# Ringfencing UK Banks



More of a problem than a solution

Edited by James Barty



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### **Executive Summary**

A headline consensus exists around the causes and effects of the recent global financial crisis. At the heart of the consensus is the necessity for financial institutions to be well managed and have appropriate levels of capital, liquidity and funding for the risks they are taking and for failing institutions to be readily resolvable, without creating unwarranted disruption to the financial system and the real economy.

Policymakers and regulators have made great strides across the board to improve levels of capital, ensure banks have much greater liquidity buffers and have more diversified sources of funding. There has been a renewed focus on the quality of management of financial institutions and on how these institutions manage their risk.

The regulatory environment has been strengthened through more effective structures, increased resources and more intrusive oversight. Regulators are on the front foot monitoring institutions closely in a way that did not happen before the crisis.

We support these measures as being necessary to make the banking system safer, although we have warned previously that if regulators try to impose them too quickly they risk delaying the economic recovery. It is the need to alleviate the pressure on banks from regulatory pressures that resulted in the government introducing both the Funding for Lending Scheme and Help to Buy.

The UK though has decided to go one step further than the rest of the developed world by forcing banks to impose a ringfence between their retail operations and their wholesale and investment banking operations. The idea, which stemmed from the report by the Independent Banking Commission under John Vickers, is to allow the risky investment and wholesale business to fail while protecting the part that supports the retail customers and SMEs. It strikes us that this is primarily a response to the failure of RBS, which in its attempt to build a global bank through its acquisition of ABN AMRO blew itself up.

That acquisition was described as, 'the wrong price, the wrong way to pay, at the wrong time and the wrong deal'. It acquired additional toxic assets, depleted the firm's capital base substantially and made it even more reliant on wholesale funding; yet the deal was waved through by regulators.

It is a fallacy to suggest that RBS was brought down by its investment banking activities. RBS' loan losses were almost twice those it suffered on its credit trading business. Its trading losses could have been readily absorbed by its available capital.

During the crisis, UK banks of all sizes failed, regardless of whether they had investment bank businesses or not. Among the long list of other failures in UK, including HBOS, Northern Rock, Bradford and Bingley and of course most recently the Co-Op bank, not one of them had any investment banking activity of note.

<sup>1</sup> See Capital Requirements: Gold plate or lead Weight? February

That pattern was repeated in many other countries. What the firms that failed had in common was not their legal structure or banking model. They failed because they had substantial real estate exposure, inadequate capital, liquidity and funding. Many also suffered from poor leadership and poor management of the risks they were running.

Banking by its nature is a risky business and real estate lending epitomizes the risks inherent in banking. Real estate displays all of the worst features of any asset class to the lender, asymmetric returns, illiquidity at crucial times, inability to hedge satisfactorily and high operational risk and losses. The bursting of a

66 The bursting of a real estate bubble has been a primary feature in virtually every banking crisis in the past century, including the most recent global financial crisis 99

real estate bubble has been a primary feature in virtually every banking crisis in the past century, including the most recent global financial crisis.

The Independent Commission on Banking's (ICB) recommendation to impose a ringfence is similar to the approach to the legal separation of

banking activities taken in US in the 1930s and imported into post-war Japan in the 1940s. There is no evidence that such legal separation prevented banking crises nor indeed did anything to mitigate their effect. Nevertheless, the UK's Banking Reform Bill, which is currently progressing through parliament, will create a ringfence in UK at significant cost to banks and to their users. The ringfence also risks creating a swathe of unintended consequences that, if not addressed, could have a seriously detrimental effect on the price and availability of credit to UK economy and in particular to small businesses and to consumers.

Another central tenet of the ICB's proposals incorporated into the Banking Reform Bill is to give preference to depositors in the event of insolvency but only up to the GBP85k limit of the Financial Services Compensation Scheme. Whilst this might be seen as a pro-consumer move, it actually does little or nothing to improve the position of small depositors. However, by creating this preference, larger depositors are subordinated. In other words they bear the losses from a failing bank ahead of smaller depositors. This subordination and "bail in" of larger depositors occurred in Cyprus earlier this year and that experience will loom large over the UK's ringfenced banks. Significant sums of deposits are likely to move outside of the ringfence or will need to be compensated with higher interest rates, to the detriment of the smaller depositor.

The UK banking system receives substantial liquidity from the Crown Dependencies mainly by "upstreaming" of deposits from UK bank branches operating in these jurisdictions. Under current proposals, these upstreamed monies would be treated as wholesale funding for a ringfenced bank and therefore at risk of being bailed-in if the UK parent was in trouble. The margin UK banks make on re-lending crown dependency upstreamed funds is estimated at between 350–500bps (net of collection costs).

If the issue of upstreaming of retail deposits from the offshore islands is not addressed, the profitability of UK ringfenced banks will be materially damaged to the detriment of customers that remain with a ringfenced bank. Critical and stable liquidity will move outside of the ringfence and there will be less scope

for lending to the real economy, whether to consumers for real estate or SMEs to fund business expansion.

Ringfencing, as currently planned, also risks denying individuals and SMEs access to certain essential products and services. Restrictions on "non-linear" derivatives, structured deposits and certain types of trade finance activities could do untold harm to consumers and businesses. By imposing overly strict rules on the ringfence the government risks preventing individuals and companies from using the products best suited to them. It would also have the perverse effect of prohibiting HSBC and Lloyds, for example, from offering structured deposits to customers whilst smaller banks, such as Metro Bank would not suffer such a prohibition.

The rules permitting high net worth individuals and larger corporates to access non-ringfenced banks, for example to secure banking facilities outside of European Economic Area (EEA), are unnecessarily complex and bureaucratic. This complexity adds cost and could drive private banking and corporate business overseas. Moreover, the proposed restrictions on ringfenced banks funding their smaller competitors will damage rather than enhance domestic retail banking competition.

It is inevitable that costs will rise materially to fund capital increases and to compensate subordinated depositors and bondholders for the extra risks they are taking. Operational costs will also rise as synergies are lost between the ringfenced bank and the rest of its group. Deposits will leak outside of the ringfence into both money market mutual funds and offshore.

Banking revenues are already under pressure. If the ringfenced banks are restricted in their range of products and services as currently envisaged (e.g. non-linear derivatives, structured deposits, trade finance) and if High Net Worth Individuals take their business abroad, ringfenced banks' revenue bases will be eroded further. If some ringfenced banks are unable to create a viable business model for maintaining a non-ringfenced bank in their overall operation they will suffer further revenue leakage and customers and clients will have less choice.

Inevitably this mix of much higher costs and lower revenues will be passed on to consumers and SMEs, those who are not allowed to bank outside of the ringfence. With few avenues to additional profitability ringfenced banks are likely to reduce their cost base probably through further closures of high street branches. They will need to augment their charging structure which will inevitably lead to higher priced products, and possibly the end of "free" consumer banking in UK.

UK, EU and global regulation has been enhanced significantly since the onset of the global financial crisis and bank ringfencing is therefore an unwarranted and expensive add-on. Ringfencing runs counter to historical precedent and is inconsistent with regulation, which has been enacted in US and is planned by EU.

However, we recognise that too much political capital has been invested in promoting a UK ringfence for the government now to abandon its legislation.

We therefore recommend that far from "electrifying" the ringfence, with automatic break up provisions for banks which are seen as testing its limits, the ringfence be made as flexible as possible. This should allow many of the unintended consequences to be addressed. It should also permit a phased and thus lower risk and cost migration to ringfencing for UK banks. Moreover, a more flexible ringfence will enable UK to align its banking structure with that of the rest of the EU as the Liikanen proposals are enacted. As currently proposed, a non-UK, EEA headquartered bank can branch into UK and completely circumvent the ringfence. This would place domestic banks at a distinct competitive disadvantage.

We also believe that the proposed capital add-on for the ring-fenced banks is an unnecessary burden on banks and thus the UK economy. We believe it will deter entrants and raise the cost of capital for incumbents. The Basel III approach to capital adequacy, requiring capital conservation and counter cyclical buffers, should ensure banks have sufficient capital for the risks they are taking. It is estimated that if the Basel III rules had been in place in 2008, RBS would have needed some five times the amount of Core Equity Tier 1 capital for the risks they were taking at the time. Its disastrous ABN Amro acquisition would thus have been prevented.

A robust supervisory and resolution regime should allow poor banks to fail without recourse to the taxpayer but there remains work to be done in driving a global resolution regime, with iron-clad protocols to address the issue of too big to fail. This, alongside the tighter rules on capital and liquidity, is the key to avoiding bank failures resulting in government rescues. And it is on this area that the UK regulators and politicians should be focusing. Ringfencing in our view is an unnecessary add on that is both costly and bureaucratic to implement.

Nevertheless, since ringfencing is set to be introduced, we urge the government to make sure that it does as little damage as possible. In that regard we make the following ten recommendations:

#### Recommendation 1

Make any ringfence as flexible as possible so that it can be suitably aligned in the future with the impending EU legislation. In addition, more flexible provisions will permit a better phased, lower cost and lower risk migration to any new legal entity structure.

#### Recommendation 2

Any automatic break up (electrification) provisions should only be able to be used in extremis. A wide array of regulatory tools is already available to discipline firms and individuals that act improperly and the EU is already planning to hand regulators the powers "to require a structural reorganization" of a bank, if needed to ensure it can be wound down if it fails.

#### Recommendation 3

Allow the upstreamed deposits from the crown dependencies to ringfenced banks to be treated as if they were raised by ringfenced banks in UK or EEA. Without this the UK ringfenced banks risk being denied a sizeable source of funding.

#### Recommendation 4

Permit ringfenced banks to offer non linear derivatives, structured deposits and a full range of trade finance services to their customer base within overall risk limits. This will ensure that retail and SME customers will not be disadvantaged by the introduction of the ringfence.

#### Recommendation 5

Simplify the definitions and streamline the procedures for large corporates and High Net Worth Individuals to deal with non-ringfenced banks. Current plans are unnecessarily bureaucratic and risk damaging UK business as well as the banks.

#### Recommendation 6

Eliminate the proposed capital add-on for the ring-fenced banks, as this will deter entrants and raise the cost of capital for incumbents. Instead rely on the Basel III capital conservation and counter cyclical buffers approach to capital adequacy. A robust supervisory and resolution regime should allow poor banks to fail without recourse to the taxpayer.

#### Recommendation 7

Ensure that the sharing of systems, particularly risk management systems and other sophisticated risk tools works in practice, to avoid unnecessary extra costs and overlap.

#### Recommendation 8

Cap the banking levy at current levels. It should not be used for general taxation purposes and instead be targeted at meeting future resolution costs. It would then be available to meet any EU requirement under the Banking and Resolution Directive for a (bail out resolution fund). If it is not to be used for such a fund it should be used to lower the public sector debt, since in such circumstances any future bailouts would come out of general government borrowing.

#### Recommendation 9

Help forge a "global resolution regime" to harmonise recovery and resolution regimes in key jurisdictions around the world, along the lines of the Financial Stability Board programme. <sup>2</sup> This is likely to be much more important in avoiding future bailouts than the ringfence.

#### Recommendation 10

Commit to a moratorium on further changes in banking regulation for five years, other than measures needed to address specific problems, so as to enable banks to make an orderly transition to a Basel III and ringfenced world. Ongoing uncertainty over the level of capital and structure of the industry can only hinder the supply of credit to the economy.

2 www.financialstabilityboard.org

# 1 Introduction

Much has been written about the causes and effects of the global financial crisis which began in 2007. A broad consensus has emerged over the past six years among policymakers, the public and perhaps belatedly, the financial community, on these causes and effects. At the heart of the consensus is the necessity for financial institutions to be well managed and have appropriate levels of capital, liquidity and funding. These are all essential ingredients for an institution's survival in times of extreme stress. The consensus also extends to a much stronger role for regulators in maintaining stability of the financial system; so far, so good.

However, when we go beyond the headlines and begin to examine in detail the lessons learned and the measures required to avoid a repeat of the financial crisis, the consensus quickly breaks down.

Central to the debate, is the role that financial intermediaries played, or should have played, before the financial crisis and what their role and associated structure ought to be in the future. The answers to these questions are necessarily complex.

At its simplest, the role of financial institutions, and especially banks, is to act as intermediaries between those who have financial resources and those that need them. In this process, banks necessarily assume and transform risk and therefore ultimately need to manage risk. Their ability to assume, transform and manage risk efficiently helps keep down the cost of capital in the economies they support. The providers of capital to financial institutions also need to see an appropriate return, adjusted for risk, on their investments. The more capital required for a given level of earnings, the lower the return on equity. This in turn means the supply of equity capital will be constrained and necessarily more expensive.

The price and availability of bank capital therefore rapidly transmits into the real economy by virtue of the rates that banks need to charge borrowers for a given level of risk and in turn the amount they are willing to pay depositors. It is these central tenets of banking and financial intermediation which led to the rapid breakdown in the consensus about how to prevent a future crisis. In essence, the heavier the burden on banks, whether through taxes, capital or other regulation, the higher the cost of funding the real economy will become. These higher costs will result, inexorably, in a tighter supply of credit, lower rates for depositors and possibly the end of "free consumer banking" in UK.

A paper earlier this year by Policy Exchange (Barty, 2013) examined in detail the relationship between the price and availability of bank capital and the supply of credit to the economy. It challenged the apparent accepted wisdom that banks "can never have too much capital".

This paper builds on that analysis of capital requirements, looking at recent developments emanating from domestic and international regulators. Further, and perhaps more crucially, it will examine plans for structural changes to UK banks, suggested by the Independent Commission on Banking (ICB) in the so-called Vickers Report.3 The recommendations of the ICB were broadly endorsed by the UK government and by the UK's Parliamentary Commission on Banking Standards (PCBS). <sup>4</sup> The combination of the ICB's recommendations and those of the PCBS are being incorporated into legislation which is currently progressing through its House of Lords Committee Stage<sup>5</sup> and will most likely come into force in early 2014.

The UK government has been explicit in its belief that "the structure of the UK banking sector needs fundamental change: to make banks more resilient to shocks and easier to fix when they get into difficulties, and to reduce the severity of future financial crises.

It wants to make sure that when banks make losses, retail customers aren't excessively affected and taxpayers' money isn't used to bail banks out."6

The government has already taken steps to address deficiencies it identified in the regulatory framework including, in April 2013, replacing the so-called tripartite structure of regulation and establishing the Prudential Regulatory Authority (PRA) as part of the Bank of England.

Under the new framework, the PRA's role

"is defined in terms of two statutory objectives to promote the safety and soundness of banks, building societies, credit unions, insurers and major investment firms and, specifically for insurers, to contribute to the securing of an appropriate degree of protection for policyholders.

In promoting safety and soundness, the PRA is focusing primarily on the harm that firms can cause to the stability of the UK financial system. A stable financial system is one in which firms continue to provide critical financial services and is seen as a precondition for a healthy and successful economy.

The PRA will make forward-looking judgements on the risks posed by firms to its statutory objectives. Those institutions and issues which pose the greatest risk to the stability of the financial system will be the focus of its work."7

The appointment of Deputy Bank of England Governor, Andrew Bailey, as the PRAs first Chief Executive, has given the PRA immediate credibility. Mr Bailey is a veteran of the Bank of England and was a key member of the team that kept HBOS and Royal Bank of Scotland from collapsing in 2008. In the changes he announced to the UK's liquidity regime in August of this year, he has shown that the PRA recognises that sustainable profitability in the banking sector is a key contributor to long run systemic stability.

The capital and other regulatory reforms which have already been implemented and the further measures being implemented in the UK Banking Reform Bill, however, fundamentally alter the cost of doing business for banks and thus the returns available to the providers of bank capital and depositors as well as the price and supply of loans to businesses. It is therefore crucial, that these further changes are effective in achieving the government's stated policy goals, whilst minimizing the risk of unintended or unforeseen consequences.

While we have previously questioned the speed of the implementation of the reforms and warned that too rapid a transition to a safe banking system risked

- 3 Independent Commission on Banking - Final Report recommendations September
- 4 Parliamentary Commission on Banking Standards - Fifth Report June 2013
- 5 Financial Services (Banking Reform) Bill 2012-13 to 2013-14 - House of Lords Committee Stage 8 October 2013
- 6 HM Treasury and Department for Business, Innovation and Skills - Creating stronger and safer banks, available at; https://www gov.uk/government/policies/ creating-stronger-and-safer-banks
- 7 Bank of England Prudential Regulation Authority, available at; http://www.bankofengland. co.uk/PRA

harming the recovery, we are generally supportive of the changes made in Basel III, which are to be implemented in Europe through CRD IV.8 The UK though has deviated from financial reforms in the rest of the world by introducing ringfencing. This will separate the retail from the investment and wholesale banking business of the banks, with the objective of protecting retail depositors and eliminating the need for government ever to bail out a bank again. This document examines this proposal and questions whether it is really needed or whether the challenge of reducing these risks can be better achieved through other measures. It also examines the costs and additional burdens a ringfence will bring.

Chapter 2 looks at the Vickers Report in detail and asks whether the conclusions of that report were the right ones. Chapter 3 looks at the lessons we can learn from the past and in particular argues that most banking failures are normally driven by some form of real estate crisis. It questions whether ringfencing would help prevent such failures. Chapter 4 examines in detail in the UK's experience in the financial crisis, looking at the failure of all the UK banks in the crisis. It argues that most of the UK's problems stemmed from real estate problems and poor lending decisions with only RBS having any real investment bank issues. Chapter 5 looks at the measures various countries are implementing to address the causes of the financial crisis and asks how the proposed UK measures can be compatible with reforms elsewhere, particularly those in Europe. It argues that any ringfence would need to be implemented flexibly if it was not to clash with proposed European legislation stemming from the Liikanen proposals. Chapter 6 analyses in detail at ringfencing and asks whether it is the right solution to the UK's problem. It concludes that it is not but accepts that it is politically impossible to drop it now. Accordingly, we finish with a number of recommendations in Chapter 7 as to how ringfencing can be implemented in the least damaging way possible.

8 With the notable exception of the cap on bankers bonuses, which we believe will lead to higher fixed costs in the banking sector.

# The Vickers Report

The Independent Commission on Banking (ICB) was announced shortly after the coalition government was formed in 2010.9

The ICB set out its aims as:

"... to create a more stable and competitive basis for UK banking in the longer term. That means much more than greater resilience against future financial crises and removing risks from banks to the public finances. It also means a banking system that is effective and efficient at providing the basic banking services of safeguarding retail deposits, operating secure payments systems, efficiently channelling savings to productive investments, and managing financial risk. To those ends there should be vigorous competition among banks to deliver the services required by well-informed customers.

These goals for UK banking are wholly consistent with maintaining the UK's strength as a pre-eminent centre for banking and finance, and are positive for the competitiveness of the UK economy. They also contribute to financial stability internationally, especially in Europe." 10

The ICB was chaired by Sir John Vickers and its final report in September 2011 is commonly referred to as the Vickers Report.

Its recommendations fell under three main headings:

- 1. Retail ring fence;
- 2. Loss-absorbency; and
- 3. Competition

#### Financial stability: ringfencing

The ICB said that "The purpose of the retail ring-fence is to isolate those banking activities where continuous provision of service is vital to the economy and to a bank's customers in order to ensure, first, that this provision is not threatened as a result of activities which are incidental to it and, second, that such provision can be maintained in the event of the bank's failure without government solvency support. A retail ring-fence should be designed to achieve the following objectives at the lowest possible cost to the economy:

- make it easier to sort out both ring-fenced banks and non-ring-fenced banks which get into trouble, without the provision of taxpayer-funded solvency support;
- insulate vital banking services on which households and SMEs depend from problems elsewhere in the financial system; and
- curtail government guarantees, reducing the risk to the public finances and making it less likely that banks will run excessive risks in the first place."11

9 Speech by the Chancellor of the Exchequer, Royal Mansion House, 16 June 2010

10 ICB Final Report: recommendations – September

11 Ibid p233

The Commission articulated their principles for ringfencing in terms of what they called mandated services, prohibited services and ancillary services.

#### Mandated services

The ICB believed that "Only ring-fenced banks should be granted permission by the UK regulator to provide mandated services. Mandated services should be those banking services where:

- a. even a temporary interruption to the provision of service resulting from the failure of a bank has significant economic costs; and
- b. customers are not well equipped to plan for such an interruption.

Mandated services currently comprise the taking of deposits from, and the provision of overdrafts to, individuals and small and medium-sized organisations." <sup>12</sup>

#### **Prohibited services**

They believed that ring-fenced banks should be prohibited from providing certain services. Prohibited services would be those that meet any of the following criteria:

- a. make it significantly harder and/or more costly to resolve the ring-fenced bank;
- b. directly increase the exposure of the ring-fenced bank to global financial markets;
- c. involve the ring-fenced bank taking risk and are not integral to the provision of payments services to customers, or the direct intermediation of funds between savers and borrowers within the non-financial sector; or
- d. in any other way threaten the objectives of the ring-fence.

As a result prohibited services should include (though need not be limited to):

- a. any service which is not provided to customers within the EEA;
- any service which results in an exposure to a non-ring-fenced bank or a non-bank financial organisation, except those associated with the provision of payments services where the regulator has deemed this appropriate;
- c. any service which would result in a trading book asset;
- d. any service which would result in a requirement to hold regulatory capital against market risk;
- e. the purchase or origination of derivatives or other contracts which would result in a requirement to hold regulatory capital against counterparty credit risk; and
- f. services relating to secondary markets activity including the purchase of loans or securities.<sup>13</sup>

The ICB accepted that "some risk of failure should be tolerated" <sup>14</sup> provided that transmission services can be protected.

The commission outlined its assessment of the impact of the prohibited services principle as follows:

12 Ibid p3813 Ibid p51–5214 Ibid p45

"Broadly, this principle would mean that the majority of the retail and commercial banking divisions of current UK banks could be placed in ring-fenced banks, but the wholesale/ investment banking divisions could not. At present most, but not all, financial companies are served out of the wholesale/investment banking divisions.

Some of the lending to large organisations currently performed in the wholesale/investment banking divisions would be permitted within ring-fenced banks. . . . based on the balance sheets of UK banks at the end of 2010 this construction of a retail ring-fence could lead to around £1.1tn-£2.3tn of assets being held within UK ring-fenced banks, or around 75%-160% of current UK GDP. This is between a sixth and a third of the total assets of the UK banking sector of over £6tn."15

#### Ancillary activities

Recognising that ring-fenced banks would need to engage in treasury and certain other functions to operate effectively, the ICB's third principle covered ancillary activities as follows:

The only activities which a ring-fenced bank should be permitted to engage in are: the provision of services which are not prohibited; and those ancillary activities necessary for the efficient provision of such services. Ancillary activities should be permitted only to the extent they are required for this provision, and not as standalone lines of business.

Ancillary activities would include, for example, employing staff and owning or procuring the necessary operational infrastructure. In particular, a ring-fenced bank should be permitted to conduct financial activities beyond the provision of non-prohibited services to the extent that these are strictly required for the purposes of its treasury function - i.e. for risk management, liquidity management, or in order to raise funding for the provision of non-prohibited services. In conducting ancillary activities a ring-fenced bank may transact with and become exposed to non-ring-fenced banks and non-bank financial organisations.

Backstop limits should be placed on the proportion of a ring-fenced bank's funding which is permitted to be wholesale funding and on its total exposures, secured and unsecured, to non-ringfenced banks and other non-bank financial companies. 16

#### Structural separation

Having laid out its three principles for what should be in and what should be outside the ringfence, the ICB considered the degree of structural separation it believed necessary to achieve its objectives. Its focus was on the relationship between a ringfenced bank and any wider corporate group to which it belonged.

