory objective of financial stability as section 2(2)(a)(b) FSMA 2000. Finally, in discharging its objectives and functions, the PRA must pay attention to the principles stated in section 2(3) such as using its resources in the most efficient way; facilitating financial innovation and competition. Although both the Australian and UK statutes highlight the importance of financial stability, Australian legislation is simpler.

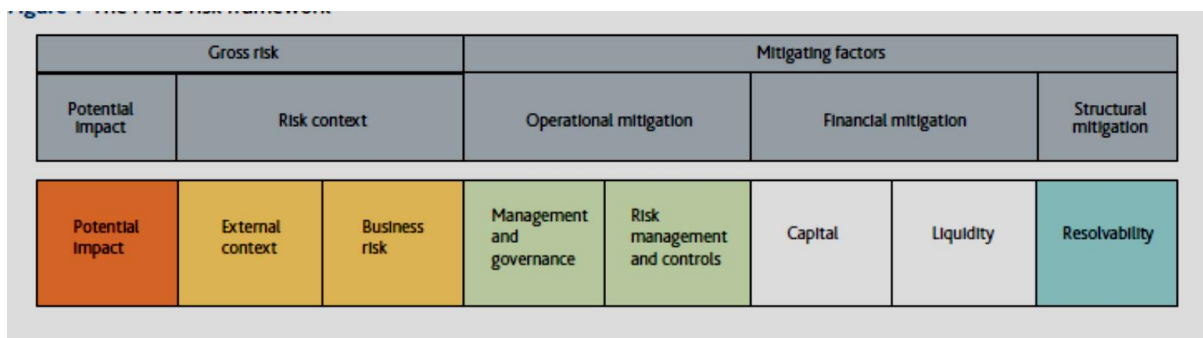
Both regulators reject a ‘zero-failure’ regulatory policy. The PRA shares the APRA’s opinion that it is impossible to prevent all bank failures. Therefore, with the Special Resolution Regime contained in the Banking Act 2009 (Campbell et al. 2009), the PRA’s role is to minimise the systemic effect of any bank failure. Further, there are costs attached to clearing up a bank failure. The PRA believes that all firms should have a minimum level of resilience against failure (Bank of England 2013b). Early intervention by the PRA should prevent potential problems aggravating. Threshold conditions are designed to impose minimum requirements for all firms before they can carry out regulatory activities. The threshold conditions include requirements on the legal status of the organisations; business conduct and effective supervision.

The PRA’s supervisory style is based on judgement; risks; forward-looking and early intervention. This is very similar to APRA’s. PRA’s risk assessment framework and its supervisory responses based on the Proactive Intervention Framework deserve closer analysis. PRA adopts a forward-looking approach, taking into account three factors: the likelihood of firm failure, the impact of firm failure on the stability of the system, and the possibility of an orderly resolution. Diagram 12 shows the factors taken into account when assessing gross risks. First, the PRA considers the potential impact of firm failure on the overall economy both whilst the firm is trading and when it fails. External risks and factors surrounding a firm are also taken into account. Since the Financial Policy Committee and the

Bank of England are responsible for macro-prudential regulation, their views on external risks will be consulted. Business risks are assessed at the level of the sector or of the firm, as appropriate, taking into account peer analysis (Allen & Overy 2013). A firm’s risk profile may be mitigated by factors such as governance measures, internal controls; financial strengths in capital and liquidity and an orderly resolution of the firm.

Diagram 12: Prudential Regulatory Authority’s Risk Assessment Framework

Source: Bank of England (2013)



The PRA’s supervisory approach is set out in the Proactive Intervention Framework. The PRA aims to intervene early when an organisation is financially in trouble. It forms its own judgement regarding a suitable supervisory response based on which stage an organisation is in. The Proactive Intervention Framework has five stages. Stage 1 is a low risk and a suitable response would be the usual supervisory risk assessments. As the stages increase, the corresponding supervisory actions increase in intensity. At stage 4, there is an imminent risk to the financial viability of an organisation. The PRA believes that such an organisation is unlikely to meet the Threshold Conditions. Suitable responses include increasing capital and liquidity levels, as well as an asset disposal. Organisations at stage five will be wound up. One significant difference between the UK and Australian supervisory frameworks is that plans for resolving an organisation is possible as early as stage 1 in the UK. This emphasises the importance of early intervention in the UK supervisory framework. The Australian SOARS approach does not accommodate this. It also has four stages instead of five.

The PRA realised from the failures of the FSA that staffing is vital to the success of an organisation. Therefore, the PRA has recruited more staff and placed more staff on frontline supervision. Senior staff are supervising high risk organisations, thus reflecting its principle

of minimising the effect of financial failures. There is convergence in relation to staffing and resources for both regulators.

Setting policies is one of PRA's powers within its regulatory framework. It publishes policies in line with its objectives so that senior management at regulated organisations can use them as guidance. As financial safety is the overriding principle of the PRA, regulated organisations are expected to follow the PRA's policy and guidance. In practice, this power of setting of policies and the vertical integration of regulators at European level means that it is unlikely that the PRA will exercise its powers to set policies very often. A great deal of policy is coded at European level already. Therefore, the fact that APRA does not have wide policy setting powers might not make a real difference in practice.

Since the twin-peaks model has only been implemented for approximately nine months at the time of writing, there is no PRA survey available on its regulatory and supervisory performances. However, BDO and DLA Piper conducted a survey in mid 2012 amongst 350 executive directors in the financial industry. The survey asked for their concerns and priorities in relation to the 'twin-peaks' model. 79% of the respondents believe that the 'twin-peaks' model will improve the effectiveness of the UK regulatory system (BDO and DLA Piper 2012) This is positive news but the respondents are concerned about certain issues once the 'twin-peaks' model has been implemented. The results revealed that the top concerns of respondents are: consumer protection; existing legislation; clarity of objectives and overlaps as well as increased costs. This is understandable when changes occur and therefore the PRA and FCA should ensure that they provide clear and helpful guidance to the regulated organisations during the first 12-24 months of the new regulatory regime. Amongst banks and building societies, 98% of respondents are concerned about increased competition in the industry due to the Vickers' Report on retail ring-fencing. 96% of respondents are worried by the increased focus by the PRA/FCA on a firm's culture (BDO and DLA Piper 2012). Finally, 88% of respondents in the banking industry are concerned by the PRA's use of judgement-based regulation. These survey results are interesting in shaping the PRA's regulatory and supervisory style.

6.7 Conclusion

This chapter examined the development of legislation on Australian prudential regulation, where the author analysed the Australian risk-based style and methodology, PAIRS, and supervisory model, SOARS. This was then compared to the UK's prudential supervisory framework. The author then focused on APRA's risk framework and reviewed APRA's stakeholder survey 2013. There are clear indications that the UK's PRA is following the Australian's supervisory style based on risks, judgement and principles. However, there are differences within the two regulatory systems. The UK legislative framework is more complex than the Australian framework. Further, the PRA has policy setting powers although the vertical integration of financial regulation at European level may suggest that the PRA is unlikely to exercise this power very often. APRA on the other hand, does not have such wide policy setting powers. The risk frameworks between the two countries are similar, although the author submits that the UK Risk Assessment Framework takes more mitigating factors into account. Its Proactive Intervention Framework has five stages and early intervention is clearly a priority for the PRA, since it can start planning for resolution of an organisation even at stage 1. This is in contrast to the Australian SOARS methodology, where there are only four stages and resolution of an organisation takes place in the later stages. Nevertheless, both countries believe that bank failures will happen in a market economy and therefore a 'zero-failure' policy is not adopted. Rather, APRA and PRA are concerned with minimising the potential impact and systemic risks of a bank failure. Financial stability, safety and soundness of the banking industry are both statutory objectives of the two regulators. The APRA Stakeholder Survey 2013 and the UK survey conducted by BDO and DLA Piper in 2012 regarding the concerns of respondents when the 'twin-peaks' model is implemented are interesting. Key lessons from APRA's regulatory and supervisory approach include improving consistency in its supervision; focus more on principles than on prescription and reduce regulatory costs. Areas of potential issues raised by the implementation of the 'twin-peaks' model include increased competition in the financial industry; increased focus on the culture of a firm; increased regulatory costs; potential overlaps in regulation, protecting consumers and reducing the complexity of legislation. The next chapter will examine the lessons from Australia's experience of the 'twin-peaks' model.

