

**The 2007-09 Financial Crisis:
Learning the Risk Management Lessons**

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Appendix A: A Detailed Anatomy of the Current Crisis (Available via the Forum Website).

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Executive Summary

The current financial crisis has had a far reaching effect on the global economy leading many to compare it to the Great Depression of the late 1920s and 30s or even suggest that its effects have been worse (see Turner 2009). It remains difficult to calculate the total cost of the crisis, however it will undoubtedly run into trillions (thousands of billions), whatever major currency is used¹.

A key question for governments, regulators, financial institutions and other interested parties is why such a major crisis occurred, especially at a time when macro-economic volatility was thought to be beaten (at least within developed nations)² and that financial regulation and risk management were believed to be so sophisticated that the risk of a major financial crisis was negligible. The purpose of this research project is to explore this question in some detail, paying particular attention to the underlying risk management aspects of the crisis.

To help investigate the underlying causes of the crisis a series of interviews were conducted with a range of senior risk management professionals (including chief risk officers and board directors where possible) from across the financial services sector (retail and investment banks, a clearing house, building societies, life and general insurers and consultants). In total 20 interviews were conducted. Interviewees were asked both what caused the crisis and the lessons that they believed needed to be learned for the future. Reassuringly there was a considerable degree of consistency in the responses provided by these interviewees and a number of common themes emerged:

- There were failures of implementation in relation to both risk management and corporate governance. Notably some financial institutions did not implement risk management and corporate governance frameworks that were aligned with accepted good practice (e.g. they failed to implement adequate stress and scenario testing and risk reporting processes). Moreover some institutions placed excessive reliance on certain tools (e.g. quantitative models for risk assessment) at the expense of others (e.g. good management judgement).
- Human/cultural weaknesses such as: ego, greed and ‘disaster myopia’ have a role to play in explaining the risk management decisions of financial institutions. However, some financial institutions were much better than others at controlling these basic human instincts, suggesting that differences in their corporate culture had a major role to play in explaining their lower exposure to the effects of the crisis. Notably the most badly affected institutions were characterised by sales cultures that promoted market dominance and rapid growth over traditional banking values like prudence, financial security and taking the long term view.
- In addition to certain basic human/cultural failings there were complementary weaknesses in risk reporting and management competency in some financial institutions, at both the board and senior management levels. However there were also weaknesses in relation to

¹ For a recent analysis of the effects of the crisis see European Commission (2009).

² See House of Commons Treasury Committee (2009a), paragraph 14, which states: “Before the start of the current financial crisis, the UK economy had experienced a sustained period of economic growth. In a speech in 2003 Mervyn King, Governor of the Bank of England, termed the previous years the “nice” (non-inflationary consistently expansionary) decade. In the United States in 2004 Ben S. Bernanke, at the time a member of the Board of Governors of the Federal Reserve, stated that ‘One of the most striking features of the economic landscape over the past twenty years or so has been a substantial decline in macroeconomic volatility’, noting that other writers had described this period as ‘The Great Moderation’.”

the competency of risk management staff – which were not always able to communicate effectively to senior management/directors or provide the kind of support that they needed (e.g. support for strategic decision making).

- It is not necessarily fair to apportion all of the blame for the financial crisis on the weaknesses of individual financial institutions or those of their management. Specifically many financial institutions found it difficult to stay out of some of the more risky activities that characterised the last boom (sub-prime lending, etc.) due to competitive pressures. That said, certain institutions did take steps to protect themselves from the developing crisis and in so doing have been much better able to weather its effects.
- Many interviewees felt that there had been significant regulatory failures – both in terms of the design of regulatory regimes (e.g. Basel 2 and its focus on capital modelling) and their implementation (in relation to the quality of supervisors and their ability to make effective judgements). Failures that may have even helped to both cause the crisis and deepen its effects.

Based on these findings it is concluded that the underlying preconditions for the crisis were, as with almost all crises before it, both complex and sociotechnical in nature³. This implies that there are no simple solutions to the prevention of future crises, such as forced reductions in bonus payments or increased capital requirements. But rather that a more considered human centred approach is required that focuses more on understanding and influencing the cultures of financial institutions and the resultant behaviour of management (including directors). In particular the following key lessons need to be learned:

There needs to be behavioural change via improved risk cultures

Many boards and senior managers should become much more risk aware and consider carefully the risks that are associated with their strategic decisions. They must also be prepared to act quickly and decisively when they find that their institution is exposed to an excessive degree of risk.

In addition, the attitudes of some risk managers need to change, where they should move away from their traditional compliance orientation, instead adopting a more enterprise-wide view that is less confrontational and more proactive.

Maintain salaries and bonuses, but redesign the terms on which they are paid

High salaries and bonuses are not necessarily a problem, what really matters are the criteria on which they are paid. Notably the time horizons over which bonus arrangements are awarded should be lengthened. Plus the rules on which remuneration payments are based should be more closely aligned to risk management and governance policies (e.g. to ensure that managers are incentivised to report on and manage risk).

Learn lessons from outside the financial services sector

Many financial institutions have focused their risk management resources on quantitative modelling, using a range of metrics in an attempt to reduce their risk exposures down to a set of numbers. However this is at odds with many other industry sectors, which make much greater use of management judgement and expertise, as well as tools such as stress testing and scenario analysis.

³ The term sociotechnical is typically used to refer to the interrelationship that exists between the social (human) aspects of an organisation and its technical systems/processes. In so doing it is concerned with the vagaries of human behaviour and how this can affect the design and operation of technical systems and processes (such as underwriting and investment systems and processes).

Hence there is a need for many financial institutions to adopt a more balanced view of their risk management activities and to make greater use of qualitative risk management tools, such tools being much more effective mechanisms for assessing and controlling the ‘unknown unknowns’ that financial institutions can face (see, for example, Jorion 2009).

Improve internal control

There is a need for some financial institutions to improve the effectiveness of their internal control frameworks. Notably they need to improve the accuracy and timeliness of their risk reports, while ensuring that boards/senior management are not swamped with too much information. They also need to improve the status of their risk functions and chief risk officers, although in some cases this will require improvements in the skills and experience of risk management staff.

Rethink prudential regulation

The report outlines a number of lessons for regulators as well as financial institutions. Notably, regulators should be careful not to overreact to the crisis by bringing in more prescriptive regulations or significantly greater capital requirements. Moreover they should learn that regulatory capital requirements are not always effective in helping to improve the quality of risk management practices and in some cases can have unintended consequences that can increase the vulnerability of financial institutions to crises. Finally they need to remember that effective supervision is often more important than highly technical ‘state of the art’ regulatory frameworks.

1. Introduction

The 2007-09 financial crisis (henceforth the ‘crisis’ or ‘the current crisis’) has been described as the worst since the Wall Street Crash and Great Depression of the late 1920s and 30s (see, for example: Congressional Oversight Panel 2009, House of Lords 2009 and de Larosière 2009) and even “the greatest crisis in the history of finance capitalism” (Turner 2009).

Given the severity and, to a large extent, global nature of the current crisis it is hardly surprising that so much has been written on it in such a short space of time. Numerous reports, enquiries, papers, books, articles and editorials have been published on the causes and effects of the financial crisis, as well as the lessons that need to be learned for the future. Moreover these have been supplied by a diverse set of commentators ranging from politicians, regulators and industry/professional associations to academics, journalists, and some practitioners from within the financial services sector itself.

However despite the wealth of information and commentary that has been provided any review of this literature will reveal that there is still no clear or universally accepted picture as to the key causes of the current crisis. Notably the answers to certain fundamental questions remain inconclusive:

- How did the risk management processes of financial institutions fail?
- Why did they fail?
- What are the risk management lessons that need to be learned, both by financial institutions and their regulators, in order to prevent future crises of this magnitude?

The purpose of this report is to shed further light on the answers to these questions by exploring the underlying causes for the current financial crisis, as well as the risk management lessons that need to be learned from them. In particular it seeks to add to our

understanding of the current crisis in two ways. Firstly it draws on pre-existing insights from the field of crisis management, a field largely ignored by most commentators on the current crisis⁴, but which contains a wealth of information on the common underlying causes of crisis, financial or otherwise. Secondly its findings are backed up with evidence from a range of primary sources, utilising the results of interviews that were conducted with 20 risk management professionals from across the financial services sector.

Drawing on the insights from the field of crisis management, along with the evidence provided by practicing risk management professionals, this report argues that the crisis was largely due to failures in the implementation of certain risk management processes. Failures that arose from human/management related weaknesses on the part of both financial institutions and their regulators. In so doing it is demonstrated that the crisis was sociotechnical in nature, resulting from a complex set of interactions between the various behavioural factors that influence organisations (e.g. market and regulatory pressures, group dynamics, culture, risk perception, personal agendas and incentives, etc.) and their technical systems and processes (for example their operational systems, governance processes, risk management and reporting frameworks, etc.).

Using this analysis lessons are also drawn regarding the prevention and mitigation of future financial crises. In particular it is suggested that many of the current regulatory responses to the crisis (notably greater prescription and capital requirements) are unlikely to prove effective⁵. Instead a more permanent solution to the prevention of future financial crises should combine enhancements in the risk management and governance practices that are implemented by financial institutions and their regulators with mechanisms that support cultural change. Moreover this cultural change needs to be both organisation wide (in terms of overall risk culture) and function specific, particularly in relation to moving the attitudes of risk functions away from compliance and towards a more business-like orientation (for example by using risk management staff and information to support strategic decision making).

The report begins with a review of the established literature on crises management before moving onto consider whether it is possible to use this research to help explain the causes of the current crisis. It then proceeds with: a description of the main research questions; the interview methodology that was adopted to investigate these propositions and the findings from these interviews. Finally a number of lessons to be learned are drawn from the interview responses and conclusions provided.

2. Understanding Crises

2.1 *What are Crises and What Can We Learn From Their Study?*

Dictionary definitions of the term crisis often use phrases such as a time of difficulty or distress or even ‘a time of intense difficulty or danger’ (Oxford English Dictionary). Hence crises are by definition a very bad thing that can impose immense instability, uncertainty and cost on those caught up in them, whether financial, reputational or physical⁶.

⁴ One notable exception being Müßig (2009).

⁵ For regulatory perspectives on the current crisis see especially: Turner (2009), FSA (2009b), de Larosière (2009), Basel (2009 b&c).

⁶ For some more academically orientated definitions of a crisis see Pearson and Clair (1998) and Smith and Elliott (2005), Ch 1. See also Smith (2005a), who defines a crisis as: “A damaging event, or series of events, that display emergent properties which exceed an organisation’s abilities to cope with the task demands that it generates and has implications that can affect a considerable proportion of the organisation as well as other bodies.” The current financial crisis undoubtedly meets this definition.

However, crises can also bring with them opportunity, both for those able to exploit their immediate effects and those who change the way that they make decisions in their aftermath (in fact the Greek origin of the word: ‘krisis’ actually means ‘decision’). Hence crises can also teach valuable lessons, whereby those individuals and organisations who are prepared to learn from them can achieve beneficial outcomes – often by addressing previous weaknesses and inefficiencies or by making changes that help to reduce the likelihood and severity of future crises. In fact crises are sometimes described as ‘turning points’, recognising that they often bring change that may well, in the long term at least, prove beneficial.

There is a considerable academic literature on the assessment and management of crises⁷ and while some may disagree on whether it is always possible to predict and or prevent crises from occurring (see Hood and Jones 1996, Ch 2) there is widespread agreement that there is much that can be learned from their study⁸. In the section below some of the more eminent contributions to this work are outlined. Much of this research has been developed following the analysis of a considerable number of crises, both financial and otherwise. Indeed there is a lot that the financial sector can learn from the analysis of non-financial crises, since many of the underlying factors that contribute to financial crises are very similar to those that affect other industry sectors – as will be illustrated within this report⁹.

2.2 *Understanding Crises and their Underlying Causes*

A key theme running through much of the work into crisis management is that crises are sociotechnical events and in so doing are influenced by factors such as human behaviour, corporate culture and an organisation’s structure/systems. Notably it has been demonstrated that one or more of the following factors usually lie at the heart of any crisis¹⁰:

- An organisation’s structure and associated management systems. Complex organisations with heavily interdependent production processes tend to be more prone to both minor and major loss events (including crises), as do those with ineffectual internal communication systems.
- Management risk perceptions. Crises being more common when managers fail to understand the risks that they are taking (arguably as in the case of Barings and Equitable Life in the UK) or the value of risk/crisis management activities. A problem that is sometimes compounded by ‘groupthink’ (Janis 1972), whereby individual misperceptions are reinforced by those of their peers and dissident views are stifled.
- An organisation’s safety/risk culture and or the social dynamics of a particular subgroup within the organisation. In particular, some organisations and or subgroups seem to be more risk aware and committed to effective risk management than others.
- Organisational change, which can divert attention from normal day to day risk management activities and or damage staff morale causing a rise in errors, fraud, etc.
- Internal politics and power dynamics. Particular individuals or departments within an organisation may wield a disproportionate amount of power and have a detrimental

⁷ See Smith and Elliott (2005) for a useful set of “key readings” that exemplify the literature on crisis management.

⁸ See for example Pearson and Clair (1998) – who provide a definition of crisis management that is rooted in the active prevention and mitigation of low probability, high impact events. See also Mitroff (2005), who in a book devoted to learning lessons from previous major crises, states: “I cannot emphasise too strongly that organizations exist that have found ways to contain and even lower substantially the economic, human and existential costs of major crises”.

⁹ See also Müßig (2009) who provides an interesting perspective on the financial crisis using a number of traditional crisis management theories.

