



Independent  
Commission  
on Banking

# **Interim Report**

## **Consultation on Reform Options**

**April 2011**





# **Interim Report**

## **Consultation on Reform Options**

April 2011



Official versions of this document are printed on 100% recycled paper. When you have finished with it please recycle it again.

If using an electronic version of the document, please consider the environment and only print the pages which you need and recycle them when you have finished.

© Crown copyright 2011

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit [www.nationalarchives.gov.uk/doc/open-government-licence/](http://www.nationalarchives.gov.uk/doc/open-government-licence/) or e-mail: [psi@nationalarchives.gsi.gov.uk](mailto:psi@nationalarchives.gsi.gov.uk).

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Any enquiries regarding this publication should be sent to:  
Independent Commission on Banking  
Victoria House  
Southampton Row  
London  
WC1B 4AD

This document is also available from our website at <http://bankingcommission.independent.gov.uk/>

# Contents

<b>Contents</b> .....	<b>1</b>
<b>List of acronyms</b> .....	<b>3</b>
<b>Executive summary</b> .....	<b>5</b>
<b>Chapter 1: Introduction</b> .....	<b>11</b>
Background.....	11
Summary .....	11
Structure of the <i>Interim Report</i> .....	12
<b>Chapter 2: The need for reform in the UK banking sector</b> .....	<b>15</b>
What is the financial system for? .....	15
Financial stability .....	17
Competition .....	26
Analytical framework .....	45
<b>Chapter 3: Current reform initiatives</b> .....	<b>51</b>
Financial stability .....	51
Competition .....	59
<b>Chapter 4: Reform options – financial stability</b> .....	<b>63</b>
Reform options to increase loss-absorbing capacity .....	64
Structural reform options to promote financial stability .....	76
Impact on competitiveness .....	101
Conclusions .....	116
<b>Chapter 5: Reform options – competition</b> .....	<b>119</b>
Structural reform options to promote competition .....	119
Improving the switching process .....	123
Barriers to entry.....	124
Promotion of competition by the Financial Conduct Authority .....	126
Other options.....	127
Conclusions .....	130

Chapter 6: Consultation questions .....	133
Glossary.....	137
Annex 1: Summary of <i>Issues Paper</i> responses.....	145
Annex 2: Non-bank financial institutions .....	147
Annex 3: Cost-benefit analysis of financial stability reforms .....	151
Annex 4: Competition and concentration .....	167
Annex 5: Other regulatory reform developments .....	175
Annex 6: Tools for increasing loss-absorbing capacity .....	179
Annex 7: Illustration of structural reform .....	189
Annex 8: Competitiveness .....	195

## List of acronyms

<b>BCBS</b>	Basel Committee on Banking Supervision	<b>GVA</b>	Gross Value Added
<b>BIS</b>	Bank for International Settlements	<b>HHI</b>	Herfindahl-Hirschman Index
<b>bps</b>	basis points (1bp = 0.01%)	<b>IMF</b>	International Monetary Fund
<b>CC</b>	Competition Commission	<b>LBG</b>	Lloyds Banking Group
<b>CCP</b>	Central Counterparty	<b>LPB</b>	Limited Purpose Banking
<b>CDS</b>	Credit Default Swap	<b>M&amp;A</b>	Mergers and Acquisitions
<b>CET1</b>	Common Equity Tier 1	<b>OFT</b>	Office of Fair Trading
<b>CRA</b>	Credit Rating Agency	<b>ONS</b>	Office for National Statistics
<b>CRD</b>	Capital Requirements Directive	<b>OTC</b>	Over-The-Counter
<b>EEA</b>	European Economic Area	<b>PCA</b>	Personal Current Account
<b>EU</b>	European Union	<b>RBS</b>	Royal Bank of Scotland
<b>FCA</b>	Financial Conduct Authority	<b>RWAs</b>	Risk-Weighted Assets
<b>FDIC</b>	Federal Deposit Insurance Corporation	<b>SEC</b>	Securities and Exchange Commission
<b>FSA</b>	Financial Services Authority	<b>SIFI</b>	Systemically Important Financial Institution
<b>FSB</b>	Financial Stability Board	<b>SIV</b>	Structured Investment Vehicle
<b>FSCS</b>	Financial Services Compensation Scheme	<b>SMEs</b>	Small and Medium-Sized Enterprises
<b>GAAP</b>	Generally Accepted Accounting Principles	<b>SPE</b>	Special Purpose Entity
<b>GDP</b>	Gross Domestic Product	<b>UKFI</b>	UK Financial Investments Ltd





## Executive summary

This *Interim Report* sets out the Commission's current and provisional views on possible reforms to improve stability and competition in UK banking, and seeks responses to those views.

### *The need for reform*

The financial crisis that began in 2007 exposed fundamental weaknesses in the global financial system and has had enormous economic costs in terms of lost output, higher unemployment and weakened public finances.

In the build-up to the crisis lenders and borrowers took on excessive and ill-understood risks, and banks operated with excessive leverage and inadequate liquidity. Regulation permitted the ratio of their assets to their capital base to grow far too high – to twice normal levels – and they could not access market funding when they needed it. When the crisis hit, bank balance sheets proved poor at absorbing losses, and the complexity of many failing institutions made it impossible efficiently to 'resolve' them – i.e. sort out which parts of them should fail and which should continue and how. To avert panic and ensure continuous provision of the basic banking services upon which the economy and society depends, governments and central banks injected vast amounts of capital and liquidity into the financial system.

The crisis was global, and the UK, with its large financial sector, was badly affected. National output in 2010 was 4.5% below its level in 2007 and 10% lower than if growth had continued on its pre-crisis trend. Unemployment has risen by more than 800,000 since 2007. The public finances have deteriorated sharply, and the 2010 deficit exceeded 10% of GDP. Despite recent de-leveraging, the total balance sheet of UK banks is more than four times annual GDP. More than 80% of RBS and more than 40% of Lloyds are in state ownership. Competition in UK banking has been seriously weakened as rivals to the largest retail banks have left the market or been absorbed into others.

Beyond the immediate task of repairing bank balance sheets while restoring the normal flow of credit to the economy at large, the challenge is to make the UK banking system more stable, and markets for banking services more competitive. The options discussed in this *Interim Report* are directed to those ends.

### *Reform options for stability*

How to make the system safer for the future? An important part of the answer is better macroeconomic – including 'macro-prudential' – policy so that there are fewer and smaller

shocks to the system. Work by others internationally and in the UK aims to address this. But these shocks cannot be eliminated, and the UK will always be subject to global events.

Making the banking system safer requires a combined approach that:

- makes banks better able to absorb losses;
- makes it easier and less costly to sort out banks that still get into trouble; and
- curbs incentives for excessive risk taking.

These goals are inter-related. The more that banks' owners and creditors (other than ordinary depositors) stand to lose when things go badly, the stronger are their incentives to monitor risks in the first place, and the greater is their capacity to shoulder losses without damage to others when risks go bad. Banks ought to face market disciplines without any prospect of taxpayer support, but systemically important banks have had and still enjoy some degree of implicit government guarantee. This is the 'too big to fail' problem. Unless contained, it gives the banks concerned an unwarranted competitive advantage over other institutions, and will encourage too much risk taking once market conditions normalise. It also puts the UK's public finances at further risk, especially given the size of the banks in relation to the UK economy. On top of the taxpayer risk from bank bail-outs, banking crises damage the public finances because of their effects on output and employment. Indeed the problem could arise in future that the banks are 'too big to save'.

Banks must have greater loss-absorbing capacity and/or simpler and safer structures. One policy approach would be structural radicalism – for example to require retail banking and wholesale and investment banking to be in wholly separate firms. Another would be to be *laissez-faire* about structure and to seek to achieve stability by very high capital requirements across the board. The Commission, however, believes that the most effective approach is likely to be a complementary combination of more moderate measures towards loss-absorbency and structure.

Achieving greater loss-absorbency requires, first, that banks hold more equity relative to their assets and, second, that creditors, not taxpayers, take losses if necessary. On equity capital, an important step is the 7% baseline ratio of equity to risk-weighted assets in the Basel III agreement. The international community is considering augmenting this for systemically important banks. In the Commission's view, the available evidence and analysis suggests that all such banks should hold equity of at least 10%, together with genuinely loss-absorbent debt. That would strike a better balance between increasing the cost of lending and reducing the frequency and/or impact of financial crises.

The Commission's view is that the 10% equity baseline should become the international standard for systemically important banks, and that it should apply to large UK retail banking operations in any event. Subject to that safeguard for UK retail banking, and recognising that wholesale and investment banking markets are international, the Commission believes that the capital standards applying to the wholesale and investment banking businesses of UK

banks need not exceed international standards provided that those businesses have credible resolution plans (including effective loss-absorbing debt) so that they can fail without risk to the UK taxpayer.

On remedying the failure of debt to absorb losses in the crisis, contingent capital and debt capable of so-called 'bail-in' might be able to contribute to improved loss-absorbency in the future. Loss-absorbency and stability might also be improved by ranking the claims of ordinary depositors higher than those of other unsecured creditors.

Greater loss-absorbing capacity has the further advantage that it may enable loss-sharing without requiring bankruptcy and thereby facilitate more orderly and efficient resolution of failing banks, limiting collateral damage. This may be of particular importance for wholesale and investment banking operations, which tend to be highly complex and span several countries with differing insolvency regimes. Disorderly failure of such banks is dangerous for the wider financial system, and international agreement on means of allowing them to fail more safely is essential.