Chapter Seven

Financial stability requires hedgehogs and foxes

7.1 Introduction

Archilochus first introduced the Greek proverb of ‘the fox knows many things but the hedgehog knows one big thing’ (πόλλ' οἶδ' ἀλώπηξ, ἀλλ' ἐχῖνος ἓν μέγα). Berlin wrote a philosophical essay entitled ‘The Hedgehog and the Fox’. The author first encountered Archilochus’s proverb in intellectual property law, where Lord Hoffman in *Designers Guild v Russell Williams* [2001] 1 All ER 700 said that: ‘Originality, in the sense of contribution of the author’s skill and labour, tends to lie in the detail with which the basic idea is presented. Copyright protects foxes than hedgehogs.’ It endorses the legal principle that copyright protects expressions of ideas and not ideas. Archilochus’s proverb has since been interpreted by the legal scholar Dworkin, where he has written a book called *Justice for Hedgehogs* in 2011. In financial regulation, the author believes that this proverb is suitable and applicable. Haldane and Madouros (2012) opined that: ‘historically, financial supervision has been long foxes and short hedgehogs’. Haldane’s metaphor refers to the fact that a crisis cycle lasts longer than the usual experiences of risk managers and bank supervisors. Therefore, foxes refer to the crisis cycle and hedgehogs refer to the expertise of relevant staff. It is therefore important to have experienced staff to supervise well and detect problems early.

Drawing upon the Australian experience of the ‘twin-peaks’ model, the author will submit in this chapter that first, both hedgehogs and foxes are needed for the regulatory approach and structure of the United Kingdom (UK) ‘twin-peaks’ model. Regulating finance is a complex matter. This is particularly the case with UK banks where the reliance on securitisation and complex products is heavier than in Australia. The functional approach to banking regulation was used by the Financial Services Authority (FSA) in regulating financial institutions in the UK. The single regulatory structure was argued to be better suited to deal with ‘functional despecialisation’ of financial products (Abrams and Taylor 2000, Borio and Filosa 1994). Conversely, Australia adopted an institutional approach to financial regulation due to its reliance on deposits. The ‘twin-peaks’ model has worked well in Australia since 1998 despite some initial teething problems. With the new ‘twin-peaks’ model in the UK, there are two problems. First, the new institutional regulatory approach of the UK ‘twin-peaks’ model is unsuitable for the funding model of UK banks. Either UK banks change their funding models

and rely more on intermediation than securitisation or the ‘twin-peaks’ model has to change. Secondly, there is a danger that the Bank of England, which is responsible for macro-prudential regulation alongside the Financial Policy Committee (FPC), may become too powerful. The introduction of judgement-based supervision might also provide the Bank of England with too much power. The author will show that the structure of the Bank of England, FPC and PRA is similar to the German regulatory model. The UK ‘twin-peaks’ model is thus a hybrid of the Australian ‘twin-peaks’ model and the German regulatory model. Further, the issue of regulatory capture will be discussed. To avoid total dominance by the Bank of England, there needs to be open and clear communication between the Bank of England, the Prudential Regulatory Authority (PRA), Financial Conduct Authority (FCA), HM Treasury and the general public. Good information flow (foxes in the guise of details) is crucial to maintain a strong regulatory model. Legislation is also a good way to reduce the exercise of judgement by the regulator through prescriptive measures.

7.2 Hedgehogs and foxes for financial regulation

7.2.1 Institutional approach to financial regulation and the UK ‘twin-peaks’ model

It is submitted that there is currently a mismatch between the financial regulatory approach and the regulatory structure of the ‘twin-peaks’ model in the UK. The functional approach to banking regulation was used by the FSA in regulating financial institutions in the UK due to the reliance on securitisation by UK banks. The single regulatory structure was argued to be better suited to deal with ‘functional despecialisation’ of financial products (Abrams and Taylor 2000, Borio and Filosa 1994). As ‘functional despecialisation’ of financial products became more popular in the 1990s, the question was whether the Central Bank has the competence to supervise ‘shadow banks’ as well as commercial banks or transfer supervisory authority to the FSA. Prior to the financial crisis of 2007-2009, the latter was preferred as Central Banks had little experience in dealing with ‘shadow banks’ and increased emphasis on consolidated supervision (Eichengreen and Dincer 2011). Australia adopted an institutional approach to financial regulation due to its reliance on deposits. The institutional regulatory approach of the ‘twin-peaks’ model is unsuitable for the funding model of UK banks. Either UK banks change their funding models and rely more on intermediation than securitisation or the ‘twin-peaks’ model has to change. As seen in chapter four, less than 10% of bank funding was from securitisation between 2006-2010 (RBA, 2010). Australian banks

had a more conservative and controlled approach to banking because risks were better monitored. Furthermore, only 18% of Australia's housing loans were securitised (International Monetary Fund 2008), so Australian banks suffered less direct losses.

The new UK 'twin-peaks' model adopts an institutional approach and splits micro-prudential regulation into deposit-takers, insurers and major investments firms on the one hand and other financial services on the other. The PRA is responsible for the former group and the FCA is responsible for the latter group. The FCA however, is also responsible for conduct regulation. Pauli (2000) argues that it makes sense to have two separate regulatory organisations to deal with prudential regulation and consumer protection since these two regulatory purposes are so different. Yet, the adoption of an institutional approach is unsuitable for the UK since the boundary between commercial and 'shadow' banks remains blurred. 'Shadow' banking relies primarily on structured finance and securitisation is the principal method of structured finance (Schwarcz 2011). Northern Rock is an example where a former building society changed its business model and relied increasingly on securitisation. Securitisation allows banks to sell loans (including corporate loans) in the secondary loan market. Securitisation gives greater liquidity; more borrowing capacity and ability to transfer risks to ultimate investors. It also allowed banks to circumvent banking regulations such as Basel II Accord on capital requirements (Acharya et al. 2009). Northern Rock obtained 40% of its funding from a Structured Investment Vehicle called Granite, which had £50 billion worth of mortgages (Milne and Wood 2008). Mortgages are considered by the Basel II Accord as low risk assets. Granite was an off-shore vehicle based in the Channel Islands and is thus unregulated for capital purposes (Hansard 2008). Northern Rock was thus under the radar for 40% of its funding. Given that London is one of the world's major financial centres (Nachum 2003, Short et al. 1996), it is unlikely that it will permanently change its funding profile to more reliance on intermediation as this will reduce its ability to make profits. Goodhart provides an interesting insight into regulatory approaches. He reinforces the advantage of the 'twin-peaks' framework in that it provides 'clarity and responsibility' (Goodhart 2002). According to Goodhart, systemic stability requires mainly macro-style (top-down) approach of regulation, with some micro-prudential (bottom-up) whilst consumer protection is mainly micro-prudential regulation. Having the Central Bank which has top-down expertise and a regulator which has bottom-up experience will complement each other (Goodhart 2002). By having the FPC within the Bank of England, 'the government is ensuring that stability does not fall by the wayside, into the gap

between monetary policy at one end of the spectrum and the regulation of firms at the other' (Tucker 2011). In his view, financial stability can be achieved through focusing on macro and micro-prudential regulatory purposes rather than an institutional approach.