The ICB rejected full separation of ringfenced banks, whilst accepting that full separation might reduce reputational contagion and be simpler. Intriguingly, the Commission pointed out that, "When domestic retail banking is suffering losses but the rest of the banking system is doing well, more retail banks would fail under full separation than under ring-fencing."17

#### Legal and operational links

It outlined its principle for legal and operational links thus:

Where a ring-fenced bank is part of a wider corporate group, the authorities should have confidence that they can isolate it from the rest of the group in a matter of days and continue the provision of its services without providing solvency support.

15 Ibid p52

16 Ibid p62

17 Ibid p63

As a result:

- a. ring-fenced banks should be separate legal entities i.e. any UK regulated legal entity which offers mandated services should only also provide services which are not prohibited and conduct ancillary activities;
- any financial organisation owned or partly owned by a ring-fenced bank should conduct only activities permitted within a ring-fenced bank. This organisation's balance sheet should contain only assets and liabilities arising from these services and activities;
- c. the wider corporate group should be required to put in place arrangements to ensure that the ring-fenced bank has continuous access to all of the operations, staff, data and services required to continue its activities, irrespective of the financial health of the rest of the group; and
- d. the ring-fenced bank should either be a direct member of all the payments systems that it uses or should use another ring-fenced bank as an agent.<sup>18</sup>

#### **Economic Linkages**

The final aspect of ring fencing it looked at was the question of economic linkages between the ring fenced institution and the rest of the group. The ICB noted:

If a ring-fenced bank was part of a wider corporate group, this group would often include other banks and financial organisations. Thus, central to whether a ringfenced bank would be successfully isolated from the global financial system are its economic links to the rest of the group. If either part of the banking group was dependent for its solvency or liquidity on the financial health of the other, then problems could still spread quickly between them and throughout the system. 19

Thus the ICB opted for a 'no more favourable than third party' principle. In effect, ensuring that transactions between the ring-fenced bank and its wider corporate group be conducted on a commercial and arm's length basis.

It also emphasised the importance of the ring-fenced bank being able to satisfy regulatory requirements including those for capital, large exposures, liquidity and funding, on a solo basis<sup>20</sup> and of having an independent board.

If the 'no more favourable than third party' principle is applied then this will mean for example, that the exposures between the bank and its parent (in either direction) could be no more than 25% of its capital resources.

#### Loss absorbency

The ICB identified a lack of quantity of equity capital amongst the banks and a narrowness of the range of assets which could absorb losses as two key areas for reform.

The reality is that much of the work to increase substantially the amount of capital in the banking system is already being undertaken through global regulation and by the EU. For example, the Basel III capital requirements require that banks must hold minimum total capital equal to at least 8% of risk-weighted assets (RWAs). At least 4.5% must be Common Equity Tier 1 (CET1) and at least 6% must be Tier 1 capital. This compares to a minimum of 2% CET1 under Basel II. The rules also introduce a CET1 'capital conservation buffer' (CCB). This must be at least 2.5% of RWAs, but can be extended in two ways.

18 Ibid p6719 Ibid p6920 Ibid p71

The capital conservation buffer can and will be extended for global systemically important banks (G-SIBs) by up to 3.5% of RWAs, although in practice the maximum conservation buffer extension for G-SIBs is likely to be 2.5%, giving a combined CET1 of 9.5% for G-SIBs. In addition, a counter cyclical buffer can also be applied, which would require banks to increase capital by up to 2.5% during good times but which can be run down during more difficult times.

The 4.5% CET1 minimum together with the minimum capital conservation buffer gives the Basel III CET1 baseline of 7% of RWAs. In theory the highest capital requirement could be the 8% baseline plus up to 8.5% in CCB and counter cyclical buffer or 16.5%.

However, in spite of the cost and added complexity, the ICB proposals went further. It concluded that,

"large ring fenced banks should be required to have an equity 'ring-fence buffer' of at least 3% of RWAs above the Basel III baseline of 7% of RWAs. (A ring-fenced bank is defined to be 'large' if it's RWAs-to-UK GDP ratio is 3% or above.) Smaller ring-fenced banks should have correspondingly smaller ring-fenced buffers."21

This ICB believed that the G-SIB surcharge to the capital conservation buffer and its own 3% capital add-on should not be additive, recommending that if a bank is subject to both a ring-fence buffer and a G-SIB surcharge, it is only the higher of the two that should be applied. Either way under the ICB's recommendations large banks will be required to hold five times as much equity capital as under Basel II. However, it believed that the counter-cyclical buffer had a different objective - i.e. requiring banks to build up an equity buffer in the good times that can be used to absorb losses in a downturn. So the ring-fence buffer should be additive to the counter-cyclical buffer.<sup>22</sup>

Size of ringfenced bank (RWAs/GDP)	Illustrative classification of banks by size	Ring-fence buffer (equity-to-RWAs)	Minimum equity- to-RWAs ratio
< 1%	All others	0%	7%
1%–3%	Co-op, Verde,24 Clydesdale Bank	(3/2 x (RWAs/ GDP-1%))	7% + ring-fence buffer
> 3%	Barclays, HSBC, Lloyds Banking Group (LBG), Nationwide, Royal Bank of Scotland (RBS), Santander UK	3%	10%

#### Higher equity requirements means higher costs

The ICB was somewhat dismissive of the higher costs likely to be associated with higher equity capital requirements. "Higher equity requirements simply require banks to use less debt and more equity funding".23 The reality is that because of the more favourable tax treatment of debt compared to equity, banks' profits would be lower and these costs would be passed onto borrowers.

21 Ibid p91 22 Ibid p94

23 Ibid p86

#### The ICB concluded:

Moreover, any increase in banks' funding costs from higher minimum equity requirements would not be borne solely by borrowers — it would be likely to be shared with shareholders and employees. So it is not clear how much a bank's average cost of funding would increase with more equity funding, nor how much of any such increase would be passed on to borrowers.<sup>24</sup>

The government's most recent impact assessment suggests ringfencing will in fact add up to GBP 2.6bn per annum to the costs of ringfenced banks for additional capital alone.<sup>25</sup>

This is no longer a theoretical exercise as it was at the time of the ICB report. We can now examine the trend of bank margins over their cost of funding as capital ratios have risen. The trend to higher margins is clear as we can see if we compare the cost of a high loan to value mortgage or an SME loan today to pre-crisis levels. Banks are specific that higher loan to value ratios for mortgages are only available at higher interest rates. This is the direct result of the amount of capital that banks have to allocate to such mortgages.

#### Loss absorbing debt and Bail-in

In addition to recommending substantially higher equity capital, the ICB expressed concern that during the financial crisis, banks had insufficient debt which could absorb losses prior to insolvency.

It went on to say, "If bank debt is to be made loss-absorbing, a mechanism is therefore needed to impose losses on failure without requiring banks to go into insolvency," that is what is often called a "bail-in" framework. It noted the difficulty of putting systemically important banks into insolvency and of imposing losses on certain types of liability.

In particular it stated:

"Imposing losses on secured debt would fundamentally undermine the concept of taking security under English law.

Most ordinary deposits are insured by the Financial Services Compensation Scheme (FSCS), so losses imposed on them would largely fall to the FSCS. The FSCS is funded by other banks, but effectively operates with a taxpayer-funded backstop — so losses either act as a channel for contagion from a failed bank to other banks, or are picked up by the taxpayer.

Imposing losses on derivatives counterparties would prompt them to close out their contracts (where this is permitted under the terms of their contracts). This process is likely to exacerbate losses for the shareholders and other creditors of the failing bank. More damaging could be the disruption to financial markets, including as a result of indirect losses to other market participants resulting from a fire sale of collateral and consequential adverse market and confidence effects.

There may also be systemic risks involved in imposing losses on 'central counterparties', or in other circumstances where market participants rely on the use of collateral and 'close-out netting' to control their mutual exposures.

Similarly, imposing losses on short-term unsecured debt and uninsured deposits may — depending on the extent to which such liabilities are regarded as loss bearing ex ante — cause significant disruption to funding markets, and act as a channel for contagion from a failing bank to other, previously healthy financial institutions.

Imposing losses on long-term unsecured debt is more straightforward."27

24 Ibid p88

25 Financial Services (Banking Reform) Bill – Impact Assessment 01/07/2013 – HM Treasury IA No: HMT1302 – Para 37

26 Ibid p100

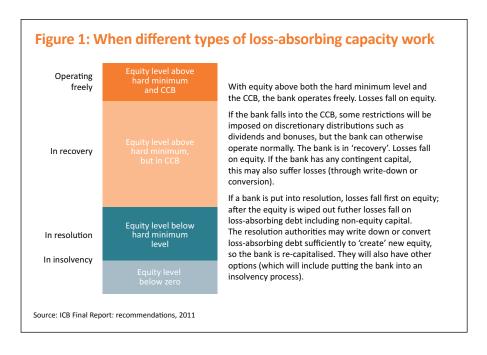
27 Ibid p100 –101

#### It recommended therefore that:

"First, the authorities should have a 'primary bail-in power' to impose losses in resolution on a set of pre-determined liabilities that are the most readily loss absorbing.

...the Commission's view is therefore that all unsecured debt with a term of at least 12 months at the time of issue—'bail-in bonds'—should be subject to the primary bail-in power. Bail-in bonds should have specific risk disclosure acknowledging this.

Second, the authorities should have a 'secondary bail-in power' that would allow them to impose losses on all unsecured liabilities beyond primary loss-absorbing capacity (PLAC) $^{28}$  (again, including the ability to write down liabilities to re-capitalise a bank) in resolution, if such loss-absorbing capacity does not prove sufficient. $^{29}$ 



It set out targets around PLAC with:

- UK G-SIBs with a 2.5% G-SIB surcharge and ring fenced banks with a ratio of RWAs to UK GDP of 3% or more, should be required to have PLAC equal to at least 17% of RWAs
- UK G-SIBs with a G-SIB surcharge below 2.5% and ring fenced banks with a ratio of RWAs to UK GDP of between 1% and 3%, should be required to have PLAC set by a sliding scale from 10.5% to 17% of RWAs.

#### Other key recommendations

- a. a leverage ratio above the 3% proposed in Basel III be imposed for all UK ring-fenced banks with a RWAs to GDP ratio of 1% or more up to a maximum leverage ratio of 4.06%.
- b. in insolvency (and so also in resolution) all insured depositors should rank ahead of other creditors to the extent that those creditors are either unsecured or only secured with a floating charge.

28 PLAC is made up of equity, non-equity capital and those bail in bonds with a remaining term of less than 12 months

29 Ibid p104

- c. The supervisor of any (i) UK G-SIB; or (ii) ring-fenced bank with a ratio of RWAs to UK GDP of 1% or more, should be able to require the bank to have additional primary loss-absorbing capacity of up to 3% of RWAs if, among other things, the supervisor has concerns about its ability to be resolved at minimum risk to the public purse.
- d. The supervisor should determine how much additional primary loss-absorbing capacity (if any) is required.<sup>30</sup>

#### **Competition** issues

The ICB noted continuing issues with competition in the industry and that the industry was more concentrated post crisis than before. It therefore believed that the prospects for competition in UK retail banking would be much improved by:

- a. the creation of a strong and effective new challenger by way of the LBG (Lloyds Banking Group) divestiture... and recommended that the government seek agreement with LBG to ensure that the divestiture leads to the emergence of a strong challenger bank.
- b. the early introduction of a redirection service for personal and small business current accounts which, among other things, provides seamless redirection for more than a year, catches all credits to and debits from the old account, and is free of risk and cost to customers.
- c. interest foregone is included on customers' annual statements, and that the FCA takes further action to require transparency in future,
- d. the statement of objectives for the FCA be strengthened to make competition central to its remit.

The ICB considered recommending account number portability but it considered that redirection may deliver many of the benefits of account number portability at lower cost. It did however, leave the issue open for re-evaluation in the future.<sup>31</sup>

#### The government and the PCBS

The government's response to Vickers, in December 2011, was to accept all of its recommendations, with one principal exception. It did not agree that the Lloyds divestiture should go beyond that required by EU state aid rules.

It also was undecided at that point over whether there should be a de-minimis exemption from the ring fence for small banks. Since then the government has announced that only banks with core deposits in excess of GBP25bn should be within the ringfence.

In June 2012, revelations that a number of banks and other intermediaries had attempted to manipulate LIBOR (London Interbank Offered Rate) and similar rates in other jurisdictions led to the establishment of a Parliamentary Commission on Banking Standards (PCBS). The thrust of the PCBS' work was to look at professional standards and culture of the UK banking sector and lessons to be learned about corporate governance, transparency and conflicts of interest.

Although the PCBS' remit was wide, its first report on 21 December 2012,<sup>32</sup> focussed almost entirely on the issue of the structural separation of banking activities proposed by ICB and contained in the draft Financial Services (Banking Reform) Bill.

30 Ibid p121–122

31 Ibid p155-156

32 Parliamentary Commission on Banking Standards; First Report; HC 848, HL 98 2012/13 The summary of the Commission's first report is as follows:

#### Separation that can stand the tests of time

Investigations into LIBOR have exposed a culture of culpable greed far removed from the interests of bank customers, corroding trust in the whole financial sector. The separation of deposit-taking from certain investment banking activities can offer benefits not just for financial stability, but also in helping to address the

damage done to standards and culture in banking. The government has proposed a ring-fence to achieve separation, but any ringfence risks being tested and eroded over time. Pressure will come from many quarters. Any new framework will need to be sufficiently robust and durable to withstand the pressures of a future banking cycle. The precautionary approach of regulators

The separation of deposit-taking from certain investment banking activities can offer benefits not just for financial stability, but also in helping to address the damage done to standards and culture in banking 99

will come under pressure from bank lobbying, possibly supported by politicians. Additional steps are essential to provide adequate incentives for the banks to comply not just with the rules of the ring-fence, but also with their spirit. In the absence of the Commission's legislative proposals to 'electrify' the ring-fence, the risk that the ring-fence will eventually fail will be much higher.

#### Electrifying the ring-fence

The Commission recommends that the ring-fence should be electrified - that banks be given a disincentive to test the limits of the ring-fence. This should take the form of two measures, set out in statute from the start, which could lead to full separation. First, if the regulator has concluded that the conduct of a banking group is such as to create a significant risk that the objectives of the ring-fence would not be met in respect of a particular bank, it should have the power (subject to a Treasury override) to require a banking group to implement full separation. Second, there should be a periodic, independent review of the effectiveness of the ring-fence across all banks, with the first such review to take place four years after implementation. Each review should be required to determine whether ringfencing is achieving the objectives set out in legislation, and to advise whether a move to full separation across the banking sector as a whole is necessary to meet those objectives.

#### The approach to legislating

The draft Bill relies too heavily on secondary legislation, the absence of drafts of which has seriously impeded the Commission in assessing the government's reforms. The jury is still out on the question of how faithfully the Bill will implement the ICB recommendations.

Furthermore, reliance on secondary legislation reinforces the risks to the durability of the ring-fence. It creates uncertainty for the regulators who will be charged with making the new framework operational and for the banks required to operate within it. The draft Bill proposes to leave the government with too much scope to redefine the location of the ringfence arbitrarily. Not only is the scrutiny provided for this inadequate, it will also provide an incentive for bank lobbying. The powers to re-define the ring-fence through secondary legislation need to be subject to more rigorous scrutiny, with changes to the location of the ring-fence to be considered by a small ad hoc joint committee of both Houses of Parliament before formal measures are brought forward.

#### Capital and leverage

It is essential that the ring-fence should be supported by tougher capital requirements, including a leverage ratio. Determining the leverage ratio is a complex and technical decision, and one which is best made by the regulator. The Financial Policy Committee (FPC) cannot be expected to work with one hand tied behind its back. The FPC should be given the duty of setting the leverage ratio from Spring 2013. The Commission would expect the leverage ratio to be set substantially higher than the 3 per cent minimum required under Basel III.<sup>33</sup>

In short the PCBS recommends reinforcing the ICB's recommendations so that there can be no slippage after the bill has become law.

33 Ibid p5-7

### Learning the Lessons From the Past

The starting point for determining the shape of the future is to ensure lessons from the past have been fully and properly understood. It was clearly in the interests of many parties to blame others for the onset of the financial crisis. Politicians sought to shift blame from an environment which they helped create, regulators and central banks recognized the issues in the system too late and consumers took advantage of an asset and credit bubble to buy properties which some could not afford. In the rush to apportion blame, the banks who were partially culpable, have taken most of that blame.

As the potential consequences for the global economy, of the bursting of the asset and credit bubble became clear, the belief that senior bankers in collapsed institutions had not only failed their shareholders, but the public at large, created significant hostility in the West. What exacerbated this hostility, was the belief that not only had these senior executives not been punished but that they were being rewarded with large pay-offs as they exited the failed institutions over which they had presided.

The public hostility towards highly paid bankers, apparently being rewarded for failure, inevitably was seized upon by politicians and the media. It became accepted wisdom that the crisis was predominantly the fault of banks and their highly paid executives. The bête noire for many politicians has been investment banking and thus the investment banks became a focal point for public pillorying. There is however, strong evidence that whilst the investment banks played a part in the financial crisis, the principal causes lay elsewhere.

If that is true, then the effort to ringfence the retail part of the bank from the investment and wholesale parts of the bank may not be the route to safety in the banking system that so many believe it is. In our view, the source of the problem came not from investment banking, which undoubtedly amplified the problems, but in real estate lending.

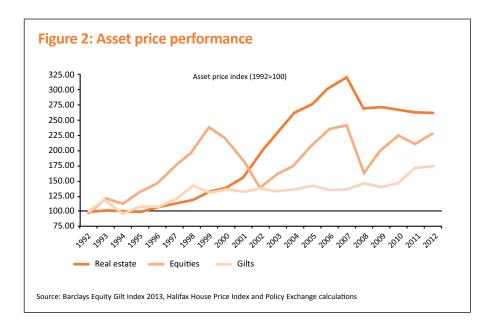
#### Real estate

Lending against real estate has been a leading contributor to virtually every banking crisis in history. The UK's secondary banking crisis in 1973-5, the US' Savings & Loans crisis in the 1980s, the Nordic banking crisis of the late 1980's and the Japanese asset bubble of the late 1980s had real estate lending as a principal cause. Even the Asian financial crisis of 1997 had its roots in real estate lending in places like Thailand and Malaysia. The most recent global financial crisis was no different with its roots also in real estate lending, most notably in the US.

Policymakers in many countries espouse the virtues of home ownership. US author Mark Twain's famous quote, "buy land, they aren't making it anymore," seems to especially resonate with the British public.

Besides the obvious attraction of an asset with finite supply, the way in which real estate purchases can be funded, typically through long term debt, adds to the attraction. When combined with their inherent utility as a place to live, owning residential real estate is high up, if not top, of many people's lifetime ambitions. Policymakers have also in many countries augmented the fundamental attractions of real estate by providing particularly advantageous tax treatment to the purchase and sale of homes. In some cases, like in US, they have gone further by permitting borrowers to offset the interest payments associated with home loans against their personal taxes.

In UK, real estate has been the best performing asset class with the lowest volatility over the last 20 years (see Figure 2 below). The especially generous tax treatment of capital gains in relation to an individual's principal or primary residence makes personal ownership of residential real estate compelling in UK.



When the inherent attractiveness and demand characteristics of real estate coincide with times of loose monetary policy, as they did in the first part of this century, an asset bubble is virtually inevitable. We saw such bubbles not just in the US but in Ireland, Spain and, of course, the UK.

#### So why is real estate such a problem for banks?

The simplest of banking models is to lend for more than it has to pay for its funding. Much of that funding typically comes from depositors. Banks take calculated risks to enhance their return by running mismatches on both the maturity of their assets and liabilities and the sources of their funding. In the case of variable rate mortgages, still the most popular in the UK, a 25 year mortgage

is often funded with deposits that have as little notice as none (as in the case of a current account with the new faster payments system).

Lending against real estate is typically the largest single asset class underlying the balance sheet of banks.

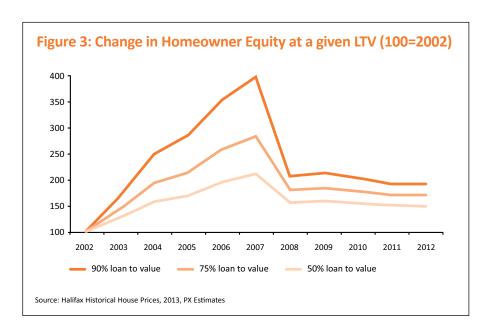
Banks have sought to optimize their capital structure and sources of funding, operating within limits determined internally and those imposed externally. Externally imposed limits have typically been determined by the Basel Committee on Banking Supervision, governments and domestic regulators. Internally determined risk frameworks and parameters have evolved materially over the past two decades but continue to vary significantly, in quality and application, between institutions and across jurisdictions.

As a rule of thumb, the larger and more sophisticated an institution and the more complex the risks it is running, the more sophisticated are the tools used for identifying and managing risk. So why then is real estate, an apparently simple and well understood asset, such a problem?

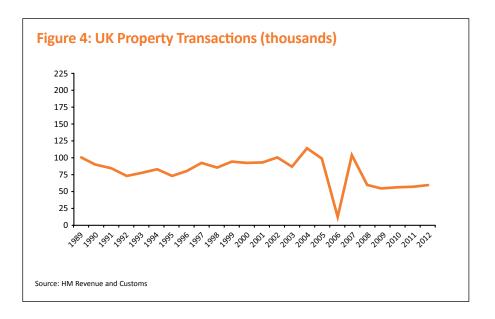
#### Debt returns for equity exposure

First and most importantly, banks earn debt returns for lending against real estate, whilst they are often exposed to equity risk, actual or contingent. Using a simple example, a bank may earn a fixed rate of interest (debt return), say 5%, on a 25 year mortgage used to purchase a residential property. If the percentage lent is say 50% of the value of the property at the outset and is repaid over time, there is very little likelihood that the bank will suffer a loss. Even in the most stressed scenarios it is rare to see price falls of 50% in residential real estate. For example in Spain, real estate prices have fallen by 34% from peak to trough and even in Greece, whilst there are areas which have experienced falls of up to 50%, a 50% repayment loan against a properly valued property, has a very low likelihood of creating a loss for the lender. Thus, at a 50% loan to value (LTV) ratio, a bank has a contingent equity exposure but a very low probability of that contingent exposure becoming an actual equity exposure. Put another way, the borrower will see substantial equity wiped out before the bank comes close to suffering a loss. The borrower will thus be highly motivated to protect their equity in the property and continue to service their debt even in times of extreme stress. One might therefore consider that a debt return to the bank is appropriate for a debt risk of this sort.

In contrast, a 100% loan to value (LTV), interest-only, mortgage at the time of commitment is immediately exposed to equity risk. The borrower has virtually no "skin in the game" and the realizable value of the property is likely to be at least 10% less than the open market value of the same property with vacant possession. Without capital repayment, the only way the bank moves from an actual to a contingent equity exposure is if house prices increase. Whilst you would expect the bank to charge a (much) higher rate of interest for a 100% LTV mortgage and to insist on much stricter criteria in terms of the borrower, the bank is still only receiving debt returns for an immediate equity exposure. In addition, in some jurisdictions such as the US, borrowers are not even liable for the shortfall if the sale of their property does not cover the outstanding loan (a non-recourse loan), they can simply "mail back the keys", leaving the bank to take the hit for the shortfall in the realization proceeds.