¹⁰ See especially Waring and Glendon (1998), Mitroff (2000) and Smith and Elliott (2005) for discussions on the various organisational and social factors that can cause crises.

effect on risk management decision-making. For example, staff within 'Marketing', 'Sales', 'Front Office', etc. may resist risk management initiatives on the grounds that they are costly, bureaucratic, time consuming, or attempt to circumvent them in order to maximise their short term, sales related bonuses, etc.

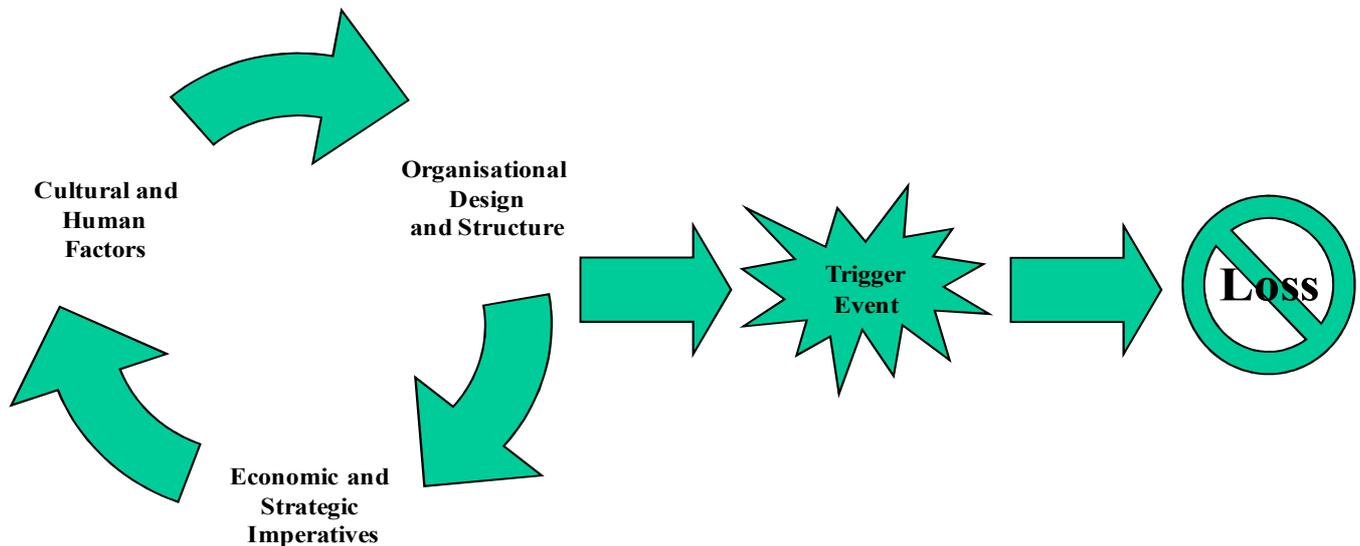
- External social, political and economic pressures. For example, organisations may decide to cut corners in terms of their risk management activities when budgets are tight or alternatively they may over/under emphasise certain activities depending on prevailing political/social factors.

In response to these findings, a number of crisis causation models have been built by eminent scholars (e.g. James Reason's 'Swiss Cheese Model'; Barry Turner's 'Chain of Causation' and Paul Shrivastava et al's 'Industrial Crisis Model'), many of which have already been applied to a wide range of crisis events¹¹. Most of these models liken the creation of a crisis to a process consistent with the diagram below¹².

¹¹ See Reason (1990), Turner (1976, 1978 and 1994) and Shrivastava et al (1988).

¹² It should be noted that there are exceptions to the above process orientated view of crises. For example, traditional 'Normal Accident Theory' postulates that crises are all but inevitable where complex and or tightly coupled (interdependent) systems are present and hence that human factors are largely irrelevant. However as pointed out by Müßig (2009) most researchers, including the architect of Normal Accident Theory (Perrow 1984, 1994) accept that complex/tightly coupled systems are usually the result of some human failing, such as weaknesses in the design of an organisation by management.

A Typical Crisis Model



What these models reveal is that the causes of crises are typically multifaceted. Hence in isolation no one single factor is likely to cause a crisis; rather the conditions for a crisis are built up over time, with multiple causes (or ‘preconditions’ as they are sometimes referred) combining and interacting to create the potential for a crisis that finally manifests itself once a suitable trigger event comes along. This has been likened to the inflation of a balloon (see Blockley 1996), whereby as the pressure builds up over time, the proneness of the balloon to bursting increases. In this regard each increase in pressure is analogous to the accumulation and interaction of multiple causes, with the addition of each cause raising the possibility that some suitable event might trigger a crisis.

What these typologies also suggest is that crises can be prevented, providing that we can spot the build up of causes/preconditions and ‘deflate’ the balloon. Of course this is not always easy, especially as organisations have a tendency to exhibit “institutional blindness” (Smith and Elliott 2005, Ch 1) and in so doing often overlook the build up of seemingly minor issues or discount the possibility that they could result in a major crisis (see also Blockley 1996, Toft and Reynolds 2005, Smith and Elliott 2005, Ch 20). However an astute organisation can both spot and correct these causes/preconditions and so prevent a crisis from occurring or at least mitigate its impact. Indeed this was proven by certain financial institutions, which not only saw the current crisis coming, but took proactive steps to reduce their vulnerability to it (see SSG 2008 and IIF 2008).

2.3 *Crisis Management and the Financial Crisis*

Despite the considerable amount of work that has been conducted in the field of crisis management, not all of the analyses into financial crises recognise the insights that it can

provide¹³. Notably the recent Financial Services Authority (FSA) review on the crisis, led by Lord Adair Turner, put certain macroeconomic/market-wide factors at its heart, stating that:

“At the core of the crisis lay an interplay between macro-imbalances which had grown rapidly in the last ten years, and financial market developments and innovations which have been underway for about 30 years but which accelerated over the last ten to 15, partly under the stimulus of the macro-imbalances.”
(Turner 2009)

In addition recent research by the International Monetary Fund (IMF) on the causes of systemic crises (Laeven and Valencia 2008) talks about ‘macroeconomic policies’, ‘credit booms’ and ‘balance sheet fragilities’, while ignoring the kinds of behavioural and organisational factors that have identified by those working in the field of crisis management. Similar analyses by the Bank of England (2008a, 2008b and 2009, box 3) and a G20 central bank workshop (Reserve Bank of India and Bank of England 2009) also provide support for this more macroeconomic/market-wide view of financial crises¹⁴.

So the question arises as to whether crisis management models, with their focus on organisational and behavioural issues, can be applied to financial crises or whether we should leave the analysis of financial crises to central bankers and macroeconomists? This project proceeds on the assumption that the insights from the research into crisis management can and indeed should be applied. Outlined below are the reasons why¹⁵.

The first reason is that most crisis management models do not preclude financial and economic factors. Indeed they often recognise that financial and economic factors can influence the vulnerability of organisations to crises, for example by forcing or at least encouraging them to take risks that they might otherwise avoid (e.g. they might need to take such risks in order to protect their market share, keep costs down or even stave off a potential takeover threat)¹⁶.

A second reason is that previous enquiries into past (albeit less significant) financial crises, such as the failure of Barings and Equitable Life, contain references to many of the issues raised in the general literature on crisis management (see Penrose 2004, Bank of England 1995). In particular these enquiries have highlighted factors such as: the knowledge and skills of board directors; weaknesses in internal controls; poor communication; etc. Similarly some broader studies into multiple banking and insurance crises (see Llewellyn 1998 and Ashby, Sharma and McDonnell 2003) have highlighted that such crises are typically caused by factors such as: inappropriate incentive structures; weak management, deficient control systems; and poor regulation, monitoring and supervision.

The final and perhaps strongest reason is that there is already a body of work on the current crisis that highlights many of the factors that have been identified in the general literature on crisis management – albeit in an unstructured way. Notably see SSG (2008, 2009), IIF (2008),

¹³ As Boin (2004) points out, generic crisis management research is “curiously absent” in the field of financial crisis analysis, an oversight that he goes onto to call “remarkable”.

¹⁴ See also Goodhart and Illing (2002, Part III), which contains some more recent academic works on banking crises – all of which are economics focussed and are primarily concerned with factors such as depositor/investor expectations, credit booms and external macroeconomic shocks.

¹⁵ Interestingly this is not an entirely new debate. Although far removed from the sociotechnical focus of the crisis management literature Caprio and Klingebiel (1996) provide an interesting analysis of the causes of financial crises, ultimately concluding that they are typically due to a combination of bad (economic) luck, bad policy (macroeconomic and regulatory) and bad banking (i.e. imprudent risk taking).

¹⁶ See, for example, Waring and Glendon 1998, Ch 6 and 7.

COP (2009) and Walker (2009)¹⁷, who all identify a range of sociotechnical issues as being key causes of the current crisis, including: managerial risk perception, weaknesses in firms' risk appetite frameworks, governance structures and risk cultures, along with inflexible/silo based corporate structures that hindered both risk management and reporting. Indeed the US Congressional Oversight Panel (COP 2009) went as far as to place risk management failures (both by firms and regulators) at the heart of the current crisis:

“As the current financial meltdown makes clear, private financial markets do not always manage risk effectively on their own. In fact, to a large extent, the current crisis can be understood as the product of a profound failure in private risk management, combined with an equally profound failure in public risk management, particularly at the federal level.”

Similarly the UK Parliament (House of Commons Treasury Committee 2009a) has stated that:

“Bankers complicated banking to the point where the location of risk was obscured, abandoned time-honoured principles of prudent lending and failed to manage their funding requirements appropriately. There were major failures in the modelling, procedures and structures for risk management.”

Gillian Tett (2009) who is a social anthropologist and experienced journalist at the Financial Times, even goes as far as to argue that the ‘traditional’ causes of financial crises (wars, recessions, major economic shocks) played hardly any part in the current crisis – arguing instead that it was largely a self-inflicted event. In so doing she states that:

“It [the crisis] is a tale best understood through the observation of human foibles, as much as through economic or financial analysis.”

An observation that resonates strongly with the work of Barry Turner (1994), one of the founding fathers of the modern literature on crisis management and who placed ‘sloppy management’ at the heart of most crises.

Hence it would seem that there is an a-priori case for assuming that many of the underlying causes of financial crises are not that different to some of the more traditional crises that have received the attentions of the crisis management literature (for example chemical and nuclear spills, major public transport accidents, terrorist attacks, etc.). Of course that is not to say that existing economic orientated analyses are invalid, just that they only provide a partial picture of why financial crises occur.

For a complete account of the various causes that characterised the current crisis see Appendix A (which is available via the Forum website).

¹⁷ Although curiously Walker (2009) contends that: “For the avoidance of doubt, it should be re-emphasised that the more effective functioning of BOFI boards, including a better contribution from NEDs, is one element in a configuration in which all elements, above all macro-financial policies and regulation, need to be aligned. Looking ahead, if the overall public policy environment were ever again to accommodate short term risk-taking by banks on the back of very high leverage, it would be unrealistic to rely on governance procedures alone to inhibit banks from generating high short-term returns by engaging in such activity. “

However this assertion of the primacy of macroeconomic factors and solutions is at odds with Walker's own observation that not all financial institutions have been affected in the same way by the crisis (i.e. some have performed much better than others), and that for the most part these differences are due to sociotechnical factors – principally in Walker's eyes weaknesses in corporate governance.

3. Understanding the Financial Crisis: Key Research Questions

As both previous crisis management research and the available commentaries on the current crisis show, crises are complex phenomena that typically require a far from serendipitous combination of factors to combine in order to reach their full force. Indeed Vladimir Putin, the Russian Prime Minister, has likened the current crisis to a ‘perfect storm’¹⁸ in that almost everything that could go wrong did go wrong, resulting in an event that has been widely compared to the Great Depression of the late 1920s and early 30s.

However blaming the crisis on ‘everything’ is far from useful, especially if lessons are to be learned for the future. Hence there is a need for deeper research into the crisis in order to provide a more objective and considered view of the factors that lie at its heart. Moreover this research needs to be translated into independent recommendations for the future that are designed to help prevent/mitigate future financial crises, rather than simply further the agendas of specific interest groups.

As a starting point for this work the current section outlines a number of research questions that are later explored with a sample of risk management experts from across the financial services sector. These questions draw on both the established crisis management literature and the commentaries that have been produced on the current crisis.

3.1 *How did Risk Management Fail?*

As indicated in Appendix A a considerable amount has already been written on the subject of risk management failures in the context of the current crisis and in particular on whether institutions were using the right tools in order to manage their exposures.

In the main commentators have taken the view that, for the most part, the available risk management tools remain valid and could, if used properly, have helped to avert the current crisis, or at least reduce its effects. However, despite this confidence two key questions remain unanswered:

1. What were the key implementation failures that helped the cause the current crisis?
2. Are risk management tools capable of managing very low probability but high impact events such as the current financial crisis (the so called ‘unknown unknowns’¹⁹)?

Ultimately this second question boils down to the issue of complexity, a long running theme within the crisis management literature and one that is also highly relevant in the context of the current crisis (see Müßig 2009, House of Lords Select Committee on Economic Affairs 2009, Ch 3). Fundamentally the question arises as to whether it is actually possible to manage the more extreme risks that can arise out of the volatile, complex and highly interconnected environments that financial services institutions operate within – where risk exposures can change very rapidly and new combinations of risks can give rise to unforeseen effects (for example the big drop in liquidity during the early stages of the crisis was largely unforeseen). Indeed prior to the crisis this complexity was actually increasing, due to the growth in securitisation, coupled with the increased use of ‘off balance sheet’ financing vehicles such as SPVs and SIVs. Hence it could be that financial institutions were all but doomed to failure given the risk management tools that were available to them and that there was little that they could do about it.