Turning to the structural aspect of reform, a focus of the Commission's work is the question of whether there should be a form of separation between UK retail banking and wholesale and investment banking.

Ring-fencing a bank's UK retail banking activities could have several advantages. It would make it easier and less costly to sort out banks if they got into trouble, by allowing different parts of the bank to be treated in different ways. Vital retail operations could be kept running while commercial solutions – reorganisation or wind-down – were found for other operations. It would help shield UK retail activities from risks arising elsewhere within the bank or wider system, while preserving the possibility that they could be saved by the rest of the bank. And in combination with higher capital standards it could curtail taxpayer exposure and thereby sharpen commercial disciplines on risk taking.

Separation between retail banking and wholesale and investment banking could take various forms, depending on where and how sharply the line is drawn. While mindful of regulatory arbitrage possibilities at the boundary, the Commission believes that there are practicable ways of distinguishing between retail banking and wholesale and investment banking. Both sorts of banking are risky and both are important, but they present somewhat different policy challenges. For the most part, retail customers have no effective alternatives to their banks for vital financial services; hence the imperative to avert disruption to the system for their continuous provision. Customers of wholesale and investment banking services, on the other hand, generally have greater choice and capacity to look after themselves. But it is vital to find ways for the providers of these services to fail safely (strengthening market infrastructure and limiting banks' exposures to each other will help). Markets for wholesale and investment banking services – including their provision by 'shadow banks' – are also more international, as must be policy towards them, whereas national policies can bear more directly on retail banking.

As to the form that separation might take, a balance must be struck between the benefits to society of making banks safer and the costs that this necessarily entails. Full separation – i.e. into separate entities with restrictions on cross-ownership – might provide the strongest firewall to protect retail banking services from contagion effects of external shocks. But it would lose some benefits of universal banking. On the other hand, it is doubtful that separability of operational systems, though desirable for effective resolvability, would itself be enough.

The Commission is therefore considering forms of retail ring-fencing under which retail banking operations would be carried out by a separate subsidiary within a wider group. This would require universal banks to maintain minimum capital ratios and loss-absorbing debt (as indicated above) for their UK retail banking operations, as well as for their businesses as a whole. Subject to that, the banks could transfer capital between their UK retail and other banking activities.

It is open to debate whether a retail ring-fence would give more or less banking stability than full separation between retail banking and wholesale and investment banking. It would be less costly to banks because they would retain significant freedom to transfer capital. The required UK retail capital level would constrain banks only when they wanted to go below it to shift capital elsewhere, say to their wholesale and investment banking operations. But at times of overall stress it would not be desirable for the leverage of UK retail banking operations to increase in this way.

Rather than pursuing more radical policies towards capital or structure, the approach outlined above is a combination of more moderate measures. They nevertheless entail costs to banks, some of which fall on the wider economy, but these appear to the Commission to be outweighed by the benefits of materially reducing the probability and impact of financial crises. The approach is also designed with a view to UK competitiveness, and to the UK's international obligations. In particular, so long as there are appropriate measures in place to protect UK retail banking, the Commission is not proposing that UK banks' wholesale and investment banking activities should have to meet higher capital standards than are agreed internationally, provided that they can fail without risk to the taxpayer.

### *Reform options for competition*

Measures to curtail the implicit government guarantee enjoyed by systemically important banks and to ensure that they face the consequences of their risk taking activity are good for competition as well as for stability.

But more than that is needed to remedy the weakening of competition in UK retail banking as a result of the crisis. Challengers to the large incumbents have mostly disappeared, and following its acquisition of HBOS, Lloyds currently has around 30% of current accounts in the UK. This *Interim Report* discusses three initiatives (beyond the continued application of general competition and merger law) that could improve competition.

The first concerns structural measures to improve competition. Although Lloyds is required to divest a package of assets and liabilities to satisfy conditions for state aid approval set by the European Commission, this divestiture will have a limited effect on competition unless it is substantially enhanced.

Second, competition among incumbent banks, and between them and challengers, is blunted by the actual and perceived difficulties for customers switching accounts, by poor conditions for consumer choice more generally, and by barriers to entry. This *Interim Report* suggests that it may be possible to introduce greatly improved means of switching at reasonable cost, in which case the industry should be required to do this within a short timescale, and that barriers to entry may be able to be reduced.

Third, the Commission regards the Financial Conduct Authority proposed as part of the Government's reforms of the regulatory architecture as potentially a vital spur to competition in banking. The Authority will have regulatory tools not available to the general competition and consumer authorities, and, in line with an earlier recommendation by the Commission, the Authority should have a clear primary duty to promote effective competition.

### *The international context*

The Commission's remit is well-aligned with the international reform agenda for financial stability, which is being led by, among others, the Basel Committee on Banking Supervision and the European Commission. The current work on systemically important financial institutions by the Financial Stability Board for the G20 is of particular relevance for the Commission. The UK authorities are centrally involved in these international initiatives, and one intention of this *Interim Report* is to contribute to the international debate.

An important consideration for the Commission is how reforms to UK banking could affect the competitiveness of UK financial services and the wider economy. The Commission's current view is that the reforms of the kind contemplated in this *Interim Report* would support the competitiveness of the economy and would be likely to have a broadly neutral effect on financial services.

First, they would affect a relatively small proportion of the international financial services industry based in the UK. Second, improved financial stability should be good, not bad, for the competitiveness both of the financial and non-financial sectors. The costs and consequences (including for taxation) of financial crises make countries that suffer them less attractive places for international businesses to locate. More resilient banks are therefore central to maintaining London's position as a leading global financial centre, not a threat to it. So while a further domestic taxpayer guarantee might be to the advantage of some UK banks in international competition, it would be a fiscally risky subsidy without justification. In any case, the location decisions of banks are affected by a wide range of factors that go well beyond the issues that the Commission has been asked to consider.

## Interim Report

### *Consultation*

The purpose of this *Interim Report* is to focus the next stage of debate on reform options which, in the current and provisional view of the Commission, appear to have most merit. The Commission welcomes views and analysis in response to it. The Commission's final report will be published in September.

# Chapter 1: Introduction

## Background

- 1.1 On 16 June 2010, the Chancellor of the Exchequer announced the creation of the Independent Commission on Banking (the Commission). Its members are Sir John Vickers (Chair), Clare Spottiswoode, Martin Taylor, Bill Winters and Martin Wolf. The Commission has been asked to consider structural and related non-structural reforms to the UK banking sector to promote financial stability and competition. The Commission is independent from Government, and will report to the Cabinet Committee on Banking Reform by the end of September 2011.<sup>1</sup>
- 1.2 In September last year the Commission published an *Issues Paper*,<sup>2</sup> which served as a call for evidence.<sup>3</sup> The *Issues Paper* also identified a number of possible options for reform. Since then, in addition to receiving submissions and gathering further evidence, the Commission has been consulting with market participants, academics and regulators in the UK and internationally, and has held a series of public debates around the country. This *Interim Report* represents the next stage in the Commission's public engagement.
- 1.3 The aim of this *Interim Report* is to set out the provisional views of the Commission on the need for reform and on possible reform options, and to seek views, evidence and analysis in response. The Commission has not reached final conclusions on any of these matters.

## Summary

- 1.4 Improved **stability** requires that banks, especially those of systemic importance, can generally absorb losses themselves, without reliance on the taxpayer, and that their businesses can fail safely, without undue damage to the rest of financial system and the wider economy. Various reform initiatives are under way internationally towards these ends, including:

---

1 The Commission's full terms of reference are set out here: <http://bankingcommission.independent.gov.uk/bankingcommission/terms-of-reference/>.

2 <http://bankingcommission.independent.gov.uk/bankingcommission/wp-content/uploads/2010/07/Issues-Paper-24-September-2010.pdf>

3 A summary of the responses that the Commission received to the *Issues Paper* is set out in Annex 1. The responses are available here: <http://bankingcommission.independent.gov.uk/bankingcommission/responses/>.

## Interim Report

- measures to enhance loss-absorbency and liquidity, both in general and additionally for systemically important banks;
- the development of recovery and resolution plans for banks that get into trouble; and
- proposals to put in place sounder market infrastructure, including more centralised clearing of derivatives.

The reform options for UK banking canvassed in this *Interim Report* are fully in accord with these initiatives.

**1.5** Further on stability, this *Interim Report* addresses the structural question of whether or not forms of separation between types of banking activity should be part of the overall package of measures to make the system safer. Specifically, it considers the pros, cons, and feasibility of forms of separation between 'retail' and 'investment' banking, as well as other sorts of structural reform.

**1.6** Beyond eliminating the distortion of the implicit state guarantee for 'too big to fail' banks, the *Interim Report* examines reform options to improve **competition** in UK banking, in particular:

- structural measures to redress increased concentration and reduction in challengers in UK banking;
- measures to strengthen the power of consumer choice, for example by reducing switching costs, and to reduce barriers to entry; and
- the potential role of the new Financial Conduct Authority.

**1.7** While stability and competition are the main objectives guiding the analysis in this *Interim Report*, careful attention is paid to the issues of lending and the pace of economic recovery, UK competitiveness, and the Government's fiscal position.