It is therefore obvious, that any borrowing to fund residential real estate, can be seen as a leveraged, and in some cases highly leveraged, investment by the borrower. In the example of the 50% LTV loan above, a 10% increase in property prices will increase the borrower's equity by 20%. In a more extreme example of say a 90% LTV, a 10% increase in property prices will double the borrower's equity, whilst the bank will continue to earn its pedestrian 5% per annum debt return.



#### Real estate is illiquid

Secondly, and almost as importantly, real estate is generally illiquid. Again, this is not surprising as the sale and purchase of homes in most jurisdictions is far from simple and the need for mortgage financing elongates the process. However, it can become extremely illiquid in a short timeframe as prices and thus sentiment

begin to turn down. It is often the single largest asset (and the associated mortgage the largest liability) that most individuals will ever have. When prices begin to fall, sellers take time to adjust their prices downwards in the hope that they will protect their equity. Buyers also withdraw from the market, as they fear being saddled with a highly leveraged asset which is falling in price. This withdrawal of both buyers and sellers means that banks who have taken possession of residential real estate are trying to sell into a falling and illiquid market. Their need to move quickly, to pre-empt further falls in prices, often helps accelerate the downward spiral and thus the losses the banks inevitably suffer.

#### Regional concentration

Thirdly, banks who operate in limited geographies have always found it difficult to find a way of hedging their exposure to real estate in those geographies. Retail banking in particular is very much a regional or at best "multi-national" rather than a global activity. This means that retail banks are highly exposed to the real estate markets in a selection of geographies and have few (if any) effective tools to hedge that structural exposure. Hence, whilst the term "too big to fail" is often used pejoratively to describe the larger global institutions, their wider geographic reach and diverse business model can often be superior to retail banks operating at the mercy of the real estate market in the jurisdictions they serve. In fact, regional or domestically focused retail banks, as a collective, are highly correlated in their risk and reward profiles and thus are naturally systemic and thus collectively too big to fail.

#### Real estate lending has high operational risk

Fourthly, banks are exposed to significant operational risk that affects the realizable value of real estate used as collateral. These operational risks are numerous but often come to light, only when there is a downturn in real estate prices. For example, in some cases legal charges over property have not been perfected meaning the cost and time to repossess a property can rise considerably, eating into the realization proceeds; if indeed the property can be repossessed at all. Many repossessed properties are in poor physical condition and are thus unattractive to buyers at anything other than highly distressed prices. It is not uncommon for banks to experience reductions of up to one third of the open market value of an equivalent property offered in good condition through a private sale.

A general decline in property prices also brings to light many more instances of fraud. Stories abound of bailiffs sent to repossess a property only to find a vacant lot or of enforcing a mortgage on a commercial property which turns out to be a roundabout owned by the local authority. Fraud, in concert with unscrupulous valuers, is also a common problem as well as the natural instinct to overvalue properties in a rapidly rising market.

Many firms also suffer from an inability to collate the data necessary to manage their real estate loan books satisfactorily. In some cases the data was never collected or; the data was inadvertently or deliberately misleading at the time the loan was underwritten. In many other cases the quality of monitoring is poor, with banks relying on a relentless march up in property prices to mitigate their exposures. Poor data is a particular issue where the real estate lending is not homogenous e.g. commercial real estate, non-standard borrowers.

Combined, these features of real estate lending conspire time and again to bring banks and sometimes whole banking systems to their knees. Real estate displays all of the worst features of any asset class to the lender, asymmetric returns, illiquidity at crucial times, inability to hedge satisfactorily and high operational risk and losses.

#### Provisioning for losses

Banks in many jurisdictions have also been unable to provision prudently. The accounting standard setters should be applauded for their work, over time, to create greater transparency and comparability of financial statements. However, the consequences of these accounting standards and their attempt to reduce the level of judgement applied by management should not be underestimated. A fond favourite of German banks, before they were outlawed in

66 Combined, these features of real estate lending conspire time and again to bring banks and sometimes whole banking systems to their knees 99

the mid-1990s, was to build up hidden reserves against "unforeseen" losses. It is understandable that standard setters would want to ban these as some managements were tempted to use them to "smooth" earnings. The effect however, was to increase the volatility of reported earnings as losses could

not be recognized and therefore provided for, unless they met reasonably strict conditions. It also undermined confidence in banks during the financial crisis as the market did not know the extent of losses likely to be incurred on lending and therefore was left to make its own judgement.

The International Accounting Standards Board (IASB) recognizes this issue and in March 2013 published revised proposals for loan-loss provisioning.<sup>34</sup> In their consultation they stated, "During the financial crisis, the delayed recognition of credit losses on loans (and other financial instruments) was identified as a weakness in existing accounting standards. Specifically, because the existing model (an 'incurred loss' model) delays the recognition of credit losses until there is evidence of a credit loss event"

This shift in thinking is welcome but the concerns IASB expressed about "excessive front-loading of losses" may still mean an unwarranted delay in loan loss recognition. Experienced credit officers and bank management often have considerable insight into the likely losses that a firm will suffer as a result of market conditions and real estate declines. They can see a slow motion accident happening before them and with the right accounting and regulatory frameworks can ensure they are well provisioned ahead of time. The consultation on the Exposure Draft concluded on 5 July 2013 and we await the draft standard with interest.

34 Financial Instruments: Expected Credit Losses IASB ED/2013/3

#### **Box 1: Lessons from the Nordic banking crisis**

This issue is perfectly illustrated by an analysis of the Nordic banking crisis of the late 1980s and early 1990s. The lack of investment and wholesale banking did not save the Nordic banks from this crisis. Indeed, the only country that did emerge relatively unscathed, Denmark, did so because its banks were better capitalized than those in the rest of the region.

#### Norway - a model akin to the UK ringfence

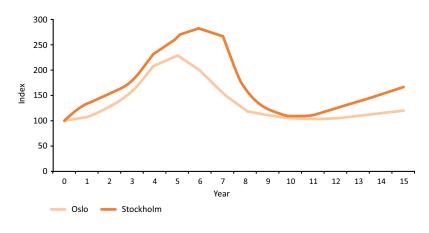
The Norwegian Banking system of the 1980s was almost an entirely domestic affair. It did not have any sophisticated trading and derivatives activity. In fact, in Norway in 1987, foreign banks had a mere 0.5% share of the domestic market for bank credit.<sup>35</sup>

In the lead up to the crisis, domestic bank lending ballooned, driven by a combination of deregulation of credit but also the inherent attractiveness of debt to individuals. Norway had some of the highest marginal income tax rates in the world with most taxpayers subject to marginal rates of between 40–70%. All nominal interest payments by households were deductible for tax purposes. There was therefore a toxic combination of pent up demand for credit, rising real estate markets, a highly attractive tax regime for debt and inexperienced banks and bankers who chased credit and balance sheet growth as a core strategy.

In 1987, there were almost 200 banks with only two commercial banks operating nationwide. These two "nationwide" banks had a combined market share of 27 per cent. The remainder were a mixture of regional banks of various sizes and small single-office banks. The smaller banks tended to be mutual and the larger banks tended to be commercial banks owned by shareholders.<sup>37</sup>

In the Autumn of 1988, a medium-sized regional commercial bank failed. In the two subsequent years, 13 small and some regional medium-sized banks failed, mostly savings banks. With two exceptions, all these bank problems were solved by merging the failed bank with a larger and solvent bank.<sup>38</sup>

Figure 5: Real estate asset price bubbles in Oslo (1981=100) and Stockholm (1983=100)



Source: OPAK (Norway) and Englund (1999) (Sweden)

35 Norges Bank. (2004). The Norwegian Banking Crisis. Oslo: Norges Bank.

36 Ibid p10

37 Ibid

38 Ibid

However, these failures depleted the two deposit guarantee funds operating in Norway. Hence, by October 1991, the crisis reached systemic proportions as the second largest bank lost all its equity capital and the fourth largest bank had lost all its original shareholder capital. In addition it was evident that the largest bank also had lost a substantial portion of its capital. The government Bank Insurance Fund (GBIF) was granted additional funds and the three major problem banks all received direct equity injections.<sup>39</sup>

Norwegian banks were unable to decouple themselves from their domestic economy and in particular their real estate market. Hence, a crisis, which began with the failure of a modest number of small institutions, became systemic. The Norwegian crisis highlighted the substantially heightened risk of operating a narrow banking model in a domestic economy with the inevitable and highly concentrated exposure to real estate markets.

#### Swedish banking in crisis

The recent report by the High Level Executive Group for the EU Commission often referred to as the Liikanen Report, (High Level Executive Group, 2012, pp. 121–122) provides an excellent précis of the parallel Swedish banking crisis.

"The deregulation of credit markets in 1985, combined with a high inflation environment and a tax system that stimulated borrowing, triggered a frenzy of real estate lending and speculation. Moreover, due to the exchange controls that were only relaxed in 1989, speculative investments were more or less confined to the domestic commercial real estate markets. Large volumes of loans were granted on doubtful grounds and the real estate bubble ultimately collapsed.

In 1992, seven of the largest Swedish banks representing 90% of the market suffered heavy losses, primarily from loans to commercial real estate. Aggregated loan losses amounted to 12% of Sweden's GDP or roughly 20% of total lending. The stock of NPLs (non-performing loans) was much larger than the banking sector's total equity capital. Five of the Seven largest banks needed and obtained additional capital from either the government or their owners."

Five of the seven largest banks received capital injections, but the Swedish government only ended up taking over two large banks. Both nationalised banks and some of the private sector banks used good bank/bad bank structures as a way to manage their troubled assets with the least disturbance to the ongoing banking activities.

The Norwegian and Swedish experiences, and the critical role that real estate lending played, was mirrored in Finland in the 1991–93 period. Thus, the analysis of the Nordic banking crisis underscores the importance of strong capital levels (Denmark's position) but also the systemic risk of any domestic banking system heavily exposed to its domestic real estate market, particularly when an asset bubble bursts.

The banks in Norway and Sweden had precisely the sort of structure, business and exposures that will be created within the UK's banking ringfence. This suggests that whilst each individual firm within the UK's ringfence will probably not be systemic, the implementation of a ringfence in the UK may not prevent the collective of ringfenced banks from being systemic.

39 Ibid

## 4

# The UK's Experience in the Global Financial Crisis

ABN AMRO acquisition: the wrong price, the wrong way to pay, at the wrong time and the wrong deal  $^{40}$ 

One of the most serious misjudgements to occur in the early days of the financial crisis may have influenced accepted wisdom, about the causes of the crisis, more than any other. That misjudgement was by the consortium of Royal Bank of Scotland (RBS), Fortis and Banco Santander to acquire and divide up between them ABN Amro. The FSA's 2011 review of the failure of RBS, referred to the deal as 'the wrong price, the wrong way to pay, at the wrong time and the wrong deal'.

The consortium's bid for ABN Amro, in contrast to the unsuccessful Barclays' merger bid, was made up, substantially, of cash consideration. During the course of the bidding war, the consortium raised the cash component it was offering from 79% to 93%.

The acquisition was to prove disastrous for both RBS and Fortis and ultimately to bring a non-consortium member, Monte dei Paschi, to its knees. Of the consortium only Santander managed to escape broadly unscathed, in part because it sold to Monte Paschi one of the assets it had acquired for an immediate profit.

#### RBS – the consortium leader

The fate of the lead member of the ABN Amro consortium, RBS, is of course well known and well documented. RBS was, of the banking failures described so far, the largest and most complex of the institutions to fail.

The FSA produced a 450 page report into the collapse of RBS.<sup>41</sup> In that report it stated:

"In October 2008, RBS in effect failed and was part nationalised. From 7 October it relied on Bank of England Emergency Liquidity Assistance (ELA) to fund itself; and on 13 October, the government announced that it would provide up to £20bn of new equity to recapitalise RBS. Subsequent increases in government capital injections amounted to £25.5bn. RBS's failure thus imposed significant direct costs on British taxpayers. In addition, the failure played an important role within an overall financial crisis which produced a major recession."

The FSA listed six factors which it believed led to the failure of RBS as follows:

40 The failure of the Royal Bank of Scotland – Financial Services Authority Board Report – December 2011

41 Ibid

- significant weaknesses in RBS's capital position ..., as a result of management decisions and permitted by an inadequate regulatory capital framework;
- over-reliance on risky short-term wholesale funding;
- concerns and uncertainties about RBS's underlying asset quality, which in turn
  was subject to little fundamental analysis by the FSA;
- substantial losses in credit trading activities, which eroded market confidence.
   Both RBS's strategy and the FSA's supervisory approach underestimated how bad losses associated with structured credit might be;
- the ABN AMRO acquisition, on which RBS proceeded without appropriate heed to the risks involved and with inadequate due diligence; and
- an overall systemic crisis in which the banks in worse relative positions were extremely vulnerable to failure. RBS was one such bank.

#### It went on to say,

"the multiple poor decisions that RBS made suggest, moreover, that there are likely to have been underlying deficiencies in RBS management, governance and culture which made it prone to make poor decisions. We therefore consider whether such underlying deficiencies should be treated as a seventh key factor in explaining RBS's failure."

#### The FSA determined that:

"The immediate cause of RBS's failure was a liquidity run. But concerns about the firm's capital adequacy (as well as about capital adequacy across the banking system) were crucial to its failure. The global regulatory capital framework in place before the crisis was severely deficient, and the reforms introduced by Basel II in retrospect added major complexity without addressing the fundamental problem of inadequate capital across entire banking systems. Even in the context of that capital regime, moreover, RBS chose to be lightly capitalised relative to its peers and made considerable use of lower-quality forms of capital. The acquisition of ABN AMRO further weakened its capital position."

#### The review team estimated that:

"RBS would have recorded a common equity tier 1 ratio at end-2007 of around 2%. This compares to an absolute minimum, under the new standards, of 4.5%, and a higher level of 9.5%, which the Financial Stability Board (FSB) and the Basel Committee have now agreed that the largest systemically important banks (as RBS was in 2008) should hold during normal times, in order to operate without restrictions on dividends and other distributions. With hindsight, RBS's capital before the crisis was grossly inadequate to provide market assurance of solvency amid the general financial crisis of autumn 2008."

"RBS entered the crisis with extensive reliance on wholesale funding. Its short-term wholesale funding gap was one of the largest in its peer group, and it was more reliant on overnight funding and unsecured funding than most of its peers. The acquisition of ABN AMRO increased its reliance on short-term wholesale funding."

In illustrating the scale of its problem with liquidity, the FSA estimated that as at August 2008, "RBS would,..., have had to increase by between £125bn and

£166bn its stock of high-quality unencumbered liquid assets or, alternatively, reduce its reliance on short-term wholesale funding in order to comply with the LCR standard."<sup>42</sup>

The FSA noted the rapid growth in RBS' loan book in the years leading up to the crisis and that:

"Significant loan losses were subsequently suffered in many areas of business, with a particular concentration in commercial property. Indeed, impairments incurred on loans and advances eventually amounted to £32.5bn over the period 2007–10, significantly exceeding the £17.7bn of losses on credit trading activities."

"...The acquisition of ABN AMRO by a consortium led by RBS greatly increased RBS's vulnerability. The decision to fund the acquisition primarily with debt, the majority of which was short-term, rather than equity eroded RBS's capital adequacy and increased its reliance on short-term wholesale funding. The acquisition significantly increased RBS's exposure to structured credit and other asset classes on which large losses were subsequently taken."

The report also highlights the losses from RBS' investment banking arm as significant.

"In 2008, credit trading losses comprised a significant element of the losses incurred, and amounted to £12.2bn. For that year, these losses exceeded the £7.1bn losses recognised due to impairment on loans and advances. In 2009, credit trading losses were a much smaller £4.1bn and more than offset by other trading profits, resulting in an overall positive trading contribution of £3.9bn. Loan impairments, however, increased to £14.1bn in 2009, and were a further £9.1bn in 2010." (Financial Services Authority, 2011, p. 50).

Table 2: Major sources of losses incurred by RBS from 2007 to 2010<sup>43</sup>

£m	2007	2008	2009	2010	Total 2007–2010
(Loss)/income on credit trading	(1,430)	(12,200)	(4,108)	41	(17,697)
Impairment of goodwill	(40)	(30,062)	(363)	(10)	(30,475)
Impairment losses on loans and advances	(2,106)	(7,091)	(14,134)	(9,144)	(32,475)
Total	(3,576)	(49,353)	(18,605)	(9,113)	(80,647)

Source: 2007, 2008, 2009 and 2010 RBS annual report and accounts

Their analysis does reveal that GBP17.7bn of losses from the years 2007–10 (inclusive) were the result of credit trading activities but almost double that amount, a massive GBP32.5bn, was the result of Impairment losses on loans and advances. Whilst RBS' asset growth was not seen as exceptional by the FSA in the period 2004–07, the acquisition of ABN Amro brought a large quantum of assets in its wake, which contributed materially to both the credit trading losses and RBS' impairments.

<sup>42</sup> Basel III Liquidity Coverage Ratio – as calibrated at end 2011

<sup>43 2007, 2008, 2009</sup> and 2010 RBS annual report and accounts

It is also worth noting that RBS' overall trading activities in 2007, 2009 and 2010 were profitable and its net loss on overall trading, after taking account of the loss on credit trading, in 2008 was GBP8.5bn which would easily have been covered by its available capital resources. 44 So of the £80bn of losses that RBS took from 2007 until 2010 less than a quarter came from credit trading losses. A ringfence might have saved RBS because it probably would have prevented the ABN AMRO acquisition but it would not, on its own, have stopped the lending losses. The new capital rules would have been much more effective in that regard and would also almost certainly have stopped the acquisition as well since RBS would have been in breach of the minimum capital ratios and the new liquidity coverage requirements under Basel III. It could only have undertaken the acquisition through a major capital raise. That would have either scuppered the acquisition or provided much more capital to absorb subsequent losses. In addition the new capital rules would have required more capital to be provided on the trading book which likely would have limited the losses there too.

The key point is that the new regulatory framework outside of ringfencing would almost certainly be more effective in achieving the aims of the ICB than ringfencing.

#### High Profile "low risk" institutions that failed in the UK

While RBS was the biggest failure it was only one of many failures of UK institutions during the financial crisis. Yet it was the only one that had a major investment bank operation. The next largest was Halifax Bank of Scotland (HBOS), which is very much the type of bank that would likely be inside a ringfence under the new legislation.

#### **HBOS**

HBOS was formed in 2001 from a merger of Halifax, a former building society, and the Bank of Scotland (BoS), known for its specialism with corporate clients and in particular small and medium sized enterprises (SMEs). At the time, the merger was particularly welcome in political circles as it was seen as creating a "fifth force" in UK banking to challenge the entrenched positions of the big four clearing banks.

Earlier this year, the UK's Parliamentary Commission on Banking Standards' (PCBS) report into the failure of HBOS (Parliamentary Commission on Banking Standards, 4 April 2013)<sup>45</sup> confirmed what many already knew, including that HBOS had embarked on overly aggressive expansion, moving up the risk curve and had poor management. However, HBOS had a particularly toxic additional ingredient in its mix, it had aggressively grown its commercial lending book and as such had drawn in some of the poorest quality "cov-lite" lending.

HBOS had a large wholesale funding requirement, as both Halifax and BoS had been significant users of wholesale funding even prior to the merger. As the PCBS reports states,

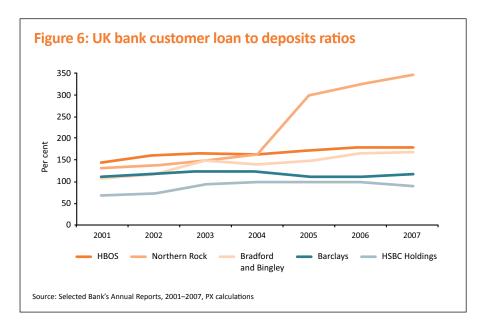
"At the Group's formation in 2001, the Group had a loans/deposits ratio of 143 per cent and a customer funding gap of £61 billion. The Retail Division, which had been substantially derived from Halifax, had customer loans of £137 billion and deposits of £97 billion — a customer funding gap of £40 billion. The rest of the HBOS Group, substantially derived from BoS, had a customer funding gap of £21 billion.

44 Ibid

45 'An accident waiting to happen': The failure of HBOS. Parliamentary Commission on Banking Standards Published 4 April 2013

46 Cov-lite lending is where there are fewer restrictions on the collateral, payment terms, and level of income of the borrower

HBOS's growth strategy meant that the funding gap increased. Customer deposits grew at a slower rate than assets. Deposits rose at 8 per cent a year between 2001 and 2008, compared with asset growth of around 13 per cent. By the end of 2008, the loans/deposits ratio had risen to 196 per cent and the customer funding gap had increased to £212.9 billion. The Retail Division's customer funding gap had risen to £112 billion, the Corporate Division had a gap of £78 billion, and the International Division a gap of £54 billion. All three of the Group's principal banking divisions contributed to the increase in the Group's overall customer funding gap and the greater need for wholesale funding over the period from 2001 to 2008."



The PCBS' report stated, "The key to HBOS's growth, the commission finds, was accepting more risk across all divisions of the group" - a strategy that "created a new culture" in the bank's higher echelons.

"This culture was brash, underpinned by a belief that the growing market share was due to a special set of skills which HBOS possessed and which its competitors lacked. The effects of the culture were all the more corrosive when coupled with a lack of corporate self-knowledge at the top of the organisation." <sup>48</sup>

HBOS also did not seem to see the crisis even when it was upon them. In October 2007, in words which echoed those of the Citigroup Chief Executive, three months earlier, the Chief Executive of HBOS' Corporate Division, Peter Cummings, was reported as saying, "Some people look as if they are losing their nerve, beginning to panic even in today's testing property environment; not us."

His corporate division ended up with £25bn of impairments, <sup>49</sup> equivalent to 20% of its 2008 loan book and way out of kilter with rival banks. But while the holes in the corporate book hastened the rescue by Lloyds Banking Group and the taxpayer – which has wound up with a 41% stake in the enlarged business (now reduced to 37%) – Cummings' division was not alone. International ran up £14.5bn of bad debts from reckless expansion in Australia and Ireland alone. The

47 Ibid p32

48 Ibid p46

49 PCBS estimates

Treasury function incurred £7.2bn of sour loans. "The roots of all these mistakes can be traced to a culture of perilously high risk lending," the report notes.

It further states,

"Poor asset quality was the direct result of the company's strategy, which pursued asset growth in higher risk areas. This asset growth was compounded by a risky funding strategy. The combination of higher risk assets and risky funding represents a fundamentally flawed business model and a colossal failure of senior management and of the Board." <sup>50</sup>

"HBOS had no culture of investment banking; if anything, its dominant culture was that of retail banking and retail financial services more widely, areas from which its senior management were largely drawn. Whatever may explain the problems of other banks, the downfall of HBOS was not the result of cultural contamination by investment banking. This was a traditional bank failure pure and simple. It was a case of a bank pursuing traditional banking activities and pursuing them badly. Structural reform of the banking industry does not diminish the need for appropriate management and supervision of traditional banking activities." <sup>51</sup>

HBOS' treasury function was not immune to this ratcheting up of risk. The Division originally established a structured investment portfolio to manage the excess capital within Halifax, and the HBOS Group maintained a large liquidity portfolio as deliberate protection against the size of its wholesale funding. The Division had £18billion of structured credit assets which were from Halifax and which predated the merger. The Division increased this to some £40

66 HBOS had no culture of investment banking; if anything, its dominant culture was that of retail banking and retail financial services more widely

billion by the end of 2008, and had another £40billion in a combination of government bonds and bank paper.