¹⁸ See CNN.com “Putin: Financial Crisis is Perfect Storm”, 28th January 2009.

¹⁹ For a good discussion of the ‘known, knowns’, ‘known, unknowns’ and ‘unknown, unknowns’ risk classification see Jorion (2009).

3.2 *Why did Risk Management 'Fail'?*

Assuming that there were failures in the management of risk by some financial institutions the next question is why did this occur?

In this regard numerous factors can be identified within the publically available commentaries on the current crisis (for more on these see Appendix A). For example there are those who have blamed, amongst other things:

- Greedy and potentially incompetent executives and senior managers, who have been blamed for encouraging or at best turning a blind eye to excessive risk taking (e.g. ACCA 2008a&b, Turner 2009, House of Commons Treasury Committee 2009a, 2009b, de Larosière et al 2009).
- Non executive directors, who may not have exercised effective oversight and challenge (e.g. Walker 2009, House of Commons Treasury Committee 2009b).
- Market forces and insufficient market discipline (e.g. Turner 2009, Walker 2009).
- Credit rating agencies (e.g. Crouhy 2008, House of Commons Treasury Committee 2009b, de Larosière et al 2009)
- External economic factors (e.g. Laeven and Valencia 2008, IMF 2008, Brunnermeier 2009, and Reserve Bank of India and Bank of England 2009).
- Government policy (e.g. Congressional Oversight Panel 2008, Dowd 2008, Butler 2009).
- Regulators (e.g. Dowd 2008, 2009a, 2009b, House of Lords Select Committee on Economic Affairs 2009).
- Etc.

Hence the question arises as to which of these factors are relevant. Moreover what is also unclear is why some of them are relevant, particularly those in relation to the management of certain financial institutions. For example, were they badly informed (in that they did not have sufficient information to do their job properly)? Were they poorly trained and incentivised? Or did they simply have the wrong attitude?

4. Methodology

While some of the commentators on the current crisis draw upon direct input from a number of financial institutions (for example the House of Lords and House of Commons reports benefited from considerable input from the CEOs and other senior directors/staff from the major banks), they have rarely consulted actual risk management professionals in a systematic manner²⁰.

Hence there is a need for confidential research that targets those individuals that are involved with managing risk within financial institutions on a daily basis. This should provide credible evidence on the causes of the crisis straight from those individuals that were not only managing risk prior to the crisis, but often also during it.

²⁰ Two exceptions are: the Institute of International Finance (IIF 2008); whose report utilises input from senior professionals from across 60 institutions; and the Senior Supervisors Group (2009) which published a regulatory perspective on the risk management lessons that need to be learned from the crisis (this draws on input from interviews with senior managers in 13 of the largest institutions, plus a further survey of 20 major global institutions and follow up interviews with 15).

The purpose of this section is to outline the methodology and scope that was adopted in order to collect these insights. It begins with an overview of the approach that was selected in order to complete the necessary interviews.

4.1 *Approach: Semi-Structured and Confidential Interviews*

In order to explore the how and why of the risk management failures that precipitated the current crisis a series of semi-structured and confidential interviews were conducted with risk management professionals from a range of financial institutions.

Semi-structured interviews provide the interviewer with an opportunity to explore a range of complex and potentially sensitive issues. Specifically they allow conversation to flow more freely than structured interviews, thereby affording the interviewee an opportunity to express their personal opinions, concerns and feelings, while still ensuring that there is a sufficient degree of structure to allow comparisons between interviewees (see box below for these questions).

Interview Agenda

1. In your opinion what was the major underlying cause of the current banking crisis?
2. Are traditional corporate risk management practices effective at assessing/controlling systemic risk?
3. To what extent did boards/management have accurate and reliable information to allow them to monitor their firm's risk exposures and did they understand this information? Notably how reliant were they on mathematical models and did they understand the inputs/outputs to these models? What was the situation in your firm?
4. To what extent did weaknesses in corporate governance contribute to the current crisis? For example were warnings from chief risk officers/risk managers being heard prior to the crisis and if not why not? Plus were managers at all levels being properly incentivised to manage risk effectively? Can you explain the situation in your own firm?
5. Going forward how should financial services firms be incentivised to implement effective risk management frameworks? Is more prescriptive regulation the solution or is there an alternative (e.g. improved disclosure, enhanced rating methodologies, changes to corporate governance rules, etc.).
6. In the light of the current banking crisis what changes have you/are you making to your company's risk management framework(s)?
7. Do you have any other comments that you would like to make?

Given the sensitive nature of the material it was also clear that these interviews should be kept completely confidential. Many financial institutions remain concerned about the risk of

further damage being done to their already tarnished reputations – so it stands to reason that no interviewee would want to be accused of contributing to this. Similarly while the representatives of most institutions may not want to get into a public debate about contentious issues such as executive/senior manager remuneration or the merits of existing approaches to financial regulation it is much more likely that they will be honest about their true opinions in private.

However while care has been taken to ensure the full anonymity of each interviewee all but one of the interviews were recorded²¹. This allows for accurate quotations that convey the true meaning and intentions of the interviewee concerned.

4.2 *Scope of Analysis: The Interviewees*

In total 20 interviews were conducted from across the financial services sector. The table below provides pseudonyms for each interviewee and a brief description of the type of financial institution(s) that they work for.

Risk Consultant 1	Large UK internationally active bank
CRO (Chief Risk Officer) 1	UK investment bank
Non Exec 1	(a) UK bank (b) Wholesale financial market intermediary (c) European subsidiary of an international bank
CRO 2	UK mutual life insurer and investment provider
Risk Consultant 2	Professional services provider for asset management institutions
FD 1	Health insurance provider and ex large UK bank
HOR (Head of Operational Risk) 1	UK bank and insurance conglomerate
HOR 2	UK insurer
FD 1	Freelance risk consultant
HOC (Head of Control) 1	European internationally active bank
HOR 3	UK insurer
DR (Director of Regulation) 1	Independent central counterparty (clearing house)
Non Exec 2	UK building society
CRO 3	Demutualised bank
CRO 4	UK insurer
FD 2	UK mutual insurer
CRO 5	UK building society
Risk Consultant 4	Financial services consultancy and previously at an international investment bank
CRO 6	International insurer
PD (Programme Director) 1	Large UK bank

All interviewees were selected on the basis that they have considerable experience in the financial services sector – having worked for a range of institutions over their careers, including in a number of cases the FSA. In addition many of them have experience of not just the current financial crisis, but also previous crises and recessions. Hence they are well placed to comment on the current crisis, its causes, and the lessons that need to be learned for the future.

²¹ In the one case where the interview was not recorded this was because the interviewee felt that, despite assurances of full confidentiality, the crisis was too sensitive an issue for them to have their opinions recorded.

While it was possible to get a good mix of financial institutions, including some that have been very badly affected by the crisis (some of which have received direct government support) and others who have been more successful, a few of the worst affected declined to participate for legal reasons. This is because they were concerned that even confidential interview material could get into the public domain and be used against them. This is an unavoidable limitation of an early study such as this – and will no doubt be rectified by future, more historical works. However, the benefits of current study, in terms of fresh insights from interviewees who even now are living through and managing the crisis, more than outweigh this limitation.

5. Findings from Interviews with Risk Management Professionals

The purpose of this section is to outline the responses provided by the 20 risk management experts that were interviewed. In so doing their responses are used to both validate and challenge the available literature on the current crisis and also provide answers to the questions that were proposed in Section 3.

5.1 *How did Risk Management Fail?*

As expected none of the interviewees suggested that risk management per-se had failed. Rather they confirmed that there were failures of implementation in many financial institutions, in short management failures²². Specifically, implementation failures were identified in²³:

- The management of low probability high impact events, and in particular systemic risk events.
- The use of enterprise-wide risk management frameworks. That can be very difficult to implement effectively.
- An over-reliance on complex quantitative risk assessment tools, that were difficult for non-experts to understand and often provided inaccurate and potentially misleading information on risk exposures.
- Poorly implemented risk appetite frameworks – where certain financial institutions either deliberately or inadvertently exposed themselves to levels of risk that far exceed their inherent capacity to do so.

Each of these failures is dealt with in turn.

Failures in the Management of Systemic Risk Events

Many of the interviewees indicated that there had been failures in the management of systemic risk events, the key issue being weak stress testing and scenario analysis, which was either insufficiently extreme, or which failed to consider correlations between certain risk types (e.g. market and liquidity risk). Indeed it may even be that the failure on the part of many institutions (not to mention quite a few regulators) to consider the effects of particular risk events on the financial sector as a whole was in itself a systemic problem:

²² For example FD 1 stated: “Fundamentally there was inadequate and poor risk management going on..... I don’t think it was bad luck. Fundamentally they didn’t understand the risks they were taking in the strategy they were going down.” (FD 1)

²³ Interestingly these findings have a lot in common with recent work by Stultz (2009) on the six ways in which he believes companies typically mismanage risk.

“The whole credit crisis was totally underestimated. If you do scenario testing and ask ‘what if these investments go wrong, what impact will it have on our balance sheet?’ But if you just leave it there what you lose is ‘well if it’s happening to us and it happens to the rest of the banking sector what implications does that have?’ That is what happened, it was systemic and all of a sudden credit completely dried up. It doesn’t seem like the sector as a whole considered that scenario.” (FD 2)

“In a way the leverage element of this is the ‘black swan’ In the 90s we had shed loads of capital and we didn’t know what to do with it. I had an employee who spent a year learning credit derivatives and then came back and we started doing it. At the time leverage wasn’t important, it was the hedging aspect. What none of us saw, and I put my hands up, was the leverage aspect.” (Non Exec 2)

As such the testimony provided by the interviewees would seem to confirm that the extreme combinations of events that have characterised the current financial crisis were not reflected in most risk management models. A situation that created a system-wide blind spot that was a key brick in the foundations for the current crisis.

Of course, such ‘unknown unknowns’ are very difficult to detect and manage (see, for example, Jorion 2009), which could lead to the conclusion that there is little point in trying to do so, at least on the part of individual financial institutions²⁴. Yet, as several of the interviewees pointed out, it is possible to detect and manage extreme systemic events, where stress and scenario testing is sufficiently robust. This finding is also reinforced by the fact that some financial institutions were able to spot the impending crisis and take steps to mitigate their exposure (for example HSBC and Goldman Sachs).

Weaknesses in Enterprise-Wide Risk Management

Although most of the interviewees believed in the merits of integrated risk reporting and enterprise risk management, they also highlighted a number of problems that can be associated with the implementation of such frameworks. Given these problems it is perhaps less surprising that so few financial institutions have been able to create effective enterprise-wide risk management and reporting frameworks and that, as a result, they were unable to appreciate the scale of the correlations that could exist between certain risk types (e.g. market and liquidity risk).

The barriers identified by the interviewees were as follows:

- The size and diversity of many financial institutions coupled with the complexity of their activities means that it is difficult for even risk management professionals to be able to keep up with the associated risks or communicate them effectively.

“I think the problem is some firms are too big – how do you manage a massive organisation that’s got retail and investment banking? It’s very difficult for any risk professional to be specialised in all these different areas..... Then you’ve got the complications of all the derivatives and CDOs and all that – you’ve got to have a PhD to understand what they’re doing. If there’s someone who can understand what’s being done and have that knowledge and convert it into a

²⁴ Some of the interviewees shared this view: “By definition you can say that corporate risk management practices even in the largest, most sophisticated, financial institutions are not geared to controlling systemic risk – they look inwards rather than outwards. So you can say no because that’s not what they’re there to do.” (DR 1)

business language that the board can understand – I doubt that very rarely exists.” (CRO 5)

Moreover it would seem that recruiting more/better risk management staff may not always help. As pointed out by one interviewee many large banks have massive risk teams and some very high quality staff; however these can be divorced from key front line decision makers and often also their boards. This means that they do not have the necessary influence that perhaps they should have or input into key business decisions. Problems with the role of the risk function and senior management attitudes towards it are developed further below.

- Collecting sufficient information over a long enough time horizon in order to spot more gradual trends. One interviewee likened this to the ‘boiling frog problem’, whereby financial institutions that have too little time series data may be slow to respond to potential problems. He illustrated this with the issue of credit defaults in the context of the current crisis, whereby many financial institutions failed to spot and respond to the relatively gradual increase in defaults before it was too late (one well publicised exception to this being HSBC):

“It wasn’t until you stepped back and looked at the whole thing you saw that it was a big movement. So you could have information but have controls that looked at too short a time window to be effective, looking at the right thing but not standing back far enough to see the overall trend for what it is.” (CRO 4)

- An excessive focus on the process of collecting and reporting data, rather than on how to use risk reports to support real world decision making. This meant that data was collected, but was not always used in an effective manner:

“I think people focused on the process of risk management and on do they have reports, are the reports on time – rather than sitting back and asking some fairly basic questions around ‘but what is this telling me, what is the exposure, what is a reasonable aggregate limit for capital exposure or loan to value ratio or for liquidity thresholds or for whatever else?’” (HOR 1)

“People talk about the process not the risk. They assume the process is going to protect them rather than putting their brains in gear and implement it, manage the risk, capture it in the framework – that will give you some idea of correlation. I’m sure that is true of a lot of organisations – they’ve invested in risk management frameworks, assumed it’s implemented and working rather than asking ‘why did we implement this in the first place?’” (Risk Consultant 3)

This last point is also related to comments that the interviewees made about the culture of many risk management functions, which appear to have been compliance orientated rather than business focussed. This meant that in some cases data was collected to satisfy the prudential rules that were in place (for the most part the Basel 2 Accord), rather than to support strategic decision making. The prevailing compliance culture of many risk functions is explored further in section 5.2.2 below.