The European regulatory structure endorses the institutional regulatory approach. Since 1 January 2011, the European financial supervisory framework came into force. The key features of the reform are the creation of a European Systemic Risk Board ('ESRB') and three European Supervisory Authorities ('ESAs'), the European Banking Authority ('EBA'), the European Securities and Markets Authority ('ESMA') and the European Insurance and Occupational Pensions Authority ('EIOPA'). The ESRB is in charge of macro-prudential supervision. The ESRB is chaired by the European Central Bank (ECB) president and supported by the ECB. The ECB has been given a major macro-prudential regulatory role (Cukierman 2011). The European regulatory changes call for more vertical regulatory co-operation between the national and European regulatory bodies. The FPC in the UK will work with the ESRB on macro-prudential regulation. The Bank of England and PRA report to the ESRB and ESFS. Thus, it is apparent that the European regulatory approach is one of institutional rather than functional. PRA and FCA will have to adapt to the institutional approach of regulation by ensuring that they have adequate and experienced staff to supervise the different institutions. A potential solution is for the FPC to issue directions and guidance to both the PRA and FCA on changing their regulatory style from a functional approach prior to the financial crisis of 2007-2009 to an institutional approach. Hedgehogs and foxes are thus required in both PRA and FCA.

7.2.2 Is the Bank of England the new single 'super-regulator'?

Academics suggested that the single regulatory structure in the UK was deceptive (Pan 2009, Taylor 2009b). Michael Taylor is the leading expert on the 'twin-peaks' model. He has revisited the 'twin-peaks' model since the financial crisis. Taylor is of the view that the simplicity of the single regulator was deceptive and that the equal parity of the FSA and the Bank of England was problematic (Taylor 2009a). HM Treasury had to step in and acted as a lynch-pin between the three organisations. The FSMA has a number of regulatory objectives namely market confidence; public awareness (which was later moved by the Financial Services Act 2010 from an objective to section 2(3)(h) as a principle); consumer protection and reduction of financial crime (section 2(2) FSMA 2000). The Financial Services Act 2010

inserted a new regulatory objective of financial stability as section 2(2)(a)(b) FSMA 2000. The FSA tried to pack too many objectives and functions into one agency (Taylor 2009b). Taylor submits that it is important not to ‘introduce too much neatness and tidiness into regulatory structures’. Hedgehogs and foxes are both needed in the UK ‘twin-peaks model’. The move to a ‘twin-peaks’ model in the UK is an attempt to improve prudential regulation. Yet, the ‘twin-peaks’ model in the UK as set out in the more complicated than the ‘twin-peaks’ model in Australia. Diagram 13 illustrates the structure of the Australian ‘twin-peaks’ model and diagram 14 below shows the structure of the new UK ‘twin-peaks’ model.

Diagram 13: Structure of the Australian ‘twin-peaks’ model

Source: Group of Thirty (2008)

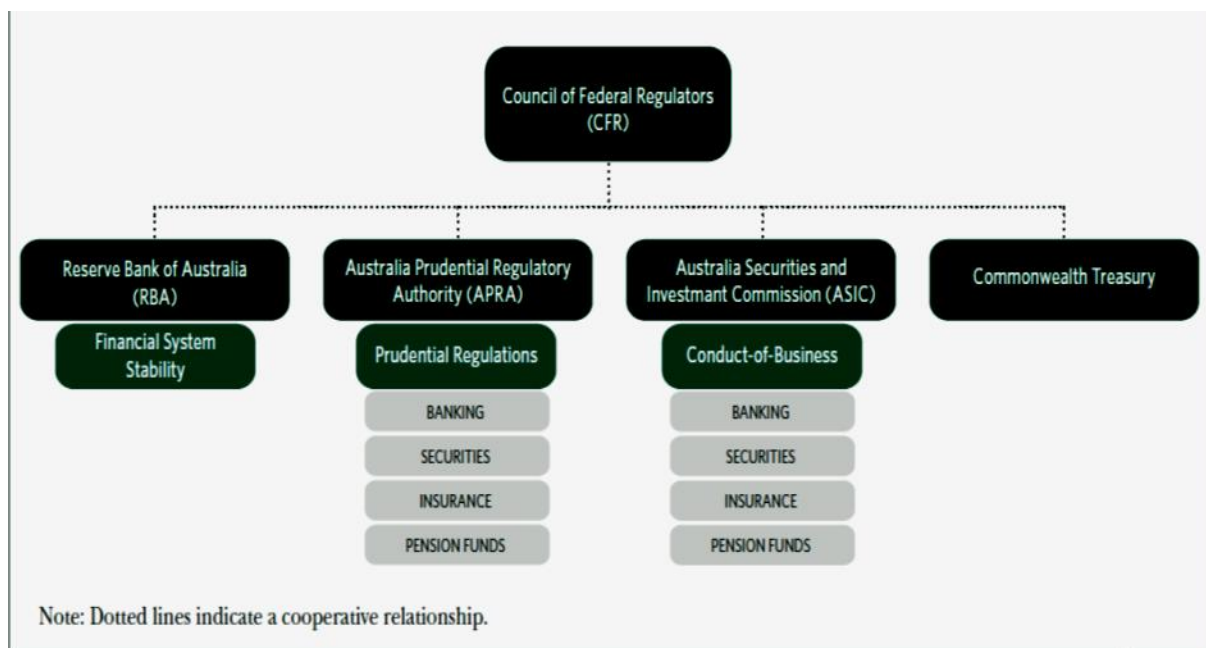
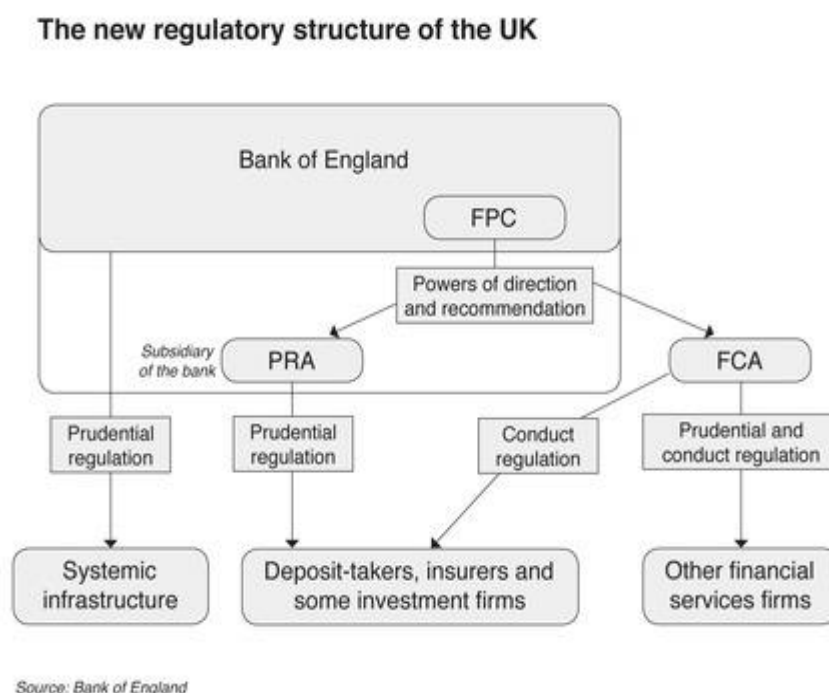


Diagram 14: Structure of the UK ‘twin-peaks’ model

Source: The Bank of England (2013)



As submitted in chapter five of the thesis, the author is of the opinion that structural differences between the FSA and the Australian Prudential Regulatory Authority (APRA) were not fundamental to regulatory and supervisory failures of both regulators, the former in relation to the financial crisis of 2007-2009 and the latter in relation to the HIH Insurance Limited scandal. Rather, the regulators failed in both countries due to organisational and management weaknesses, especially at the senior management level. Pan (2009) expresses the view that: ‘a single regulator may just internalize many of the problems faced by a more fragmented regulatory system’. He was referring to co-ordination and co-operation problems within the FSA as highlighted in the failure of Northern Rock. The ‘twin-peaks’ model in the UK has several advantages. Proximity between the Bank of England and the PRA should assist with preventive measures such as the use of PRA’s Threshold Conditions and judgement-based regulatory style. The Threshold Conditions set out the absolute minimum requirements which financial institutions must meet before they can carry out regulated activities (Bank of England 2013b). The PRA uses a forward-looking, judgement-based regulatory style which aims to detect present and potential risks which might affect financial institutions. When macro and micro-prudential regulation/supervision is vested within one umbrella organisation, the PRA can in theory, react quicker to market volatility and provide

liquidity where necessary. The success of a regulator is measured by its ability to achieve its objectives. Communication and co-operation between the regulatory bodies should be improved under the 'twin-peaks model' since there are extensive provisions in Part 2 section 3 of the Financial Services Act 2012 governing this area. The sections set out the boundaries of each regulatory body and when the PRA can require the FCA to refrain from acting.