## Structure of the *Interim Report*

**1.8** The rest of this *Interim Report* is organised as follows:

- Chapter 2 assesses the need for reform in the UK banking sector following the financial crisis that began in 2007. The chapter identifies the stability and competition problems that must now be addressed, and sets out an analytical framework for the appraisal of possible solutions.
- Chapter 3 places the Commission's work in the context of other UK and international banking reform initiatives.



- Chapter 4 examines reform options principally aimed at improving financial stability, with particular emphasis on increased loss-absorbency and forms of structural separation. It also assesses the likely impact of these reform options on competitiveness.
- Chapter 5 examines reform options principally aimed at improving competition.
- Chapter 6 brings together a series of questions for consultation that are spread throughout the preceding chapters, and provides information on how to respond.
- The Glossary contains definitions of financial terms used in this *Interim Report*.
- Annex 1 contains a summary of responses to the Commission's *Issues Paper*.
- Annex 2 describes the nature and activities of non-bank financial institutions.
- Annex 3 analyses the costs and benefits of the Commission's current preferred reform options to improve financial stability.
- Annex 4 provides a summary of a review of the literature on the empirical link between competition and concentration.
- Annex 5 follows on from the financial stability section of Chapter 3 by summarising regulatory reform developments not already addressed in that chapter.
- Annex 6 contains details on the characteristics and effectiveness of different types of loss-absorbing capacity.
- Annex 7 provides an illustration of how a 'retail ring-fence' might be designed.
- Annex 8 sets out additional evidence supporting the Commission's findings on the impact of the proposed reform options on competitiveness.



## Chapter 2: The need for reform in the UK banking sector

- 2.1** This chapter begins by considering what the financial system is for. It then examines sources of instability in banking, and explains how the nature of banks' activities can make them more fragile than other businesses. It briefly considers the recent crisis from a UK perspective, and discusses how the UK is particularly exposed to financial turbulence through having a financial sector that is large relative to its economy. This is followed by a general consideration of what needs to be done to make the banking system safer.
- 2.2** The chapter also discusses competition in UK banking markets. It explains how competition has suffered as a result of the financial crisis, with a particular focus on the markets for personal current accounts (PCAs), mortgages and banking services for small and medium-sized enterprises (SMEs).
- 2.3** This *Interim Report* considers a range of reform options to promote financial stability and competition in UK banking. Each of these options will have different benefits and costs, and the Commission's goal is to recommend reforms that strike the best balance between these benefits and costs. In order to assess these, a common frame of reference is required and this chapter sets out an analytical framework for this purpose.

### What is the financial system for?

- 2.4** The financial system supports the wider economy by:
- providing payments systems;
  - providing deposit-taking facilities and a store-of-value system;
  - lending to households, businesses and governments; and
  - helping households and businesses to manage their risks and financial needs over time.
- 2.5** Each of these activities is explained in more detail below. Banks are central to all of them. But other financial institutions also play an important role. In particular, insurance companies and pension funds hold the majority of UK household savings, provide funding for firms (including banks) and help households and businesses manage their financial risks. In addition, other financial companies have taken on

many of the traditional functions of banks. More detail on the role of non-banks in the financial system is discussed in Annex 2.

### Payments systems

- 2.6** Over time banks have developed complex networks that enable them safely and efficiently to transfer funds between different bank accounts. A payments system is the shared part of an end-to-end process that offers an account-based transfer service between two final customers and (usually) between two different banks. Payments systems sit at the heart of the banking system. Transfers can occur between personal customers, between businesses, or between personal and business customers. Payments systems are vital to the UK economy, and disruption of a payments system could de-stabilise the financial markets and cause wider economic disruption.

### Deposit-taking facilities and store-of-value system

- 2.7** The most visible function that banks undertake is to receive deposits from savers, including the general public. Households in the UK are the ultimate holders of wealth in the UK, yet they are not well placed to look after that wealth safely themselves and use it effectively. Furthermore, money that is not engaged in productive activity will devalue over time as a consequence of inflation. Interest-bearing deposit facilities therefore act to store value.

### Lending

- 2.8** However, banks do not take deposits simply to provide safety for the savings of the public. They use funds that are deposited with them<sup>1</sup> to provide loans to businesses to allow them to undertake productive economic activities, and also to consumers. The banks pay interest to depositors for the right to use their funds to make loans. They make a profit by charging a higher rate of interest on loans than they pay on deposits. Getting access to loans is advantageous to borrowers – and to the economy in general – because capital is able to circulate, and be used in an efficient manner.

### Managing risks and financial needs over time

- 2.9** Having access to banking facilities enables individuals and businesses to manage their risks and financial needs over time. At its most basic, this involves providing banks' customers with access to both borrowing and saving facilities. Banks' ability to manage risk is also fundamental to the value they add in other activities. For example, financial intermediation between retail depositors and business borrowers

---

<sup>1</sup> Banks also have other sources of funding, such as borrowing in the capital markets.

is advantageous to depositors as it ensures that they can get a return on their deposit, without needing to have specialist knowledge of the borrowers or the various activities that loans may fund. Banks also provide investment banking services – such as advisory services and acting as counterparties for client trades – to companies and governments. Banks take on the management of the various risks – such as credit risk, liquidity risk and interest rate risk – inherent in making and managing loans. The management of risk goes to the very heart of banking.

## Financial stability

### Sources of instability in banking

- 2.10** Banks have a much higher ratio of debt to shareholders' capital than non-financial firms (see Box 1 below), and conduct maturity transformation by financing long-term assets with short-term liabilities. So a bank's solvency can be threatened by a relatively small proportion of its assets going bad. And because of maturity mismatch between assets and liabilities, even a solvent bank can fail (in the absence of the provision of liquidity from a 'lender-of-last-resort') if there is a large-scale withdrawal of deposits and other short-term funding.
- 2.11** In addition, banks tend to fail together, for a number of reasons. Banks are connected to each other in important ways,<sup>2</sup> so the failure of one or more banks can directly harm others. The collapse of one bank may cause one or more of its counterparties to fail, to the detriment of other banks with which the counterparties also have dealings. The rapid sale of assets by a bank suffering stress may depress prices, triggering losses on 'marked-to-market' assets for other financial institutions. Banks are often exposed to similar risks, so if one bank's assets are hit other banks are also likely to experience problems. And all banks are vulnerable to a generalised lack of confidence in financial institutions that limits the availability of liquidity and funding. These are all manifestations of systemic risk – the risk of significant disruption to the financial system as a whole, exacerbated by dependencies and interconnections between financial institutions and markets. Without robust system design, the stability of the system can be susceptible to the failure of just one component.

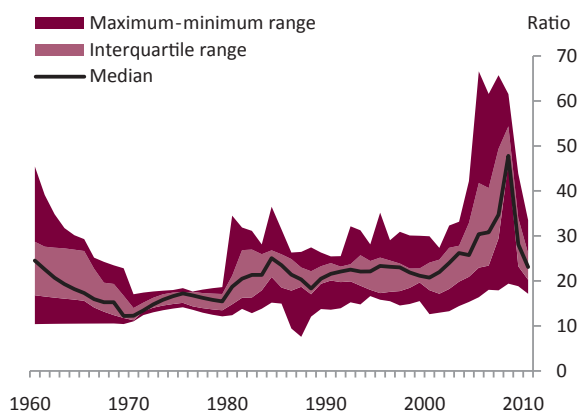
---

<sup>2</sup> For example, through the interbank, repo and derivatives markets, and through payments systems.

**Box 1: Banks and leverage**

Banks use a lot more debt and a lot less equity to finance their activities than other firms. Figure 2.1 shows that UK banks were typically 20x leveraged from 1960 to 2000 – i.e. their assets (loans etc.) were twenty times bigger than the capital supplied by shareholders. This leverage ratio rose to nearly 50x as the crisis hit (although it has since fallen back). Much of the increase was associated with the expansion of UK banks’ global investment banking activities in the 2000s.

**Figure 2.1: UK banks’ leverage**<sup>(a) (b)</sup>



(a) Ratio of total assets to shareholders’ claims.  
 (b) The data are for a sample of institutions providing banking services in the UK in 2009, adjusted historically for mergers and acquisitions. The sample includes the following financial groups: Barclays, Bradford & Bingley, HSBC, Lloyds Banking Group, National Australia Bank, Nationwide, Northern Rock, RBS and Santander UK. Where data are consistently available for the UK component of the banking group, these have been used.

Source: Bank of England, December 2010, *Financial Stability Report* (updated, with some restatements for 2009 data).

Leverage has a multiplier effect on returns. In good years, such as the earlier 2000s, leverage magnifies the private returns to banking. In bad years, however, it magnifies losses. With 20x leverage, a 5% fall in the value of a bank’s assets would wipe out its equity value. With 50x leverage, even a 2% fall would do this. In an effort to contain private incentives for leverage, minimum capital requirements began to be imposed on banks and these were harmonised in 1988 as part of the Basel Capital Accord. Capital had to be at least 8% of *risk-weighted* assets (RWAs). If, for example, the average ‘risk weight’ for a bank’s assets was 50%, then this would allow leverage of 25x total assets.<sup>[1]</sup>

This constraint was still in place in the run-up to the crisis. But the average risk weight attributed to UK banks’ assets had roughly halved since 1988 to around 33% by 2008.<sup>[2]</sup> (With hindsight it would appear that as risk weights were decreasing, risk was in fact mounting.) So the 8% minimum capital ratio translated to leverage of 35-40x in terms of total assets. And because some of this 8% was met with non-equity forms of capital which proved unable to bear losses, real leverage was higher still.