An Over-Reliance on Complex Quantitative Risk Assessment Tools

External commentators such as Turner (2009) have suggested that a key risk management failure in relation to the current crisis was an over-reliance on mathematical models. The premise being that many financial institutions were using overly complex models that provided a misleading indication of their true risk exposures.

In the main the interviewees agreed with this, as exemplified by the following quotes:

“I don’t think the output of models was generally well understood at all. I think that is the domain of the ‘Quants’ that build the models in the first place and are very clever and that is their reason for existence – to appear to be very clever. Do they serve any useful purpose in helping to run an organisation? You only need look at today’s battlefield to see the results of that – they clearly weren’t. It’s the danger of putting too much faith in models – models are only right some of the time and are only useful some of the time and people need to understand that at the outset. It’s the application of a little common sense. It’s like these people who use a sat-nav when they’re in the middle of a pond – just look up once and you’ll see the pond in front of you.” (Risk Consultant 2)

“It wouldn’t take much for those [mathematical] models to not be right and you are making decisions off the back of them at board level and they are sending you in completely the wrong direction. An example of that is risk pricing so we’ve got models that are prudent and conservative as required by the FSA and from those models we derive an expected loss which we plug into a mortgage product. Now we debated buying several years ago and met a few of the GMACs of this world and said what’s your expected loss and they just gave us a number but couldn’t validate it and you question have we got it right, have they got it right? We didn’t buy because we didn’t believe them and the board was saying ‘on your models are you sure they’re right – they’ve got the same pricing for a high risk as you’ve got for a low risk?’ So you wonder what GMAC were doing because their numbers were too low and it would have been very easy to accept that ours were too conservative, too risk averse and buy the mortgages which is what a lot of building societies did and put them on the balance sheet and obviously didn’t work and their assumptions were wrong.” (CRO 5)

Further interviewees went onto expand this theme, confirming that in many cases the models in use by financial institutions were both overly complex and misleading. The main problems cited were the poor quality and inaccurate nature of the input data and models that could be overly sensitive to specific assumptions²⁵.

That said it is also clear that not all financial institutions fell into the trap of relying too heavily on overly complex models:

“I think there are two camps here. The first camp, where the board relied entirely on the output from the use of such models and the opinions from the people running those models. So the board said to itself ‘if the head of risk management says that that works we’re happy to do it’..... The 2nd camp is ‘no, please explain because we don’t fully understand what you are saying here, explain more, how much stressing have you actually done to come out with this, what happens if we go into a negative interest rate situation?’. Just asking questions that frankly any board member should be able to ask...” (DR 1)

Risk Appetite

Most interviewees were of the opinion that many financial institutions had taken on excessive amounts of risk and that they had sometimes done so with very little appreciation of even common sense limits:

²⁵ One interviewee even suggested that many models were affected by ‘a law of thirds’ where “a third [of the input data] is totally accurate, a third flawed and a third is entirely wrong” (Risk Consultant 2).

“How can you make so much money out of nothing? Frankly it’s always been one of my big questions. If your P&L is looking too big, as an accountant and financial controller in lots of organisations one of the things I’m always looking at is why it is too big. You can’t just say ‘ooh isn’t that nice, it’s much bigger than I was expecting it to be’ and leave it at that. You have too question far more when it’s too big than when it’s too small.

I’m afraid that the old saying if it looks too good to be true it probably is. For a lot of these board members, highly paid people because they have the stewardship of these large and complex institutions, they either deliberately didn’t look at the implications or didn’t understand them, the product or the instruments they were dealing with.” (DR 1)

However, competitive pressures also played a part in dictating the risk appetites of some financial institutions, suggesting that the excessive risk appetites that were exhibited may not have been simply due to incompetence:

“There’s a difference between spotting and managing it and going back to what I said before everybody’s in the same market. Unless you distinguish yourself as an organisation with a very different appetite, for example a building society has a very different appetite in comparison to an ex building society, a traditional life insurance has a very different appetite to an investment bank. Other than that I don’t think that if all of your peers are in that market it takes a strong will and a lot of trust to buck that trend.” (HOR 3)

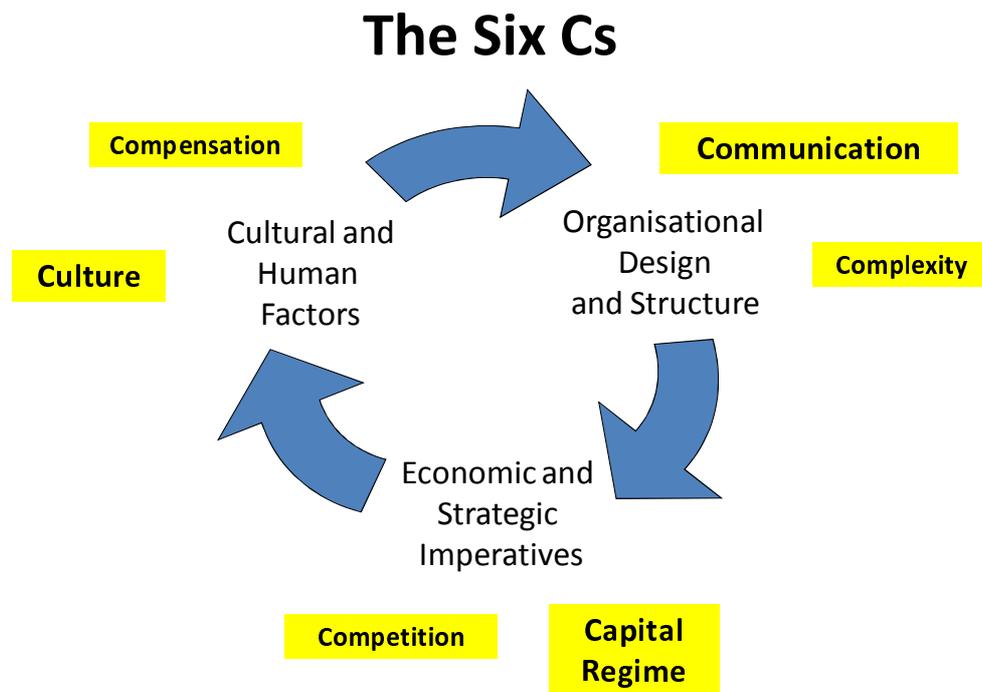
None-the-less the risk appetite frameworks that were implemented by certain financial institutions were significantly better than others, allowing them to control their risk exposures in a more effective manner. The following quotes illustrate some of the key factors that helped to differentiate more from less effective risk appetite frameworks.

“It’s very difficult at the end of cycle, it’s one thing knowing the bubble’s going to burst one day but some of these people were saying this in 2000 or 2001, when it happened it 2007. You could argue that they were ahead of their time. It comes back to understanding risk appetite over the lifecycle, thinking the unthinkable, working that into your equation and being able to tweak your risk appetite..... If you look at the share price of Northern Rock, that told you a long time before it collapsed that things were wrong because the valuation was going pear shaped. Smart money knew and was actually pulling their money out of Northern Rock very early on.” (Non Exec 2)

“Some of them [had effective risk appetite frameworks], yes. Others quite clearly, no. If I look at Dick Fuld [CEO of Lehman Brothers], for example, there was a man who’d been working for the same company for many, many years and he reckoned he knew pretty much what happened in his company. I would guess that Lehman’s didn’t actually have a heavy formalised structure for determining the corporate risk appetite, let alone link that with what’s actually happening on the ground on a day to day basis. Whereas I would guess an organisation like JP Morgan would have far more solid, identifiable systems in place, where they would effectively be back testing all the time as that’s the only way you can get to know whether your risk appetite is working right. I think there are companies at both ends of the scale.” (DR 1)

5.2 *Why Did Risk Management Fail? The Six Cs of the Financial Crisis*

Given that there were a number of failures in relation to the risk management practices of certain financial institutions the next question is: why? A detailed analysis of the responses provided by the interviewees revealed that the above risk management failures were due to six key factors, or as they will be termed the Six Cs. These factors are illustrated in the diagram below:



Hence the causes of the current financial crisis are not that different from those of many previous crises, financial or otherwise. As illustrated by the fact that each of the six Cs relates to one of the underlying preconditions that have already been identified by crisis management researchers (see section 2.2).

Moreover it would seem that the crisis can neither be blamed on any one single cause (or one group of related causes) nor is it likely to be resolved by any one solution, no matter how simple or elegant it might seem. As such it is inappropriate to suggest that the crisis can be blamed primarily on factors such as banker's remuneration arrangements (House of Commons Treasury Committee 2009b), insufficient capital or liquidity risk regulation (FSA 2009b) or the interconnectedness of retail and investment banking (see for example Kay 2009).

Each of these six Cs is examined in further detail below. The analysis starts with the three least important factors that arose from the interviewees (these being the ones with the smaller font size) and then proceeds with the three most important ones.

5.2.1 *The Three Least Important Cs*

Before proceeding it is important to stress that the following Cs are far from unimportant. Rather they were, in the opinions of the majority of the interviewees, less important than the other three. Hence this does not mean that the following factors should be ignored, however it

may be that they should not have been given the importance that they have by some commentators. In no particular order of importance these three Cs are as follows:

- Compensation
- Complexity
- Competition

Compensation

Blaming the crisis on ‘greedy’ bankers has been a popular thread in much of the publically available commentaries on the crisis (e.g. see COP 2009, House of Commons Treasury Committee 2009b). However, not all of the interviewees agreed that the crisis should be blamed on high salaries or bonuses alone²⁶, moreover it was pointed out that financial institutions must offer good salary and bonus arrangements, in order to attract quality employees²⁷.

Although high salaries and bonuses per-se may not be the problem that some believe them to be none of the interviewees questioned whether poorly designed compensation arrangements had been a contributory factor in relation to the crisis. The key issues being as follows:

- Incentive arrangements that encouraged short-termist, sales driven, behaviour.
- Arrangements that did not claw back salary/bonuses when losses were incurred, thus forcing key decision makers to have a financial stake in the decisions that they were making.
- Arrangements that failed to reinforce or even contradicted the governance arrangements of some financial institutions (e.g. arrangements that did not incentivise managers to properly assess, monitor or control risk).

Fundamentally the above flaws in compensation arrangements helped to create a moral hazard problem, whereby the agents in receipt of them (e.g. directors, senior managers, etc.) were being incentivised to expose their principles (typically shareholders) to an excessive amount of risk. This being because these agents were able to share in the upside (profitable) states of the world that could accompany their decision making, but not bear the full costs (or possibly even none of the costs) that may be associated with any loss making states²⁸.

The following quotes illustrate this moral hazard problem in the words of the interviewees:

²⁶ For example one Finance Director explained: “It [remuneration] was a brick in the foundations of what has happened rather than a cause. Remuneration on its own wouldn’t drive the current turmoil but alongside weaknesses in corporate governance, the fact that risk management practices were not being used effectively, good times were being had by all so an element of complacency crept in – that along with remuneration all combined to create the issues we’ve got.” (FD 2)

²⁷ As one interviewee explained: “I think one thing which perhaps the general public doesn’t necessarily realise is that you do need to pay good people the right amount of money. That situation still remains even if the organisation is in government ownership, I’m afraid. So when people start talking about the remuneration packages of the replacements to Fred Goodwin etc. they’re a bit off the mark because if you pay peanuts you will get monkeys and particularly when an organisation is under government ownership you need to have it properly run. That’s a sort of starting point. It’s understandable I guess for the general public who are putting their tax pounds into bailing out banks to ask ‘why are we paying these guys such high amounts?’ Actually the answer is if you don’t that organisation will disappear and you won’t get anything back, but not many people like saying that.” (DR 1)

²⁸ For a good overview of the various moral hazard problems that may have helped to cause the current financial crisis see Dowd (2008).

“...when you hear the head of a major function, who lost in excess of \$20 billion, and when asked before all this went wrong how he was going to deliver the very aggressive targets set by the bank and his response is ‘I get paid regardless’ you have to question what sort of behaviour is going to come next. When you incentivise a certain type of behaviour don’t be surprised if very quickly that is what you get. That’s clearly what happened and all through this time – the go-go banking days – while the good times roll and there’s plenty of money washing through a system errors and frauds get covered up. You can hide these things but when the money stops it all comes tumbling out into open view and that’s what is happening now.” (Risk Consultant 2)

“I think this is really important actually because you’ve got people on mighty salaries running large organisations for relatively short periods of time and they don’t have ‘skin in the game’. People have walked away with fortunes off the back of running enormous organisations without managing risk properly..... If you are running a small business it’s easier to understand it, if you’ve got skin in the game then I think you’ll be more careful with it. I would say and I’m no expert in this area that old style city investment banks which were based on partnerships were probably more acutely aware of the need to manage that business as their own because it was their partnership, they really had skin in the game whereas when you get corporates I just think there’s more scope for mismanagement or a lack of attention to that kind of detail.” (HOR 2)

Hence it would seem that there is a need to redesign the compensation arrangements of some financial institutions in order to mitigate any moral hazard problems. However what the evidence also shows is that it is too simplistic to blame the crisis on the size of pay/bonus awards that some people were receiving. In fact there is no reason why such awards should not be high, providing that they are earned on the basis of considered risk taking that balances the interests of all major stakeholder groups (for example shareholders, consumers, employees and society at large).

Complexity

Financial services is a complex business, whether assessing the credit worthiness of borrowers, the riskiness of a prospective insurance policyholder or the value of certain assets such as collateralised debt obligations (CDOs). In particular there are a wide range of difficult and sometimes volatile risk factors to consider. Moreover the interrelatedness of many activities, risks and institutions creates the perfect environment for unforeseen correlations and extreme events.