By 2004, the Treasury Division had developed a strategy to diversify the portfolio of liquid assets from what was regarded as an over-reliance on government bonds and bank certificates

of deposit (CDs). This diversification added significant risk and consequently, the Treasury Division held a significant portfolio of debt securities at the end of 2007.

The Division's US residential mortgage backed securities (RMBS) portfolio included £7.1 billion in Alt-A backed loans. The investments included £5.1 billion in exposure to monoline insurers in the form of negative basis trades and guarantees. The Division held an increasingly significant portion of its assets via conduits. The most significant of these was Grampian. Grampian had a balance sheet of £19 billion (ie 23 per cent of the Division's debt securities holdings at the end of 2007), all of which was held in asset backed securities (ABS) (ie 44 per cent of the Division's ABS holdings).

Grampian sought to fund its investments by raising funds on the wholesale markets, notably in commercial paper. After the beginning of the financial crisis, in common with many other similar vehicles, Grampian became unable to fund itself from third party sources at acceptable rates and was forced to rely on the Group.

As noted above, the Treasury Division took £7.2 billion of profit and loss account charges against its assets between 2008 and 2011.<sup>52</sup> This scale of loss in a Treasury Division is symptomatic of extremely poor risk management.

50 Ibid p3951 Ibid p4452 Ibid p70–72

The PCBS slated HBOS' risk function saying "The risk function in HBOS was a cardinal area of weakness in the bank and successive Group Risk Directors were fatally weakened in carrying out their duties by their lack of expertise and experience in carrying out a risk function."

The PCBS went on to say, "the degradation of the risk function was an important factor in explaining why the high risk activities of the Corporate, International and Treasury Divisions were not properly analysed or checked at the highest levels within the bank.<sup>53</sup>

What is also revealing is the apparent lack of understanding of risk among senior management and at least some members of the HBOS Board. HBOS Treasury, like a number of "low-risk" institutions held asset-backed securities, HBOS' Executive Committee "understood that there was greater risk inherent in the move to instruments with higher returns, although some members of the Board may not have done so, judging by Jo Dawson's (Group Risk Director in 2004–05 and subsequently Group Board member and head of Insurance & Investment Division and Retail Distribution) admission that she "would not have known what an Alt-A security was". 54

HBOS' failure has provided no ammunition to the ringfencing lobby, "As Sir Charles Dunstone, non Executive Director of HBOS 2001–08, observed, if HBOS had survived as an independent entity in the form it took in 2008, it would almost all fall within the proposed ring-fence". 55

Like RBS it is the stronger capital and liquidity requirements that are now being introduced which would have curtailed its ability to act so recklessly. A ringfence might have prevented the RBS acquisition of ABN AMRO but it would have done little on its own to prevent the disaster which befell HBOS.

#### Northern Rock

Northern Rock was the first UK casualty of the global banking crisis. Northern Rock's collapse was very straightforward. It had expanded its lending on real estate at a breakneck pace, and was overly reliant on wholesale funding. Some of its product range, which included The Rock's "Together" mortgage, was exceptionally risky. The "Together" mortgage for example, allowed borrowers to take out a loan for up to 125% of the value of the property being acquired.<sup>56</sup>

For the first half of 2007, Northern Rock's interim report boasted that its net lending was GBP19.3bn, a new record and 18.9% of all UK net lending. When interbank lending seized up only weeks later, the bank could not refinance itself, sparking a run on the bank in mid-September 2007. Queues of depositors outside Northern Rock's branches forced the hand of reluctant politicians and the bank was nationalized in early 2008.

As the financial crisis deepened, the losses on Northern Rock's mortgage book ballooned. Its range of lending products meant that they were earning good origination fees but still only debt returns for substantial exposure to real estate equity. Had Northern Rock survived it would be one of the ringfenced banks under the proposed UK ringfencing legislation.

# **Bradford & Bingley**

The issues at Bradford & Bingley (B&B) were virtually identical to Northern Rock. It bought the specialist lender, Mortgage Express, from Lloyds TSB in the

53 Ibid p22

54 Ibid p16

55 Ibid p44

56 The Scotsman, 'Northern Rock pulls plug on 125% mortgages', 21.02.2008

late 1990s. Mortgage Express catered for the self-employed, those seeking second home finance and buy-to-let mortgages. It also moved into the self-certification mortgage market, where borrowers in effect self-certify their own income rather than have it independently verified. In essence, B&B was exposing itself to the most risky elements of residential real estate lending.

During the 2000s and with rapidly rising house prices, the levels of defaults remained very low and before long B&B became the country's largest buy-to-let mortgage lender in UK. In fact, Mortgage Express undertook more new lending in the buy-to-let sector in the first half of 2007 than any other lender, according to the UK's Council of Mortgage Lenders (CML). These same figures showed that Mortgage Express was not only the largest lender of buy-to-let mortgages in terms of gross advances in H1 2007 but also of balances outstanding.

Just like Northern Rock, B&B, relied heavily on wholesale funding. Customer deposits were little more than half of its lending by the time it was nationalised in September 2008 and with arrears nearly three times the national average. Its provisions for bad loans increased from GBP22.5m in 2007 to GBP507m in 2008. B&B lost GBP65.5m in 2008 on sales of some of the 1,503 properties it repossessed in 2008 - 1,012 that were owner-occupied, largely by customers with self-certification mortgages, and 491 that were buy-to-let. This perfectly underscores the issue of banks earning debt returns for their contingent or actual equity exposure and B&B's exposure to the riskiest parts of the UK residential real estate market.

It is also noteworthy, that in 2008, it lost £120.3m selling collateralized debt obligations (CDOs) which it had acquired in the lead up to the credit crunch. As we discuss later, these are sophisticated instruments which in the case of B&B were clearly in the hands of a relatively unsophisticated management team.

B&B was a story of a business which expanded its loan book aggressively by organic means, moving further and further up the risk curve in the belief that house prices would continue to rise and that funding from the wholesale markets would continue to flow. It also acquired "specialist" (read risky) loans from competitors. In fact, it so badly misread the market that even as late as 2007 B&B bought GBP1.3bn of loans from GMAC-RFC Ltd and GBP648m from Kensington Mortgage Company, despite signs that the UK housing market was unsustainable. The agreements it entered into with these firms meant that in 2008 B&B acquired a further almost GBP2bn of loans from GMAC and Kensington and to cap it all, had to pay GBP32m in fees in early 2009 to terminate its agreement to buy more loans from GMAC.

Northern Rock, Bradford and Bingley and indeed Halifax, were among the group of building societies that demutualised in the late 1980s and 1990s. Many of the firms that demutualised argued that they could expand quicker if not subject to the strict lending and funding limits imposed by legislation. However, none of these demutualised former building societies has survived independently.

#### **Building Societies**

The Building Societies Act 1986 sets out the principal purpose of a building society, which is to make loans that are secured on residential property, substantially funded by members' deposits. Building societies have strict legislative limits on their lending and funding activities, known as 'nature limits'.

These limits mean that at least 75 per cent of trading assets must be loans secured on residential property, and that at least 50 per cent of total funding must come from their members in the form of retail deposits. In addition there are significant restrictions placed on the treasury activities of building societies. These enforced limits and restrictions help to create a distinctive identity for building societies, and also prevent them from taking excessive risks.

Post the demutualisation wave, there were still a large number of typically smaller societies operating as mutual organisations. Building societies in many ways are similar to ringfenced banks. Nevertheless, even the restrictions on funding and lending did not prevent repeated failures of these apparently "low-risk" deposit taking and real estate lending institutions during the financial crisis. The principal cause always came back to real estate, whether residential or commercial. For example, Chelsea Building Society was taken over in December 2009 by Yorkshire Building Society.

Chelsea was the most high profile UK victim of the sort of operational risk that comes with real estate lending. It announced in August 2009 that it had lost up to GBP41m from fraud, connected to lending between 2006 and 2008. The sort of fraud it encountered was the classic collusive fraud, where valuers, estate agents and solicitors in a particular locale, collude to artificially inflate prices, thus exposing the lender to higher default rates and low recoveries on repossessions. Chelsea also lost an estimated GBP44m which had been invested in two failed Icelandic Banks.

In November 2008, the Scarborough Building Society announced that it would be acquired by the much larger Skipton Building Society. A press statement said the board of the Scarborough had considered the possible impacts of continuing house price falls and the impending recession in the UK and "concluded that the effect would be an unacceptable reduction in its capital resources".

Nationwide Building Society came to the rescue of three failing "low risk" institutions during the financial crisis, having already acquired the Portman Building Society in 2007. Nationwide was content to see its market share in new lending decline in the run up to the financial crisis as it focused on quality. This together with prudent management of its capital, funding and liquidity, with deposits fully covering its lending, is in sharp contrast to the firms it acquired.

Two of Nationwide's acquisitions, the Cheshire and Derbyshire Building societies were acquired in 2008 as the sharp downturn in mortgage lending and the weakness of their respective capital bases meant they did not have the financial strength to continue independently. The small size of these acquisitions made them relatively straightforward.

The Nationwide's third acquisition, that of Dunfermline Building Society in 2009 was anything but straightforward. It was only achieved by separating out different parts of the Dunfermline's lending book. In order to get the deal away, the taxpayer had to provide funds of GBP1.5bn to facilitate the break-up of Dunfermline and its orderly disposition. In a pattern reminiscent of many of its peers, it had grown aggressively and taken on commercial lending risk.

It was the first financial institution to be resolved through the UK's new Special Resolution Regime. The House of Commons Scottish Affairs Committee produced a report on the Dunfermline Building Society in July 2009. <sup>57</sup> It quoted Graeme Dalziel, who was the Chief Executive of Dunfermline up until December

57 Scottish Affairs Committee – Fifth Report Dunfermline Building Society – Published 30 July 2009 2008, defending Dunfermline's decision to venture into commercial lending by pointing out that by the end of 2007, the commercial lending operation had added a £25m contribution to overall member value. He also added that "commercial loans had only amounted to 16.7% of the society's total assets at the end of 2007. The statutory limit under the Building Societies Act 1997 is 25% of a society's total assets – and therefore DBS was well within the limits... Mr Dalziel also told us that four or five other societies had similar, if not higher, levels of commercial lending."<sup>58</sup>

Dunfermline had an added twist to the causes of its failure. In 2002 Dunfermline set up a subsidiary called Dunfermline Solutions to "provide software solutions and back office services to deposit takers and mortgage lenders". It was reported that the intention was that DBS would use banking software company Temenos' "Globus" application to develop its own mortgage IT system that would be distributed to other building societies via Dunfermline Solutions. In November 2008, DBS finally went live on the less comprehensive "T24" system which supported DBS's savings and investments but did not support mortgage offerings as had been originally envisaged for "Project Destiny".

In total, DBS invested £31.4m in Project Destiny – a large sum for a society of its size. However, DBS was forced to write off £9.5m in respect of the IT development. This reduced DBS's operating profits in 2007 from £11.5m to £2m.

West Bromwich Building Society was another accident waiting to happen. Like Dunfermline, it was forays into commercial real estate which ultimately crippled the institution. It only avoided a bail out because of an FSA brokered deal with its creditors to swap GBP182m of debt for capital in June 2009.

Yorkshire Building Society (YBS), like the Nationwide, is widely regarded as a well managed institution and coped correspondingly well during the financial crisis. It became a "white knight" for two other distressed societies. In October 2008, Barnsley Building Society announced that it had GBP10m on deposit with Kaupthing Singer & Friedlander (KSF) and with the Heritable bank, owned by Landsbanki, the parent of Icesave. The collapse of these Icelandic banks put the Barnsley at considerable risk. The Barnsley was a small society which at the end of 2007 had assets of only GBP 376m. It agreed to be taken over by the Yorkshire in October 2008 and the merger was completed by year end.

The Norwich and Peterborough Building Society provided a different twist on the theme of "low risk" institutions. The Norwich and Peterborough had sold Keydata Investment Services products to over 3000 customers via Financial Advisers between November 2005 and the time Keydata went into administration in June 2009.

According to the UK's Serious Fraud Office (SFO),

"The Financial Services Authority (FSA) applied for Keydata to be put into administration because Keydata had been found to have sold products they claimed qualified for Individual Savings Account (ISA) status when in fact they did not. In July 2009 the SFO) began investigating Keydata Investment Services Ltd (Keydata) following a referral by the FSA.

Keydata investors had invested more than £100m in secure income bonds (SIB) 1, 2 and 3. This money was invested in bonds issued by a Luxembourg company, SLS Capital SA (SLS). Sums had also been invested in SLS bonds by investors who had not invested in Keydata.

58 Scottish Affairs Committee – Fifth Report Dunfermline Building Society – Published 30 July 2009

After PricewaterhouseCoopers had been appointed as administrators of Keydata, it was discovered that SLS had not paid income and fees due to Keydata. It was also discovered that assets of SLS had been misappropriated. SLS itself was wound up and a liquidator appointed in Luxembourg."59

N&P announced in March 2011 that it would compensate all 3200 customers who had invested in Keydata. It put aside GBP57m to buy the policies, pay customers, and pay legal fees. The compensation dwarfed the GBP5.1m of profit that N&P made in 2010. At the time of the announcement N&P was already in late stage talks to be acquired by YBS which was consummated some months later.

#### Britannia and the Co-Op

Perhaps the icing on the cake of failures of "low risk" institutions in UK was the "doubling down" effect of the acquisition of the Britannia Building Society by Co-operative Financial Services (CFS). At the time the talks were first revealed, Neville Richardson, then chief executive of Britannia, Britain's second-largest building society, said: "As two like-minded, forward-thinking and financially strong mutuals, we're talking with CFS about how we can work together. Both businesses have been pursuing successful strategies and don't need to merge, but

we recognise we could be even more successful by coming together."60

The reality has been anything but successful. Mr Richardson went on to run the combined business as Chief Executive of Co-Op bank. In March this year, the Co-op Bank reported annual losses of GBP674m for 2012 and GBP559m for the first half of 2013. In a

66 Perhaps the icing on the cake of failures of 'low risk' institutions in UK was the 'doubling down' effect of the acquisition of the Britannia **Building Society by Co-operative Financial** Services 99

credit downgrade announced in May 2013, the ratings agency Moody's reckoned the bank's "problem loan ratio" rose to 10.9% in 2012, up from 8.1% in 2011, reflecting a deterioration in its commercial property portfolio. 61 Earlier this year, the Co-Op Bank was adjudged to need some GBP1.5bn of additional capital.

Andrew Bailey, the deputy governor of the Bank of England for prudential regulation, in a letter to the UK's Treasury Select Committee in September 2013, said that just under a third of the Co-Op Bank's mortgage book consists of the Britannia's former specialist lending portfolio, which also includes mortgage books it acquired, adding this contains significant levels of non-conforming or self-certification business that presents higher risk characteristics than Co-Op's or Britannia's 'prime' business.

Mr Bailey's letter to Andrew Tyrie, the Chair of the UK's Treasury Select Committee states that more than 75 per cent of 2012 non-core loan loss impairments and around 85 to 90 per cent of the first half of 2013 non-core loan loss impairments related to Britannia-originated assets.

This corresponds to more than half of the bank's total loan losses during the last 18 months.

Notwithstanding the level of losses incurred to date, the risk profile of the remaining Britannia assets were, and remain, a key factor in their assessment of Co-Op Bank's current capital position, Mr Bailey said.

- 59 Serious Fraud Office, 'Keydata Investment Services Ltd', available at; http://www.sfo.gov.uk/ourwork/our-cases/case-progress/ keydata-investment-services-ltd
- 60 The Guardian, Monday 13 October 2008
- 61 Moody's, 'Rating Action: Moody's downgrades Cooperative Bank; on review for further downgrade', available at https://www.moodys.com/ research/Moodys-downgrades-Co-operative-Bank-on-review-forfurther-downgrade--PR 272729

"Whilst recent performance has most probably been assisted by the continuation of the low interest-rate environment, the book remains vulnerable to payment-shock or other forms of stress, where the high LTVs could lead to significant losses in the event of default."

Members of the former management team of the Co-Op Bank do not necessarily accept the PRA's views, however. In the end, whether standalone or combined, the high risk loan book and its associated provisions have made a serious hole in the capital of Co-Op Bank, one of the UK's largest mutual organisations.

This has now led to the Co-Op ceding control of the bank as part of a recapitalisation plan. The Co-Op and the Britannia combined entity, like so many of the institutions that failed in the UK, would have been firmly within the proposed ringfence.

# A summary of the principal causes of failure

It is evident that a very large number of supposedly "low-risk" institutions were found severely wanting with the onset of the financial crisis. There is little evidence that their legal structure made any difference to their fate. That is, a large number of "low-risk" banks and mutual building societies with no investment banking activities failed during the financial crisis. As can be seen from the table below, each of them lacked at least one but typically all of sufficient capital, liquidity and funding and the necessary management quality or at least the management of the risks their firms were taking.

Only one, RBS had an investment bank and even its losses were dominated by the non investment bank exposure. In short if ringfencing is the ICB's answer to the problems of the financial crisis, which apparently it is, then the only conclusion is that the Commission asked the wrong question! It is our contention that ringfencing is not only an unnecessary addition to the regulatory framework in the UK it also does little on its own to ensure that banks will not fail in the future. The table below highlights that of the institutions that failed only RBS fitted the ringfence solution. The others would have either wholly or largely been inside the ringfence. It is the capital and liquidity rules that would address the issues of undercapitalisation, insufficient liquidity, aggressive growth and inadequate funding that undermined so many. The more hands on approach from regulators (as opposed to the FSA's box ticking approach) should see significantly fewer opportunities for poor risk management and fraud too.

This chapter has focused on the UK experience. While every country was slightly different in the issues it faced in the financial crisis there are many common threads that run through the analysis, not least exposure to real estate, low levels of capital and liquidity and poor risk management. We look at those lessons in detail in appendix 1. We also look at the role of investment banks in the crisis and ask how important they really were in appendix 2.

62 FT Adviser Sep 23, 2013

Principal causes of failure/ nstitution	Investment banking business	Poor real estate lending	Under- capitalised	Insufficient liquidity	Aggressive growth	Inadequate funding base	Poor risk management	Fraud
RBS	•	•	63	•	64	•	•	
HBOS		•		•	•	•	•	
Northern Rock		•	•	•	•	•	•	
Bradford & Bingley		•	•	•	•	•	•	
Brittania		•	•	•	•	•		
Со-Ор		•	•					
Chelsea				•			•	•
Dunfermline		•	•	•	•	•	•	
Cheshire		•	•	•				•
Derbyshire		•	•	•				
West Bromwich		•			•			
Scarborough			•					
Barnsley				•				

63 Ibid

64 Due to the acquisition of ABN Amro

65 Keydata fraud

# 5 Addressing the Causes of the Financial Crisis

Governments and regulators around the world have implemented numerous measures to prevent a recurrence of the financial crisis. They have forced capital raising across the sector and across the globe. Insufficient liquidity has been addressed by requirements for banks to hold much higher buffers of high quality liquid assets.<sup>66</sup>

The regulatory environment has been strengthened through more effective structures, increased resources and more intrusive oversight. Regulators are on the front foot monitoring institutions closely in a way that did not happen before the crisis.

It is clear that the lessons around capital, liquidity, funding and management and the role of regulation have been incorporated into all aspects of financial services activity. The Dodd Frank reforms emanating from US, should also be effective in reducing the risk profile of the more complex institutions and complex financial instruments.

During our research, two critical areas stood out in which there is a strong consensus that further work is required, being moral hazard and the calculation of capital requirements.

#### Moral Hazard and too big to fail

The proponents for UK bank ringfencing use the argument that universal banks are inherently riskier because their size makes it likely that they will have to be bailed out. This is central to the moral hazard argument. If you believe that someone will bail you out, you can take high risks because you are protected from failure. There is however, no evidence that bankers in the lead up to the financial crisis even contemplated this in their activities. In the research we have undertaken no one has cited the belief that they or their firm would be "bailed out," as a driver for risk taking. In fact, the opposite may even apply. The more compelling argument is that bankers pursued increasingly risky strategies to drive greater shareholder value and thus, potentially, their share in the success and value of the institution they managed. The very last thing in the world they would expect or contemplate is that their institution would collapse with them at the helm. It was also noticeable how many senior banking executives voluntarily held on to substantial stock positions in their respective firms, for example Lehman Brothers, lost many millions as a result. In fact hubris is likely to have been a much greater factor in banking failure rather than moral hazard. Such levels of self-belief among senior bankers would be totally at odds with those executives even contemplating a bail out or relying on some form of implicit guarantee.

66 Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools – Bank for International Settlements – January 2013

#### A global resolution regime

Nevertheless, irrespective of the cause of failure, the ability for an institution to fail, without causing undue stress on essential market mechanisms, must be addressed comprehensively. The too big to fail (or at least too complex to resolve) debate is also being addressed by regulators around the world, as the former Chief Executive of Barclays, Bob Diamond noted in a recent article for the Financial Times. <sup>67</sup>

We concur with him that progress, in tackling this issue, has been encouraging but it has proved insufficient to end the "too big to fail" problem. In his article, Mr Diamond argues that "Without an international plan to wind down an important bank in an orderly fashion, political and regulatory leaders are compelled to create more rules — often to protect national and regional markets and economies."

He goes on to urge the establishment of a "global resolution regime" and the need for such a regime to have "ironclad protocols and agreements for implementation".

We also agree with his view that competing rules in different jurisdictions drain confidence and trust in the regulatory framework. The UK going it alone on ringfencing is a clear example of creating more (competing) rules.

#### Liikanen and the EU

Mr Diamond's point is further underscored as the EU is continuing to work through its own proposals for structural reform of the banking industry. The EU Commission established an expert panel under the Chairmanship of Erkki Liikanen, in February 2012 to assist with this.

Liikanen defined the expert group's task as

"to assess whether additional reforms directly targeted at the structure of individual banks would further reduce the probability and impact of failure, ensure the continuation of vital economic functions upon failure and better protect vulnerable retail clients." (Liikanen, 2012, p. i)

In its final report, it

"...concluded that it is necessary to require legal separation of certain particularly risky financial activities from deposit-taking banks within the banking group. The activities to be separated would include proprietary trading of securities and derivatives, and certain other activities closely linked with securities and derivatives markets." (Liikanen, 2012, p. iv)

The Liikanen proposals, have been widely consulted on over the past year. In terms of structural separation, the EU's consultation document<sup>68</sup> sets out three types of separation model as follows:

## ""Narrow" trading entity and "broad" deposit bank:

A first polar case is the case in which only relatively few trading activities that need to be separated from a broad deposit bank (DB), namely those types of trading where traders are speculating on markets using the bank's capital and borrowed money, for no purpose other than to make a profit and without any connection to trading on behalf of customers. Such activities would include proprietary trading, and the setting up of dedicated units in order to do so.

<sup>67</sup> Too big to fail' is still a threat to the financial system – Bob Diamond, Financial Times 15 September 2013

<sup>68</sup> Reforming the structure of the EU banking sector Consultation paper- EUROPEAN COMMISSION Consultation From 16.05.2013 to 11.07.2013

Although precise estimates are not publicly available, the importance of the activities considered above, relative to total assets or total income, does not seem significant according to preliminary data provided by banks and bank associations. The deposit-taking entity hence remains relatively unrestricted and allowed to perform a broad set of retail and investment banking activities;

#### "Medium" trading entity and "medium" deposit bank:

While proprietary trading and market making can be distinguished in theory, it is difficult to delineate the two in practice. Accordingly, a second option is to add market making to the above set of activities that need to be separated from the deposit bank. This can be motivated from a risk point of view, as market makers need to mobilise large trading volumes and also hold significant stocks of inventory, which in principle exposes the bank to counterparty risk, and to some extent, market risk. Even so, market makers provide an important function by enabling buyers to meet sellers, which is particularly important in less liquid markets; or

#### "Broad" trading entity and "narrow" deposit bank:

at the other end of the spectrum, all wholesale and investment banking activities would need to be separated. Trading entities (TEs) would accordingly engage in activities including underwriting of securities, derivatives transactions, origination of securities, in addition to the ones in the above options."