However, there are concerns that the Bank of England is too powerful under the new regulatory structure and will become a single super-regulator (Scott 2010, Ferran 2011). Interestingly, the FSA had more powers than the powers given to any single Australian financial regulatory body (Primikiris 2004). It performed functions equivalent to three out of four regulatory agencies in Australia. The new UK regulatory framework, as shown above in diagram 14, reveals power concentration in the Bank of England. It is apparent that the FPC, which is part of the Bank of England, can recommend and give directions to the PRA and the FCA so that its objectives of reducing systemic risks and supporting the government's economy policy are pursued. The relationship of the Bank of England, PRA and FPC is close. This is demonstrated by the fact that the Chief Executive Officer of the PRA is also a member of the FPC and a Deputy Governor of the Bank of England. The fact that the FPC can direct both PRA and the FCA is worrying. This is because the main principle of the 'twin-peaks' model is to separate prudential regulation from consumer protection, where the regulatory strategy is different.

With prudential regulation, the regulator relies upon a co-operative relationship with the financial institutions whereas the regulator responsible for consumer protection is more adversarial since it protects consumers from financial institutions (Taylor 1995). Therefore, when the Bank of England has powers over both the PRA and FCA, it would seem that there is a conflict with regards to the supervisory strategy. Ferran (2011) submits that the government sent out mixed messages regarding macro and micro-prudential regulation in the 'twin-peaks' model. On the one hand, whilst the government said that the PRA has 'operational independence for the day-to-day regulation and supervision of firms' (HM Treasury 2010) and micro-prudential regulation is the FPC's responsibility, macro- and micro-prudential regulation is located 'in a *single* institution' (Ferran 2011). FPC's oversight is going to blur the boundaries of the PRA/FPC further. In Australia, discussions were held as to whether APRA should come under the control of the Reserve Bank of Australia but this was rejected (Financial System Inquiry 1997). APRA is thus totally independent of its Central Bank. Indications from the UK so far suggest that although the UK are keen on the

autonomy of the prudential regulator, the UK government has no plans to adopt APRA's independence (Ferran 2011).

There are advantages and disadvantages of putting the roles of prudential regulation and monetary policy within the Bank of England. Advantages include the Central Bank can synergise information and provide better focus on reducing systemic risks (Ferran 2011). Goodhart (2002) argues that 'micro-level supervisory information may be a valuable input into macro-level monetary decisions, certainly during periods of financial instability'. Peek et al (1999) submit that deciding on monetary policy issues is more efficient due to better information. Another advantage of the combining prudential regulation with monetary policy in the Bank of England is its capacity as lender of last resort. The new emphasis on financial stability in section 2(2)(a)(b) of the Financial Services Act 2010 lends weight to the argument that the Bank of England, as the lender of last resort, should have increased powers for financial stability. Bernanke (2011) supports the creation of the FPC within the Bank of England, the creation of the ESRB in Europe and the revamped Federal Reserve, where its focus on systemic stability has been broadened. It has been given new responsibilities for financial stability, including supervisory authority over nonbank financial institutions. The Bank of England can only provide liquidity assistance in times of crises if it has the relevant information. As Eichengreen and Dincer (2011) explain: 'the Central Bank is the ultimate guarantor of financial stability, and it cannot make good on that guarantee in the absence of the kind of information that can only be obtained through hands-on supervision'. Blinder (2010) argues that the central bank should be the macro-prudential regulator because maintaining financial stability links well with the aims of monetary policy and lender-of-last resort. Empirical research from Cihak and Podpiera (2008) reveal that banking supervision under the 'twin-peaks' model produces better quality of supervision, even after adjusting for cross-country differences. The impact on supervisory quality in insurance and securities is not entirely different for the 'twin-peaks' model compared to other models. The 'twin-peaks' model relies on better prudential regulatory frameworks and practices (Čihák and Podpiera 2008). Cihak and Podpiera's research is extensive in that they covered 84 countries between the period of 2000-2005.

A disadvantage of combining prudential regulation with monetary policy within the Bank of England is that potential conflicts of interest can arise between policy independence and prudential supervision (Ferran 2011, Goodhart 2002) For example, the Central Bank may be reluctant to control inflation when it is concerned that higher interest rates may lead to bank

failures (Čihák and Podpiera 2008). Potential conflicts of interest can lead to underinvestment in time for monetary policy since supervision is a time-consuming and thankless task (Goodhart 2002). The Central Bank will find it easier to gain credibility through implementing monetary policy than supervision since banking supervision is mainly about prevention of financial crisis. Regulators will only be mentioned in the press for supervisory failures. Therefore, 'if an independent Central Bank feels the need to achieve credibility and a good reputation, then being yoked with simultaneous credibility for banking supervision may not be advisable' (Goodhart 2002).

A Central Bank can be seen as a firefighter in the short-term, stepping in financial crises and providing assistance to banks in the form of liquidity, thus minimising the damage to financial stability (Cukierman 2011). Barth *et al* (2009) studied the development of non-traditional mortgages in the US between 2003-2006. They claimed that close monitoring of the loans by the Central Bank would have prevented the build-up of the sub-prime mortgage crises. They submitted that the Central Bank should work closely with the supervisory agency responsible for micro-prudential issues since financial innovations are primarily of a micro-economic nature. In light of Barth *et al's* research and the prevailing European and UK preferences for increased powers to the Central Bank, the issue now is how to prevent any potential problems due to power concentration.

7.2.3 Germanic regulatory structure of the Bank of England

The author submits that the 'twin-peaks' model in the UK is not a straightforward replica of the Australian model. The unique arrangement between the Bank of England, FPC and PRA resembles the German banking supervision model. In Germany, the German Central Bank (Deutsche Bundesbank) shares banking supervisory duties with the German Federal Financial Supervisory Authority, BaFin. According to section 6 (1) of the Banking Act 1961, BaFin is the administrative authority responsible for the supervision of institutions under the Banking Act. Section 7(1) of the Banking Act 1961 deals with the cooperation of German Central Bank and the German Federal Financial Authority (BaFin) in the banking institutions' ongoing supervision (German Federal Financial Supervisory Authority 2014). The Banking Act 1961 has been revised several times since it came into force in 1961. Section 7(1) of the Banking Act 1961 states that as part of the ongoing supervision process, the Deutsche Bundesbank have a number of responsibilities. These include analysing reports and returns

which financial institutions have submitted and assessing whether the capital and risk management procedures of banks are adequate (German Federal Financial Supervisory Authority 2014). BaFin has also issued a 'Guideline on the execution and quality assurance of the ongoing supervision of credit and financial services institutions by the Deutsche Bundesbank. BaFin's guideline is useful because it sets out clear guidance on various issues such as: functions and responsibilities of both the German Central Bank and the BaFin (section 1); co-operation between the German Central Bank and banking institutions (section 1:2); supervisory review and evaluation process instruments (section 1:3); supervisors' risk identification instruments (section 2); reporting and notification system (section 2:2) and data processing system (section 2:3).