Hence it is hardly surprising that, in an environment as complex as the financial services sector, major crises emerge from time to time. Indeed there is even a branch of crisis management research (Normal Accident Theory) which suggests that crises are all but inevitable where complex and or tightly coupled (interdependent) systems are present²⁹.

However, while accepting that the financial services sector is highly complex most of the interviewees did not see the financial crisis as an inevitable result of this, rather they highlighted a failure on the part of some institutions to manage the complexities of their risk exposures in an effective manner. The following quote illustrates this sentiment:

“People forgot the basics of banking ‘Banking 101’ is don’t lend if you can’t get it back and ‘Banking 102’ is if you are going to lend long and borrow short

²⁹ See Müßig 2009 for a discussion of Normal Accident Theory in the context of the current crisis.

you are taking a huge risk. People forgot that one as well! I was taught this literally in my first week of banking.” (Risk Consultant 4)

Indeed this quote is particularly illuminating since it highlights that even in complex environments there are often certain basic rules or principles that can help to reduce the associated risk exposures.

Hence while the complexity that can be associated with the financial services sector played its part, the current crisis was far from inevitable. Rather it was the ability of management to cope with this complexity that was key – where the management of some financial institutions were better at this than others:

“The big boys, Barclays, HSBC etc., were leading the charge but the smaller banks were following the herd. For the likes of Clydesdale for example that is not their core competency, for Halifax who took over a bank that wasn’t core competency. The big boys knew what they were doing but when you get to the second or third tier that is where too many players were chasing too few and the dross got picked up without them knowing what they were doing.” (Risk Consultant 3)

Competition

Many of the interviewees had something to say in relation to the issue of competitive pressures. The key theme being that it is too simple to blame excessive risk taking on greedy or irrational/incompetent managers. Instead it was made clear that some very real and rational economic pressures often drove institutions to make the risk management decisions that they did:

“Some people say a bonus culture – I don’t think its bonus culture, I think it’s a real desire for shareholders and stakeholders and the analyst community to get returns and their consistent profits. You get very little credit for having a steady ship and being consistent, it’s much more about differentiating from the rest of the market and getting the best margin.” (Project Director 1)

Equally increased competition may have driven some institutions to take short cuts in their risk management activities in order to save both time and money:

“When I first came into the city in ’85 you would have a euro bond dealer, the primary market euro bond trading bank. We would buy at ‘89’ in Germany and sell at ‘101’ in Tokyo. A quarter of a million bucks was made in a single transaction - basically ring the old fire alarm, Tom and Dave would go down to the cellar for half a bottle of bubbly per person to celebrate. There was no communication [between the traders of rival institutions – hence slowing down the price mechanism]. The market was driven by people who were trading because they saw an opportunity. Today’s world in the finance industry is one with near enough perfect communication. The opportunities for big profit and big loss have really gone. The only way you can still do that is by inventing something new. And as soon as something new is invented Goldman Sachs will be the first to come up with the idea (laughs) and the flock will follow. If you are in the 2nd wave you will pick up some of the action but by the time you are in the 3rd wave you are really taking on risk for no reward. Therefore it comes down to processing – process transactions with the fewest number of people in the quickest, most accurate manner. Its how can you process it quicker and cheaper and this has forced not only finance but all industries to do that because it applies equally to making widgets, selling grapes whatever. Its how can you get the

thing in the cheapest possible way so you derive the greatest profit margin. It has driven everyone to process, to computerise people, remove delay and accept – in the old days you would never have a bank accept a Teller who had a problem with his till and was a penny out, he was there until he sorted it and if he had a problem he was in the manager's office having a dressing down. Do people care? No, it just gets stuck in a spreadsheet" (HOC 1)

While there were clearly a number of market related elements at play, some interviewees pointed out that not every financial institution followed the trend for increase risk taking in the pursuit of higher rewards. The key features of such institutions were twofold:

- The quality of their risk appetite framework and associated risk reporting structures. Where some institutions were not only able to spot the crisis coming, but also took decisive action to reduce their exposure to it (one public example being HSBC)³⁰.
- An organisational culture that embodied the traditional financial services virtues of prudence and conservatism³¹.

As such it would seem that where a financial institution has implemented an effective risk appetite framework and or where it has a strong internal culture it is possible for it to resist external market pressures. So again, as with the issues of 'Compensation' and 'Complexity', it largely comes down to the quality of the management of a financial institution.

5.2.2 *The Three Most Important Cs*

The three Cs outlined below represent the factors that, in the opinions of the interviewees, lie at the very heart of the crisis:

- Culture
- Communication
- Capital regime

Each of these factors is outlined in turn.

Culture

The role that cultural weaknesses can play in causing crises is a major theme within much of the established research into crisis management. In particular it has been known for some time that 'crisis prone' organisations typically have cultures which are very different to 'crisis avoiding' ones (Pauchant and Mitroff 1988). The key difference being that crisis prone organisations are self inflated and narcissistic, where their managers care mainly about

³⁰ The following quote illustrates this point: "It's very difficult at the end of cycle, it's one thing knowing the bubble's going to burst one day but some of these people were saying this in 2000 or 2001, when it happened it 2007. You could argue that they were ahead of their time. It comes back to understanding risk appetite over the lifecycle, thinking the unthinkable, working that into your equation and being able to tweak your risk appetite..... If you look at the share price of Northern Rock, that told you a long time before it collapsed that things were wrong because the valuation was going pear shaped. Smart money knew and was actually pulling their money out of Northern Rock very early on." (Non Exec 2)

³¹ See for example this quote: "I would have thought there are very few companies out there – a good example would have been Lloyds who sort of bucked the trend but they then got caught out in a different area (laughs). They did remain relatively prudent and cautious compared to others and I think that's because they had an excellent CEO and Chairman who weren't prepared at that point to do what everyone else was doing. The risk culture was set at the top and they weren't going full on for growth but taking it steady...." (CRO 5)

themselves and their organisation. While crisis avoiding organisations are exactly the opposite – being much more self regarding and outward looking (i.e. they consider the needs of all stakeholder groups). Much subsequent work has been conducted, using a range of real world crisis events, thus expanding and deepening our understanding of the factors that can influence the ‘safety culture’ of organisations (as it is often termed) and hence their underlying vulnerability to crises (see Choudhry, Fang and Mohamed 2007 for a review of this literature). Moreover, this includes a limited amount of work in the financial services sector (see for example Ashby, Sharma and McDonnell 2003, Herbane, Elliott and Swartz 2004) thus confirming that it is equally relevant here.

When asked about the underlying causes of the crisis almost all of the interviewees referred to a range of common human/cultural ‘weaknesses’, including greed, short-termism and herding (the tendency to copy the strategies of other institutions)³². Indeed for some such weaknesses were fundamental:

“I’m a great believer that when you do look at underlying causes you use root cause analysis and try to go back to basics. I’m going to say this because of my bent towards people, but when I look at risk there are two underlying causes – one is god and one is people.” (FD 1)

“For me it’s human behaviour. Everything else comes off the back of that whether its governance, culture, capacity, capability or implementation of framework – it all comes back to the person.” (Risk Consultant 3)

The interviewees also revealed that these human/cultural weaknesses were often reinforced by certain powerful factors, at the industry-wide, inter-firm and intra-firm levels. Moreover, they indicated that some financial institutions had cultural characteristics which allowed them to control these inherent weaknesses, indicating that culture also had a positive crisis avoiding effect.

At the industry wide level greed, short termism and herding were reinforced by a very strong collective belief that the good times would continue almost indefinitely. A belief that was strengthened by ill advised (at least with the benefit of hindsight) statements from governments that the traditional cycle of boom and bust had been conquered. Indeed one of the interviewees likened this to a drug crazed party at which financial institutions, governments and much of society was present:

“I was speaking to people who said this is unsustainable but when the whole world is on this drug crazed party it’s very difficult to say stop the music and the drugs and it just carried on until it couldn’t carry on any more..... the environment we were in worked for everybody really well and the government created tax revenues, people were feeling better so were voting their governments back in so nobody saw that the emperor had no clothes on. It wasn’t just greedy capitalism – we’d gone beyond that and it seemed OK for people to earn vast sums of money producing financial instruments that made short term killings for the people. Everything worked – the fact it couldn’t be sustained without generating more wealth nobody really cared about.” (Non Exec 2)

At the inter-firm level interviewees often highlighted two types of financial institution: the crisis prone which had aggressive, sales and market share orientated cultures and

³² The issue of herding is well illustrated by the following quote: “I think within the sector there’s a bit of a sheep mentality, so if you see one do it they all do it.” (CRO 5)

who were frequently run by dominant and egotistical executive directors³³; versus the crisis avoiding ones, which escaped significant losses by maintaining more traditional prudent and conservative cultures. The crisis avoiding institutions also had directors and employees who were prepared to take a long term view rather than strive for short term growth. For example, one interviewee explained the crisis avoiding nature of their culture as follows:

“...the problems in the subprime market were flagged very early in the organisation, the decision to reduce activity and provision in that area was taken very early, the organisation is fundamentally conservative in its attitudes and I suspect that more than anything helped us in the current crisis. We hadn’t gone down the gearing up of the balance sheets and almost the commercialisation that some of the other organisations had done, which indicates that there is a more robust management culture, rather I think a more deeply ingrained level of conservatism....” (Risk Consultant 1)

While a crisis prone culture was expressed as follows:

“The culture of the whole organisation was sales driven. The rewards and promotion were all internal and rapid. People were hugely rewarded with lots of share options and bonuses. The risk people were disaggregated, not rewarded, so didn’t have an integrated risk function.... There was no incentive for any of the risk people to stand up and challenge and there are stories of those who did challenge the groupthink that were heavily penalised as a result.” (CRO 3)

In this context the fable of the hare and the tortoise springs to mind; however such an overly conservative approach to management can stifle profitable growth and innovation. Rather, based on what the interviewees said, what was more important was the fact that many of the institutions which have been less affected by the crisis had risk aware cultures, where risks were discussed in an open and non confrontational way, but were also accepted when the rewards were deemed adequate. Also in relation to many of the financial institutions that have been badly affected by the crisis it would appear that they failed to see the link between their risk culture and capacity to bear risk. Where an aggressive high risk culture is probably inappropriate within second and third tier institutions (as in the case of Northern Rock, HBOS, Derbyshire BS, Cheshire BS, etc.), who lack the necessary experience and financial strength to exploit more volatile areas such as the riskier categories of sub-prime/commercial lending or credit securities and derivatives.

Finally at the intra firm level many of the interviewees talked about the cultures of not only boards/senior managers, but also those of certain risk management functions. As such it would seem that while some boards/senior managers may not have paid sufficient attention to risk management considerations, or been reluctant to challenge high levels of risk taking

³³ See for example the following quotes from the two finance directors that were interviewed:

“Having spent 3½ years in the boardroom they do tend to be made up of people with big egos and I do think that they are part of any business’ boardroom. You’ve got to be of that ilk to be in those kinds of positions and there are probably too many big egos and not enough people with a more rational point of view who can pull these egos back into a more sensible space.” (FD 1)

“If you have a powerful or dominant person in a company, historically that had a huge impact on the direction a company took.... A dominant management team can be quite persuasive without receiving the challenge of ‘do you fully understand the direction you are taking the company in or the commitments you are making on its behalf?’ It was all about growth....” (FD 2)

while the profits were rolling in³⁴, many risk functions were their own worst enemies when trying to get their voices heard. Specifically it was commented that many risk functions adopted “ivory tower” (HOR 2) and or officious ‘compliance orientated’ cultures, instead of business focused ones devoted to supporting both strategic and operational decision making. In so doing risk management functions are much more likely to be marginalised and ignored, meaning that valuable messages about an institution’s risk exposures may not be given the attention that they deserve. As one Chief Risk Officer explained:

“Often we get things achieved in our own firm because we say ‘we must do this, the regulator says we have to and that’s why we’re doing it’. We should be doing good risk management for the right reasons because we see the benefit to the business and our clients and our reputation. We’re going to make money out of it – fantastic – not because the regulator tells us to.” (CRO 1)

Communication

Along with culture weaknesses in communication have been identified as a key underlying cause in many crises³⁵. The key issues being:

- Whether the right data is communicated to the right people (e.g. whether key decision makers such as boards/senior managers are receiving the information that they need to make effective strategic decisions and or avert an impending crisis).
- Whether those receiving this data are able to understand it.

In the context of the current crisis much has been written on the second point, especially around the issues of board level understanding and the competency of board directors (for example see Turner 2009, Walker 2009). However much less has been said on the first.

Interestingly the interviewees had a lot to say on both points. Moreover they indicated that boards did not always receive sufficient support from management to help them make sense of the information that was being presented to them.

It is, therefore, too simplistic to attribute all of the blame to the boards of financial institutions, since in some cases it was management (including the risk management function) that failed to present meaningful information. This may either have been because management did not have the tools/expertise to do so or even because information was being deliberately withheld from boards. Some of the interviewees summed this up as follows:

“...maybe we are not always best at putting that message across. As risk managers we’re all very good at saying how good we are but are we good at saying ‘actually there is some fault within us?’” (CRO 1)

³⁴ The following quotes illustrate the attitudes of some boards/senior managers towards risk management:

“...there’s ignorance that you often see at a senior level. There is lack of understanding, lack of willingness to understand risk issues.” (CRO 1)

“There were one or two incidents of people at lower levels raising concerns but they were either not heard or passed over. So you had a management that had a one way [sales orientated] mindset, that was almost blinkered in terms of its focus.” (CRO 3)

³⁵ For crisis management research on the issue of communication see, for example, Shrivastava et al (1988) and Smith and Elliott (2005, Ch 20).