The Commission highlighted a particular issue which arises as regards the deposit bank's ability:

"to directly provide clients with certain risk management services. Under one scenario, the deposit bank would not be able to provide such services directly, as they would be transferred to the trading entity given the associated risk. In another scenario, it could be allowed to directly offer some risk management products. This right could be more or less curtailed (e.g. limiting type of derivative products to be used, providing for position risk limits...)."69

The same consultation also examined the "strength" of separation, which it categorized into three buckets as follows:

- 1. accounting separation;
- 2. functional separation (i.e. subsidiarisation); and
- 3. ownership separation (i.e. prohibition of certain business lines).

The Commission explicitly recognised in its consultation that "these forms of separation are not mutually exclusive."

However, it said that, accounting separation "would not appear to contribute to addressing the problem of too-big-to-fail."

Having virtually ruled out accounting separation, it further described functional separation whereby "banking groups continue to provide a universal set of banking services within one group but some of these activities would need to be provided by separate "functional" subsidiaries. Links between the banking group and the functionally separate legal entity(-ies) would nevertheless remain, and choices need to be made as regards the degree of legal, economic, governance and operational independence of the separated entity(-ies)."

69 Ibid

The Commission's consultation posited two functional separation models:

- Functional separation with economic and governance links restricted according to current rules (Functional Separation 1) and;
- Functional separation with tighter restrictions on economic and governance links (Functional Separation 2).

It went on to describe ownership separation as follows:

"The third and strongest degree of structural intervention is ownership separation where the ownership of assets supporting different activities would be fully separated. Accordingly, those services would have to be provided by different firms with different owners that have no affiliations."

It set out the following table to simplify the consultation.

Activities/ strength	Functional Separation 1	Functional Separation 2	Ownership Separation	
	Current requirements	Stricter requirements	Ownership separation	
Narrow TE/Broad DB e.g. Proprietary trading + exposures to VC/PE/HF (PT)	Option A [≈FR, DE Baseline]	Option B [≈ US swaps pushout]	Option C [≈ US Volcker]	
Medium TE/ Medium DB e.g. PT + market- making (MM)	Option D [≈FR, DE if wider separation activated]	Option E [≈HLEG]	Option F	
Broad TE/Narrow Option G  DB  e.g. all investment banking activities		Option H [≈US BHC, ≈ UK]	Option I	

Hence, the Commission is examining a 3x3 matrix of possibilities (around types of activity and strength of separation). Each of the nine options above, also has a whole range of potential sub-options along a continuum.

Put simply, at one end of the continuum, the changes might only involve the separate subsidiarisation of proprietary trading, hedge fund and private equity activity, still within the same banking group (Option A) and at the other, a harsh ringfencing regime, similar but still different to that in UK (Option H) or as the proponents of "electrifying" the UK ringfence might desire, Option I.

Further, the EU's proposals seek to define trading activity in order to determine the scope of the institutions subject to a separation requirement, based on various balance sheet criteria. In essence, it is likely, depending on the option chosen, that only about 30-35 banks in EU would meet the threshold for separation.<sup>70</sup> However, the UK ringfencing "de minimis" limits reference a threshold based on core deposits of GBP25bn.

70 Annex2: To Reforming the structure of the EU banking sector Consultation paper - Technical Summary of FU Commission services work on thresholds calibration

In addition, The EU is already planning, in a separate draft law, to hand regulators the powers "to require a structural reorganization" of a bank, if needed to ensure it can be wound down if it fails.

Hence, the EU's proposals will almost certainly be different to UK, in scope of activities, in scope of affected institutions and in the ownership structure required or permitted.

As Paul Tucker, who has recently stepped down as Deputy Governor of the Bank of England, said to the UK's Treasury Select Committee, "EU banks "will need to reorganise themselves on a scale going beyond ringfencing" in order to comply with the incoming provisions of the region's recovery and resolution directive."

Whatever happens, it is almost certain that the UK ringfencing legislation will merely add another layer of complexity onto an already impossibly complex problem.

#### Box 2: The March 2013 Cyprus bail in – what has it taught us?

A recent, tangible, example of the too big to fail problem and the complexity of the issues it raises, came to a head in March 2013 in Cyprus. <sup>72</sup> Cyprus attracted a massive influx of banking deposits, mainly from Russia and Eastern Europe and by 2011 banking deposits were 250% of GDP. <sup>73</sup> In its report on Cyprus in November 2011, the IMF highlighted that assets in the Cypriot banking system were nearly 8.5 times GDP. The banking system and some of Cyprus' key banks had become too big to fail (or at least too big to bail).

Cyprus has a close affinity to Greece. It was therefore a natural choice for Cypriot Banks to invest their excess deposits in Greek Government Bonds and lend to Greek borrowers. When the Greek government restructured its debt and effectively forced losses on its bondholders as a condition of its various sovereign bailouts, Cypriot banks' capital depleted rapidly. Together with loan losses incurred in Greece and Cyprus the country's two largest banks, Laiki and Bank of Cyprus needed to be bailed out. The sheer size of the capital deficit made these Cypriot banks too big to fail for their economy and too big to be rescued by the Cypriot government.

Laiki's business was closed and its assets were divided between a good bank and a bad bank. Insured depositors, those with less than EUR 100,000 were transferred into Bank of Cyprus which was to be recapitalised. Uninsured depositors, those with more than EUR100k, transferred into the bad bank and will lose an unspecified amount based on how much can be recovered from the bad bank's realisation proceeds. Shareholders in both banks were wiped out as were bondholders in Laiki. Senior bondholders of, and depositors with more than EUR 100,000 in, the Bank of Cyprus will also face a haircut, with the amount to be determined according to the amount required to resolve Laiki and recapitalise the Bank of Cyprus. In the meantime, these larger depositors in the Bank of Cyprus have their funds frozen.

The Cyprus resolution was not pretty but it did not rely on taxpayers' money. Although the road to agreement was bumpy and the Cyprus crisis was almost an entirely domestic affair, the outcomes may well be used as a blueprint for bail ins elsewhere in the world. Depending on the level of shortfall, shareholders, bondholders and uninsured depositors will all be bailed in, that is will lose money, in the event of a bank failing in the future. These sort of bail in arrangements should slay the spectre of moral hazard once and for all.

<sup>71</sup> Financial Times 8 October 2013

<sup>72</sup> Federal Reserve Bank of St. Louis, Economic Research – Bank Deposits to GDP for Cyprus, available at; http://research. stlouisfed.org/fred2/series/ DDOI02CVA156NWDB

<sup>73</sup> Cyprus: Selected Issues Paper IMF Country Report No. 11/332 November 2011

However, as Cyprus was essentially a domestic affair, it still leaves the point made by Bob Diamond open; the need for a global resolution regime.

We believe that the time, money and effort that is being invested in ringfencing by regulators, politicians and banks would be much better spent bringing together parties in jurisdictions with a concentration of banking assets to work on a global resolution regime. Further, we believe the UK banks and the British public would be much better served by creating legal structures that are able to be resolved more readily than to separate commercial and investment banking in the way that is currently being proposed in UK.

#### Recovery and resolution regimes

It is understandable that each national government and domestic regulator will feel the need to protect their jurisdiction in the event of a future crisis. We believe that the interests of nation states, the crown dependencies and EU are best served by an alignment of recovery and resolution regimes to be applied to failing financial institutions.

In addition to a global resolution regime, we do believe that recovery and resolution plans, required of the major systemically important financial institutions (SIFIs) will help significantly in the event of a future crisis. Well constructed plans should provide regulators, management and investors in banks with much greater certainty over what would happen in the event of a SIFI becoming troubled. These plans may well result in or require changes to the legal entity structures of some firms but that should be the outcome of a well constructed recovery and resolution plan. The sort of ringfencing the UK is seeking to establish is putting the "cart firmly before the horse."

#### Capital calculations

The second area, we believe requires further work, is that of the rules governing capital calculations. Most believe that the quantum of capital, banks are being required to hold under Basel III is sufficient. Although not a predictor of failure of institutions in the financial crisis, many also believe that a maximum leverage ratio, that is capital as a percentage of assets is also appropriate as a regulatory backstop. In other words, if a firm was to breach the leverage ratio, it would trigger a regulatory review to determine whether more capital would be required. Nevertheless, there is a minority that would like to see such simple approaches applied to all capital calculations. In particular, there are some that argue that the more sophisticated approaches to risk weightings, introduced in Basel II, should be abolished and a standardized approach, similar to Basel I be adopted.

As noted in our report on capital requirements (Barty, 2013, p. 35), Basel II failed in a number of ways and is best summarized by this statement from the Basel Committee itself:

"One of the main reasons the economic and financial crisis became so severe was that the banking sectors of many countries had built up excessive on-and off-balance sheet leverage. This was accompanied by a gradual erosion of the level and quality of the capital base. At the same time, many banks were holding insufficient liquidity buffers. The banking system therefore was not able to absorb the resulting systemic trading and credit losses nor could it cope with

the re-intermediation of large off balance sheet exposures that had built up in the shadow banking system. The crisis was further amplified by a procyclical deleveraging process and by the interconnectedness of systemic institutions through an array of complex transactions."<sup>74</sup>

That report noted that extra leverage was in part driven by the regulations of Basel II, which encouraged the accumulation of highly rated and hence low capital weighted assets which were attractive to banks, as they sought the best trade-off between capital weightings and returns on that capital.

A major cause of UBS' problems (see appendix 2) was its enormous holdings of super senior CDOs, which gave a small yield uplift (over equivalent US treasuries) but were given effectively a zero risk weight using internal models. No-one, including the Basel Committee believes that the risk weightings applied to these types of securities whether the standardized or the model based weightings, in the run up to the financial crisis, were appropriate. However, the question is where do we go from here? The Chief Executive of Standard Chartered, Peter Sands, highlighted the dangers of "the current enthusiasm for simpler measures of banks' capital solvency" in August of this year.<sup>75</sup>

He stated.

"The standardised approach and leverage ratio share two characteristics. First, they simplify a complex reality. But the allure of simplicity should be resisted if the simplification so dangerously distorts and obscures the real picture. Second, they narrow the difference in regulatory approach between risky and safe assets, creating perverse and powerful incentives for banks to run higher risk portfolios.

Instead we should focus on working to make risk-weighting function better. The fact that different institutions give apparently similar assets different risk weightings is a real problem, and it has created a serious credibility gap."

Concerns about different institutions giving apparently similar assets different risk weightings have risen after the Bank of England's Andrew Haldane highlighted the materially different outcomes for default probabilities and differences in risk weights from exercises that were undertaken in UK, in 2007, 2009 and 2011, for a subset of banking assets.<sup>76</sup>

As Mr Sands further notes in his FT article,

"Some of the differences between model results are good, reflecting real variations in intrinsic risks and in the effectiveness of different banks' risk-management approaches. But some differences are bad. They are the outcome of unwarranted differences in methodology, data sets or technical definitions. There are also variations driven by different parameters imposed by different regulators — some sensible, some fairly arbitrary. We can fix these: it is possible for banks and regulators to iron out most of the bad differences; the enhanced disclosure the industry is implementing will enable investors and regulators to scrutinise the residual ones."

He goes on to say,

"The models do not capture tail risks well, deal effectively with low data portfolios or incorporate diversification benefits. The underlying mathematics is dated. While no model that predicts the future will be perfect, we can certainly make them much better.

74 See Basel III: A global regulatory framework for more resilient banks and banking systems

75 When it comes to banks, simplest is not always best – FT 27 August 2013

76 Constraining discretion in bank regulation – Paper by Andrew G Haldane, Executive Director, Financial Stability and member of the Financial Policy Committee – Bank of England 9 April 2013 I am convinced that improving risk-weighting must be at the heart of a robust approach to bank solvency, and that we can remedy its most significant flaws."

Mr Haldane makes a valuable point that too much discretion in internal models may well undermine stability but a one-size fits all solution of the Basel I variety is likely to do far more damage. The greater use of stress tests, combined with backstop controls on leverage should help identify and help protect against the tail risks inherent in banking. Nevertheless, as with resolution and recovery, banks, regulators and government still have some way to go before the potential threat to stability from the inadequacies in the system of risk weightings is fully addressed.

Basel III attempts to square the circle by overlaying a leverage ratio onto the capital requirements. Many argue that, at 3%, it is too low and we would agree if banks did not have to meet all the other rules on capital requirements and liquidity as well. The key point is that Basel III, and the implementation through CRD IV in Europe, creates a much tighter regulatory regime for banks across the globe. The advantage of sticking closely to Basel III in national regulation is that it means all banks are on a broadly level playing field.

By introducing ringfencing, when that has largely been rejected by the US and Europe, the UK is creating an additional layer of complexity and cost for what, we would argue, is little or no additional protection. As we see in the next chapter ringfencing also risks having adverse consequences for both the banks and their customers if it is not implemented in a sensible and flexible way.

# 6 More of a Problem Than a Solution

# Ringfencing in UK

The UK has been a leader, or at least a "fast follower," in many of the reforms which have and are taking place across the financial services industry.

However, one area where the UK stands alone is in driving a concept of retail bank ringfencing (see p13). The enabling legislation, which is currently at its Committee Stage in the UK's House of Lords, has the following stated objectives:<sup>77</sup>

- introduce a 'ring-fence' around the deposits of people and small businesses, to separate the high street from the dealing floor and protect taxpayers when things go wrong
- make sure the new Prudential Regulation Authority can hold banks to account for the way they separate their retail and investment activities, giving it powers to enforce the full separation of individual banks
- give depositors, protected under the Financial Services Compensation Scheme, preference if a bank enters insolvency
- give the government power to ensure that banks are more able to absorb losses

### Ringfencing in US

Ringfencing is not a new concept. Following the Wall Street Crash in 1929 and the ensuing great depression, the US introduced legislation to dictate the structure and separate the activities of different parts of its financial services industry. In particular, it separated the activities of commercial banks from what would now be termed investment banks. It prohibited investment banks from taking deposits. This legislation, known as Glass-Steagall survived until its repeal in 1999. In the period of its currency it prevented the creation in the US of universal banks. It did however, create a heavy burden on US institutions, particularly commercial banks as they were increasingly competing with financial organizations which were not subject to the same restrictions. In particular, the shift from traditional lending by banks to securitization meant that commercial banks no longer had a market in which they could be profitable unless they too carried out quasi-investment banking activities.

A research report by McKinsey<sup>78</sup> provides a valuable historical analysis of the rise of universal banking in US, Germany and UK. It charts the gradual erosion and the final repeal of Glass-Steagall, as the lines between securities underwriting and commercial banking became blurred. It noted that:

77 HM Treasury and Department for Business, Innovation and Skills – Creating stronger and safer banks, available at; https://www. gov.uk/government/polices creating-stronger-and-safer-banks Undated 10 September 2013

78 Should commercial and investment banking be separated? – McKinsey & Company

"The US banks had a number of eminent supporters, most notably Alan Greenspan, who argued strongly in favour of deregulation. In addition, revisionist academic accounts started to appear that attributed the destabilization of the banking system in the 1930s not to securities activities, but to the small local banks without securities businesses that failed in their thousands while the large national banks survived. Support for this analysis seemed to be provided by the savings and loans crisis of the 1980s and 1990s. More than 700 S&L associations failed, demonstrating once again the frailty of a system based on single-branch banks." 79

Alex Tabarrok's paper on Glass-Steagall<sup>80</sup> goes further still in its assessment of the effectiveness of ringfencing in US. He argues that "Proponents of the Glass-Steagall Act argued that separating commercial and investment banking would increase safety and reduce bank and customer conflicts of interest. Neither of these arguments bares close scrutiny here."

He went on to say,

"The Supreme Court, economists, historians, and others have uncritically referred readers to the Pecora–Glass Subcommittee Hearings and to other hearings for evidence that banks with security affiliates created an undue risk to depositors. But in an exhaustive reading of all of the relevant material, Benston (1990) has found no evidence to support this conclusion. The hearings are replete with unsupported assertions, bald hypotheses, but no evidence on the risk of unified banking was ever presented. Since then, evidence has been found which strongly indicates that separated banking is riskier than unified banking."

Tabarrok also challenges the conflicts of interest argument citing extensive academic research, including an in-depth study by Randall Kroszner in 1993.<sup>81</sup>

The EU's Liikanen commentary (Liikanen, 2012) on the US Savings & Loans (banking) crisis highlighted many of the same issues identified earlier in the failures of UK institutions in the recent financial crisis (see p45). It said,

"Financial deregulation and innovation allowed the US Savings and Loans (S&L) industry to expand rapidly. However, S&L managers did not manage risks appropriately in the new lines of business. As expertise and risk management culture did not keep pace with the rapid growth in new lending, risk taking grew in excessive proportions. Regulators and supervisors did not sufficiently monitor and constrain the new activities."

#### Japan s65

Glass Steagall ringfencing legislation, also known as section 65<sup>82</sup> was imported into Japan after the Second World War during the US occupation. Japan has had a legal separation of commercial and investment banking activity for more than sixty years. As with US there is no evidence that this ringfencing did anything to prevent the Japanese financial crisis which began in the late 1980s or indeed lessen its impact. Some commentators argue the financial crisis is still ongoing more than twenty years later.

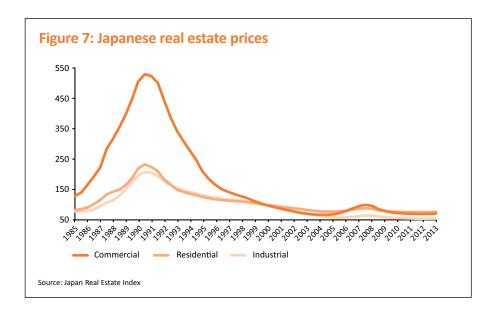
The Japanese crisis was triggered by the bursting of a real estate and stock market bubble. During the 1980s excess liquidity was allowed to build up in the financial system which inflated an asset bubble. As fears of inflation surfaced and interest rates rose sharply, the asset bubble burst with all of the attendant consequences. Stock and real estate prices fell and loan defaults rose, yet banks were encouraged to continue

79 Ibio

80 The Separation of Commercial and Investment Banking: The Morgans vs. The Rockefellers – The Quarterly Journal of Austrian Economics vol. 1, no 1 (1998): 1–18

81 Is the Glass-Steagall Act Justified? A Study of the U.S. Experience with Universal Banking before 1933 – Randall S. Kroszner and Raghuram G. Rajan

82 Section 65 of Japanese Securities and Exchange Law, Law No. 25 of 1948, incorporates the Glass-Steagall Act (1933), lending even to poor credits. Japan had adopted the Basel capital framework but had allowed its banks some additional leeway on how their capital requirements were met. This meant the banks were woefully short of the capital required to deal with the fallout from the asset bubble bursting and many failed.



Ringfencing did nothing to address the inadequate capital, poor real estate lending and inadequate risk management which were hallmarks of the Japanese banking sector for many years. Nevertheless, the strictly enforced ringfence adds both to the cost of the banking sector in Japan and arguably hampers its ability to compete globally.

#### Universal banking in Germany

In McKinsey's analysis of universal banking in Germany,<sup>83</sup> it cited the Gessler Commission,

"The universal banking system has proved its worth.... deficiencies of the current banking system are not sufficient to necessitate a change of system... A transition to a system based on separation might be able to eliminate the kinds of conflict of interest which exist within the universal banking system. However, major structural change of this nature would have such detrimental effects that it can ultimately not be justified." 84

#### Ringfencing in UK is not supported by the experience of other countries

Hence, there is no historical evidence that ringfencing is an effective tool in preventing financial crises nor that the universal banking model is an inferior structure.

As McKinsey noted in their report:

"Whenever the separation of commercial and investment banking has been discussed in the wake of a banking crisis, the debate has focused, as it does today, on solving the issues that the crisis has created. All such debates have been highly political, and their outcomes have been driven more by the strength of politicians' opinions on the immediate crisis than by deep analysis of the long-term causes."

83 Ibid

84 Andreas Busch, Banking Regulation and Globalization, Oxford University Press, 2008, p. 110.

85 Ibid

# UK ringfencing – costs and consequences

In today's environment, many we have spoken to regard the UK's decision to pursue ringfencing as seeking a solution to yesterday's problem and to somehow punish the universal or investment banks. The financial services industry is already enormously complex in part due to the quantum of regulation, but, in particular, due to the differences in regulation between countries. Ringfencing, far from making things simpler will add significant complexity to UK banking system.

It will also likely result in many unintended consequences and will most definitely result in material additional costs for the consumer and SMEs. It is impossible to identify all of these costs and consequences but in the course of our research we have looked at a number of issues likely to arise.

#### Depositor preference

As noted above the Banking Bill proposes to give depositors, protected under the Financial Services Compensation Scheme (FSCS) i.e. those with deposits up to GBP85k, preference if a bank enters insolvency. On the face of it this seems like a pro-consumer move. However, if it is only the deposits that are covered by the FSCS or its overseas equivalent, a key question is whether it really makes the consumer any better off? After all, the terms of the FSCS mean that a depositor in a failed institution will receive their money back, up to GBP85k, anyway, and in short order. What it also does though, is immediately subordinate the claims of other depositors and creditors, including for example, larger charities and those small and medium sized enterprises (SMEs) with more than GBP85k on deposit and unsecured bondholders. The main effect of this measure is to ensure that others, namely large depositors and bondholders take the losses rather than the government in the event of bank failure. Hence, the scheme will continue to charge banks a levy on FSCS deposits but in reality the scheme will be of minimal value to the smaller depositor as it is unlikely to be triggered with so many others to incur losses ahead of the FSCS.

This subordination of larger depositors and creditors will most likely result in rational depositors, with sums greater than GBP85k, removing those excess deposits from ringfenced banks. The recent experience in Cyprus of the bail-in of two key institutions, underscores this likelihood. This would deprive the ringfenced banks of significant pools of liquidity which they need to on-lend to SMEs and individuals.

Keeping larger (subordinated) deposits with a ringfenced institution will require the institution to pay higher rates on amounts over the FSCS compensation limit to compensate subordinated depositors for the additional risk they are taking. The most obvious way to do this is to pay less to smaller depositors. Hence, in this scenario the consumer and SMEs may well lose out by earning less interest whilst charities and enterprises with larger deposits will be highly vulnerable to bail-in in the event an institution fails.

If customers with larger deposits do decide to keep their money within the ringfence, they are most likely to use financial products to layer their deposits across multiple firms. A number of such products grew up in US in the Glass-Steagall era. An example is the Insured Network Deposit product. This takes clients with balances in excess of the Federal Deposit Insurance Corporation

(FDIC) insured limit and layers their deposits (up to the insured maximum) with other institutions. This type of product/arrangement ensures that all of the client's balance is insured in the event of a default. However, if a recipient bank is perceived to be in trouble, the product provider could immediately remove that counterparty from the arrangement. This in turn would exacerbate both the speed and quantum of deposit outflows from the troubled institution, making its failure much more likely. In other words, subordinating depositors with amounts over GBP85k, may actually put individual institutions and potentially the system at greater risk, without any corresponding consumer benefit.