BaFin's guideline deserves closer inspection because it is clear in setting boundaries. BaFin's guideline reflects the position that the German Central Bank has macro-prudential responsibility under section 7(1) Banking Act 1961. Section 7(2) of the Banking Act 1961 is important because the statutory intention for having BaFin's guideline to prevent overlaps and ensure there is consistency between the quality of supervision amongst the two regulatory authorities; clear division of responsibilities and good flow of information. Essentially, the German Central Bank has ongoing supervision duties and will report to the BaFin on its findings and evaluations as soon as possible. The German Central Bank has wide powers under Article 2(1) of the Banking Act 1961 to provide information to banking institutions by virtue of the Banking Act 1961 and circulars. This is an unusual power and emphasises the mutual duty of both regulator and regulatee to provide information. Further, under Article 2(1), the German Central Bank has powers to clarify with the institutions at its own discretion any discrepancies regarding the documents. It also has the right to demand information accordance to section 44(1) of the Banking Act. It is clear that the German Central Bank has considerable powers in relation to information gathering and ongoing supervision of banks. Co-operation is a key element of Article 2 and the German Central Bank supervises problem banking institutions (Article 5); institutions of systemic importance (Article 6) and institutions under intensified supervision (Article 7). These different levels of supervision reflect how risky institutions are under the Supervisory Review and Evaluation Process (SREP). SREP is defined in Article 1 of the Banking Act 1961. Article 10 then provides details of the SREP risk profile. SREP focuses on forward-looking risk assessment, taking into account current and potential risks. It also uses a risk-based supervision plan. These are similar to the UK PRA Risk Assessment Framework discussed in chapter six.

Articles 5 to 7 highlight the importance of close co-operation and co-ordination between the German central bank and BaFin in making the final assessment of the institution, especially with banks under intensified supervision. For banks which are classified as ‘problem banks’ or institutions of systemic importance under Articles 5 and 6, the BaFin has the power to ask the German Central Bank to provide more facts and carry out deeper analysis. Article 9 provides more information on further principles of co-operation. Article 19 further states that the German Central Bank and the BaFin should work closely together when conducting stress tests. These are commendable measures due to the importance attached to clear communication, co-operation and co-ordination between the regulatory bodies. Failure to do so would create overlaps and inefficient decision-making, as revealed in the FSA’s failures in dealing with Northern Rock and HBOS.

Article 3(2) of the Banking Act 1961 is fundamental in understanding the relationship between the German Central Bank and the BaFin. This Article stipulates that: ‘the final assessment and decision-making power on all supervisory measures and questions of interpretation shall rest with BaFin’. BaFin is thus the supervisory agency responsible for micro-prudential regulation. Article 8 is interesting because it introduces the concept of a BaFin risk committee. The German Central Bank is a permanent member of the BaFin risk committee without voting rights. The German Central Bank has two members on the BaFin risk committee. The risk committee meets four times a year and its rationale is to act as a lynch-pin between the two supervisory bodies on both macro and micro-prudential issues. Article 8(3) Banking Act 1961 then introduces the concept of an ongoing-supervision committee. This committee can meet at either the German Central Bank or BaFin. It is more flexible in the frequency of meeting. Although it should meet four times a year, it can meet more frequently for informal purposes between two meetings (Article 8(3)). The establishment of the risk and ongoing supervision committees aligns the two supervisory bodies with the principle of sharing information of banks.

Having examined the German legislation on banking regulation, the article by Paul *et al* (2012) provides an interesting insight into the relationship between the German Central Bank and BaFin. Paul *et al* (2012) conducted a survey in 2010 amongst 1,919 German banks. These banks include co-operative banks; savings banks, commercial banks and others. They conducted a similar survey in 2006. The survey of 2010 asked banks to rate statements from 1 (completely untrue) to 5 (completely true). Each grade of this scale was weighted with an index value, ranging from 0 points for the value of “1” to 100 points for the value of “5”. The

response rate was 20%. Paul et al's research is important because there was increased debate over the sharing of supervisory responsibilities between the German Central Bank and BaFin. Their survey in 2010 reveals that there are high scores for dialogues between the two supervisory agencies are focused, structured and concentrated on important issues. In particular, the statements 'strong co-operation with supervisors' (score of 80); 'supervisors are familiar with the individual bank' (score of 75) and 'supervisors are familiar with the individual bank's business in general' (score of 74) (Paul et al. 2012). The scores for these statements in 2006 were similarly high. Paul *et al* (2012) then asked the banks for their opinions on both the German Central Bank and BaFin. The results showed that the supervisors at the German Central Bank are more competent; act more swiftly and pragmatically than the supervisors at BaFin. The difference in the quality of the supervisors is even starker in 2010 than 2006. Paul *et al* (2012) thus cast doubt over the German Ministry's decision of keeping the current division of supervisory authorities and increasing the powers of the BaFin. In Paul *et al*'s opinion, 'the more promising strategy would be that the two authorities should not be played off against each other but represent themselves as one independent institution resisting all attempts of bank lobbyism' (Paul et al. 2012). The author agrees with this statement. Co-operation rather than an adversarial relationship should be adopted amongst the FPC and PRA.

The author is concerned about the degree of power concentration in the hands of the Bank of England. However, since the 'twin-peaks' model in the UK has only been in existence of approximately a year at the time of writing, dismantling the current FPC and PRA structure is unlikely to happen. In light of this, the author finds the risk committee and ongoing supervision committee in the German regulatory model very useful. These committees should help to reduce the possibility of overlaps of responsibilities and problem of information sharing. The Bank of England in the UK does not have such committees. The governor of the Bank of England, the Deputy Governor for Financial Stability and the Chief Executive Officer of the PRA sits on the boards of both the PRA and FPC. The PRA and the FCA are also parties to other Memorandum of Understanding with the Bank of England as a whole. The author believes that these measures are insufficient to ensure that there is healthy information exchange and co-operation between the PRA and FPC. She submits that a PRA risk committee and an ongoing supervision committee should be established, following the German regulatory structure.

7.2.4 Avoiding regulatory capture

The point about independence and avoiding bank lobbyism implied in the statement of Paul *et al* is important. ‘Regulatory capture’ is also known as the private interest approach (Stigler 1971). Regulation is perceived as a product, enhancing the power of bankers and politicians. Competing interest groups such as bankers, politicians and consumers try to influence national policies towards banks in ways that favour themselves even if these policies do not maximise social welfare. According to Mervyn King, ‘One of the major problems in regulation in the last 10 to 20 years has been that of regulatory capture. By that I do not mean people were bought off but that the sheer weight of resources, time and legal effort put in by banks to try to persuade regulators that what they were doing was compliant with the rules made life extraordinarily difficult for the regulators’ (Joint Committee on the draft Financial Services Bill 2011). Thus, the private interest approach relies heavily on the market and information disclosure. Critics of regulatory capture argue that the causal relationship in regulatory capture is unclear in analysing the performance of regulators. Just because Parliament has adopted a policy supported by a group of bankers does not necessarily imply that there is something wrong in the process (Carpenter 2010). Yet, Baxter (2011) argues that regulatory capture can be seen in the US financial industry. For example, the Office of the Comptroller of the Currency has utilised its powers to enable national banks to avoid restrictions on their activities. Further, the Securities and Exchange Commission adopted a ‘consolidated supervised entities’ policy which meant that large banks were able to increase their leverage ratios to very high levels (Baxter 2011). In the UK, evidence of regulatory capture is manifested in the FSA adopting a light-touch regulatory style with banks; the use of computer models rather than the FSA’s risk assessment framework and asking rating agencies to assess important risks as financial products became increasingly complicated (The Warwick Commission 2012, Watson 2013). Watson (2013) is of the opinion that regulatory capture and the ‘intellectual or moral failure’ to deal with risk concentration in Northern Rock and some Irish banks played a role in the financial crisis. The Warwick Commission (2012) believes that: ‘regulatory capture substantially contributed to the regulatory failure’. Boyer and Ponce (2012) opine that concentration of supervisory authority within a single supervisor such as a central bank increases the likelihood of regulatory capture where bank supervisors are likely to pursue their own self interests. This reduces the social welfare function of a central bank.