This thin layer of capital proved insufficient for many banks in the recent crisis. Holders of bank debt should have been next in line to bear losses. In the event, however, due to the difficulties of reorganising complex banks while keeping essential banking services running, this generally proved impossible and taxpayers picked up the bill instead.

The recent Basel III reforms aim to make this structure less brittle.<sup>[3]</sup> But even if average risk weights rise to 50% (from around 33%) and banks hold truly loss-absorbing equity capital of 7% of RWAs, this would allow total assets to be almost 30x equity capital. And so banks could only withstand a 3.5% fall in the value of their assets before wiping out this capital.

<sup>[1]</sup> 8% of RWAs would be 4%, or 1/25<sup>th</sup>, of total assets.

<sup>[2]</sup> Ratio of RWAs to total assets for Barclays, HSBC, Lloyds Banking Group, RBS and Standard Chartered.

<sup>[3]</sup> See Box 3 in Chapter 3 for a summary of the Basel III reforms.

**2.12** These fundamental vulnerabilities are particularly important because of the difficulties involved in dealing with failing banks. The difficulties are heightened for banks which are large and/or complex, and for banks whose operations span several countries. Two of the main difficulties are:

- *the bankruptcy process is greatly value-destroying for banks.* Standard corporate insolvency procedures involve freezing the claims of creditors while liquidating assets and/or continuing to operate the business insofar as this maximises the value of the firm. But banks are different in that in order to continue to function they need to maintain the confidence of their creditors (including depositors) and they risk suffering losses on assets (such as loans) if they are forced to sell them before maturity. The process of liquidating assets prematurely and freezing creditor claims therefore brings banking activities to a halt and destroys significant value; and
- *bank failure imposes collateral damage.* To a much greater degree than is typical for other firms, the failure of a bank can result in collateral damage for others including its competitors, counterparties and other market participants. Even if depositors are protected by insurance, they will still be vulnerable to temporary lack of access to funds and to the disruption of payment arrangements.

**2.13** Bank failure can also affect the economy more widely if the bank is systemically important. The consequences of an interruption in the supply of financial services will vary depending on the nature of those services, and the proportion of the financial system that is affected. A major disruption to the retail payments system could have a catastrophic social and economic impact. And interruptions in the supply of bank lending to borrowers with limited access to alternative sources of credit will constrain investment, reducing both demand and supply capacity and hence GDP.

**2.14** Accordingly, the failure of a systemically important bank which provides critical financial services and which is heavily connected to the rest of the financial system and the wider economy has particularly high costs. Because not all of the costs of a bank's failure are borne by its owners, creditors and managers, banks are likely to take on more risk than is good for society as a whole, unless their structure and conduct is carefully regulated.

**2.15** As a consequence of the high social cost of bank insolvency, governments have often felt compelled to provide capital as well as liquidity support to rescue banks on the brink of failure (as happened in the recent crisis). If it is anticipated that governments will bail out failing banks – particularly likely for banks that are seen as systemically important – then such institutions operate with a government guarantee. A government cannot credibly commit in advance not to bail out a systemically important bank, because should it fail in the future, the costs of letting it collapse are greater than the costs of a bail-out. Taxpayers underwrite risks for which the related

rewards are enjoyed by the private sector.<sup>3</sup> This undercuts market discipline. As a result of the government guarantee, creditors will be prepared to provide cheap funding to a systemically important bank that conducts risky activities, rather than constraining such risk taking by demanding a higher return to compensate for the risks. This is not only inequitable, but also further incentivises excessive risk taking by banks.

- 2.16** As well as imposing direct costs on taxpayers, guarantees can also jeopardise the creditworthiness of the state, raising borrowing costs for the government and the wider economy. This point is discussed in more detail in Paragraph 2.24 below.

### The recent crisis from a UK perspective

- 2.17** Reforms to financial regulation must not aim solely at addressing past crises. The next crisis will surely have different causes, and run a different course. The goal must be to improve the resilience of the banking system to shocks regardless of the form they take. Nonetheless, it is useful to take a look at how the recent crisis unfolded.
- 2.18** In the run-up to the recent crisis there was an explosion in bank leverage. This made banks more vulnerable to losses. Triggered by a decline in US property prices, losses on securities backed by US subprime mortgages from the summer of 2007 onwards – exacerbated by uncertainty as to which institutions were holding assets with unrealised losses – caused a generalised withdrawal of liquidity. Interbank lending declined, and banks’ ability to raise funds in the repo markets was hit as participants became more worried about the price that collateral would achieve in a forced sale. Central banks injected huge amounts of liquidity into the banking system in attempts to alleviate banks’ liquidity problems – although in the UK this did not save Northern Rock.<sup>4</sup>
- 2.19** Similar concerns also affected leveraged non-banks (which did not have access to central banks’ liquidity facilities), including hedge funds, insurers, securities dealers and structured investment vehicles (SIVs). Having long-term assets funded with short-term borrowings, leveraged institutions were vulnerable to re-financing risk. As the crisis progressed and asset prices fell, these institutions suffered what were effectively runs. Lenders demanded more or better quality collateral against loans. Unable to comply, borrowers were forced to sell assets to repay their loans, further depressing prices. The problem for many financial institutions was compounded by the fact that liquidity provision commitments and reputational concerns led them to bring off-balance sheet vehicles – such as SIVs – back on-balance sheet.
- 2.20** The combination of depressed asset prices and increasing losses on loans led to fundamental solvency issues at a number of institutions, both banks and non-banks. In the US, Bear Stearns had to be rescued by JPMorgan (with US Government support) in March 2008 and Lehman Brothers collapsed in September 2008. Unable to meet

---

<sup>3</sup> Annex 3 discusses the government guarantee of the UK banking system in more detail.

<sup>4</sup> Shin, H.S., 2008, *Reflections on Modern Bank Runs: A Case Study of Northern Rock*: <http://www.princeton.edu/~hsshin/www/nr.pdf>



collateral requirements, AIG was bailed out by the US Government in September 2008. Royal Bank of Scotland (RBS) and Lloyds Banking Group (LBG) were bailed out by the UK Government in October 2008, and there were more government bail-outs in Europe. With falling asset prices, and troubled financial institutions cutting back on lending, the crisis spread beyond the financial sector, and economies around the world were thrown into recession.

- 2.21** An important contributory factor to the need for and size of government bail-outs was that when losses hit, banks' liability structures proved to be poor at absorbing them. In theory, losses fall on unsecured liabilities in reverse order of seniority from equity, through to subordinated debt, and then to senior debt and other unsecured creditors (with retail depositors protected to the extent provided for by deposit insurance schemes). However, this order of loss absorption only works well in insolvency, which the government bail-outs prevented. Accordingly, in many banks that received government bail-outs equity holders were not wiped out, holders of subordinated debt took modest losses, if any, and senior debt holders generally came out whole.
- 2.22** The crisis represented a spectacular failure by financial institutions and the market to manage risk efficiently. They amplified, rather than absorbed, the shock from the fall in property prices. A (severe) correction in asset prices was transformed into a global economic crisis.
- 2.23** The UK was severely affected by the crisis. National output in 2010 was 4.5% below its pre-recession peak.<sup>5</sup> Unemployment has risen by more than 800,000 since 2007.<sup>6</sup> The public finances have deteriorated sharply, and the 2009/10 deficit exceeded 10% of GDP.<sup>7</sup> There is evidence to suggest that some of the output loss economies suffer during crises is permanent. Work by the Basel Committee on Banking Supervision (BCBS) suggests that the cost of banking crises may exceed 60% of pre-crisis GDP.<sup>8</sup> More than 80% of RBS and more than 40% of LBG are in state ownership as a result of the Government bail-out of the banking system.<sup>9</sup> Competition in UK banking has been seriously weakened as rivals to the largest retail banks have left the market or been absorbed into others.

<sup>5</sup> Bank of England, *Inflation Report*, February 2011: <http://www.bankofengland.co.uk/publications/inflationreport/ir11feb.pdf>

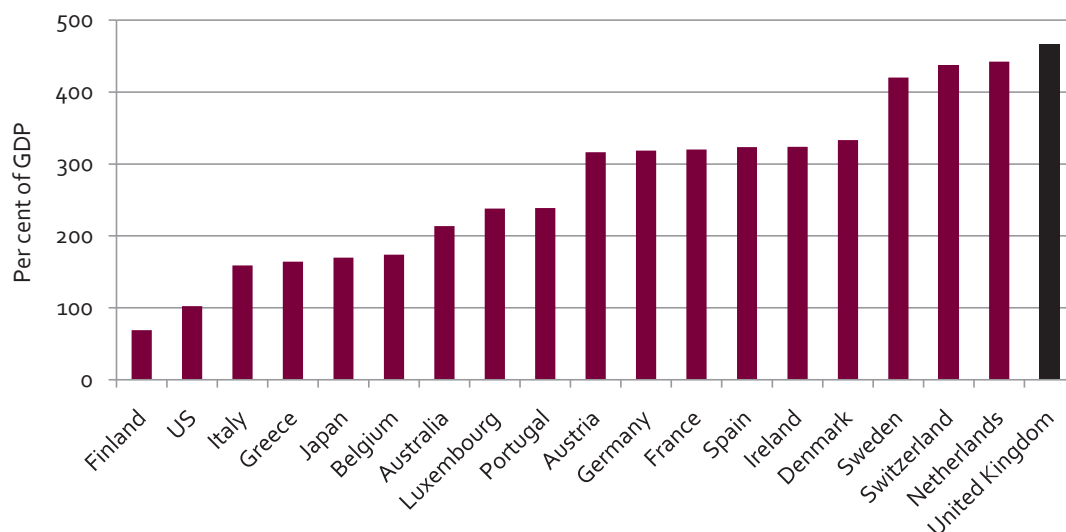
<sup>6</sup> Unemployment was more than 800,000 higher in January 2011 than in January 2007: Office for National Statistics, *Statistical Bulletin: Labour Market*, March 2011 and March 2007.