“I don’t think boards in general get sufficient info on [risk] exposures – because they either don’t want or understand it. For whatever reason the boards seem to be kept away from being told ‘you must understand risk’.” (HOR 3)

Based on the responses from the interviewees the most likely explanation for any deliberate reporting failures is filtering, such behaviour having occurred because of pressure from executive/senior management, or where those responsible for producing risk reports wanted a ‘quiet life’ (for example to avoid increased work demands)³⁶:

“One of the big problems is whether boards have relevant and accurate info to be able to monitor a firm’s risk exposures. Risk reports get diluted at every level as they go up until eventually something that is presentable, won’t upset anyone, or rock the boat is presented to the board. We’ve all seen that.” (Risk Consultant 2)

In contrast some other interviewees highlighted the opposite problem, whereby the boards of certain financial institutions may have been overburdened with information, preventing them from ‘seeing the wood for the trees’.

“When I arrived the first thing I did was look at the risk report and it was something like 76 pages long in size 8 font, it was absolutely incredibly detailed and I couldn’t read it.... So I basically cut that report down to 12 pages and it still did not get enough attention, so I cut it down to 3 and then it received air time.” (HOR 2)

“People have this desire to get into huge volumes of data and I’ve actually seen in one bank an audit point that states, and it’s from the external auditors, that they should stop collecting data and start analysing it.” (Risk Consultant 4)

Hence it would seem that there were a variety of communication related weaknesses within financial institutions, the net result of which being that their boards and senior managers either did not have the information that they needed to make effective risk management decisions, or simply did not understand the information that they were being presented. It is hardly surprising that under such circumstances they ended up exposing their institutions to ‘excessive’ amounts of risk.

Capital Regime

While all of the interviewees accepted that many financial institutions have to shoulder some of the ‘blame’ for the current crisis, they also had a lot to say about the poor performance of the current capital regime for banks, building societies and investment firms. Indeed some of the interviewees made it very plain that financial services regulation in general had failed and had introduced system-wide weaknesses that were a major cause of the current crisis:

“Of course the regulators were appalling either at understanding what they were regulating or actually regulating, probably the latter because of the former.” (DR 1)

This adds weight to the findings of the various external commentators that highlight the role that regulation has played in causing both previous financial crises (see: Caprio and Klingebiel 1996, Llewellyn 1998) and the current one (e.g. Dowd 2008 and 2009b, Beenstock 2009, House of Lords Select Committee on Economic Affairs 2009).

³⁶ Filtering has also been observed in previous crises. See, for example, Shrivastava et al (1988) who highlight the issue in the context of the Challenger Space Shuttle disaster.

The points raised by the interviewees on this topic fell into one of two main areas:

- Criticisms regarding the current Basel 2 based prudential regime.
- Criticisms regarding the implementation of this regime by ‘competent authorities’ such as the FSA (Financial Services Authority).

Did Existing Regulation and Specifically the Basel Accord Help to Cause the Crisis?

The interviewees addressed a range of issues on the subject of whether existing prudential regulation helped to cause/make worse the current financial crisis, notably:

- The bias within the Basel 2 regime towards quantitative risk assessment. A focus that encouraged many financial institutions to become overly reliant on mathematical risk models at the expense of management judgement:

“I think it’s probably worth saying that the good old Basel 1 regime wasn’t risk sensitive but it didn’t allow a credit crunch like we’ve had. Basel 2 sensitivity drove people to models.... so you are making a lot of strategic decisions off the information these models are producing and again you hope the people managing the models are totally competent.” (CRO 5)

“I’m a bit of a Luddite when it comes to risk frameworks. Because the way the regulations work now it tends to lead you into defined categories and you imagine a room with green, red and amber lights and you spend all your time watching them and reacting to how they go off. The nature of risk management is that’s the hygiene stuff that you have to do. And notwithstanding all that, where is the stuff I don’t know about? You only track what you know about and this was a new emerging risk, which with the overall complexity of the financial system hadn’t been fully appreciated by anybody. With the result that when it happened there were no KPIs that were telling you what was going on... The point of risk management is to think about where the emerging risks are and what the regulators do is focus on what can be measured and they’re not the same thing.” (CRO 4)

- Interviewees also highlighted the capital myopia of the current Basel based rules, which predominantly relate to the calculation of regulatory capital requirements, rather than the essential elements of sound frameworks for risk management and corporate governance:

“The whole incentive behind Basel 2 was to reduce capital but underlying that was the failure to understand what risk management actually means – do we believe in good risk management against decent capital?” (HOR 3)

Moreover there is a real possibility that the regulatory emphasis on capital adequacy encouraged financial institutions to ignore risk management considerations. This was caused by a kind of moral hazard, where institutions were able to increase their exposure to risk providing they had sufficient capital – since capital effectively operates as a substitute for good risk management in the current Basel based prudential regime. This of course runs contrary to the conventional argument that risk based capital requirements should help to incentivise good risk management.

- Some interviewees raised the issue of pro-cyclicality, both in relation to the Basel Accord and International Financial Reporting Standards³⁷. In so doing they argued that these regulations may have helped to make the crisis worse by accentuating the impact that paper losses had on the balance sheets and capital requirements of many financial institutions:

“To make things easy for themselves does not necessarily lead to good regulation. They were told about pro-cyclicality – I remember sitting there at the 4th annual supervision conference at the BBA where they went through Basel 2 and said ‘well excuse me doesn’t this stink, as soon as there’s a bad time it’s going to be a deck of cards’. ‘Well yes’ they said. ‘So what are you going to do about it then?’ I asked and they obviously never had an answer to it, which is a shame really because it’s just so obvious.” (HOC 1)

- Finally it was suggested that the current capital rules may have fuelled the growth in both credit securitisation and the use of shadow banking organisations such as special investment vehicles. The purpose of this being to reduce regulatory capital requirements:

“So there you go you’ve got a triple-A rated bit of paper, you buy it – they [financial institutions] did question the fact that they were being issued with 50 basis point margins and things like that, it’s a bit high for a triple A rated piece of paper but you could repo it out at 5 basis points less than LIBOR, so no cash out the door, 55% return with practically zero capital.” (HOR 1)

“There were a lot of people making a lot of money out of what was effectively ... the rules allow me to do this, I am working within the guidelines that have been set by the regulator, I perform all those things and tick all the boxes therefore it says that my return is ‘y’ and as long as it continues like that, great but if you are left holding the baby at the end it’s a problem.” (HOC 1)

“We underpriced credit risk. 6 months before the crisis we were scratching our heads saying how can these guys do these deals at 40 over LIBOR? You can’t do these deals. The answer was SIVs and SPVs which were a massive market and regulatory failure. We all thought it was going into the system. It wasn’t. As Turner found out it was being recycled back into the banking sector.” (Non Exec 1)

Hence it would seem that there were a range of flaws within the existing regulatory frameworks. Moreover these flaws may themselves have helped to create the preconditions for a major system wide event. This highlights the potential dangers of poorly conceived regulation and suggests that future regulatory initiatives must consider carefully any unintended consequences that may be associated with them.

Were Regulatory Agencies Competent?

The competency of the regulatory agencies charged with implementing the Basel 2 based capital regime was questioned by many of the interviewees, who criticised the skills and business related experience of regulators, suggesting that their staff were not good enough to keep ahead of the institutions that they were regulating:

³⁷ Pro-cyclicality can arise where a particular regulatory regime encourages or necessitates business responses that exacerbate the strength of the economic cycle. In the Basel 2 context it arises because the capital requirements of many financial institutions will fall in boom periods (for example because credit default losses are low) and rise in recessions.

“I don’t think the regulators actually understand, I think that they have a problem in that the good people get bought by the industry.” (HOC 1)

“Our supervisor at the FSA has probably just had his 14th birthday! I know that is a bit of an unkind statement but they come in with their checklists and tick everything off and we got a very good report but they don’t really understand what is going on underneath the surface because they are not streetwise enough and don’t understand some of the people aspects – some of the characters on the board, some of the egos that fly around etc., which fundamentally I think is part of what’s going on here. (FD 1)

“When I was at the FSA..... I just had very fleeting conversations with the banking supervisors and I remember one of the comments that was made to me which was, specific to xxxx, they said they were in the too big to fail category and another comment that was made was ‘no one understands why the banks hold so much capital’. At the time I was the kind of person who likes to get to the bottom of something and understand it and that rang a bit of an alarm bell because I thought ‘how can that be the case, how can you not understand why banks hold so much capital’. With hindsight you can say probably that the FSA didn’t understand the risk in the bank and obviously the banks didn’t understand the extent of the risk either because the banks ran out of capital but the FSA didn’t understand why they had so much. It’s just an anecdotal comment but quite revealing.” (HOR 2)

The interviewees also commented on the mechanistic nature with which regulations are often implemented. The difficulty being that it is hard to coordinate large numbers of supervisors and ensure a consistent response without some degree of standardisation, which can lead to a box ticking exercise that does little to incentivise good risk management:

“One of the biggest problems I think that regulators have is they might have great theoreticians but what they absolutely need is people who know how real life works and if this wasn’t being recorded I would speak quite specifically about the FSA in those terms because that’s where I think the FSA has really fallen down. Regulators absolutely do not need to demonstrate internally or to the outside world that they have ticked boxes – that is just not what a regulator needs to do.” (DR 1)

“...rules based supervision invariably goes as a box ticking exercise. I think that is a massive failure..... I did not like the rules based stuff at all. And I thought ARROW 1 was far too... I mean I sat there watching team in MFGD [the Major Financial Groups Division] say ‘we know xxxx wants a medium-high on this one’. You’ve got 3 pages of boxes and they are filling the boxes in like Sudoku to make sure the result at the bottom is an MH [medium high]. That’s not the way to do it. You’ve got to get there through the process.” (Non Exec 1)

6 Learning Lessons: Managing Future Financial Crises

“...while it is tempting to address the most conspicuous problems highlighted by the present turmoil, there is a risk of focusing too much on the symptoms, rather than the underlying causes.” (Borio 2008)

As indicated by Claudio Borio there is always a danger when analysing financial crises that too much emphasis is given to those events that are the easiest to observe – typically the events that have triggered the crisis in question³⁸. However such superficial analysis is unlikely to provide lasting solutions to the prevention and mitigation of future crises, not least because:

- Any such solutions will do little to alleviate the financial services sector's inherent vulnerability towards financial crises. Hence although such measures may delay the occurrence of future crises or provide a small amount of relief from their effects they are, in the final analysis, unlikely to prove effective over the long term.
- While the underlying causes are likely to be the same, the next crisis may, on the surface, look very different to the current one. This means that the triggers for the current crisis may not even manifest themselves in the future.

The purpose of this section is to outline the views of the interviewees concerning the fundamental lessons that they believe need to be learned for the future, both by financial institutions and their regulators. In so doing it will consider how future crises can be prevented and/or mitigated somewhat more effectively than the current one.

6.1 Lessons for Financial Institutions: Reducing their Exposure to Future Financial Crises

The interviewees all had something to say regarding how they thought financial institutions should enhance their risk management and corporate governance practices, since many had already participated in internal post-mortems of the crisis.

Improving Risk Cultures

It is tempting to conclude that the current crisis is a victory for the 'traditional' banking model of prudence and conservatism. However as explained in section 5.2.2 above, an analysis of the responses provided by the current set of interviewees reveals that such a conclusion may be premature.

Instead the key cultural lessons that need to be learned are:

- The boards/management of financial institutions need to be more risk aware and prepared to act quickly when they find themselves exposed to 'excessive' amounts of risk:

“At the end of the day you've got to take risk somewhere to make any money and that's the thing. It's visibility around our equity exposure – the MI is much more detailed and quicker – and about decisions that can be made in an informed way. Whether you can spot the next big thing? You can't necessarily have a crystal ball in place but you've got to have all your pegs in place so that you can respond.” (CRO 6)

- To improve the assessment and control of extreme events (such as systemic crises) management experience and expert judgement should be valued more.

“People talk about learning lessons – people don't learn lessons because they retire and when the last person retires who knew about something once he's gone

³⁸ For example in the case of the current crisis the main trigger events were rising mortgage defaults, coupled with the loss of confidence that was observed in many markets. See Appendix A.

you start a whole new cycle and they make the same bloody mistakes all over again. I was having lunch with someone today who was telling me the story of her talking to a credit derivatives trader and in his experience this is the worst market environment he's ever come across and she asked him how long he'd been a credit derivatives trader – 3 years (laughs). He knows absolutely nothing! One would hope that the institutions don't get rid of all the 'grey hairs' because the sort of risk management we talk about is based on experience and not forgetting what you already know." (Risk Consultant 2)

- No blame cultures should be created, where staff (including risk managers) feel able to "bring out their dead" (CRO 6) and report not only actual losses/near misses, but also their concerns regarding future potential losses.
- Risk management departments should adopt a more business focussed culture, where risk managers work in partnership with front line managers, helping them to make effective risk management decisions, rather than putting obstacles in their way.

"The key is having the right people who understand the business and buy into the need [for risk management]. As long as you've got that and the right people in risk management, who understand how to sell and get the message across, it's relatively easy I think." (CRO 1)

Of course the above elements of a sound risk culture for financial institutions, are easy to articulate, but may seem hard to implement. However, the interviewees revealed that there are some quite simple HR solutions that can be used to achieve these goals. Solutions such as the retention of experienced staff, the communication of risk management objectives in training and induction programmes, internal placements (where risk management staff work within front line departments for a time and or vice-versa) or cross department team building projects that are designed to break down barriers. Indeed, more generally, there is a lot that could be achieved by closer integration between risk management and HR; however this is not something that has received much attention in the financial services sector (see Ashby 2009b).