The Warwick Commission (2012) recommend two ways to reduce regulatory capture. First, macro-prudential regulation of liquidity, leverage and capital should adopt a risk-based, counter-cyclical approach, so that the regulator is strict in a bull market and more lenient in a bear market. Secondly, the host regulator should have more power than the home regulator to deal with potential issues quickly. When Icelandic banks such as Glitnir, Landsbanki and Kaupthing ran into financial trouble in 2008, the Icelandic government did not have enough financial resources to compensate UK depositors. The UK government (host country) had to step in and provide compensation to UK depositors even though the FSA only has secondary responsibility for regulating and supervising the branches of these Icelandic banks. Primary responsibility of supervision lies with the Icelandic regulator because the EU Second Banking Directive 1989, the Home State, has primary responsibility for prudential regulation of branches. Again with the collapse of Lehman Brothers International European, the UK bore the brunt of the financial disaster. Therefore, it is only logical that the host country regulator should take a leading role in regulation and supervision of cross-border banks. Article 40 of the Capital Requirements Directive should therefore be amended so that the host (not the home) supervisor has more supervisory powers. Legislative amendment in this will enhance financial stability, improve certainty and reduce bank lobbying. The author agrees with the Warwick Committee's recommendations. Basel III measures of higher and better quality capital, counter-cyclical buffer of 0-2.5%, tier 1 leverage ratio (ratio of book capital to assets) of 3% and maintenance of minimum liquidity should improve macro-prudential regulation. Tier 1 capital ratio will increase from 4% to 6% but the overall capital ratio remains at 8%. The wide discretionary powers enjoyed by the FPC in making directions and recommendations and PRA's supervisory style is based on judgement, the author is concerned about the prospect of regulatory capture, given the examples provided in the financial crisis of 2007-2009. Legislation seems to be a good way forward to reduce regulatory capture because it is prescriptive and gives less room to regulators to manoeuvre. However, Basel III does not deal with the shadow banking sector so banks can Basel III rules by relying on securitisation. Australian regulators have recently increased regulation of the shadow banking institutions. The Australian Securities and Investments Commission now grants licences and imposes certain obligations on these institutions (Australian Securities and Investments Commission 2013b). The regulatory coverage of credit products under the National Consumer Credit Code has been expanded to include investor-housing mortgages (Australian Securities and Investments Commission 2013a). The UK government needs to adopt similar measures. It is encouraging to note that on an international dimension, several

advanced economies are working towards increased regulation of hedge funds and credit rating agencies. In the UK, Mervyn King believes that the Vickers' report on retail ring-fencing is a good idea and stated that: 'I would rather the efforts and resources of the PRA be devoted to judging the risks which banks are taking on their balance sheets than a perpetual legal game of trying to define the ring fence' (Joint Committee on the draft Financial Services Bill 2011). Retail ring-fencing is considered a compromise since full subsidiarisation is too costly and operational subsidiarisation is too minimal. The Independent Commission of Banking published its final report on 12th September 2011 (Vickers 2011b). They recommended ring-fencing retail banking and a 10% equity baseline (Vickers 2011b). The government has since adopted retail ring-fencing and electrified it, this giving the regulator enforcement power. Part 1 of the Financial Services (Banking Reform) Act 2013 incorporates the 'electrification' of retail ring-fencing. Prescription in the form of legislation is thus a good way to reduce regulatory capture by the regulator, since this is not dependent on the regulator's judgement.

7.3 Recent investigations by the PRA and FCA

Effective enforcement powers, like clear objectives, sufficient resources and independence are important to the success of a regulator. It will be interesting to see the results of the separate enforcement investigations by the PRA and FCA into the near collapse of the Co-operative Group. There was a financial capital shortfall of £1.5bn in May 2013 at the Co-operative Group and the shortfall was largely a result of the acquisition of the Britannia Building Society in 2009 (Goff and Gray 2014). There are also allegations against Paul Flowers, the ex-Chairman of the Co-operative Bank of inappropriate behaviour. The FSA, now FCA, has bolstered its enforcement strategy by pursuing a 'credible deterrence' policy (Teasdale 2011, Wilson and Wilson 2014). 'Credible deterrence' relies on proactive enforcement and publicity of successful convictions, judgements and decisions (Teasdale 2011). It applies to both criminal and civil breaches by financial organisations. It is envisaged that the 'credible deterrence' policy is here to stay for two reasons. First, most of the staff from the Enforcement and Financial Crime of the FSA have moved to the FCA (Teasdale 2011). Secondly, Margaret Cole, the current head of the FCA, has experienced the tougher and more interventionist style of the FSA (Teasdale 2011, Wilson and Wilson 2014). The PRA and FCA are thus likely to maintain the 'credible deterrence' policy when carrying out

objective and independent investigations into the Co-operative Group. A recent successful example of enforcement action by the ‘twin-peaks’ model is Standard Chartered Bank. In December 2013, Standard Chartered was told by the PRA to dismiss Richard Meddings, former Group Finance Director of Standard Chartered. The PRA was worried about the potential conflict between Meddings’s duty to oversee risk operations and his responsibility in finance (Wilson 2013). The FCA also imposed a fine of £8.75m on Coutts for failing to take reasonable care to establish and maintain effective anti-money laundering systems and controls relating to high risk customers, including politically exposed persons. The interventionist, pro-active styles of both the PRA and FCA are most encouraging. It is hoped that they will adopt the same styles with regulation and supervision of UK banks. The challenge is as Ferran (2011) opines, ‘to maintain an aggressively judgmental style when economic conditions improve and political sentiment moves on’.

7.4 Conclusion

This chapter examined the regulatory approach and structure of the UK ‘twin-peaks’ model. The UK has seen a shift from the functional approach to institutional approach to financial regulation, where the PRA and FCA are divided according to the legal entities rather than financial products. This is problematic because the UK still relies more on securitisation than intermediation compared to Australia. There is thus a mismatch between regulatory approach and structure of the regulatory agencies in the UK. The current European regulatory structure adopts an institutional approach too and the European Central Bank’s powers and has been given a major macro-prudential regulatory role. The author analysed the argument that the Bank of England has too much power by comparing the Australian and UK ‘twin-peaks’ models. The latter is more complicated and there is power concentration within the Bank of England, where the FPC is part of the Bank and the PRA is a subsidiary of the Bank. Further, the FPC has powers to issue directions and recommendations to both the PRA and FCA. The sharing of supervisory responsibilities between the FPC and PRA is similar to the German Central Bank and the German Federal Financial Authority. The author then analysed the German Banking Act 1961 in detail and thinks that the establishment of a PRA risk committee and ongoing supervisory committee is a good method to increase information

exchange and co-operation between the PRA and FPC. Regulatory capture has been a problem in the UK financial industry and the author believes that legislation is a possible solution to curb the discretion and power of bankers. Prescription is helpful in that it provides certainty. Recent enforcement actions by the PRA and FCA are encouraging since their approach is more robust and pro-active.

Hedgehogs and foxes are both required to remedy the regulatory and structural weaknesses in the UK 'twin-peaks' model. On the macro level, there needs a cultural shift from a functional to institutional approach to regulation. The German concept of a risk committee within the macro-prudential regulator and an ongoing supervisory committee is a good way of sharing information, enhance communication and co-operation. Foxes are also necessary at the micro level. Legislation is a good mechanism to curb regulatory capture so the Basel III Accord and the Financial Services (Banking Reform) Act 2013 are commendable. However, there is a weakness in the Basel III Accord since it does not deal with the shadow banking sector. It is hoped that legislators will look into this as soon as possible to deal with the possibility of bankers circumventing legislation.