#### "Offshore" deposits and "upstreaming"

It is also likely that larger (subordinated) deposits will gravitate offshore into entities that are not covered by the ringfencing provisions but are still within the Sterling payments area e.g. Isle of Man, Jersey and Guernsey. There are already

66 The Crown Dependencies make a significant contribution to the liquidity of the UK market. Together, they provided net financing to UK banks of \$332.5 billion in the second quarter of calendar year 2009

vast deposits, many from individuals banking in these Crown Dependencies, which are provided to UK banking parents.

The previous Chancellor of the Exchequer asked Michael Foot to conduct an independent review of the long-term opportunities and challenges facing the three British Crown

Dependencies (Guernsey, Isle of Man and Jersey) and six Overseas Territories (Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Gibraltar, Turks and Caicos Islands) as financial centres in 2008.<sup>86</sup>

The Foot report established that:

"The UK has consistently been the net recipient of funds flowing through the banking system from the nine jurisdictions, with large regular inflows from the Crown Dependencies partly offset by net outflows to the Cayman Islands.

The Crown Dependencies make a significant contribution to the liquidity of the UK market. Together, they provided net financing to UK banks of \$332.5 billion in the second quarter of calendar year 2009, largely accounted for by the 'up-streaming' to the UK head office of deposits collected by UK banks in the Crown Dependencies."

At end-June 2009, UK banks had net financing of approximately \$218.3 billion from Jersey, \$74.1 billion from Guernsey and \$40.1 billion from the Isle of Man. In a recent report on Jersey, Capital Economics established that:

"the (Jersey) banks upstream the bulk of funds to their parent companies which are typically in London. The United Kingdom's banking sector is bolstered by almost £120bn of funding received this way, which is equivalent to 1.5% per cent of its total balance sheet or two-fifths of the overall customer funding gap. The up-streaming model brings real economic benefits to the United Kingdom, both through the extra liquidity it provides and through the revenue it generates from intermediation. Moreover, in recent years, the ability of the part-nationalised banks to secure funding through Jersey has eased the burden on the British taxpayers." 88

86 Final report of the independent Review of British offshore financial centres – Michael Foot October 2009

87 Ibid p6

88 Jersey's value to Britain – Capital Economics 2 July 2013 p10 These deposits, which are sourced relatively cheaply are also of high quality in that they support very little local lending.

Table 5: Crown dependencies deposits and lending

Crown dependency	Total deposits 30 June 2013 (GBP bn)	Total lending 30 June 2013 (GBP bn)	Ratio of deposits to lending
Jersey	150.83	32.78	4.60
Guernsey	89.7	24.95 <sup>89</sup>	3.60
Isle of Man	46.01	7.56	6.09
Total	286.54	7.56	4.39

Source: Jersey, Guernsey and Isle of Man Financial Services Commissions

Under current proposals, these upstreamed monies would be treated as wholesale for a ringfenced bank and therefore at risk of being bailed-in if the UK parent was in trouble. The margin UK banks make on re-lending crown dependency upstreamed funds is estimated at between 350–500bps (net of collection costs).

If the issue of upstreaming of retail deposits from the offshore islands is not addressed, the profitability of UK ringfenced banks will be materially damaged. This will be to the detriment of customers that remain with a ringfenced bank. Critical and stable liquidity will move outside of the ringfence. In addition, given the liquidity limits likely to be applied to the ringfenced banks, they will have less scope for lending to the real economy, whether to consumers for real estate or SMEs to fund business expansion.

#### The ringfenced banks' product range

#### Derivatives

Ringfenced banks under the proposed rules will be permitted to offer their customers simple derivatives. Derivatives are crucial to businesses of all sizes in allowing them to hedge some of their most common risks including interest rate and currency risks. However, the term simple is proving anything but simple to define. As it stands, it includes only derivatives that display linear risk, meaning that ringfenced banks will not be able to sell options to customers.

This prohibition on options is a serious flaw in the government's current thinking. Any linear risk can be immediately converted into a non-linear risk by the insertion of a break clause. It is hard to see how a small business would be helped by not being able to access a break clause in its hedging activities. Interest rate caps, collars and floors are all non-linear by definition and it is easily possible to create a synthetic linear derivative by the combination of two non-linear derivatives.

We believe the government needs to amend the legislation to allow for such products to be offered within the ringfenced bank. If it does not then smaller customers both retail and corporate will be at a disadvantage. For example, many small companies have found themselves at a disadvantage having fixed their

89 Guernsey lending data as at 31 December 2012

interest rates through an interest rate swap after the Bank of England cut rates. Many going forward would probably prefer to buy an interest rate cap, which protects them against rising rates but allows them to benefit if rates remain low or fall further. Such products would not be available inside the ringfenced bank on current proposals.

As we understand it break clauses which would, for example, allow someone to exit an interest rate swap should interest rate fall sufficiently would also not be possible under current legislation. The introduction of such a break clause would make the derivative non-linear.

This highlights the problem when legislation tries to enforce an artificial barrier between parts of what would normally be a single bank. If you write the legislation too tightly to try and protect the ringfenced retail bank you prevent it from offering more sophisticated products to its customers and therefore adversely impact on those customers. For sure the banks have not done themselves any favours by the way they have sold some of those products in the past but that should be addressed through better regulation. Using a ringfence to do this is really like using a sledgehammer to crack a nut.

Moreover, the proposal to use the IFRS 13 fair value hierarchy (Levels 1 & 2 being permitted and level 3 not permitted)<sup>90</sup> as the basis for determining what products ringfenced banks can offer may have further unintended consequences. The proposal would place responsibility in the hands of international accounting standard setters for determining what products ringfenced banks can offer in UK. The International Accounting Standards Board's objectives are unlikely to take account of the needs of UK SMEs for banking products when determining their fair value hierarchy. In addition, in practical terms, there are often products where part falls into the level 2 hierarchy but another part, for example, the bank's hedge, may have certain unobservable parameters, which would place that part into IFRS 13's level 3.

#### Trade finance

Vast numbers of companies importing and exporting from UK and elsewhere rely upon banks to finance this type of business. The ICB recommended that trade and project finance be permitted in a ringfenced bank. <sup>91</sup> The government's proposed approach permits ringfenced banks to undertake certain trade finance activities. The government recognised in its own consultations the importance of getting trade finance right if ringfencing is not to have a disproportionate negative impact on the ability of UK businesses to trade internationally, or upon the UK's ability to attract international investment. However, what should be a simple exemption from prohibited exposures for ringfenced banks is proving again to be anything but simple.

The government's proposals would limit the definition of trade finance services to the issue or confirmation of a documentary credit or guarantee and by applying certain conditions to the qualifying instruments. Together, these are likely to leave far too much outside of the ringfence. Trade finance can of course take the form of a documentary credit or guarantee but this is far from universally the case and such restrictions would probably preclude other widely used forms of trade finance such as standby letters of credit, avalisation<sup>92</sup> or bank payment obligations (covered in the SWIFT trade services utility).

90 IFRS 13 – Fair Value Measurement – IASB May 2011 – Paras 72–90

91 Ihid n54

92 The specific endorsement on a bill of exchange by a bank. By doing this, the bank guarantees payment in the event that the drawee defaults on payment of the bill at maturity.

The other principal issue with the government's proposals is that eligible contracts must be drawn up under the Uniform Customs and Practice Documentary Credits (UCP 600) published by the International Chamber of Commerce. This documentation is by no means universal and it is difficult to see how a ringfenced bank could insist on its use. The effect of this, therefore, would be to rule out a significant proportion of documentary credits and guarantees currently provided. For example, there is not yet standard documentation for Islamic trade finance and sovereign export credit agencies tend to issue their own documentation.

Rather than tackle all of this detail in the legislation, it would seem to make more sense for the government to set out an in-principle statement of the characteristics of transactions which ringfenced banks would be permitted to undertake in relation to trade finance.

#### Structured products

Structured products are a popular form of investment for many retail customers. Prohibiting the ringfenced banks from selling structured deposits risks eliminating the market altogether, as many structured deposits would qualify as core deposits which cannot be offered by non-ringfenced banks. Sales would therefore be limited to small banks with less than GBP25bn in deposits and/or UK branches of EEA banks which as noted later are exempted from the UK's ringfencing regulations. Hence, a Barclays or HSBC would be unable to provide these types of products but Metro Bank would be able to offer them. In addition, there is uncertainty as to whether ringfenced banks would be able to distribute third party structured products because in doing so, the ringfenced bank may create a financial exposure to a non-ringfenced bank for commissions on the sale (or repurchase) of the product.

#### Access to sophisticated hedging products by "large organisations"

Large organisations will be permitted to bank with a non-ringfenced bank. The definition of a large organisation in the proposed legislation however departs from the Companies Act definition in that it requires employment of 50 staff and a turnover of more than GBP6.5m or an annual balance sheet of more than GBP 3.26m. These criteria appear to set the bar at a relatively high level for being able to deal with a non-ringfenced bank. This is likely to impact firms which need access to a sophisticated product set which ringfenced banks will be prohibited from providing. It will particularly impact firms that have sophisticated commodity hedging needs or firms with few employees but large balance sheets.

The practical application of these criteria will be bureaucratic and costly to administer as the criteria for determining whether linked enterprises and partner enterprises can be assessed as one enterprise are complex.

#### The viability of the non-ringfenced component

It was suggested during the course of our research that two of the ringfenced banks are struggling to create a viable business model for maintaining a non-ringfenced bank in their overall operation. If this issue cannot be overcome, it has serious implications for both competition and the ability to service corporate clients as they grow. In competition terms, the largest players will be able to offer their corporate clients access to both their ringfenced and (subject to meeting the qualifying criteria) non-ringfenced products and services. Thus, from the outset

the larger banks will have an advantage, for example where the corporate needs access to banking products and services outside of EEA or has sophisticated hedging needs. In addition, the ringfenced banks without a non-ringfenced operation will most likely lose corporate clients as the client grows. With that growth, their needs will become more sophisticated and a standalone ringfenced bank will be unable to meet those needs.

#### High net worth individuals (HNWIs)

The ICB recommended that only sophisticated investors with substantial liquid wealth be allowed to deposit outside the ring-fence, as such individuals would be able to tolerate a temporary interruption in access to their accounts. The Banking reform white paper therefore suggested that to be eligible to bank outside the ring-fence, individuals should have to have 'free and investible assets' (that is, liquid financial assets, excluding the value of assets such as property and pension rights) with a single bank above a threshold set in the range of £250,000 to £750,000, and should have made an active choice to bank with a non-ring-fenced bank.<sup>93</sup>

The government continues to support this general approach, but now believes that total individual wealth is likely to be a better basis for this exemption than wealth with a single bank. $^{94}$ 

The government is thus proposing that HNWIs choosing to deposit outside the ring-fence must have free and investible assets of £250,000 or more and make a signed declaration that they wish to do so. The statement of eligibility for HNWIs wishing to deposit outside the ring-fence must be countersigned by a chartered accountant. HNWIs tend to spread their assets across a number of institutions in contrast to retail customers and SMEs who tend to be single banked. Hence, the total individual wealth approach is to be welcomed.

However, the certification process associated with HNWIs wishing to deposit outside of the ringfence as currently proposed is likely to be bureaucratic and deter HNWIs from banking in UK. The British Bankers Association has suggested that the process be streamlined by reusing existing definitions of HNWIs. The 'consumer credit – regulated and exempt agreements' published by the Office of Fair Trading (OFT) in November 2010<sup>95</sup> for example, define a HNWI as someone having an income during the previous financial year of not less than GBP150k or net assets throughout the year of not less than GBP500k. Aligning to this definition of HNWI and permitting the individual to make a declaration and the non-ringfenced bank to countersign it should prove adequate, without the necessity and expense of using an accountant. Financial institutions are required under the various rules to prevent Financial Crime to "Know Your Customer" and thus must maintain detailed records of each of their customer's financial position and source of wealth.

#### European Economic Area (EEA) Competitors

The broader issue of impending and different EU regulation is dealt with in detail earlier (see p45). Nevertheless, one particularly relevant "consequence" is widely recognised and thus must be intended or at lease expected by UK lawmakers. Under EU law the UK authorities cannot impose ring fencing on banks incorporated in another EEA member state, if they choose to operate in UK via a branch or branches. Hence, for example, if Santander chose to restructure its substantial UK operations into a branch (or branches) of its Spanish Head Office, the UK ringfence rules

93 Banking reform:draft secondary legislation – July 2013 p8 94 Ibid p9 95 Office of Fair Trading, Consumer credit – regulated and exempt agreements, November

would not apply. We have no evidence by the way, that Santander has any plans of this sort, but the principle holds for any non-UK bank from the other 29 EEA States with passporting rights. Thus a universal bank established in EU or in Iceland, Liechtenstein or Norway can branch into the UK and completely circumvent the UK's ringfencing rules. This would create a wholly unlevel playing field for the UK's ringfenced banks. It would also expose SMEs and consumers to EEA banks in the way that they were for example, exposed to Icelandic banks in the financial crisis.

#### Will risk management improve?

It was noted earlier that larger, more sophisticated institutions have correspondingly better and more sophisticated risk management capabilities. The ringfencing proposals will most likely deny access to these capabilities, due to the separate entity and board structures required of ringfenced firms.

This picture of low growth, low profitability and less sophisticated risk management will undoubtedly resemble the building society sector of the past. It will deny the ringfenced banks the ability to pay for top tier talent and starve them of the investment funds which are so desperately needed to modernise the UK's antiquated retail banking infrastructure.

The ringfenced firms will be allowed to buy and sell derivatives to manage their own balance sheet risk within limits but may lack the sophistication and the systems necessary to manage that risk satisfactorily. After all, a number of failures of "low risk" institutions were, at least partially, the result of poor treasury management, including in derivatives e.g. HBOS (p34).

#### What will ringfenced banks do with surplus deposits?

Depositor preference, issues around upstreaming, structured deposit issuance and the difficulty of retaining high net worth individuals' balances within the ringfence all suggest that ringfenced banks will be short of deposits to on-lend to the real economy. It is however, also worth looking at the other albeit unlikely scenario. If we assume that some ringfenced banks become hugely successful at raising deposits; they could easily find themselves unable to use those deposits for lending to the real economy. Many smaller banks, those outside of the ringfence, rely upon term funding from the large retail banks as a mainstay of their funding. As it stands, ringfenced banks would not be permitted to provide funding to small and challenger banks, placing those entrants at a commercial disadvantage. This restriction would thus prevent a quantum of deposits from being recycled into lending by the small and challenger banks.

Correspondingly, the ringfenced banks with surplus deposits may well be tempted to place the excess in increasingly risky investments and lending as the Cypriot banks did or be satisfied by placing them with the Bank of England earning pedestrian and most likely loss-making returns.

# How much will it really cost?

The UK Treasury's most recent impact assessment from July this year<sup>96</sup> estimates that the costs of implementing the Banking Reform Bill will be as follows:

- Direct private costs to UK banks: £1.7bn -£4.4bn p.a.
- Direct costs to regulator: £20m (up-front), £2m p.a.

96 Financial Services (Banking Reform) Bill - Impact Assessment 01/07/2013 - HM Treasury IA No: HMT1302

- Indirect cost to GDP from banks passing increased private costs to economy: reduction in long-run GDP level of 0.04%–0.16% (equivalent to average annual GDP cost of £0.4bn–£1.9bn p.a.)
- Indirect Exchequer impact: reduction in tax receipts of £150m-£690m p.a.
- Reduction of value of HMG shareholdings in RBS and Lloyds Banking Group of £1.6bn–£4.5bn, relative to 'do nothing' baseline.

The large ranges of these cost estimates suggests that the UK government is little more than guessing at the real costs of ringfencing. In addition, our research suggests that the largest UK universal banks may need to invest upwards of GBP1bn each in transition costs alone. Costs which we believe would be better invested in renewing their retail banking systems and facilitating number portability.

#### Unable to quantify the benefits

The benefits the UK government sets out for ringfencing are based on an illustrative calculation that the legislation reduces the likelihood of a future crisis by 10% and the severity of future crises by 15%. It thus posits an annual equivalent benefit over thirty years equivalent to 0.47% of GDP (£7.1bn in 2011–12 terms). As noted earlier, Glass-Steagall type provisions in US and Japan did not prevent major banking crises nor indeed appear to have reduced their severity. As we have argued above we believe the higher capital and liquidity requirements under Basel III, together with much more active regulatory oversight (as opposed to the FSA's box ticking) will be the main channel through which risk is lowered, not the ringfence. Accordingly, we believe the savings argued for in the ICB paper are markedly overstated.

Even if that was not the case, there has not been a global financial crisis for almost eighty years. Is the government therefore suggesting that due to the measures it is adopting that the next global financial crisis will be eighty-eight years hence? If that is the case, the present value of the loss of even 10% of GDP in eight-eight years time is virtually zero. So the savings are likely to be negligible, at least in the short term, while the costs, both to the banks and more importantly to the banks' customers are real and immediate.

#### It took more than six decades to finally repeal Glass Steagall

This sort of primary legislation, once passed, is notoriously difficult to repeal. Despite numerous attempts to water down or eliminate the separation provisions of Glass-Steagall in US, it took until 1999, more than six and a half decades, after enactment, before they were finally eliminated through the Gramm–Leach–Bliley Act. This seems to support the old adage, "legislate in haste, repent at leisure."

#### Harming the consumer, SME

The problems do not end there, however. The limits on what ringfenced firms can do with their money for example, real estate lending, means they will face competitive pressures from firms outside of the ringfence as indeed also happened in US under Glass-Steagall. As the ringfenced firms' margins come under pressure from non-deposit taking institutions, which don't need so much expensive capital, the ringfenced firm will most likely reduce its deposit rates further, harming the consumer and SME.

It is obvious that consumers, even now, do not assess in great detail the creditworthiness of the institutions with which they entrust their money. Many consumers are swayed by headline returns and best buy tables. As in the US Glass-Steagall era, it is highly likely that significant retail deposits especially those that are subordinated will be channelled into money market funds, chasing a higher

rate of return. Many believe the vast size of the US cash mutual fund industry was the result of the Glass Steagall restrictions.

The subordination of bondholders will further raise the cost of capital for ringfenced banks as will the substantial amounts of equity capital they will

1t is obvious that consumers, even now, do not assess in great detail the creditworthiness of the institutions with which they entrust their money

require. In fact, ringfenced banks will need to hold Core Equity Tier 1 capital equivalent to 10% of risk-weighted assets and maintain an additional buffer of 7% of primary loss absorbing capacity (PLAC).

This could put some ring-fenced banks on a par with the requirements for the global Systemically Important Financial Institutions (SIFIs).

This combined with capital add-ons and the pressure on lending margins from outside could destroy a central tenet of banking stability; that is banks should be able to be sustainably profitable.

#### The end of "free" consumer banking?

It has not been possible to model with any certainty the impact on individual bank profitability of the numerous consequences associated with ringfencing, depositor preference and capital add-ons. Much will depend on the final shape of the secondary legislation and whether key issues identified are addressed satisfactorily. However, it is highly likely that costs will rise materially to fund capital increases and to compensate subordinated depositors and bondholders for the extra risks they are taking. Operational costs will also rise as synergies are lost between the ringfenced bank and the rest of its group. Deposits will leak outside of the ringfence into both money market mutual funds and offshore.

Banking revenues are already under pressure as restrictions on the provision of investment advice<sup>97</sup> bite and the cross sell/cross subsidisation of products and services has become harder for banks to maintain under the FCA's Treating Customers Fairly regime. If the ringfenced banks are restricted in their range of products and services as currently envisaged (e.g. non-linear derivatives, structured deposits, trade finance) and if HNWIs take their business abroad, ringfenced banks' revenue bases will be under considerable pressure. If some ringfenced banks are unable to create a viable business model for maintaining a non-ringfenced bank in their overall operation they will suffer further revenue leakage.

Inevitably this mix of much higher costs and lower revenues will be passed on to consumers and SMEs, those who are not allowed to bank outside of the ringfence. With few avenues to additional profitability ringfenced banks are likely to slash their cost base by forcing the closure of many more high street branches. They will need to augment their charging structure which will inevitably lead to higher priced products and the end of "free" consumer banking in UK.

97 As a result of the Retail Distribution Review

# **7** Conclusion

Our analysis indicates that many of the issues which led to the financial crisis have been or are being addressed by governments and regulators around the world. Capital requirements have been raised substantially and liquidity rules have been tightened considerably.

As we have seen throughout this paper, what really matters to institutional and systemic stability are:

- 1. appropriate levels of capital, and bail-inable debt to absorb material losses;
- robust liquidity buffers made up of high quality instruments, ensuring, otherwise solvent institutions are not taken down by a prolonged seizure in wholesale markets;
- diverse sources of funding which are appropriate to the risks taken, diversity is essential whether the deposits are retail, wholesale or a combination of the two;
- 4. high quality management, both of financial institutions and of the risks those institutions run as an integral part of their activity; banking is a complex business and needs high quality people who both understand and can manage the complexity inherent in today's modern and interconnected world;
- 5. failing institutions must be readily resolvable without creating unwarranted disruption to the financial system.

As Deutsche Bank stated in their response to the Liikanen consultation:

"The delivery of a Recovery and Resolution Directive (RRD), the prudential Capital Requirements Regulation (CRR) and reforms to derivatives markets enacted by the European Market Infrastructure Regulation (EMIR) will address interconnectedness and contagion risk between financial entities and ensure that higher levels of capital, liquidity and funding are in place to balance the market, counterparty and liquidity risks inherent in banking activity. Collectively, the new rules have been designed to ensure that the overall level of financial resources which the banking system must allocate to be able to offer market making and risk management services to the real economy will be appropriate to cover all risks."98

Many believe that further work is required to create a global resolution regime and to work on the issues surrounding the finalization of Basel III and in particular appropriate risk weightings for trading activities and the appropriate calibration of internal models for valuations and loss calculations.

98 Deutsche Bank – Andrew Procter letter to Mr. Alain Deckers – European Commission 11 July 2013

The separation of proprietary trading, private equity and principal hedge fund activity, enacted in US via Dodd Frank, will further help to derisk the banking system and is likely to be adopted in some form in the forthcoming EU banking reforms.

We therefore believe that the Glass-Steagall approach to UK banking, creating a ringfence around a range of banking activities is expensive and unnecessary. The UK's proposed ringfence would still contain substantial and undiversifiable real estate lending risk, which has been the cause of so many financial crises around the world.

The UK's current position appears politically motivated rather than based on hard evidence, historical or contemporaneous, with little substance to support the benefits that are supposed to arise from ringfencing. Hence, the UK's ringfencing proposals seem to add little to the aims of stronger and safer banks. It would appear to be the wrong solution to the wrong problem.

In an ideal world the government would have rejected the ICB's recommendation for a ringfence. The reality is that too much political capital has already been invested in the project and the conventional wisdom (as can be seen from the recent parliamentary debates) that it will make the UK banking system safer is firmly entrenched. Our intention has been to highlight the flaws in the analysis, to try and ensure that there is a more informed debate. We also believe there are changes the government can still make to ensure that the implementation of the ringfence does as little damage as possible.

We therefore make the following ten recommendations:

#### Recommendation 1

Make any ringfence as flexible as possible so that it can be suitably aligned in the future with the impending EU legislation. In addition, more flexible provisions will permit a better phased, lower cost and lower risk migration to any new legal entity structure.

#### Recommendation 2

Any automatic break up (electrification) provisions should only be able to be used in extremis. A wide array of regulatory tools is already available to discipline firms and individuals that act improperly and the EU is already planning to hand regulators the powers "to require a structural reorganization" of a bank, if needed to ensure it can be wound down if it fails.