Redesign Compensation Arrangements

Many of the interviewees commented on the lessons that need to be learned in terms of salary and bonus arrangements. However they did not generally waiver from the belief that financial services staff/directors require a decent level of remuneration, or that bonuses have their uses:

"There is a role for remuneration. It's a dirty word 'bonuses' today, but there is a role for it, there's absolutely no question whatsoever. There are lots of options. You can have deferred bonus schemes, phantom options schemes, etc. There's a load of consultants out there who can tell you how to do it." (Non Exec 1)

One key lesson that was outlined by some of the director level interviewees (Non Exec 1 and 2, FD 2) relates to the time horizons over which bonuses are paid, where staff who receive short term bonuses are likely to behave in a more risk seeking manner (as they are less likely to suffer from the consequences of their actions). In contrast those who receive longer term bonuses should behave more conservatively:

"There is a need to align long term value creation with the longevity of a financial institution's "reward culture" (Non Exec 2).

In addition it was stressed by several interviewees that compensation arrangements should be aligned with an institution's risk management and governance policies. In so doing they should be designed in such a way that managers are incentivised to not only consider their

institution's risk appetite when making business decisions, but also assess and report on risk issues in a timely and efficient way. Such arrangements should be enforced using clear rules that highlight the kinds of risk taking/reducing behaviours that will be rewarded as well as those that will not:

“We've also incentivised everyone by having it [risk management] in every senior manager's objectives. Which for this year includes a risk and controls objective with some very clear measures around fulfilling risk, risk policies, controls that will set up obligations demonstrating the control environment being made more robust on an ongoing basis, and continuous improvement in those processes to make sure there's nowhere to hide behind 'you know I'm here to make money'.....

...if they don't fulfil that objective its 1 of 6 objectives on which they would fail. I don't think the culture at the exec level will tolerate that kind of behaviour, there's always one or two who will sail close to the wind but they're generally known and the best approach is to bring them back in line and make sure they fulfil the policies.” (HOR 1)

Learn Lessons from Outside the Financial Services Sector

“I think we need to look for some real solutions and look outside of the financial services sector. At the Operational Risk Reality Check Conference there was a young guy there who had just joined the Institute [of Operational Risk] who came from the oil and gas industry and he was looking at us as if we had two heads. He was saying 'why don't you just manage it? Why are you bothering to count it? You've lost it, now fix it'. Just a very practical hardnosed approach, there's a huge amount we can learn.” (Risk Consultant 2)

As indicated by the above quote there is much that financial institutions can learn from risk management practices in other sectors. One key issue being a re-evaluation of the financial sector's current focus on risk modelling³⁹.

This issue was raised by several of the interviewees, who commented that models should be seen as only one of the many tools that are in a risk manager's tool box:

“I think of the analogy of a kit bag with lots of different tools in it and for a given purpose you take out one of those tools but typically you need a number of those tools to achieve your results. I think that if as maybe some people do who put all of their effort into a model and assume that that's going to give them everything, that's when you get the problems. In the same way as if you don't have any models at all you've got problems.” (CRO 1)

Many of the interviewees also commented that stress testing and scenario analysis should be put to greater use. An assertion that reinforces many of the public commentaries on the lessons from the current crisis (see for example SSG 2008, 2009, Basel 2009b):

“I think scenario planning and modelling is a big lesson that's come out of this and there is a lot of work going on now in financial institutions who look at scenarios far more than they used to.” (Non Exec 2)

³⁹ For a detailed analysis of the risk management lessons that can be learned from non-financial organisations see Ashby (2009b).

Some interviewees went on to emphasise that stress testing and scenario analysis must become more judgemental (for example by incorporating 'softer' risks, such as reputation risk) and extreme, reflecting genuine worst case scenarios. It was also made clear that the results from this should be considered and discussed right up to board level:

“The point of doing scenario analysis and stress testing is not to decide how much capital you should hold because, if you are doing it properly, you will need so much capital that your business is never going to be able to make money. The point of doing this is to enable you to prepare, enable you to think through different circumstances, unfavourable circumstances, and decide how you would manage in those circumstances. It's qualitative, not quantitative, its contingency planning on a larger scale almost. If you identify a scenario that potentially brings down your firm then you must, I would assume, conclude that it is an unacceptable risk for your business and you need to think about what you are going to do about it.”

“There's been a significant improvement in the way they are looking at their scenario analysis and stress testing. For a lot of these firms it's probably the most useful exercise because this will get the board's attention by talking about the headline risks that bother them and show them how they impact and how you mitigate against that to make sure they stay within risk appetite.” (Risk Consultant 2)

Thus, while quantitative risk models may have their uses, they are no substitute for management judgement and expertise. Not least because when this judgement is focused via tools such as stress testing and scenario analysis, it is likely to be a much more effective mechanism for assessing and controlling the 'unknown unknowns' that financial institutions can face.

Improve Internal Control

The final lesson contains a number of related elements. These being as follows:

- Improve the timeliness and quality of risk reports.
- Educate and involve board directors in risk management decision making.
- Enhance the status of the risk function and Chief Risk Officer.

Risk Reporting

Many of the interviewees indicated that there needs to be improvements in both the quality of management information and the speed with which it is produced. Good practice in this area requiring a strong, but compact, set of metrics that includes leading indicators that can provide an early warning of potential problems. Moreover these indicators need to be monitored on a regular basis and presented in such a way that they can support business decisions:

“Certainly some lessons have been learned in terms of the speed in getting relevant management information together.” (CRO 6)

“We're not very good at showing trends and future outcomes, it's much better at what's happened in the past and today but even today its murder trying to get a report that's not 1 month out of date..... Early warning signs help the business to protect the future – using tools like stress testing and scenario analysis. It's not

going overly mathematical and complicating it, it's almost making it simpler but better." (Project Director 1)

"We're getting more people talking about key risk indicators although we try to stop them doing this and get them talking about indicators and metrics because it's very difficult to get a useful risk indicator that's forward looking. Most of them are backward looking and then it's too late to do anything. That comes back to getting the right info into the hands of the right people at the right time. An awful lot of the risk management focus ought to be on taking all of the 'data' of which there are phenomenal quantities and turning it into 'information'." (Risk Consultant 2)

However, despite the value of good quality information complex and highly quantitative risk reporting frameworks are not required. Instead risk reporting frameworks need to be kept relatively simple, so that senior/executive management can make sense of the information that they are receiving and use it to support strategic and operational decision making:

"I think if you presented boards with clear accurate information in a 1-2 page format then they'd make perfectly good decisions. They're not stupid.... [data] needs to be interpreted and presented effectively. Very few people do that..... I sound very old fashioned! It's actually about taking a step back and people understanding their risk profile." (Risk Consultant 4)

The Role of the Board

As indicated in section 5.2 not all boards paid enough attention to risk management considerations and, for one reason or another (greed, myopia, ego, market pressures, etc.), exposed their institutions to excessive amounts of risk. Indeed the conduct of both executive and non-executive directors have come under significant scrutiny following the financial crisis, with a variety of reports making recommendations in relation to them (see for example Walker 2009 and House of Commons Treasury Committee 2009b).

For the interviewees a key lesson from the crisis is that boards must become more engaged in risk management activities. The mechanisms to achieving this being:

- Education initiatives, but without going into detail on the technicalities of risk models:

"I think you need development plans for directors. A couple of boards I'm on are doing that." (Non Exec 2)

"It's down to education of the director and should be the responsibility of every firm to make sure that all their directors (particularly independent non executives, as by definition they're likely to be coming from a different field) need to be well educated as to what the organisation does, how it does it and the things that are involved in doing it." (DR 1)

"I can say for us we put quite a lot of work into educating the board on what the key assumptions are to go into the models and how to interpret the results. Ten years ago I think if we'd mentioned the word 'stochastic modelling' they wouldn't have had a clue what we were talking about and wouldn't understand quite what doing a thousand scenarios meant. Now they're pretty well informed on what a stochastic model means, why we would do a thousand, etc. so their level of education and knowledge about this has come on in leaps and bounds. They wouldn't understand how the model works and they can just about get their heads around what distribution means but not the specifics or the mechanics of

how the whole thing fits together. What they do know is what the important inputs are and how to interpret the output.” (FD 2)

- The creation of a board risk committee. To provide a dedicated forum within which non-executive directors can review and challenge risk management reports and decisions:

“There must be that ability to have the direct link into the non executives. There is the argument that’s kind of covered in the Turner report that boards should have an independent risk committee, the same as they have an independent audit committee. And it ought to be chaired by an independent non exec who understands risk. And the risk management function should have a direct line into that. Should it be completely independent of senior management? I think there is an argument to be made for that but then a lot of audit committees will also include the CEO of an organisation, so whatever works.” (Risk Consultant 2)

- Involving boards in some aspects of the risk management process, for example by using them to help determine an institution’s risk appetite or by supporting and challenging the development of stress and scenario tests:

“I can remember going to an FSA workshop where they talked about financial stress testing and HSBC went on to tell the story of how the Chairman of the board was heavily involved in the conversations about stress testing these models and I think that’s very mature. I haven’t seen much of that close engagement.” (Risk Consultant 3)

That said some of the interviewees cautioned against over involving boards (and non executives in particular) in risk management activities. The danger being that they may get stuck in the detail of day to day risk management decisions. Similarly concern was expressed at the trend towards recruiting more risk specialists onto boards, since they may fail to take a sufficiently broad view of the institutions that they are directing:

“The pendulum is certainly swinging the other way from having generalists on boards to having specialists, which has its own issues. Having people who are only subject matter experts and maybe not having the helicopter view produces different strategic risk as opposed to market or other risk.” (Non Exec 2)

Thus while directors should be knowledgeable and supportive of the risk management activities that are being performed by their institutions, they should not be used as substitute risk managers. Rather they should retain a degree of distance, which allows them to take an enterprise-wide view, while maintaining their objectivity and independence.

The Status of the Risk Function and CRO

The interviewees indicated that the status and authority of many risk functions and Chief Risk Officers should be improved:

“I think that risk management needs to be a strong voice at the table.” (CRO 3)

However, they did not suggest that risk functions/CROs should be able to veto front line decisions. Rather that they should be have the power to raise concerns about risk issues and that these concerns should be given proper consideration by senior management/boards, although not always acted upon, where there are compelling reasons for doing so:

“...just because a CRO voices concern doesn’t necessarily mean the company has to stop what it’s doing. What the company has to do is listen to that concern and understand it and factor it into the decisions they are making. The job of the CRO is to ensure that risk is adequately understood and taken into account. If a company does understand and factor it in then it does something because it’s the right thing to do.... At the end of the day it’s not the CRO’s job to run the business, it’s the board’s job taking into account all the info they’ve been given.” (FD 2)

One of the interviewees used the analogy of a referee in a game of football, where risk managers must be prepared to ‘stop play’ (i.e. intervene) when the risk appetite of an institution is exceeded, but not actually get involved in the ‘play’ (i.e. the running of the business) themselves:

“I always think of risk management as a game of football – the risk appetite is the playing field and as long as the ball stays within the playing field the referee/risk manager can intervene if somebody causes a foul but keeps the yellow and red cards in his pocket until such a time as it really goes wrong. Then if the ball goes out of play, the referee stops the game until people can decide how to get the game restarted. For me that’s always worked in practice, but I don’t think risk managers use the yellow and red cards frequently enough.” (Risk Consultant 3)

Moreover it was recognised that any increase in the status and authority of the risk function and CRO must be accompanied by cultural change within these areas:

“There’s a cultural change required. I’m getting back again to the need to push risk management into the strategic decision making process not to leave it as an afterthought to work out how much capital you should be holding. It’s got to be key to the whole debate and it’s not a question of ‘the man from risk he says no’ it’s a question of the man from risk highlighting circumstances where your prediction proposals don’t work and therefore you have an opportunity now to make them work better. To enhance, to refine the proposals and not just to push ahead with something that actually exposes the organisation to sometimes fatal risks.” (Risk Consultant 1)

“I think that what companies need to do is develop a mechanism where they have a culture where the CRO can put forward their case and that case to be heard and supported in a non-confrontational way. So that the CRO isn’t seen as the person always putting obstacles in the way of doing things because that’s the way it can go. The CRO needs to develop the skills to put forward a cohesive analysis of the risk a company is taking and the business needs to accept that in the spirit in which it is offered which is ‘here’s some info you need to take into account’.” (FD 2)

Similarly it was stressed that CROs and risk function staff need better front line business experience, in order to improve their credibility and ability to engage with other managers. An interesting way to do this could be by recruiting CROs and risk managers from front line business areas or by encouraging them to run their own profit and loss accounts for a time:

“I think for risk management to work well it must be staffed with capable and credible individuals. If people are not professional then they won’t be engaged by the first line [front line managers], they’ll be excluded from business decisions and always playing catch up.... you can only provide [appropriate challenge] if you’ve got the right insights yourself and that’s one of our

aspirations where people go through the risk function as part of their career development. It has so much value in it for the individual as well as the organisation.” (CRO 6)

“I would argue that risk managers should run a P&L for a period of time just to understand how hard it is to sell things and make margin so you can buy more products to sell the next day. It is all about credibility and respect.” (Risk Consultant 3)

6.2 Lessons for Regulators: Enhancing the Stability of the Financial System

Many of the interviewees provided lessons for regulators, as well as financial institutions. The main themes that they covered are outlined below⁴⁰.