Chapter Eight

Conclusion

8.1 Introduction

In mid-April 2013, Christine Lagarde, Managing Director of the International Monetary Fund opined that:

“In too many cases – from the United States in 2008 to Cyprus today – we have seen what happens when a banking sector chooses the quick buck over the lasting benefit, backing a business model that ultimately destabilizes the economy. We simply cannot have pre-crisis banking in a post-crisis world. We need reform, even in the face of intense pushback from an industry sometimes reluctant to abandon lucrative lines of business.”(Lagarde in Aldrick 2013)

Lagarde’s quote highlights the importance of financial stability, more traditional borrowing and a stakeholder approach to banking. She later added:

“Especially in the periphery, many banks are still in an early stage of repair – not enough capital and too many bad loans on their books. Even outside the periphery, there is a need to shrink balance sheets, reduce reliance on wholesale funding, and improve business models.”(Lagarde in Aldrick 2013)

This thesis agrees with Lagarde’s recommendations. This thesis started from the premise that banking regulation is important for two reasons. First, its liquidity function is important for a country’s economy. Businesses and individuals need banks in daily lives. Secondly, banks run on confidence and reputation. If a bank has liquidity problems, it generates panic and potentially a bank run. This then creates a seismic effect in the economy and financial sector. In the financial crisis of 2007, it has been seen that the effect was trans-Atlantic. Thus, regulation of banks is of public interest. Banking regulation reduces the collective action problem in representing broader stakeholder interests to ensure that social costs of bank risk taking are mitigated. The Turner Report identified the macro-economic imbalances between China and the emerging Asian countries. Cheap credit was readily available and the development of securitisation enabled investors to diversify their risks in theory. In practice, highly leveraged banks retained the risks and a solvency crisis emerged.

The financial crisis of 2007-2009 revealed that the Financial Services Authority (FSA) failed to supervise banks such as Northern Rock, Bradford & Bingley and HBOS properly. The main regulatory and supervisory failures of the FSA are due to organisational and management problems. There needs to be better information flow, co-ordination, co-operation, engagement with banks and stricter internal controls. With regards to the statutory provisions on banking regulation, the FSMA 2000 is complicated, with standards and principles underpinning the FSA's statutory core objectives. The FSA's remit is too wide. It is responsible for regulating banks, deposit-taking institutions and insurance companies. With the development of complex products, increased use of securitisation and merging of financial services offered to customers, the tripartite system increasingly found it difficult to delineate their scope and responsibility. Overall, the FSA's passive, non-interventionist and laissez-faire regulatory approach led to criticisms that its measures were too late and too little.

The light-touch, laissez-faire regulatory approach led to banks essentially taking control of their own financial ratios. Christine Lagarde's second quote earlier in this chapter advocating for less reliance on wholesale funding and more conservative business models are in accord with the findings in chapter four of this thesis. In comparison to the big four Australian banks, the thesis revealed that the big four UK banks had on average, higher cash ratio, higher leverage ratio, higher loan to deposit ratio, higher capital ratio, lower asset quality, lower ROA but higher ROE than the big four Australian banks. Interestingly, the core 1 capital ratio was slightly higher amongst UK banks than Australian banks although the difference is slight. Australian banks did not require any government assistance during the financial crisis. Four UK banks required significant financial assistance from the UK government during the financial crisis. Macro-prudential regulatory changes are inevitable for the UK financial sector. UK financial institutions should rely less on short-term wholesale funding and more on cash, deposits and equity. Solvency and good quality assets are important. One must balance financial innovation with financial stability.

Financial stability was inserted into section 2(2)(a)(b) of the FSMA 2000 as a statutory objective of the regulator. Further legislative reforms to improve financial stability include the Special Resolution Regime found in the Banking Act 2009 and retail ring-fencing of banks. The Special Resolution Regime was needed because UK insolvency law did not provide a mechanism to resolve a financially distressed bank prior to the Banking Act 2009 was in force. The Bank Special Provisions Act 2008 was passed on 21st February 2008 to

facilitate the nationalisation of Northern Rock and part of Bradford & Bingley. The priority of the UK government during the financial crisis was to limit the costs of bank failures within the industry. The Banking Act 2009 on 21st February 2009 replaced the Bank Special Provisions Act 2008 and the main rationale of the legislation is to minimise contagion risks in the financial system. Another legislative reform is retail ring-fencing of banks. The first report of the Parliamentary Commission on Banking Standards said that:

“There is evidence to suggest that, as well as supporting financial stability and reducing the risk to the taxpayer, separation has the potential to change the culture of banks for the better and to make banks simpler and easier to monitor”(The Parliamentary Commission on Banking Standards 2012)

Under Part 1 of the Financial Services Banking Reform Act 2013 (‘the 2013 Act’), retail banks are separated from investment banks through the use of subsidiaries. The 2013 Act does not ban proprietary trading so it does not go as far as the Volcker rule in the United States where proprietary trading is banned. Section 11(2) of the 2013 Act defines proprietary trading as ‘trading in commodities or financial instruments as principal’. Under section 9 of the 2013 Act, the PRA will conduct a review of proprietary trading within five years of the 2013 Act coming into force. It will then pass its findings to HM Treasury to see if any change needs to be made. The most important implication of the 2013 Act is that both the PRA and FCA have a continuity objective of maintaining financial stability under clauses 1 and 2 of the 2013 Act. They do so by monitoring the risks which the ring-fenced banks are taking and minimise any adverse effects of the failure of a ring-fenced bank. The scope of ‘financial stability’ in section 2(2)(a)(b) FSMA 2000 has thus been broadened.

The twin-peaks model in Australia was not an initial success. Under this model, the Australian Prudential Regulatory Authority (APRA) is responsible for prudential regulation and the Australian Securities and Investments Commission (ASIC) is responsible for conduct regulation. The Australian ‘twin-peaks’ model had its own teething problems. However, the important lesson is that the Australians learnt from previous mistakes, made changes and learnt from other common law jurisdictions such as Canada, the United States and the United Kingdom. The Australian regulatory framework is by no means perfect. Nevertheless, the aim of prudential regulation is not to prevent total financial disasters since this is impossible. After the HIH Insurance incident, Australia adopted a new risk framework. It is important to note that Australia studied the risk frameworks of the US, Canada and the UK but it did not

directly copy their models. Australia formulated its own risk framework and differs to the risk frameworks of Canada and the UK, which influenced Australian's risk model. Since implementing the PAIRS and SOARS prudential regulatory risk models, the APRA became more proactive and interventionist in its regulatory style. At a macro-level, APRA uses a risk-based, principles-based and outcomes-focussed style of regulation. Such a combination means that APRA can allocate resources effectively to high risks organisations and concentrate on the end results and tailored outcomes rather than the processes used. The unique regulatory style is an affirmation of APRA's values. APRA's Framework for Prudential Supervision contains five important values: foresight, accountability, collaboration, integrity and professionalism. In pursuing these values, APRA is committed to provide consistent, high-quality supervision in a fair and balanced manner. APRA's supervisory style and framework received positive feedback in the APRA Stakeholder Survey 2013, especially in the areas of staff; communication and the APRA's framework in achieving its mission. Weaknesses include inconsistency in supervision amongst banks; harmonisation of prudential standards across the regulated industries seems to be unsuccessful and APRA neglecting the costs of complying with regulation. The generally positive results from the APRA Stakeholder Survey 2013 confirms that APRA is doing its job and is well-received by the regulated organisations. APRA is able to identify risks and its PAIRS model has been identified as generally accurate.