#### Recommendation 3

Allow the upstreamed deposits from the crown dependencies to ringfenced banks to be treated as if they were raised by ringfenced banks in UK or EEA. Without this the UK ringfenced banks risk being denied a sizeable source of funding.

#### Recommendation 4

Permit ringfenced banks to offer non linear derivatives, structured deposits and a full range of trade finance services to their customer base within overall risk limits. This will ensure that retail and SME customers will not be disadvantaged by the introduction of the ringfence.

#### Recommendation 5

Simplify the definitions and streamline the procedures for large corporates and High Net Worth Individuals to deal with non-ringfenced banks. Current plans are unnecessarily bureaucratic and risk damaging UK business as well as the banks.

#### Recommendation 6

Eliminate the proposed capital add-on for the ring-fenced banks, as this will deter entrants and raise the cost of capital for incumbents. Instead rely on the Basel III capital conservation and counter cyclical buffers approach to capital adequacy. A robust supervisory and resolution regime should allow poor banks to fail without recourse to the taxpayer.

#### Recommendation 7

Ensure that the sharing of systems, particularly risk management systems and other sophisticated risk tools works in practice, to avoid unnecessary extra costs and overlap.

#### Recommendation 8

Cap the banking levy at current levels. It should not be used for general taxation purposes and instead be targeted at meeting future resolution costs. It would then be available to meet any EU requirement under the Banking and Resolution Directive for a (bail out resolution fund). If it is not to be used for such a fund it should be used to lower the public sector debt since in such circumstances any future bailouts would come out of general government borrowing.

#### Recommendation 9

Help forge a "global resolution regime" to harmonise recovery and resolution regimes in key jurisdictions around the world, along the lines of the Financial Stability Board programme. <sup>99</sup> This is likely to be much more important in avoiding future bailouts than the ringfence.

#### Recommendation 10

Commit to a moratorium on further changes in banking regulation for five years, other than measures needed to address specific problems, so as to enable banks to make an orderly transition to a Basel III and ringfenced world. Ongoing uncertainty over the level of capital and structure of the industry can only hinder the supply of credit to the economy.

The safest banks are those that are sustainably profitable, the best rules are those that don't keep changing and the most successful economies are those which do not handicap their leading industries. We want a banking sector that is safe but able to provide credit to the UK economy so it can grow. If we concentrate too hard on making it safe then it cannot provide the credit. This has already led, in our view, to a slower recovery and the need for schemes like FLS and Help to Buy. It is our hope that the government and parliament will make the ringfencing legislation sensible so that the UK banking system can still do what it is meant to do, supply service to its customers and credit to the economy.

99 www.financialstabilityboard.

# Appendix 1: The Global Crisis Overseas

No analysis of the financial crisis and the lessons to be learned would be complete without looking at the place where it began, the United States and its high profile casualties. There is insufficient space in this paper to examine each and every one of the failures in US in detail and thus we will focus on those which were particularly seminal. The highest profile and perhaps most damaging collapse was that of Lehman Brothers in September 2008. However, it was the problems at Bear Stearns which, many believe, led directly to the collapse of Lehman Brothers.

#### **Bear Stearns**

Bear Stearns was one of the smaller US investment banks, attempting to compete with the so-called bulge bracket firms.

Bear had a particular niche in the mortgage related business and in 2004 started the Bear Stearns High-Grade Structured Credit Fund (HGSCF), which for almost three and a half years performed well. On the back of this performance and client demand, in August 2006, the firm started the Bear Stearns High-Grade Structured Credit Enhanced Leveraged Fund (HGSCELF). As the name of the second fund suggested, it was riskier even than the first fund. The leverage in the second fund was aggressive, even for the time, with c.USD600m of client money invested and in excess of USD6billion of borrowings. Such leverage was designed to amplify returns but of course in a downturn would also amplify losses.

As the US real estate market began to falter the funds began to move rapidly into losses. Investors in the HGSCELF, were informed in June 2007 that the fund had lost 23% of its value over the period to April 2007 (not the 10% loss that was originally announced). In order to minimise its further losses, the fund began a fire sale of its assets, which of course began to depress the price of mortgage backed securities further. On 22 June 2007 the firm announced a USD 3.2bn rescue package for the Bear Stearns HGSCF by substituting its own lending for loans from other banks. This move bought time but following further losses and credit rating agency downgrades, in March 2008, some of the largest banks began to withdraw their credit lines from Bear. Within 72 hours the firm was effectively cut off from funding and was set to run out of money. Over the weekend of 15 and 16 March 2008, Bear was bought by JP Morgan Chase. The US Federal Reserve approved a loan of USD30bn to support JP Morgan Chase's purchase.

The rescue of Bear and the US government's role in it, triggered heated debate in US about moral hazard and the use of government funds to bail out private businesses.

The shockwaves from the collapse of Bear and perhaps even more so, the speed at which it occurred led to a further deterioration in wholesale funding market conditions. The markets nerves were on edge as trust between institutions began to evaporate.

# IndyMac

IndyMac grew rapidly during the US real estate boom. Its specialty was Alt-A residential mortgage loans, which in terms of riskiness sit between Prime and Sub Prime. Like many of UK institutions which later failed, while house prices climbed, IndyMac's loan book was not problematic. But when the housing bubble burst and prices began to fall, losses at IndyMac began to rise. In April 2008 Moody's and Standard and Poors downgraded IndyMac's mortgage backed securities and the entire Alt-A securitisation market began to seize. In scenes reminiscent of Northern Rock, a run on the bank ensued in late June after a letter from a US senator was leaked to the public. IndyMac was flooded with customers withdrawing their money. Less than two weeks later, on 11 July 2008, regulators seized the bank and proceeded to close it down.

Its Chief Executive at the time, settled a lawsuit in December 2012, filed by the Federal Deposit Insurance Corporation (FDIC) that stemmed from the collapse of the bank during the financial crisis. The FDIC had accused the former Chief Executive of being negligent in not reducing the bank's core loan volume. The collapse is believed to have cost the FDIC almost USD13bn. Worse, it represented yet another domino in the collapsing financial system.

Its business model, in specialising in risky lending was flawed and it did not have the financial strength or the liquidity to survive a run on the institution.

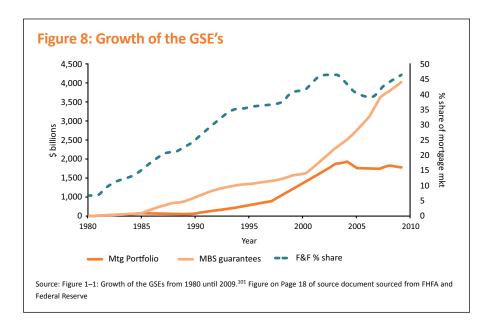
#### The GSEs

The US mortgage loan market developed during the 1930s. The government backed Federal National Mortgage Association (FNMA), known as Fannie Mae, was founded in 1938. Its role was to acquire mortgages from lending banks and place them on the market. The Federal Home Loan Mortgage Corporation (FHLMC), known as Freddie Mac was chartered by US Congress in 1970 with a public mission to stabilize the nation's residential mortgage markets and expand opportunities for home ownership and affordable rental housing. Together with the Federal Home Loan Banks (FHLB) these three institutions are collectively known as Government Sponsored Enterprises (GSEs).

Fannie Mae was converted into a private company in 1968. It was primarily because the US government wanted to remove Fannie Mae's debt from the federal government's books, thereby reducing the size of the national debt. Freddie Mac followed in Fannie Mae's footsteps and became a public company in 1989.

The GSEs were assigned a set of "mission goals" in law in1992, <sup>100</sup> similar to those in the Community Reinvestment Act for firms covered by the FDIC insurance scheme. These mission goals were to support housing for low-and moderate-income households, as well as a special "affordable goal" and serving "underserved areas" (formerly inner-city areas). These goals effectively gave the GSEs a mandate to purchase low-quality mortgages. Fannie and Freddie dramatically increased their share of the mortgage market and by 2007 had by far

100 The Federal Housing Enterprises Financial Safety and Soundness Act (FHEFSSA) – 1992 the largest share of private residential mortgages by means of guarantees, financed directly or indirectly, and even assumed some of them in their entirety.



The GSEs exploited their defacto guarantees, for which they did not have to pay, and had a strong incentive to try to leverage themselves as much as possible - to issue as much debt and as little equity, the sort of distorting effects highlighted

by (Lilico, 2010, pp. 22–28). Further, their special "risk weighted" regulatory regime, afforded them extraordinarily light capital requirements in comparison to any other financial institution. In addition the risk weights attached to "Agency" bonds as they were called were much lower than for so-called "private label" securitisations, incentivising

66 The combination has produced two GSEs that are not only too big to be allowed to fail but perhaps too influential and too politically connected to be regulated or shaped effectively in the public interest 99

private sector banks to hold increasing amounts of their paper. A review of their leverage ratios suggested that (including the off balance sheet guarantees) they were levered around 70+ times compared with their equity.

Periodically, questions were asked about the growing role of government and the GSEs in mortgage financing but as noted by one observer years before the financial crisis,

"Fannie Mae and Freddie Mac are fast learners. Born of the federal bureaucracy, these enterprises have swiftly and skillfully managed to pick up the roughshod tactics of the private corporate world and at the same time cling tightly to one of the federal government's deepest and most lucrative welfare troughs...The combination has produced two GSEs that are not only too big to be allowed to fail but perhaps too influential and too politically connected to be regulated or shaped effectively in the public interest." 102

The two GSEs showed their first losses in 2007 of a combined USD5bn and lost a little more than that in the first half of 2008. However in the third quarter

101 Guaranteed to Fail – Fannie, Freddie, and the Debacle of Mortgage Finance Viral V. Acharya and others – NYU Stern 2011

102 Ralph Nader, How Fannie and Freddie Influence the political process, Chapter 6 of Peter Wallison, ed., 2001, Serving Two Masters, Yet Out of Control: Fannie Mae and Freddie Mac, AEI Press. of 2008, Fannie's losses exploded to USD29.0 billion and Freddie's to USD25.3 billion and their market capitalisation was virtually wiped out in the year up to September 2008. The collapse in their share prices meant that they could not tap the equity markets for further capital.

By September 2008, the two GSEs had USD1.73 trillion in outstanding debt. Of which 30% had a maturity of less than a year. It was ultimately these huge losses and the GSEs' inability to raise private capital that prompted the Treasury to put the GSEs into conservatorship on 6 September 2008. Their combined losses for 2008 amounted to USD109 billion. Inevitably, with such a dominant share of an increasingly risky mortgage market Fannie Mae and Freddie Mac were doomed.

The CEOs of Freddie and Fannie were dismissed. It is reported that these executives were surprised, expecting, instead, to receive a government capital injection on their own terms. This is one of the few tangible examples of moral hazard at work that we encountered in our research. The GSEs, although appearing to be private enterprises on the surface, were defacto underwritten by and through their mission goals directed by US government.

If true moral hazard was to be seen in the world's financial system, the US GSEs were the poster children. Government backed agencies subsidising the cost of housing in US through often direct intervention in the marketplace and massively distorting the true cost and availability of mortgage finance for the public.

#### Lehman Brothers

The collapse of Lehman Brothers will undoubtedly be the most memorable and was arguably the most seismic event of the global financial crisis. It sent shockwaves through the global financial system and many other firms failed in its wake. However, as noted earlier (p67), the collapse of Bear Stearns probably sealed Lehman's fate. The markets used the Bear failure as a template on which to judge other financial institutions' resilience. All market participants were trying to work out who was exposed to what.

These market concerns grew and interbank lending began to seize. All of the firms saw their money books shorten in maturity day by day. The more far-sighted, better run, institutions like Deutsche Bank, had already acquired considerable liquidity at the first signs of the crisis. Management at the time came in for some criticism in the Summer of 2007 as they borrowed substantial term funding at what looked like relatively high rates of interest. As Deutsche Bank's 20-F US regulatory filing revealed "In 2007, Treasury issued capital market instruments with a total value of approximately €44.6billion, revised upwards from an original target of €23billion. This increased capital market issuance was one of a series of measures taken in response to the deteriorating market conditions in the second half of the year to enhance our strong liquidity position, fund existing commitments, facilitate new business and prepare for contingencies".<sup>103</sup>

This sort of management action, together with a much better understanding of the risks they were running and how to micro-hedge them, would prove to be invaluable to the stability and survival, unaided, of the firm. In addition, as funding markets came under further stress and Banks' ability to borrow reduced, the apparently high price Deutsche Bank's paid for its additional term funding, in hindsight, proved to be a bargain.

103 Deutsche Bank – Annual Report 2007 on Form 20-F (Page 159)

However, Lehman was not to be as fortunate, as Ben Bernanke noted in later testimony to the US Congress:104

"The Federal Reserve, with the SEC's participation, developed and conducted several stress tests of the liquidity position of Lehman and the other major primary dealers during the spring and summer of 2008. The results of these stress tests were presented ... to the managements of Lehman and the other firms. Lehman's results showed significant deficiencies in available liquidity, which the management was strongly urged to correct.

... the information we obtained suggested that the capital and liquidity of the firm were seriously deficient, a view that we conveyed to the company.

Lehman did succeed at raising about \$6 billion in capital in June 2008, took steps to improve its liquidity position in July, and was attempting to raise additional capital in the weeks leading up to its failure. However, its efforts proved inadequate. During August and early September 2008, increasingly panicky conditions in markets put Lehman and other financial firms under severe pressure. In an attempt to devise a private-sector solution for Lehman's plight, the Federal Reserve, Treasury, and SEC brought together leaders of the major financial firms in a series of meetings at the Federal Reserve Bank of New York during the weekend of September 13-15. Despite the best efforts of all involved, a solution could not be crafted, nor could an acquisition by another company be arranged. With no other option available, Lehman declared bankruptcy."

Bernanke went on to say, "The Federal Reserve fully understood that the failure of Lehman would shake the financial system and the economy."

The nine volume report into Lehman's failure by the court appointed examiner, Anton Valukas asserted,

"In 2006, Lehman made the deliberate decision to embark upon an aggressive growth strategy, to take on significantly greater risk, and to substantially increase leverage on its capital. In 2007, as the sub-prime residential mortgage business progressed from problem to crisis, Lehman was slow to recognize the developing storm and its spillover effect upon commercial real estate and other business lines. Rather than pull back, Lehman made the conscious decision to "double down," hoping to profit from a counter — cyclical strategy. As it did so, Lehman significantly and repeatedly exceeded its own internal risk limits and controls.

With the implosion and near collapse of Bear Stearns in March 2008, it became clear that Lehman's growth strategy had been flawed, so much so that its very survival was in jeopardy. The markets were shaken by Bear's demise, and Lehman was widely considered to be the next bank that might fail."105

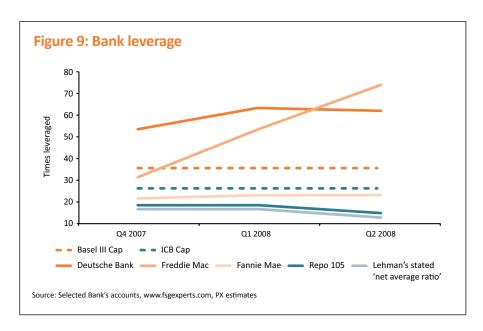
The examiner devoted more than 300 pages of his report to an accounting approach used by Lehman (Repo 105), apparently to flatter its published leverage ratio. The reality however, is that Lehman's leverage ratio as published declined from 16.1x in Q4 2007 to 12.1x in Q2 2008. Without the benefit of Repo 105, it would have declined from 17.8x to 13.9x. Even the aggressive 4% (or 25x leverage) cap demanded by the ICB (see p19), let alone the leverage cap of 3% (equivalent to 33.3x leverage) used today by the PRA and regulators around the world106 would, on the face of it, easily have been achieved by Lehman.

104 Chairman Ben S Bernanke Lessons from the failure of Lehman Brothers- Before the Committee on Financial Services. U.S. House of Representatives Washington, D.C. - April 20, 2010

105 Report of Anton r. Valukas, examiner in re Lehman Brothers Holdings inc., et al. March 11,

106 Basel Committee on Banking Supervision - Consultative Document - Revised Basel III leverage ratio framework and disclosure requirements - June

In the analysis of lessons to be learned, gross leverage, is a proverbial "red herring". It was not a reliable predictor of failure in the financial crisis, in that some banks with very low reported leverage failed like Lehman, whilst others with much higher leverage ratios survived without recourse to taxpayer support. However, we applaud the way that the Basel Committee on Banking Supervision has been constructing a framework that will standardise the measurement of leverage and promote its use as a prudential backstop tool.



The sad facts about Lehman are that it was yet another institution which had aggressively grown its balance sheet without the capital, liquidity or funding to support it. The firm was massively exposed to illiquid real estate, both residential and commercial. They sealed their own fate by "doubling down", as noted by the Court Examiner, in continuing to do large commercial real estate deals, even as the crisis was upon them.

It was perhaps unfortunate for Lehman, that the issue of moral hazard and government bail outs of private institutions had become a major issue in the US. It was becoming politically unacceptable for the US government to keep bailing out private companies as it was in UK. Hence, neither US nor UK government would give Barclays the sorts of guarantee for Lehman's trading obligations, Barclays deemed essential, as part of a deal to buy the business.

Without a deal, Lehman collapsed into Chapter 11 bankruptcy on 15 September 2008. As is well documented, Lehman's bankruptcy sent shockwaves not just through the US financial system but across the world. Lehman was a seminal event in that it marked the end of the beginning of the global financial crisis.

More investment banks failed in US than elsewhere, which is not in itself surprising as US firms dominate investment banking. However, it was the quantum and nature of real estate exposure that differentiated the victims from the survivors of the crisis, whether universal banks, investment banks or retail and commercial banks.

#### AIG

Lehman's collapse was followed immediately by another seminal event, the collapse of the global insurance giant, AIG. AIG's failure was quite unlike the banking failures. It did however, have some echoes of the collapse of Enron almost seven years earlier. As with Enron, AIG was conducting quasi investment banking business without the regulatory framework or capital to support that business. This type of shadow banking activity was a source of serious concern as it represented a source of contagion that few had seen in advance.

AIG, via its UK subsidiary, AIG Financial Products, was a major participant in the credit default swap (CDS) market. CDSs allowed banks to insure against potential losses on their bond holdings. AIGs AAA credit rating, one of few in the world, meant that the division could grow rapidly using its parent's superior credit rating and in most cases it did not need to post collateral on trades. However things began to change in March 2005 when AIG's chairman and CEO, Hank Greenberg, stepped down. The next day, the Fitch Ratings service downgraded AIG's credit rating to AA followed soon afterwards by Moody's and S&P.

Problems in the US real estate market began to affect the value of the CDOs that AIG had insured and towards the end of 2007 there began a series of collateral calls by AIG's counterparties that put pressure on the firm. The first big writeoff came in the fourth quarter of 2007, when AIG reported an \$11 billion charge. After a series of concerns raised by auditors and regulators over the coming months, the final straw came on 15 September 2008, the day that Lehman went under. Moody's, S&P and Fitch all cut AIG's credit ratings further, triggering billions of dollars in collateral calls from AIG's counterparties, money it did not have. Numerous stories and conspiracy theories still abound about the bailout of AIG but in the end, the US government felt compelled to act. The belief was that the failure of AIG, with hundreds of global counterparties, including some of the best known names on Wall Street would bring down the global banking system.

The wider issues of collateral calls on over-the-counter (OTC) derivatives during the crisis is beyond the scope of this paper but suffice to say, some major firms' valuations of these products were exposed, as severely wanting, as a result of margin calls by counterparties on the other side of their trades.

In a series of articles examining, in depth, the rise and fall of AIG, the Washington Post noted the words of the then SEC chairman Christopher Cox, "The federal government had failed taxpayers by not regulating the swaps market. The regulatory black hole for credit-default swaps is one of the most significant issues we are confronting in the current credit crisis, and it requires immediate legislative action."107

#### Washington Mutual (WaMu)

Continuing the theme of regulatory failings, in testimony to a Senate Subcommittee in April 2010, 108 the US Treasury's Inspector General stated,

"Since mid-2007, my Office has completed 18 reviews of failed financial institutions, including... (Washington Mutual). Based on those reviews, we have found that time and time again, the regulators for which we have oversight, the Office of Thrift Supervision (OTS) and the Office of Comptroller the Currency (OCC), frequently identified the early warning signs (or "red flags") that could have at least minimized, if not prevented, the losses associated with the financial institutions' failure but did not take sufficient corrective action soon enough to do so." 107 The Washington Post, 'Downgrades and Downfall', 31.12.2008

108 Statement of the Honorable Eric M. Thorson, Inspector General, Department of the Treasury, before the Senate Homeland Security and Governmental Affairs Committee Permanent Subcommittee on April 16, 2010

WaMu was the largest bank (although strictly it was a Savings & Loan corporation) failure in US history. Its USD307 billion in assets dwarfed the USD40 billion of Continental Illinois National Bank, which failed in 1984, and the USD32 billion of IndyMac, discussed earlier (p68).

In describing WaMu's failure, the US Treasury's Inspector General stated,

"its management pursued a high-risk business strategy without adequately underwriting its loans or controlling its risks. WaMu's high-risk strategy, combined with the housing and mortgage market collapse in mid-2007, left WaMu with loan losses, borrowing capacity limitations, and a falling stock price. In September 2008, WaMu was unable to raise capital to counter significant depositor withdrawals sparked by rumours of WaMu's problems and other high-profile failures at the time. OTS closed WaMu on September 25, 2008."

The Inspector General added,

"WaMu's underwriting policies and procedures made inherently high-risk products even riskier. For example, WaMu originated a significant number of loans as "stated income" loans, sometimes referred to as "low-doc" loans. These loans allowed borrowers to simply write-in their income on the loan application without providing supporting documentation. Approximately 90 percent of all of WaMu's home equity loans, 73% of its Option ARMs (adjustable rate mortgages), and 50% of its subprime loans were "stated income" loans. WaMu also originated loans with high loan-to-value ratios. To that end, WaMu held a significant percentage of loans where the loan exceeded 80% of the underlying property value. For example, at the end of 2007, 44% of WaMu's subprime loans, 35% of WaMu's home equity loans, and 6% of WaMu's Option ARMs were originated for total loan amounts in excess of 80 percent of the property's value. Moreover, WaMu did not require borrowers to purchase private mortgage insurance to protect itself against loss in case of default by the borrowers."

In the depressingly familiar pattern, WaMu, which was supposed to be a low risk institution, had problems with capital, liquidity, funding and management. Its management failings were both in the strategy it pursued but also in the management of its lending and liquidity risks. As the Inspector General said,

"Risk management was especially important for WaMu because of its high-risk lending strategy, significant and frequent management changes, corporate reorganizations, and significant growth as well as its sheer size." And although, "WaMu remained well-capitalized through September 25, 2008, when it was placed in receivership. . . . it was only a matter of time before losses associated with WaMu's high-risk lending practices would have depleted its capital below regulatory requirements."

WaMu was quickly sold to JP Morgan Chase.

WaMu's case deserves additional focus as its bankruptcy and sale to JP Morgan have generated significant debate, including whether the bankruptcy was inevitable. <sup>109</sup> In addition, some consider that the bankruptcy process led to a dangerous set of precedents.

In a Forbes article earlier this year, 110 it was said "During the FDIC-led WAMU bankruptcy, regulators ignored established FDIC precedent by protecting certain third-party creditors ahead of bondholders, a move that almost certainly contributed to the 2008 capital market shutdown."