<sup>7</sup> Office for National Statistics, *Statistical Bulletin: Public sector finances*, January 2011

<sup>8</sup> BCBS, 2010, *An assessment of the long-term economic impact of stronger capital and liquidity requirements*: <http://www.bis.org/publ/bcbs173.pdf>

<sup>9</sup> UK Financial Investments, 2010, *Update on UKFI Market Investments*: [http://www.ukfi.co.uk/releases/115\\_2%20FW%20Update%20Jan%202010\\_10\\_AW\\_LR.pdf](http://www.ukfi.co.uk/releases/115_2%20FW%20Update%20Jan%202010_10_AW_LR.pdf). The Government has invested approximately £65bn in RBS and LBG.

**Figure 2.2: Domestic banking assets as a percentage of GDP consolidated by nationality of headquarters (2009)<sup>10</sup>**



Source: ECB, Eurostat, published accounts, national sources, IMF, Commission calculations

**2.24** Despite recent de-leveraging, the total balance sheet of UK banks is large by international standards, more than four times annual GDP (see Figure 2.2). As the difficulties being experienced by Ireland illustrate, a large banking sector can represent a real threat to the public finances.<sup>11</sup> Figure 2.3 below shows how Irish bank credit default swap (CDS) spreads initially tightened when the guarantee of their liabilities was announced in 2008, but at the expense of the sovereign. There was a similar pattern in the UK at the announcement of the bank rescue package in October 2008 (see Figure 2.3). Had the asset quality of UK banks turned out to be as bad as that in Ireland, the hit to the UK's fiscal position would have been significantly worse than it was. If the public finances become unable to bear the costs of bailing out a failing banking system, the 'too big to fail' problem becomes a 'too big to save' problem, risking the collapse of the provision of financial services and/or a collapse in the perceived creditworthiness of the public finances.

<sup>10</sup> EU data are consolidated domestic banking assets from the ECB, and GDP from Eurostat. Australia, Japan and Switzerland banking data from national sources. US data are for the 30 largest banking groups, from company accounts. Non-EU GDP data are sourced from Datastream. 'Domestic banking assets' are the global assets of all banks whose global headquarters are located in the relevant country.

<sup>11</sup> In the case of Ireland, this culminated in the announcement of an external assistance package worth €67.5bn funded by the European Financial Stability Mechanism, the IMF, the European Financial Stability Facility and bilateral loans.

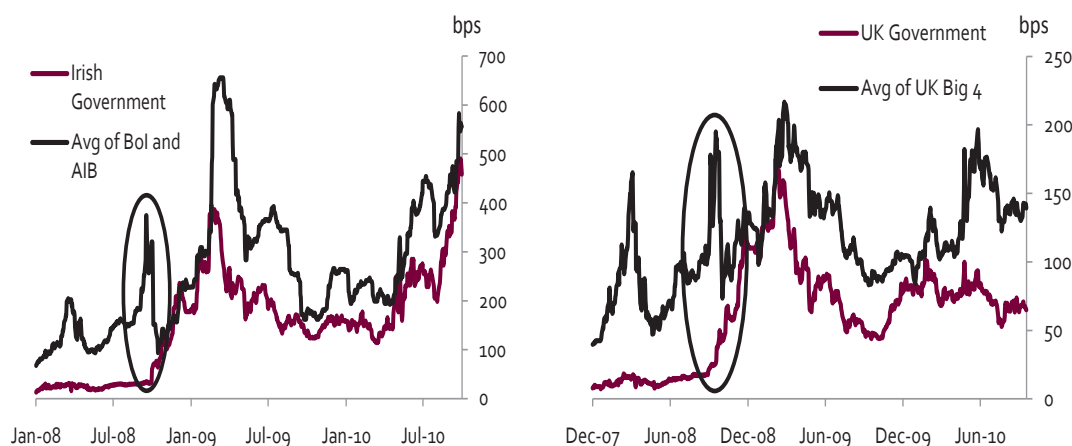
### Box 2: Credit default swaps

Credit default swaps (CDS) are a form of insurance against loss on a debt contract. The price (or spread or premium) on a CDS is a measure of how likely and severe the market expects default on the underlying contract to be.

Bank CDS spreads rose during 2008, and rose particularly sharply after the bankruptcy of Lehman Brothers on 15 September 2008 as markets became more concerned about the quality of bank assets. Bank CDS spreads fell back again in the UK and Ireland as government support measures for banks were announced. But the price of insuring against the default of those governments' debt rose at the same time. This is consistent with the markets taking into account an increased probability of a sovereign debt crisis caused by the costs of bailing out banks.

As the picture for Irish banks worsened throughout 2009-10, the cost to the Irish Government of the guarantee increased, and Irish sovereign CDS spreads rose further. Market perceptions of UK banks stabilised throughout 2009-10, limiting the contagion to sovereign creditworthiness. However, the initial market reaction in 2008 and the experience of Ireland suggests that, had the position of UK banks been worse, they may have been big enough to cause a UK sovereign debt crisis. And UK Government CDS spreads remain much higher than they were before 2008.

**Figure 2.3: Irish sovereign vs Irish bank CDS spreads and UK sovereign vs UK bank CDS spreads**



Source: Datastream, Commission calculations. 'BoI' is Bank of Ireland, 'AIB' is Allied Irish Bank. UK 'Big 4' are Barclays, HSBC, LBG and RBS.

- 2.25** As well as being high in aggregate relative to GDP, UK banking assets are concentrated in a small number of institutions, the four biggest of which each operate a major UK retail banking network. The failure of even one such institution could therefore represent a potential threat to the public finances. This risk is not unique to the UK, but it is more severe for the UK than for many other countries. By way of

example, Citigroup's total assets amounted to 16% of US GDP<sup>12</sup> at the time it had to be bailed out by the US Government. The comparable figure for RBS at the time of its bail-out was 99% of UK GDP,<sup>13</sup> including a considerable volume of non-UK assets.

### Making the banking system safer

- 2.26** What needs to be done to make the UK banking system safer? The probability and size of macroeconomic shocks need to be reduced. But better macroeconomic – including macro-prudential – policy, while important, will never be able to eliminate shocks altogether (particularly global shocks). So measures are also required to increase the resilience of UK banks and so reduce the probability that a shock will trigger bank failures. And measures are needed to protect the economy, and the taxpayer, from significant harm, by reducing the impact of bank failures that do occur.
- 2.27** While banks do need to become better able to withstand losses, reducing the probability of bank failure does not require all banks to be prevented from failing in all circumstances. Indeed, the possibility of idiosyncratic bank failure is a necessary constituent of healthy competition. But any bank failure needs to be orderly, so as to minimise the costs to others.
- 2.28** In the recent crisis, when a systemically important bank neared the point of failure, the government was faced with a choice. It could allow the bank to go insolvent, or it could bail it out. As discussed above, allowing a systemically important bank to collapse into insolvency brings huge social costs – so in the crisis these banks were bailed out. What is required is an alternative that allows a failing bank to be sorted out – or 'resolved' – in a way that avoids both significant costs to the rest of the economy, and the need for a government bail-out. Much of the negative impact on society of the insolvency of a systemically important bank stems from interruptions in the continuous provision of essential banking services. So a successful 'resolution' of such a bank needs to keep any such interruptions to a minimum.
- 2.29** The ways in which an interruption in the provision of banking activities resulting from bank failure may have a negative impact on the financial system and the wider economy will vary with the size and nature of the bank, but may include:
- a disruption to the payments system;
  - depositors being unable to access funds;
  - poorer availability and/or pricing of credit (including the re-financing of existing loans);

---

<sup>12</sup> Commission analysis, based on US GDP numbers from the World Bank's *World Indicators* and Citigroup's 2008 *Annual Report*.

<sup>13</sup> Commission analysis, based on UK GDP numbers from the Office of National Statistics and RBS's 2008 *Annual Report*, adjusted to show assets under US GAAP definitions to allow comparison.

- disruption to clients' ability to access assets placed with a failed bank, and to the provision of investment banking trading and advisory services; and
- contagion to other financial institutions and to the wholesale funding markets, both through direct exposure to the failed firm and through a generalised collapse in confidence in financial institutions.