Beware the Regulatory Pendulum

There was general acceptance that regulation has a role to play and that limited increases in capital requirements and prescription in certain areas (for example regulation around the structure and composition of boards⁴¹) were justified. However there was significant concern that regulators may overdo things:

“Making sure we don’t over react to one downturn in order to miss the next one is important.” (Non Exec 2)

In particular the interviewees stressed that an effective approach to regulation, post crisis, requires a balance between ‘hard’ rules and ‘softer’ principles led guidance. Moreover, many warnings were issued regarding the dangers of knee-jerk reactions and excessive prescription:

“I do agree that a light touch isn’t the right touch – it needs to be medium. They need to get the balance right but think about it over the long term. There’s going to be booms and busts going through the cycle so they need to pitch it at a different point, but not go to risk averse because of what’s happened because that will stifle entrepreneurship..... I think they need to understand what caused the problem before trying to make solutions. At the moment I don’t think it’s absolutely clear whether there’s been enough research on the causes and yet the FSA are going at it hammer and tongs before they’ve identified the problem.” (CRO 5)

“Rules help because people know where the lines are that they can and can’t cross over. If you make it too prescriptive you are tying people down too much and not allowing that element of entrepreneurship. Businesses have got to take

⁴⁰ For more from the Forum on the lessons that need to be learned by regulators see Ashby (2009).

⁴¹ On the regulation of boards: “I think the structure and composition of boards needs to be far more strongly assessed by regulators and if the regulator feels that an individual on a board isn’t pulling their weight or doing the job they’re supposed to then the regulator frankly should be taking that up with the board. Don’t spare people’s feelings – the time has long gone for that. This is about stewardship, governance and protection of the world’s financial markets and ultimately the individual consumer.” (DR 1)

“Regulation in interviewing non executive directors – that is a useful approach. People have to pass the test. Regulating and making it longer term – changing perspectives. People need to be qualified – all board members should pass the basic British Banking Association exam or something – why not when they have to go back and do banking?!” (Risk Consultant 4)

risks to move forward plus the fact of having too many prescriptive rules assumes that every business operates in the same way and while there is some homogeneity, fundamentally you can't tie them down too much. It's a balance between prescriptive rules on one hand but allowing freedom within those guidelines to be able to take appropriate risks." (FD 1)

"I have the regulator all over my back like a rash. Absolutely at the far end of cautious – over prudent. There is an element of closing the stable door after the horse has bolted and a total knee jerk reaction. I just believe a sense of balance is what is right.... I'm not a great believer that more prescriptive regulation is needed." (CRO 3)

Thus regulators must be very careful not to over-react to the current crisis and should only implement new regulations where there are clear justifications for doing so. Justifications that are based on a thorough analysis of the underlying causes of the current crisis:

"What you want is not to tell people what they can and can't do, which is where the regulator is going, but to have some flexibility and some guidelines that people work to. The proof is in the pudding – the companies who have been prudent will survive and prosper – we haven't taken any wreckage. But no one comes along and says 'well done guys'! We've not got any positive feedback, but actually shouldn't they be taking some of the companies that have been run well and saying 'that's a good business model, what were they doing that hasn't lead them down the path of failure?'.... They know what's caused the problem so surely they should be speaking to the companies who haven't got into a mess to find out what they did and how they controlled the desire to go for profit against the risks of doing that" (CRO 5)

Capital is not the Only Way

Capital requirements were a major theme in many of the responses to the question of how regulation should change in the future. This though is unsurprising given the pre-eminent role that they play under the current prudential regime and the fact that they are likely to continue to do so in the future.

However the question remains as to whether the current and expected future focus on capital requirements is the right approach. Indeed many of the interviewees were critical of the apparent regulatory obsession with capital. Not that they wished to see an end to all regulatory capital requirements, just that they doubted that capital requirements provide the panacea that some regulators seem to believe is the case.

The More Positive Comments on Capital

Despite cautionary words from many of the interviewees regarding the limited value of large scale increases in capital it was generally accepted that limited increases may be justified, for example to help restore confidence in the sector.

"Undoubtedly there's a requirement to have a bit more security in people's balance sheets." (HOC 1)

"Should banks be made to hold more capital? It's extremely difficult to argue that that should not be the case." (Risk Consultant 2)

“I think ultimately banks will hold more capital because they don’t want a future government bale out – so the way they’re going to do that is by holding more capital for themselves” (CRO 5)

There was also support for less ‘pro cyclical’ capital requirements, where institutions are required to build up their capital reserves in benign growth periods, but allowed to let them fall in a downturn (rather than the opposite as in the original Basel 2 rules):

“A counter cyclical capital requirement is a sensible idea – put more aside in the good times to cater for the bad times..... It does seem that in both the UK and US there’s a move towards that. Although I recognise that this is a difficult tightrope to walk, right now deliberately not ramping up people’s capital requirements or even in certain cases holding organisations to their theoretically legal capital requirements is probably a good idea but I recognise it’s quite a narrow path. You’ve got to make sure there is protection there but at the same time if you just insist on the legal minimum you can strangle the company which doesn’t help anybody.” (DR 1)

Equally there was praise for the new Pillar 2 capital regime (both for banks and insurers), that requires financial institutions to perform their own risk based assessment of their capital requirements and which is then reviewed by their regulator (who has the power to require increases in capital if risk management practices are thought to be weak or if an institution is thought to have underestimated its risk exposures):

“The sad thing about Pillar 2 and ICAAP is it’s a bit like the cavalry arrive after Custer just passed over. If we’d have had a real robust Pillar 2 mechanism in 2000-2001 a lot of this stuff would have been picked up.” (Non Exec 1)

“I think it [ICAAP] helps the board understand how it all fits together in one document that they never had before. Internally it is a useful document – previously they had the business plan, financial accounts but not a capital plan and weren’t really bothered about capital or return on capital. Obviously they are now which I think is very good but it’s not really embedded yet so had it been in place two or three years ago it may have aided the credit crunch.” (CRO 5)

“ICAS regime – that has been extremely helpful to us as an insurance company because it has put some quantum around the different types of risk we are taking. We did scenario testing and adequate reserving calculations but what we didn’t know was how likely some of the scenarios were. What the capital adequacy regime has allowed us to do is say ‘well actually some of these scenarios are more likely than we thought’. The tools were there, what the FSA has done in the insurance sector over the last few years is force the industry to bring a bit more discipline to what they’re doing rather than the fairly random way that insurance companies were facing this in the past.” (FD 2)

However the interviewees also had some less positive things to say about the predominant role of regulatory capital in most regulatory regimes, along with the significant increases in capital requirements that have been proposed by regulators (see, for example, FSA 2009, Turner 2009, Basel 2009b, 2009c).

The Less Positive Comments

Despite the support for limited increases in capital requirements, it was made very clear that significant increases in capital would be overly costly. Moreover, some interviewees

questioned whether any amount of capital could ever be enough to prevent a large scale crisis such as the current one:

“There’s no doubt that if we have more capital then the whole market will be more secure. The question is how much capital is enough? The amount people thought was enough probably isn’t, because when you look at a market fall of 50% the capital test didn’t seem enough, but at the same time having all that capital around when most of the time you don’t need it.... If you are going to do that how can you make money out of a bank? You can’t.... you get to the point where to be safe the model doesn’t make any sense, so maybe you go back to putting money under mattresses (laughs). (CRO 4)

“I don’t think given the circumstances we had it would be economically sensible for us to hold that much capital [to fully protect the financial system] because if banks hold capital they’ve got to make it work and if you quadruple the amount of capital the banking sector has to hold then that is not capital efficient. It’s not the best use of capital because you are holding it for a risk you should be driving down in some other way. Certainly if the UK went down that route we’d pretty quickly become uncompetitive and UK banks would disappear because it would all become based overseas.” (FD 2)

“I think there are different measures of adequate protection and capital is an easy proxy for how solid a company is, or certainly was in the past. As we saw last year it doesn’t take many days for a company’s capital to be worth next to nothing and we have to bear that in mind. And so, if we only look at capital as the proxy for how strong a company is then we’ve clearly got that wrong. Capital is a tool in the toolbox but it’s not everything and knowing your company is much more important than knowing how much capital your company has in terms of regulating it and ultimately ensuring that it doesn’t go under.” (DR 1)

This last quote also highlights another key theme in the responses from many interviewees – the recognition that capital is only one of many tools that can be used to help control the effects of major loss events. In short capital requirements are no substitute for good risk management. Many of the interviewees stressed this point.

Indeed one finance director suggested that increased capital requirements could actually discourage financial institutions from improving their risk management activities by creating a moral hazard problem:

“I think more capital decreases the likelihood of a bank going bust but doesn’t necessarily improve risk management and you could argue that more capital could reduce the focus on risk management. Because there is more money to play with you can be more cavalier. I can’t see that happening going forward, hopefully we’ve learnt the lesson but I don’t think more capital on its own is a solution to risk management.” (FD 2)

It’s not what you Implement but How Effectively you Implement it

Several of the interviewees pointed out that the design of a regulatory regime is probably less important than how it is implemented. Hence a prescriptive regime with poor quality supervisors is likely to fail, while a seemingly weak regime with good supervisors can work very effectively.

“I’m personally concerned with where it’s going because I’m not sure more regulation and paperwork will sort the problem. It comes back to having the right

individuals at the regulator who come into an organisation and sniff around and use that insight when they come and have a chat with us and ‘talk prudential’ down the road.” (CRO 6)

“A more rigorous regulatory framework would help but I don’t think it needs to be more intrusive. The FSA needs a better understanding of what companies are doing and be able to ask the right questions.” (FD 2)

In particular several of the interviewees referred back to the Bank of England model for bank regulation – which was principles based, and informal. This relied on regular communication with top management, a thorough understanding of each bank, and early intervention (i.e. good supervision):

“The way I’m going to say it is unfair and as relevant today as it was 12 years ago but when the Bank of England had responsibility for supervising the banks in this country they didn’t do it that way [prescriptive] and in an awful lot of ways the Bank of England’s supervisory regime was very successful. You are bound to get in any environment organisations that get into trouble somehow or other. The regulatory trick is to know that organisation well, because you can see something going wrong and onto a wrong path and discussing with them what path they’re on and so on... that’s my view of what should be done at a higher level. I think there are other tools in the tool box like having views on remuneration policies, but what regulators absolutely have to draw back from is micro managing their regulatees because that can easily lead to a worse situation where the regulator becomes directly responsible for the failure of a regulatee, which is unthinkable.” (DOR 1)

“I believe that the FSA got this right in 1998. Of course it wasn’t the FSA then but the Bank of England – good old RATE was perfectly good as principles risk based supervision.... Risk based supervision works and I think principles based supervision works as well. I don’t think you can distinguish between the two, because if you say what is the fundamental principle of supervision it is to find out what their risk is!” (Non Exec 1)

“What will work is what [Adair] Turner said about ‘regulators should be feared’ – they should actually have a voice that’s heard. In some other countries that did better the regulator was heard. Whether it’s the old Bank of England model of taking somebody to lunch and chatting informally, it’s just being heard and maybe reign back.” (HOR 3)

Promoting Proper Market Incentives

A final regulatory theme that was raised by the interviewees related to the measures that should be taken to help strengthen market forces. All of these lessons related to the rules on market disclosure, the third pillar of the Basel Accord:

- These reports should be made more user-friendly and less accounting based – so that it is easier for non financial experts to understand the nature and extent of the risks that particular financial institutions are being exposed to. With Non Exec 2 even going as far as to suggest that current disclosure reports contain little more than:

“Bland statements about numbers that don’t mean a great deal.”

- These reports should become more bespoke so that stakeholders can more easily distinguish between financial institutions with good and bad risk management frameworks:

There needs to be an incentive for firms that are managing well to trumpet that to the general public. There needs to be a recognition that if you are disclosing fully that is going to be something that distinguishes you and is rewarded.” (Risk Consultant 1)

- Institutional shareholders should be encouraged to become more involved in risk management issues. A development that may require both education and increased disclosure to such shareholders:

“...you should be sharing [more granular information] with your major shareholders, I’ve said that on several occasions.” (Non Exec 1)

In fact Non Exec 1 went onto suggest that a two tier disclosure regime could be considered, where major institutional shareholders are provided with more detailed information, this being kept confidential from the wider market for reasons of commercial sensitivity.

7 Conclusions and Recommendations

“...it will happen again.” (FD 2)

History has shown that financial crises are all but inevitable. However that does not mean that with good risk management their frequency can’t be reduced or the severity of their impact lessened. As such it is important to learn from the current crisis so that we can help to prevent/mitigate similar events in the future.

The purpose of this report has been to provide a risk management perspective on the underlying causes and lessons that need to be learned from the current crisis. In so doing it has drawn on the opinions of a diverse range of risk management professionals – thus providing a first hand account of what went wrong, coupled with their expert input into what the financial services sector and its regulators should do about it.

What these interviewees revealed is that, while the causes of the current crisis were many and varied, a relatively few factors lie at its heart, specifically:

- Human/cultural weaknesses at the industry-wide, inter-firm and intra-firm levels.
- Communication weaknesses within some financial institutions, where boards and senior managers either did not get the information that they needed, or failed to understand it when they did.
- Weaknesses in the prudential regime for banks, building societies and investment firms, coupled with flawed supervision.

So, like many previous crises, the current financial crisis was ultimately caused by management weaknesses within both financial institutions and their regulators. As such the crisis was self-inflicted and could have been prevented.

From this conclusion a variety of lessons were drawn, based on the feedback from the interviewees. In particular the findings from this research challenge the notion that greater

regulatory prescription and capital requirements are required or that simple solutions such as caps on bonus payments will prove effective. Rather a more permanent solution to the prevention of future financial crises is likely to combine enhancements in the risk management and governance practices that are implemented by financial institutions and their regulators with mechanisms that support cultural change. Moreover this cultural change needs to be both organisation wide (in terms of the overall safety culture) and function specific, particularly in relation to moving the attitudes of risk functions away from compliance and towards a more business-like orientation (for example, by using risk management staff and risk reports to support strategic decision making).

Learning these lessons may prove hard for some, not least because they will require a change of mindset for many within the financial sector, including it regulators, however change is required if future crises are to be prevented.

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