109 The Lost Bank: The Story of Washington Mutual-The Biggest Bank Failure in American History – by Kirsten Grind, (12 Jun 2012)

110 Forbes, 'The Cyprus 'Bail-In' Exposes 'Too Big To Fail' As All Too Timid', 18.04.2013 The US now has a new resolution regime for financial companies posing a systemic risk, the Orderly Liquidation Authority (OLA)<sup>111</sup> the Forbes article, went on to say,

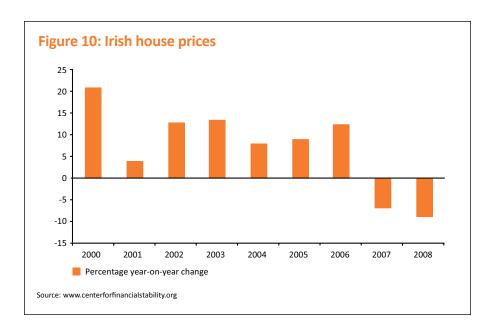
"Regulators are fond of pointing out that OLA is a "last resort" to be invoked only if other bankruptcy processes are deemed unworkable. But as the Cyprus confusion shows, this logic is exactly backwards. Congress and its regulators should commit themselves to a path now so that creditors, bondholders and depositors can understand and price their risk accordingly. If we want market participants to exercise discipline over the largest institutions, we need to give them the incentive to do so.

This argument applies equally to the rules that will be applied during an OLA proceeding. In the absence of a binding playbook, the temptation of regulators to succumb to short-term political considerations during a crisis is too great."

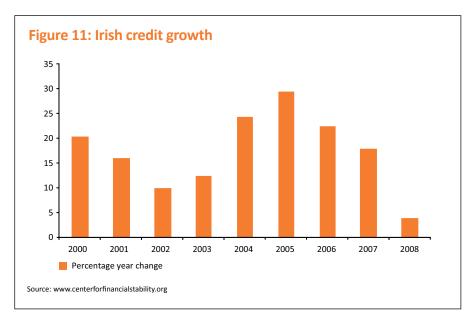
We discussed the critical issue of resolution regimes earlier (A global resolution regime p49) and in particular, their need to be comprehensive, with iron-clad protocols.

#### Ireland

This pattern of bank failures of "low risk" institutions was repeated across the world, most notably in countries where there had been a rapid rise in real estate prices, and associated lending by banks. The Eurozone's periphery suffered some of the worst failures. It was clear to many, even at the time, that monetary policy in the Eurozone, in the early 2000s, did not suit countries on the periphery. Interest rates were much lower than was required to address the real estate bubbles inflating in full view of politicians, bankers, regulators and of course the public. Arguably, the most extreme examples were Ireland and Spain, where the very rapid growth in, and sustained supply of, properties overwhelmed demand and led to some of the most dramatic falls in prices from peak to trough.



111 Established under the US Dodd-Frank legislation



As late as June 2008, the Irish Central Bank was still putting a brave face on the impending crisis. Its annual report said, "the exposure of Irish banks to US sub-prime mortgages, whether direct or indirect, is negligible. Irish banks remain strong by the usual metrics of capital, profitability and asset quality, and this is confirmed by stress tests on the banking sector. This is an essential prerequisite for the more challenging times that have arisen from the less benign international economic outlook and the significant effect on domestic economic growth of the substantial and rapid adjustment of housing output to a more sustainable level."<sup>112</sup>

External parties were also expressing serious concerns. A research report, published on March 13, 2008 from Merrill Lynch (subsequently revised after publication) authored by Philip Ingram, claimed that "HBoS, RBS, 'Irish Banks' generically, Anglo, AIB and the conduits were perceived to have the most aggressive lending standards by our sample of UK commercial real estate, CRE valuers. These banks also ranked as the most exposed on our... UK CRE asset quality risk ranking."<sup>113</sup>

Within months, the Irish government was forced to guarantee all deposits as the domestic banks collapsed. The warning signs were clearly there, perhaps most obviously with yields. On the very best Dublin City Centre property yields fell as low as 1% per annum; a situation that would only be corrected by dramatic increases in rents or a collapse of property prices. Ireland was a classic example of a huge real estate bubble which burst and took the banks and the economy with it.

# Spain

In Spain, the real estate market followed the Irish pattern with the inevitable consequences for the Spanish banking system. A key difference between Ireland and Spain was the presence of regional savings banks (cajas) with strong connections to and partial ownership by, regional governments. The Spanish regulator had also required pro-cyclical provisioning against loan books in Spain, which should have meant losses could be more easily absorbed.

112 Central Bank and Financial Services Authority of Ireland – Annual Report 2007

113 CRE underwriting from a new angle – Merrill Lynch 13 March 2008

However, the extent of oversupply of real estate, the quantum of loans to real estate developers, the poor underwriting standards applied by many institutions and the sharp drop in real estate prices inexorably lead to the depletion of banking capital. The Spanish government sought consolidation in the industry with numerous cajas being forced into "marriages of convenience". This merely delayed the inevitable. The largest mortgage lender in Spain, Bankia, itself a product of the merger of seven separate cajas, collapsed in May 2012, requiring more than EUR23bn in capital. The largest foreign banks operating in Spain also suffered substantial losses from their real estate activities.

The Spanish banks that failed were not those with material investment banking activities but the savings banks that conducted the same sort of activities as proposed for the UK ringfenced banks.

So it was, in country after country, apparently low risk institutions failed, ostensibly due to loan book exposures, mostly real estate related. They did not have sufficient capital, liquidity, funding nor in many cases the appropriate quality of management of their institution nor of the risks they were taking.

# A summary of the lessons learned

It is clear that banks are inherently risky as that is fundamental to their business. Having reviewed past financial crises and the most recent financial crisis at home and abroad, it is evident that however effective the system of regulation; individual institutions will fail in the future. The key lessons to be learned from the most recent and other financial crises are:

- Lesson 1 banks are structurally exposed to real estate as they take liquid deposits and lend against illiquid real estate and find it difficult to hedge this exposure satisfactorily;
- Lesson 2 banks which attempt or succeed in growing their balance sheet rapidly, inevitably attract troubled credits and have much higher than average risk in their portfolio;
- Lesson 3 capital in many institutions and in the system as a whole was insufficient in both quantity and quality for the risks that firms were taking;
- **Lesson 4** banks need diverse sources of funding overreliance on wholesale funding (or indeed any other liquid concentrated funding source) for lending against illiquid assets will always cause a bank to collapse in times of stress;
- **Lesson 5** bank management needs to be of sufficient quality and experience to understand the full implications of the strategies they are pursuing and the risks to which the firm is exposed;
- **Lesson 6** dedicated risk functions need to be resourced in terms of people, process and technology and need to have sufficient internal weight in their organization to identify and help prevent poor risk taking;
- **Lesson 7** the structural separation of banking activities (e.g. Glass Steagall, ringfencing) is not a safeguard against the failure of individual institutions nor of banking systems as a whole;
- Lesson 8 legal and regulatory regimes for addressing failing banks were inadequate; and
- Lesson 9 risks growing in the shadow banking system were not properly identified and thus were not adequately monitored and addressed.

# Appendix 2: What Blame Should the Investment Banks Shoulder?

Having established real estate lending as a key, and sometimes sole, contributor to most banking crises in the past century, including the most recent, what role did the investment banks play in order to be cast as the principal villains?

#### Masters of the Universe

Investment banks built a "masters of the universe" persona. For at least the past thirty years and arguably longer, they have been at the forefront of unbridled capitalism. They were material beneficiaries of the wave of deregulation which swept the world in the 1980s. Most of what they did was a world away from politicians and even more remote from the general public. Prior to the financial crisis, investment banks were the subject of occasional books, typically authored by former insiders like Liars Poker<sup>114</sup> or The Greed Merchants, <sup>115</sup> although none of these books became mainstream reading. Periodically, the trading activities of banks made it to the popular press usually as a result of a rogue trader such as Nick Leeson at Barings – 1995, or John Rusnak at Allied Irish Bank – 2002. The investment banking industry also became synonymous with colourful (yet fictional) characters like Gordon Gekko from the 1987 movie Wall Street who was synonymous with the line "greed is good."

The public's understanding of investment banking and capital markets remained vague over the years post deregulation, with little appreciation as to how banks and capital markets impacted their lives either for the better or the worse. This vagueness and general disinterest would occasionally be punctuated by real world events such as George Soros' famous bet against Sterling and Sterling's consequent ejection from the European Exchange Rate Mechanism in 1992.

Hence, at the onset of the financial crisis, the public and politicians had little information on which to judge the investment banks. What they did know, or at least perceive, was almost universally negative. Such a vague and universally negative starting point was bound to make investment banks an easy target for blame when the financial crisis began in 2007.

# They didn't help themselves

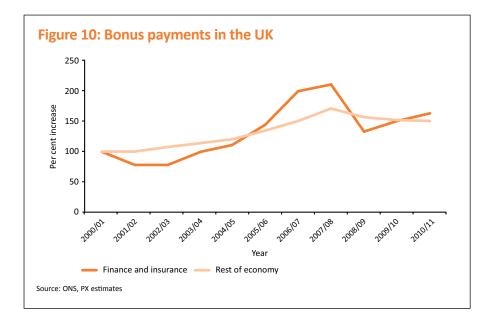
Firms also did little to help themselves with their public pronouncements. For example, Chuck Prince, The Citigroup chief executive told the Financial Times in July 2007 that the party would end at some point but there was so much liquidity it would not be disrupted by the turmoil in the US subprime mortgage market.

114 Liar's Poker (Michael Lewis October 1990)

115 The Greed Merchants (Philip Augar April 2005)

In that interview he was famously quoted as saying, "When the music stops, in terms of liquidity, things will be complicated. But as long as the music is playing, you've got to get up and dance. We're still dancing". He was not the only one to seriously misjudge the enormity of the impending storm. The Royal Bank of Scotland-led consortium's, acquisition of ABN Amro (discussed earlier p31) and the comments of HBOS' Corporate Division, Peter Cummings (see p35) are among the long list of poor judgements demonstrated by banks in the lead up to the crisis.

Another key source of public and political ire was that investment banking pay was not only oversized compared to other industries and other parts of financial services but did not appear to be linked to performance. In the eyes of the politicians, the media and thus the general public, bankers appeared to continue to pay themselves as before and not take account of the massive losses that their institutions were experiencing.



This public resentment reached a deafening crescendo in the weeks after RBS was nationalized and Fred Goodwin, its Chief Executive, resigned. The public was bombarded with stories about "Sir Fred's payoff" and his unwillingness to countenance returning some, or all, of his pension fund.<sup>116</sup>

# Innovation or self-serving complexity?

The raison d'être of investment banks is to innovate in financial markets and products. Banks have thus devoted considerable energy in developing new and more complex products. These products became increasingly impenetrable and it appeared to many concerned, that the purpose of innovation was not to improve the structure or functioning of the capital markets, nor to assist clients achieve their goals, but to take an even larger slice in fees and commissions for their intermediation activities.

Much of the commentary about securitization and complex structuring has focused on investment bank greed as the root cause. In our research there were few apologists for the investment banks and their behaviour. However, the origin(s) of the financial crisis were considered by many not to be the investment banks.

116 The Guardian, 'Sir Fred Goodwin: minister approved my pension and I'm keeping it', 27.02.2009

# The Community Reinvestment Act

One oft-cited strand of causation was the US Community Reinvestment Act (CRA). This was passed into law in 1977. The Act mandated that those firms covered by the Federal Deposit Insurance Corporation (FDIC) insurance scheme be encouraged to meet the needs of borrowers in all segments of their communities. This relatively innocuous legislation, which was designed to remove discrimination in lending practices in US, may well have been the very point of origin of the financial crisis to sweep the world thirty years later. The 1977 law did, however, emphasize that an institution's CRA activities should be undertaken in a safe and sound manner, and did not require institutions to make high-risk loans. The penalties for non-compliance with the CRA were relatively benign.

In 1995, however, the Clinton Administration issued regulations that added numerical guidelines, urged lending flexibility, and which made regulators take into account CRA activity when deciding whether to approve bank merger or expansion requests. Many believe that if it was not the original 1977 legislation that laid the seeds for the recent financial crisis, the way it was beefed up almost twenty years later was a contributor.

# Securitization and complexity

The argument is that commercial enterprises in whatever sphere of business, will, if required to undertake unprofitable activity, search for every legitimate means to reduce the impact on their business of that unprofitable activity. Over time, banks began to realize that through the use of a technique known as securitization and the requisite financial engineering, they could mitigate the losses or risk of losses on these lower quality mortgages.

The earliest securitizations involved an army of auditors checking every detail and piece of documentation of every mortgage that was to be placed in a securitized vehicle. Eligible mortgages were almost universally prime mortgages with very conservative parameters around eligibility for inclusion in the securitization vehicle. These conservative parameters included low loan to value ratios and low multiples of borrower income to loan size.

As securitization matured and financial engineering became ever more sophisticated, packaging mortgages almost became an end in itself, rather than a means to an end. So-called Alt-A and subprime mortgages, with few restrictions on eligibility and virtually no checks on documentation were packaged, credit enhanced and carved up into tranches. Credit rating agencies blessed these tranches with ratings, which in hindsight underestimated the real risk to the end investor. Some large and some specialist insurers would in effect insure the vehicles against losses (see AIG p73).

Investment banks found the mortgage packaging business so lucrative for the fees that they earned that they began to push mortgage originators for ever more volume, irrespective of the quality. The so-called NINJA (No INcome Job or Assets) mortgage became popular. Salesmen from other industries including many from the second hand car market became mortgage originators to ramp up the volumes. Investment banks themselves began buying mortgage originators so that they could access more and more of these loans to fuel the securitization machine. In short lending to poor credits had turned from a loss making activity forced upon the banks into a self-perpetuating and apparently highly profitable line of business.

#### **Box 3: Securitisation explained**

Securitization is the process in which certain types of assets (mortgages, leases, loans and credit cards, etc.) are pooled so that they can be repackaged and passed on/sold, through an issuer (usually a special purpose vehicle), as tradeable 'securities' to capital market investors. Typically the original owner of the assets will service the loans and pass on the repayments to the new owner of the relevant security, minus a servicing fee. Securitization became a large source of new funding for banks, which allowed them to lower the regulatory minimum capital requirements and the flexibility of creating tailored securities packages allowed banks to sell securities to a whole range of investors at different risk potentials.

When a securitisation is carried out a bond is often divided into different tranches, which have different yields dependent on the risk. The equity tranche is normally the most risky and therefore has the highest yield because it absorbs the initial losses. That tranche might take the first 2% of all losses, as a result those holding the tranches above this would only see their investment affected if the losses exceeded 2%. Immediately above the equity tranche was normally a mezzanine tranche (i.e. in between equity and bond tranches) and then above that the different bond tranches. The AAA tranche was set so that the losses had to be quite substantial before those bonds were affected. Often the losses had to exceed 20-25% before this tranche was affected. The ratings agencies would normally set a "thickness" of loss absorption on the non-AAA rated tranches based on their models of historic defaults, so that they would meet the low level of likely default that would normally be associated with AAA rated risk.

There were a number of flaws with this approach for mortgage backed securities that became evident during the financial crisis. First and foremost the models used by the ratings agencies were too optimistic and put a low risk of house prices falling across the United States. In recent US history prior to the crisis, there had been house price declines in some regions but not across the US as a whole. The models therefore assumed that if you diversified regionally you reduced the probability of loss across a pool of mortgages. As soon as house prices started to fall nationally this source of diversification ceased to work.

Secondly this form of tranching was taken to a further level where the tranches of the mortgage backed securities were themselves tranched to create what are known as Collateralised Debt Obligations. The real problem with this operation was that it was typically the lower rated tranches that were retrenched. In theory if you took, for example, a BBB rated tranche of a mortgage bond and overcollateralised it enough you could turn it into a triple AAA rated instrument. However, in many of the mortgage backed securities the BBB rated tranche was too thin because of the assumptions made by the ratings agency about the level of default that was likely to be reached. If that BBB rated tranche got seriously damaged or worst wiped out by the losses, as happened in the crisis, it didn't matter how much you had overcollateralised the AAA CDO it also got wiped out or severely damaged.

The opaqueness and complexity of securitizations also increased significantly over time. This had serious implications for the ability of banks to understand and manage their risks satisfactorily. Among the most impenetrable of the products was a category known as CDO Squared. Essentially CDO squared is a CDO where the underlying is not bonds, loans or similar as in a traditional CDO but is a package of tranches of other CDOs. Understanding, modeling and managing the risk on such products was beyond the capability of even some of the largest and best resourced banks in the world. Many firms merely relied upon ratings agencies "to tell them how good they were."

The assumptions about how CDO squared would behave under various market conditions were almost universally flawed. The extra, opaque, layer of financial engineering made it almost impossible to "micro hedge" the underlying exposure. One probably would have little sympathy with the investment banks if they alone suffered as a result of structuring and distributing these types of complex products. However, a number of these products ended up in the hands of smaller and less sophisticated institutions causing them material losses. The search for higher yielding and apparently low risk investments came back to haunt many an institution that purchased CDOs and their more complex derivatives.

It is also worth highlighting that the ultimate underlying assets of so many CDOs and their more complex derivatives were real estate loans. Securitisation and financial engineering helped mask, amplify and distribute risk but in the end, real estate lending yet again, was at the root of institutional and systemic failure.

#### **UBS**

UBS lost billions in the financial crisis via its investment banking arm. UBS had to write down more than SFR50 billion between the third quarter of 2007 and the fourth quarter of 2009. UBS ranked third worldwide for highest total losses in the financial crisis and first among the banks in Europe, according to IMF estimates in April 2010.<sup>117</sup> It was bailed out by transferring almost SFR 40bn of securities to a special purpose vehicle established by the Swiss National Bank and by the Swiss Confederation purchasing SFR 6bn of mandatory convertible bonds.

Its economic failings had their principal roots in US real estate and a rapid expansion of its fixed income business. Like Bear Stearns, UBS had an in-house hedge fund, Dillon Read Capital Management (DRCM) which was heavily exposed to US real estate lending, directly and through mortgage backed securities (MBS).

UBS wrote down 150 million francs on DRCM's assets for the first quarter of 2007. On 3 May 2007, the firm announced that it would be closing DRCM and reintegrating the investment platform's trading book into the Investment Bank. However, as the mortgage market in US began to deteriorate further, it became apparent that losses would be incurred in the AAA rated so-called super senior tranches of CDOs of which the bank had considerable holdings. Some insiders from the time have commented that as these super senior CDOs were internally "zero risk weighted" and did not even appear on many of the firm's internal risk reports.

Further, as the firm's own transparency report states "Prior to the financial market crisis, the bank did not set balance sheet limits..., this allowed the accumulation of massive holdings of US mortgage securities, which had devastating consequences as this business began to collapse" 118

There is little indication that UBS had a belief that it was protected from failure because it would be bailed out. In fact, as was noted in an expert opinion provided to UBS in 2010 and which formed part of their transparency report,

117 Transparency report to the shareholders of UBS AG – 2010

118 Transparency report to the shareholders of UBS AG – 2010 – pg 22

"Ever since the size of the Bank's losses — going into the billions — and the nature of its legal violations have become known, the public has queried the true causes of the UBS crisis. This has given rise to a wide range of explanations. There is one, however, that stands out: the theory that sees top management at UBS as having behaved like gamblers at a casino, constantly taking greater risks as their profits and their bonuses increased, until they finally lost everything and almost landed in prison. Having read the internal and external reports, I reach an entirely different conclusion. The problem at UBS was not that the Bank's leadership simply ran rampant without any restraint. In fact, the contrary was the case: top management was too complacent, wrongly believing that everything was under control, given that the numerous risk reports, internal audits and external reviews almost always ended in a positive conclusion. The bank did not lack risk consciousness; it lacked healthy mistrust, independent judgement and strength of leadership." 119

Citigroup and Merrill Lynch together with UBS are good examples of real estate as a principal cause of institutional distress and failure, compounded by management failing to understand and manage the risks to which it was exposed.

#### Rogue traders

This failure of risk management was further underscored in 2011 when UBS uncovered a rogue trader in London. The UBS incident was one of a succession of large and high profile unauthorized trading scandals which emerged during the financial crisis and which negatively impacted the reputation of the investment banks. In 2008, there were seven such scandals where the losses are believed to have exceeded USD1bn. The highest profile of which was Societe Generale which was believed to have lost almost EUR 5bn closing out unauthorized positions it said were taken by a trader on its Delta 1 desk. UBS' losses from its rogue trader, Kweku Adoboli, were estimated at USD2bn. Last year JP Morgan, which had become the poster child for internal control and risk management as a result of its exemplary handling of the financial crisis admitted that it had incurred losses of over USD6bn at its Chief Investment Office and recently was fined almost USD1bn by regulators over the affair.

These apparently repetitive failings in risk management added to the backlash from the public at large. They appeared to demonstrate that the highly paid investment bankers were incapable of managing the seemingly enormous risks, which might, in part, have been used to justify their compensation levels in the first place.

However, what appears to have been the final straw and ignited almost universal opprobrium among politicians and the public was the realization of the effect that a collapsing banking system would have on the economy as a whole and on individuals' jobs and savings, in particular.

The investment banks were such obvious targets for politicians to channel their anger and to make out that they were merely casinos, gambling with the public's money. Some of the attacks became very personal as a British Cabinet Minister referred to the Chief Executive of one major UK financial institution as the unacceptable face of banking, paraphrasing a term first used by British Prime Minister Edward Heath nearly forty years before. So, over time, investment banks became the primary scapegoat for the industry. They had become detached from public opinion, appeared self serving and made themselves easy to blame.

119 The UBS Crisis in Historical Perspective Expert Opinion prepared for delivery to UBS AG 28 September 2010 – Dr. Tobias Straumann, Lecturer, University of Zurich

# Fixing the investment banks

It is clear therefore, that there is substance in some of the criticism leveled at investment banks in the lead up to and during the financial crisis. In particular, it is hard to justify the increasing amounts of money that were being paid for financial intermediation. Financial innovation seemed to just add complexity and that complexity seemed to benefit those who worked in the industry more than those who relied on it. Internal controls and risk management were not of the standard they should have been in a number of institutions and capital was clearly inadequate for the risks to which investment banks were exposed.

Although some had proprietary trading arms they were not casinos gambling with the public's money. In any event, that proprietary trading activity has now been outlawed with the enactment of the Dodd Frank legislation in US. Further, that legislation has resulted in a material shift towards more transparent

66 It is right therefore, that investment banks should shoulder a share of the blame for the financial crisis but it would be wrong to conclude that investment banks were the primary cause ??

"on-exchange" activity which should make it easier for the authorities to monitor. This should help reduce but will not eliminate the risk of material losses from trading activity. After all, Nick Leeson's very famous destruction of Barings Bank was undertaken using on-exchange "vanilla" instruments. The

restrictions on banks' activities also increases the likelihood of some of their riskiest activities migrating into the shadow banking sector, where regulatory oversight is much less developed.

It is right therefore, that investment banks should shoulder a share of the blame for the financial crisis but it would be wrong to conclude that investment banks were the primary cause.

It is important to remember that investment banks perform an essential role in assuming, transforming and dispersing risk. Even shorn of their proprietary trading activities they will still be taking risk in their critical role as intermediaries and liquidity providers in the markets they serve. As with all banks, they need to have the capital, liquidity, funding and management to be able to do this and be overseen by a high quality, globally consistent, regulatory regime.



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