**2.30** It is important that authorities are provided with a comprehensive set of resolution tools to improve their ability to manage the failure of banks.<sup>14</sup> But in order to avoid an interruption to the conduct of key banking operations in resolution, those operations need to have access to adequate capital and liquidity resources. In resolution, certainly in the short term, the most credible alternative to the taxpayer as a source of new capital is likely to be the imposition of losses on existing holders of liabilities. And the liquidity insurance provided by the central bank to solvent, creditworthy institutions is also likely to be called upon.<sup>15</sup>

**2.31** Even where the authorities have a broad range of resolution powers, there are still challenges and risks associated with the failure and resolution of a systemically important bank. Putting such a bank into resolution is likely to involve the regulatory authorities exercising their judgement in coming to a decision which effectively wrests the bank away from the existing shareholders, and may involve the imposition of losses on creditors. Even in a situation where a solvent wind-down is ultimately achieved, the decision to put the bank into resolution – in particular if the position is finely balanced – may unsettle markets. This could make it more difficult for other banks to access the wholesale funding markets; some institutions may be shut out altogether.

**2.32** Any reform proposal that limits the spillovers from bank failure will reduce systemic risk, and so lessen the chance that a bank failure threatens the financial system as a whole. But reforms that stabilise the UK banking system may also raise its costs. This may cause some activities to move to non-banks, foreign banks, or capital markets. This shift in activity may create financial instability, by facilitating excessively rapid growth in credit and asset prices in good times or, in times of stress, by non-bank institutions withdrawing too quickly, shifting losses onto the banks, or requiring liquidity from them. This was the case with some non-banks in the recent crisis.

**2.33** But these alternative providers may be able to conduct business without generating instability elsewhere in the financial system. For example, many hedge funds collapsed in the recent crisis, and yet in general their failure did not cause major systemic problems. While in the run-up to the recent crisis some financial activities

---

<sup>14</sup> The Banking Act 2009 creates a 'Special Resolution Regime' which gives the UK authorities a permanent framework providing tools for dealing with distressed banks and building societies.

<sup>15</sup> See Rochet & Vives (2011) for a rationale for helping illiquid but solvent banks (Rochet, J. & Vives, X., 2011, *Coordination Failures and the Lender of Last Resort: Was Bagehot Right After All?*, in Allen, F., Carletti, E., Krahenen, J.P. & Tyrell, M., 2011, *Liquidity and Crises*, Oxford, Oxford University Press).

were conducted in the shadow banking<sup>16</sup> sector simply to avoid bank regulatory requirements, this is not invariably the case. Non-banks may well be better-placed than banks to conduct some financial activities, and limiting the implicit government guarantee for banks may also encourage some activities to move out of the banking system. To the extent that shadow banks can safely remove risk from the banking system, an increased role for them will be positive for financial stability.

**2.34** So the migration of activities between banks and non-banks can have mixed consequences. More generally, financial innovation and reform of banking regulation will cause the financial system to evolve in unpredictable ways. The advent of the Financial Policy Committee of the Bank of England is crucial in this regard. The Committee will have tools designed to moderate credit and asset prices, and to bring non-banks within the regulatory perimeter. Proposals to standardise over-the-counter (OTC) derivatives where possible, and clear them through a central counterparty, will also help contain systemic risk by strengthening market infrastructure across the financial system as a whole. However, the prospect of tighter regulation shifting activity outside of the banking system is nonetheless a key consideration for the Commission. Annex 2 provides more detail on this issue.

**2.35** In brief, reforms are needed:

- to reduce the probability of failure of systemically important banks by improving their resilience; and
- to reduce the impact of failure of systemically important banks, both by providing for the orderly resolution of any institutions that fail, and by reducing levels of risk in the financial system as a whole,

without disproportionately affecting the financial system's ability to provide critical financial services. The Commission's proposals for reform options to promote financial stability are set out in Chapter 4 of this *Interim Report*.

## Competition

**2.36** Many studies and competition investigations in recent years have looked into competition in retail banking services, in the UK and other countries. These have identified a number of factors that affect competition in retail banking, including concentration, barriers to entry, regulation, ability to compare products, switching costs, and other informational problems. In many markets, including the UK, problems have been found in a number of these areas that inhibit effective competition in retail banking, and a range of measures have been introduced by the competition authorities to attempt to address these.<sup>17</sup>

---

<sup>16</sup> 'Shadow banks' are non-banks that conduct banking-type activities

<sup>17</sup> See for example, OFT, 2008, *Personal current accounts in the UK*: [http://www.of.gov.uk/shared\\_of/reports/financial\\_products/OFT1005.pdf](http://www.of.gov.uk/shared_of/reports/financial_products/OFT1005.pdf).

- 2.37** Some progress was made in the UK over the past decade, due in part to the efforts of the competition authorities, but also through the activities of ‘challenger’ banks – those that are large enough to be a threat to the incumbents, but small enough to have a strong incentive to compete to increase their market share. These challengers seem to have played an important role in stimulating competition in a number of retail banking markets. The financial crisis has reversed some of the gains of the past decade, most notably by leading to a significant increase in concentration in retail banking markets, and by reducing the number of challengers. The Commission has considered the extent to which the financial crisis has affected these markets, taking full account of the extensive work already conducted by the competition authorities. In doing so, it has investigated the other key factors determining market competition, to see if market forces could remedy the effects of the crisis.
- 2.38** This section provides an overview of the current state of competition in UK banking markets. It considers their structure over the past decade and the extent to which they have been affected by the crisis, the nature of the relationship between concentration and competition, and other factors affecting competition in retail banking, including the important role of challengers.
- 2.39** Much of the market information made available to the Commission is proprietary data, and as such has been included in this *Interim Report* only in summary form.

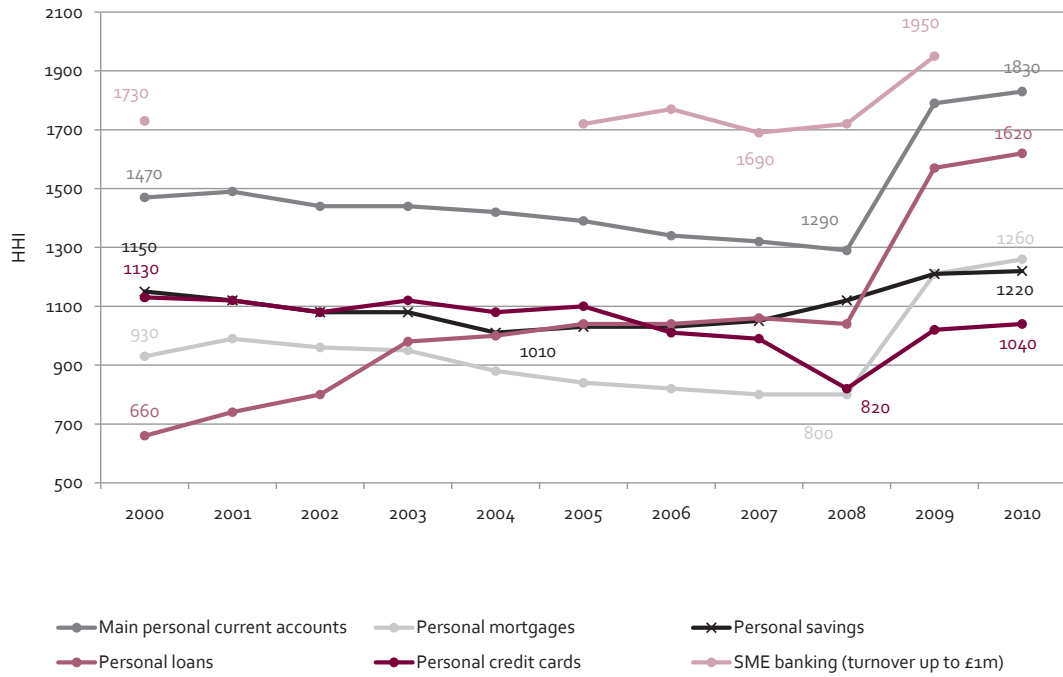
## Concentration in UK banking markets

- 2.40** The financial crisis led to a significant increase in the concentration of UK banking markets.<sup>18</sup> Some small and medium-sized banks left the market through failure, merger or (in the case of some foreign banks) withdrawal. The reductions in concentration across the majority of markets in the years preceding the crisis were reversed. As Figure 2.4 shows, levels of concentration rose to their highest points in a decade or more.

---

<sup>18</sup> The Commission has considered separately the markets for PCAs, savings accounts, mortgages, credit cards, personal loans, and SME banking services. In general, the Commission has assumed markets to be UK-wide. The great majority of retail banking products are available to customers across the UK without any difference in characteristics or prices and a number of large banks have national branch networks that make the same products available across the country (source: Defaqto). The Commission has considered separate markets to enable a complete economic analysis, rather than conducting a full relevant market definition exercise for the purposes of competition law.

**Figure 2.4: Concentration levels in personal and SME banking measured using the Herfindahl-Hirschman Index<sup>19</sup>**



Source: Commission analysis of SME banking data from the Competition Commission (2000) and TNS (2005-2009), and personal banking data from GfK FRS.<sup>i</sup> (Roman numerals refer to endnotes at the end of the chapter.)

**2.41** Competition led to a gradual but steady decrease in concentration of the PCA market before the crisis. In general, brands with consistently the highest level of customer service,<sup>ii</sup> or better interest rates, have grown only slowly. As aggregate groups, challengers have achieved some organic growth, though smaller banks have not. The PCA market is now particularly concentrated following a jump in concentration as a result of the crisis, as Figure 2.4 shows. In 2010, the five largest banks had an 87% share of the market.<sup>iii</sup>

**2.42** The market for SME banking services is more concentrated than any of the personal banking markets, with five banking groups holding over 90% of the market in 2009.