The UK moved away from a single regulator to a 'twin-peaks' model in April 2013. The Financial Services Act 2012 replaced the FSA with the Prudential Regulatory Authority (PRA), the Financial Conduct Authority (FCA) and the Bank of England. The UK regulatory structure has changed from a single regulator to a 'twin-peaks' model, where the PRA is responsible for micro-prudential regulation and the Bank of England (together with the Financial Policy Committee, are responsible for macro-prudential regulation. The FCA is responsible for conduct regulation as well as being the micro-prudential regulator for other financial services firms. There is gradual convergence between the UK and Australian prudential supervisory models although there are still some differences between the two models. Financial stability is enshrined in both countries' legislation and is a key priority after the financial crisis of 2007-2009. Both regulators reject a 'zero-failure' regulatory policy. The PRA shares the APRA's opinion that it is impossible to prevent all bank failures. Therefore, with the Special Resolution Regime contained in the Banking Act 2009, the PRA's role is to minimise the systemic effect of any bank failure. The PRA's supervisory

style is based on judgement; risks; forward-looking and early intervention. This is very similar to APRA's. PRA's risk assessment framework and its supervisory responses based on the Proactive Intervention Framework. Yet, there are differences between the prudential regulatory and supervisory systems between Australia and the UK. The UK legislative framework is more complex than the Australian framework. Further, the PRA has policy setting powers although the vertical integration of financial regulation at European level may suggest that the PRA is unlikely to exercise this power very often. APRA on the other hand, does not have such wide policy setting powers. The UK Risk Assessment Framework takes more mitigating factors into account. Its Proactive Intervention Framework has five stages and early intervention is clearly a priority for the PRA, since it can start planning for resolution of an organisation even at stage 1. This is in contrast to the Australian SOARS methodology, where there are only four stages and resolution of an organisation takes place in the later stages.

Although both Australia and the UK have a 'twin-peaks' model, Australia uses a functional regulatory approach whilst the UK uses an institutional regulatory approach. Australia adopted an institutional approach to financial regulation due to its reliance on deposits. There is currently a mismatch between the financial regulatory approach and the regulatory structure of the 'twin-peaks' model in the UK. The functional approach to banking regulation was used by the FSA in regulating financial institutions in the UK due to the reliance on securitisation by UK banks. The single regulatory structure was argued to be better suited to deal with 'functional despecialisation' of financial products. The UK 'twin-peaks' model splits micro-prudential regulation into deposit-takers, insurers and major investments firms on the one hand and other financial services on the other. The PRA is responsible for the former group and the FCA is responsible for the latter group. The FCA however, is also responsible for conduct regulation. The institutional regulatory approach of the 'twin-peaks' model is unsuitable for the funding model of UK banks. Either UK banks change their funding models and rely more on intermediation than securitisation or the 'twin-peaks' model has to change. Yet, the European regulatory structure endorses the institutional regulatory approach. Since 1 January 2011, the European financial supervisory framework came into force. The key features of the reform are the creation of a European Systemic Risk Board ('ESRB') and three European Supervisory Authorities ('ESAs'), the European Banking Authority ('EBA'), the European Securities and Markets Authority ('ESMA') and the European Insurance and Occupational Pensions Authority ('EIOPA'). The ESRB is in charge

of macro-prudential supervision. The ESRB is chaired by the European Central Bank (ECB) president and supported by the ECB. The ECB has been given a major macro-prudential regulatory role. The PRA and FCA will have to adapt to the institutional approach of regulation by ensuring that they have adequate and experienced staff to supervise the different institutions. A potential solution is for the FPC to issue directions and guidance to both the PRA and FCA on changing their regulatory style from a functional approach prior to the financial crisis of 2007-2009 to an institutional approach.

There are concerns that the Bank of England is too powerful under the new regulatory structure and will become a single super-regulator. The new UK regulatory framework reveals power concentration in the Bank of England. It is apparent that the Financial Policy Committee, which is part of the Bank of England, can recommend and give directions to the PRA and the FCA so that the FPC's objectives of reducing systemic risks and supporting the government's economy policy are pursued. The relationship of the Bank of England, PRA and FPC is close. This is demonstrated by the fact that the Chief Executive Officer of the PRA is also a member of the FPC and a Deputy Governor of the Bank of England. The fact that the FPC can direct both PRA and the FCA is worrying. This is because the main principle of the 'twin-peaks' model is to separate prudential regulation from consumer protection, where the regulatory strategy is different. With prudential regulation, the regulator relies upon a co-operative relationship with the financial institutions whereas the regulator responsible for consumer protection is more adversarial since it protects consumers from financial institutions. Therefore, when the Bank of England has powers over both the PRA and FCA, it would seem that there is a conflict with regards to the supervisory strategy.

One possible solution to avoid power concentration within the Bank of England is to establish a PRA risk committee and ongoing supervisory committee. The unique arrangement between the Bank of England, FPC and PRA resembles the German banking supervision model. In Germany, the German Central Bank (Deutsche Bundesbank) shares banking supervisory duties with the German Federal Financial Supervisory Authority, BaFin. The German Central Bank and BaFin both belong to the BaFin risk committee and ongoing supervisory committee. The establishment of a PRA risk committee and ongoing supervisory committee is a good method to increase information exchange and co-operation between the PRA and FPC. Regulatory capture has been a problem in the UK financial industry. In the UK, evidence of regulatory capture is manifested in the FSA adopting a light-touch regulatory style with banks; the use of computer models rather than the FSA's risk assessment

framework and asking rating agencies to assess important risks as financial products became increasingly complicated. The author believes that legislation is a possible solution to curb the discretion and power of bankers. Prescription is helpful in that it provides certainty. Recent enforcement actions by the PRA and FCA are encouraging since their approach is more robust and pro-active.

8.2 Further research

The author would like to conduct more empirical research with regards to the financial ratios of Australian and UK banks from an earlier period. As financial stability is still a matter of concern for most European countries, research can also be undertaken to include financial ratios up to 2013. It would be interesting to monitor the capital ratios and solvency positions of banks. Secondly, she would like to research more into the German banking regulatory system. It has been revealed that the structure of the Bank of England, Financial Policy Committee and Prudential Regulatory Authority is similar to the German regulatory system. If possible, she would like to interview regulatory experts and staff working at the respective regulatory organisations in the UK, Australia and Germany. It would be interesting to obtain their perspectives of the financial regulator in their country. Relevant ethical approval will be obtained where necessary.

8.3 The way forward

To move forward in banking regulation, it is submitted that the following steps should be taken. First, the new structure of the Financial Conduct Authority and Prudential Regulation Authority alone will not solve all the weaknesses of the Financial Services Authority. What is important is that the lessons from the failures of the Financial Services Authority should be learnt. The new regulatory bodies, the Financial Conduct Authority and Prudential Regulation Authority should communicate and co-operate more. They should also co-operate with the new European financial supervisory bodies.

Secondly, the issue of power concentration in the Bank of England is of concern. The fact that the Financial Policy Committee is within the Bank of England and the PRA is a subsidiary of the Bank of England leads to a powerful Bank of England. To avoid the possibility of a single super regulator, it is recommended that a PRA risk committee and

ongoing supervisory committee are adopted. This should improve information flow between the regulatory authorities.

Thirdly, healthy financial ratios regarding liquidity, debt, capital and asset quality are very important to maintain financial stability in the financial sector. The financial crisis of 2007-2009 revealed the problems created by weak liquidity, capital and asset quality ratios. Chapter five revealed that excessive leverage and poor asset quality contributed to poor liquidity and solvency control. The financial crisis of 2007-2009 was ultimately a crisis of solvency. The UK financial system is still on the mend, so there is no room for complacency.

The pendulum should shift towards financial stability but without jeopardising economic growth. Better regulation and risk management are required. A leverage ratio and minimum liquidity requirements are welcomed. Good quality capital is necessary to absorb externalities. Basel III has laid down suitable recommendations but they are insufficient. In particular, the shadow banking sector should be subject to the same rules and regulations as the banking sector to create a level playing field.

Statistics from the Bank of England in April 2013 showed that the UK is heading in the correct direction of restoring financial stability (Bank of England 2013a). UK banks continue to increase the amount of high quality assets such as government gilts and reserves held at the Bank of England. This is important as solvency is still a matter of concern to some banks. It is important that lessons can be learnt from the crisis of 2007-2009 and recommendations are adopted to reduce the impact of the next crisis.

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