<sup>19</sup> The Herfindahl-Hirschman Index (HHI) is a measure of market concentration. Higher numbers indicate more concentrated markets. See the Glossary for further details. ‘Main personal current accounts’ are those that survey respondents holding more than one current account indicated was their ‘main’ account. From TNS, market shares (by number of customers) for SMEs with a turnover of up to £1 million were used as these were available for the longest time period. Where market shares were also available for larger businesses, these were similar to the shares for this sub-section. The TNS RI Small Business Banking Survey data uses respondents’ subjective opinion of a definition based on ‘main bank’. In the view of at least one bank this has a potentially misleading effect on any subsequent assessment, analysis and calculations of the ‘SME market’ based on the data. 2009 and 2010 data does not include the RBS and LBG divestitures discussed later (see Chapter 5).



The market has been concentrated for at least the past decade. Very few new entrants or challengers have succeeded in gaining significant market share.<sup>20</sup>

- 2.43** A number of new firms (including foreign banks) entered the mortgage market over the past decade, though many have since exited, and it may be more difficult to enter in the coming years due to more difficult funding conditions and stricter regulation. The market is currently concentrated, and significantly more concentrated than at any time since at least the year 2000.<sup>v</sup>
- 2.44** The savings market is less concentrated and more contestable, and market shares show more organic change than for PCAs. The credit card market – the supply of credit card services to personal consumers rather than to retailers – is not particularly concentrated. There has been significant entry and exit, and changes in market share over time. The personal loan market has become more concentrated over time, with the five biggest banking groups expanding their market share from under 50% in 2000 to over 75% in 2010. However, the personal loan market is still only moderately concentrated, and some small players have been able to increase their market share. These three markets – savings, credit cards and personal loans – appear to be more contestable than the PCA, SME banking and mortgage markets.<sup>v</sup>
- 2.45** Four banking groups have had significant market shares in all of the five personal banking markets mentioned above, as well as SME banking, throughout the last decade.<sup>v</sup> These banks – RBS, HSBC, Barclays and Lloyds TSB (or LBG since 2009) – are referred to as the ‘Big Four’ banks. Following Lloyds TSB’s merger with HBOS in 2009, in 2010 LBG had a significantly greater market share in all of these five personal banking markets than any other bank.<sup>21</sup> (The state aid divestitures by LBG and RBS and their effect on levels of concentration are discussed in Chapter 5.)
- 2.46** Some markets are significantly more concentrated in parts of the UK. For example, the SME banking market appears to be more concentrated in Scotland than in the rest of the UK and the market in Northern Ireland is complicated by the financial stability problems of the Irish-owned banks. The Commission does not currently intend to make region-specific recommendations, but it is mindful of specific regional issues and impacts, and would welcome further evidence on this subject.
- 2.47** The UK appears to be similar to many other developed countries, such as the Netherlands, Sweden, Australia and Canada, in having a concentrated retail banking market. However, it is difficult to compare across countries as their histories and competitive dynamics differ (for example, in some countries regional banks are

---

<sup>20</sup> Based on Commission analysis of data provided by TNS RI Small Business Banking Survey in Great Britain, for businesses with a turnover <£1 million for 2005-2009, and businesses with a turnover <£15 million for 2007-2009. Market shares are based on the number of survey respondents naming each bank as their ‘main’ bank. Therefore, this does not allow for the case where an SME banks with more than one bank, and it measures market share by share of customers rather than share of products sold.

<sup>21</sup> OFT, 2010, *Review of barriers to entry, expansion and exit in retail banking*: [http://www.offt.gov.uk/shared\\_offt/personal-current-accounts/oft1282](http://www.offt.gov.uk/shared_offt/personal-current-accounts/oft1282)

the norm), and there are few comparators with a similar population to the UK, and national (as opposed to regional) bank networks. In any case, the fact that there are other examples of concentrated markets does not suggest that there are no problems with competition. Governments or regulators in other countries (for example, Australia and the Netherlands) have recently investigated aspects of retail banking competition in their own markets, or are acting to reduce market concentration: in the US, the Dodd-Frank reforms prohibit a financial company from merging with or acquiring another firm, if the result is a company with over 10% of the 'aggregate consolidated liabilities' of all firms in the domestic market.<sup>22</sup>

### Does concentration matter?

- 2.48** Market power – that is, the ability to set prices above the costs incurred in supplying a banking service – can arise due to markets being concentrated, and/or individual banks being large (in practice, these two factors are likely to occur together). In its simplest form, a market with a small number of large banks would be expected to have prices set higher than the costs of supply, even without active collusion between the banks. An alternative explanation is that only large banks can influence pricing and raise profits – in this case, it would be large banks that charge higher prices, rather than more concentrated markets having higher prices throughout.
- 2.49** Market power can also come from customers being unable or unwilling to switch. In a market where only a small proportion of customers switch and banks charge the same price to all their customers, banks can choose between setting high prices to maximise the profits they make from their existing customers, or setting low prices to attract switchers.<sup>23</sup>
- 2.50** For a small bank, setting a low price to attract switchers is more worthwhile than for larger banks since small banks can gain a greater proportion of their total customers by offering good deals.<sup>24</sup> In addition, smaller banks lose less money on their existing customers by offering good deals as the existing customers are a smaller proportion of the existing and new customers together.
- 2.51** Annex 4 summarises a number of studies that have investigated how concentration in banking markets affects competition and the prices that consumers pay. In practice, it does appear to be the case that banks in more concentrated markets tend to charge

---

<sup>22</sup> See Section 622 of the Dodd-Frank Act, analysed in depth here: <http://www.treasury.gov/initiatives/Documents/Study%20on%20Concentration%20Limits%20on%20Large%20Firms%2001-17-11.pdf>.

<sup>23</sup> This is premised on the assumption that banks are unable to charge different prices to new versus existing customers. In many cases, banks are able to differentiate charges to a certain extent across groups of customers. However, they cannot do this perfectly, and their ability to do so varies across banks and products. Therefore this is likely to explain some of the pricing behaviour seen in banking markets. Price discrimination is considered further below.

<sup>24</sup> This argument is made in OFT, 2008, *Anticipated acquisition by Lloyds TSB plc of HBOS plc*: [http://www.ofg.gov.uk/shared\\_ofg/press\\_release\\_attachments/LLloydstsb.pdf](http://www.ofg.gov.uk/shared_ofg/press_release_attachments/LLloydstsb.pdf).

higher prices (i.e. pay less interest on deposits and/or charge more interest on loans).<sup>25</sup> However, the results can vary, particularly across countries, since many other factors can also affect competition and the prices that consumers pay. In analysis looking specifically at the UK market, the two most relevant studies both show that in most cases greater concentration led to higher prices.<sup>26</sup>

- 2.52** As market power insulates banks from competition, banks therefore have less incentive to innovate and become more efficient, which would lead to lower costs and improved products for customers. In the long run, higher costs due to reduced pressure to raise efficiency may have a greater impact on the economy than the ongoing higher prices for customers.

## Barriers to entry

- 2.53** The Office of Fair Trading (OFT) reported recently on barriers to entry in retail banking, and found that new entrants face significant challenges in attracting customers and expanding their market shares.<sup>27</sup> The greatest barriers came from the difficulty in attracting personal and SME customers, due to customers' preference for banks with an extensive branch network, strong brand loyalty and low switching rates. These barriers can have the effect of deterring firms from entering the market in the first place, if they do not believe they will be able to attract sufficient numbers of customers to recover start-up costs, grow market share and maintain a successful presence in the market. Table 2.1 provides a summary of the OFT's conclusions on the barriers to entry in retail banking.

---

<sup>25</sup> For example, one review of a number of other studies finds that: "Market concentration ... results in significant spreads in both deposit and loan markets." See page 540, Degryse, H. & Ongena, S., 2008, Competition and Regulation in the Banking Sector: A Review of the Empirical Evidence on the Sources of Bank Rents, in Thakor, A. V. & Boot, A., eds., *Handbook of Financial Intermediation and Banking*, Amsterdam, Elsevier.

<sup>26</sup> Heffernan, S. & Fu, X., 2009, The structure of retail markets: what do we learn from bank-specific rates?, *Applied Financial Economics* and Gondat-Larralde, C. & Nier, E., 2006, Switching costs in the market for personal current accounts: some evidence for the United Kingdom, *Bank of England Working Paper*

<sup>27</sup> OFT, 2010, *Review of barriers to entry, expansion and exit in retail banking*: [http://www.offt.gov.uk/shared\\_offt/personal-current-accounts/oft1282](http://www.offt.gov.uk/shared_offt/personal-current-accounts/oft1282)

**Table 2.1: OFT's conclusions on barriers to entry**

Issue	Potential barrier investigated	OFT conclusion
Regulatory requirements	FSA authorisation requirements	Not identified as a barrier/no evidence received.
	FSA authorisation process	Noted as a barrier in the past by some firms due to length and uncertainty of process; initiatives have now been put in place to improve this (although it is too early to say how effective they are).
	OFT Consumer Credit Licence	Not identified as a barrier/no evidence received.
	FSA capital and liquidity requirements	Potentially high barrier for new entrants and smaller firms due to high capital requirements relative to incumbents. New capital and liquidity requirements could exacerbate or reduce these barriers.
	Consumer protection and money laundering compliance	Not identified as a barrier/no evidence received.
Access to essential inputs	Implementation of IT systems	While a high sunk cost at start-up, the costs of IT systems only become a barrier if firms believe they will be unable to attract enough customers to recover these costs in the future.
	Access to payments systems (e.g. CHAPS & Bacs)	Barriers may exist for certain unconventional business models, but no evidence received to suggest there are significant or widespread barriers to access.
	Customer information access	Not a significant barrier for personal banking (many information providers); however, banks can find it more difficult to source financial information on small enterprises in order to price SME banking products accurately.
	Access to funds to finance expansion	Post-crisis, limited access to interbank funding and few alternative funding sources can pose a barrier to expansion for certain firms, especially monoline credit providers.
Ability to attract customers and reach scale	Levels of switching in personal and business current account markets	Low levels of switching make it difficult to attract customers.
	Brand loyalty	A significant barrier to expansion, as consumers are often wary of switching to unfamiliar brands, perhaps in particular in Scotland and Northern Ireland.
	Branch network	A significant barrier to expansion, especially for PCAs/business current accounts (both gateway products). Alternative distribution channels remain complements not substitutes.

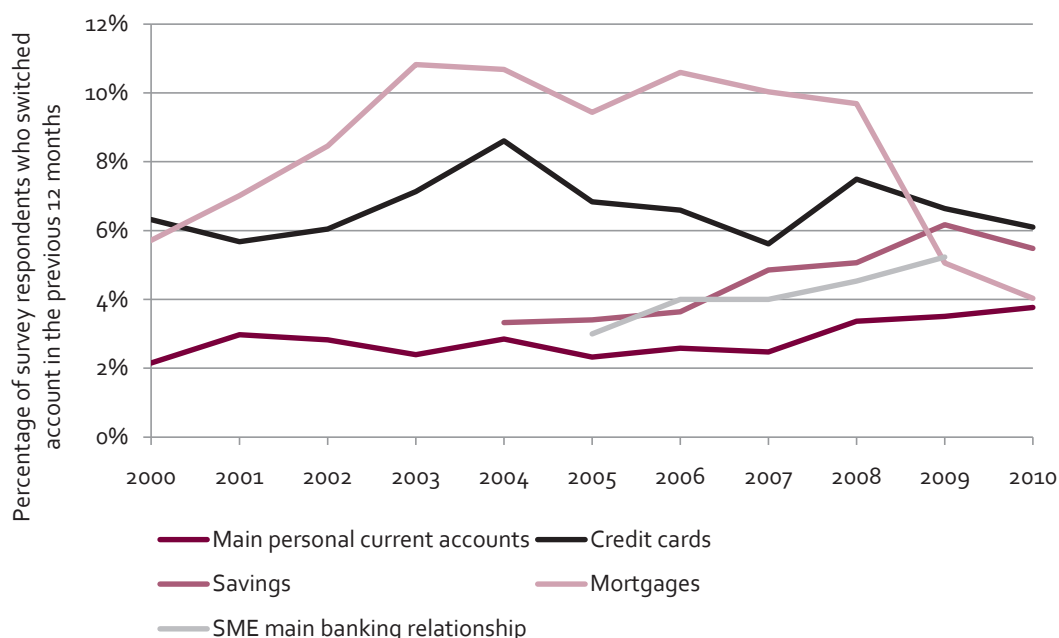
- 2.54** Based on evidence of entry over the past decade, the credit card and personal loan markets appear the most contestable, with evidence of some new entry. These are the markets with the greatest number of providers, and also a high number of entrants over the past decade compared to the size of the market. There were also some new entrants into the markets for mortgages and savings accounts, though entry into these markets has dropped off since the crisis, perhaps as a response to the economic environment and/or increased regulatory requirements. Many of the entrants into the credit card, loan and mortgage markets have provided only a small number of products (rather than the full range of personal banking products), and typically, these providers have captured only a small share of the market.<sup>vii</sup>
- 2.55** There have been very few new entrants into the PCA market: just six over the past decade, of which only four maintained a presence in the market for more than one year. Those that survived have failed to take a significant share of the market.<sup>viii</sup> Of the four potential challengers in SME banking over the past decade, only two have succeeded in gaining significant market share. Other new entrants into SME banking have not (yet) gained substantial market share.<sup>ix</sup>
- 2.56** The UK retail banking market is readily open to entry by other banks from within the European Economic Area, and from further afield. In some markets, this has increased the number of bank service providers. In addition, certain firms in other industries may also be able to offer substitutes for bank services, for example, trade credit firms providing finance to SMEs. However, in general, there are few substitutes for many retail banking services.

## Switching and choosing providers

- 2.57** Three conditions must be satisfied in order for the threat of consumer switching to apply pressure on banks to improve their products and services: a better product to switch to must exist somewhere in the market; the consumer must be able to identify that product and the benefit of switching; and the consumer must be able to switch easily and without risk.
- 2.58** Competition between banks is blunted by the actual and perceived difficulties for customers switching accounts, and by poor conditions for consumer choice more generally. In its market study of PCAs in 2008, the OFT found that without consumers being willing to switch between competitors, banks have little incentive to provide better offers. The study found that a significant proportion of consumers believe that it is complex and risky to switch accounts, with the result that switching rates are very low. Few consumers actively monitor the relative competitiveness of their accounts. It also found that many consumers are not familiar with the key fees associated with their PCA, and that they have difficulty understanding and calculating these fees.<sup>28</sup>

---

<sup>28</sup> OFT, 2008, *Personal current accounts in the UK*: [http://www.offt.gov.uk/shared\\_offt/reports/financial\\_products/OFT1005.pdf](http://www.offt.gov.uk/shared_offt/reports/financial_products/OFT1005.pdf)

**Figure 2.5: Annual switching rates**

Source: Commission analysis of data provided by GFK FRS and TNS.<sup>x</sup>

**2.59** Figure 2.5 shows that annual switching rates are low for banking products.<sup>29</sup> Switching rates are also low relative to other markets. For example, Ofgem recently reported that during 2010, 15% of consumers reported switching their gas supplier and 17% reported switching their electricity supplier.<sup>30</sup> Consumer Focus also conducted a survey in 2010 comparing switching rates across industries, and found that only 7% of respondents had switched current accounts in the past two years, compared to 31% who had switched energy provider, 26% who had switched telephone provider, and 22% who had switched insurance provider.<sup>31</sup>

**2.60** Within banking products, mortgages had the highest switching rates, peaking at just over 10% in the middle of the last decade. However, over the past two years mortgage switching rates have been much lower, which is likely a reflection of low base rates making standard variable rate mortgages attractive, but which may also indicate a worsening of competitive conditions in the mortgage market. PCAs and SME banking

<sup>29</sup> Here, switching in personal banking markets is defined as those customers who reported that they had switched their account in the past 12 months or that they had opened an additional account with a different brand. It also includes switchers between brands of the same banking groups. Therefore, it is likely to overstate the total amount of switching (in the sense of opening a new account and closing an old account), but it presents a better picture of the amount of shopping around by consumers. In SME banking, switching refers to survey respondents who reported that they had changed their main relationship bank within the past 12 months. This does not include the case where an SME has started an additional relationship with a different bank, and hence may underestimate the amount of shopping around.

<sup>30</sup> Ofgem, 2011, *The Retail Market Review – Finding and initial proposals*: [http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/RMR\\_FINAL.pdf](http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/RMR_FINAL.pdf)

<sup>31</sup> Consumer Focus, 2010, *Stick or twist*: <http://www.consumerfocus.org.uk/assets/1/files/2010/10/Stick-or-twist-for-web.pdf>

appear to have the lowest switching rates over time.<sup>xi</sup> In addition, other research has found that a large proportion of consumers have never considered switching their current account.<sup>32</sup>

- 2.61** Low levels of switching on their own may not be a concern if it is the case that many consumers are able and willing to switch quickly when differences between firms' products or prices occur. However, there appears to have been persistent price dispersion over the past decade for PCAs.<sup>33</sup> This suggests that in this market, customers have tended not to switch to better deals that have existed. The price dispersion of standard variable rate mortgages has increased significantly in the last few years at the same time as mortgage switching rates have fallen, also suggesting that consumers are less able and willing to switch now than before the crisis.<sup>xii</sup> There is also some indication of price dispersion in SME banking, although prices are more difficult to estimate as they depend on account usage.<sup>xiii</sup>
- 2.62** The UK's low switching rates for PCAs are close to the average for the EU. However, for other products (mortgages, savings and personal loans), UK switching rates are relatively high by EU standards.<sup>34</sup> The low PCA switching rate in other countries may indicate that difficulties with switching are present elsewhere as well as in the UK.
- 2.63** The OFT has been active in this area, and the switching process has improved, with the proportion of PCA switchers experiencing problems in switching their account falling from 32% in 2007 to 8% in 2010. In 2010, 85% of switchers reported that they were satisfied with the switching process.<sup>35</sup> However, even a small risk of a problem may be enough to deter potential switchers, and the *perception* of ease of switching is as important as the actual level of problems experienced.
- 2.64** Whether consumers are switching or opening a new account, how do they choose their provider? Figure 2.6 shows the reasons given by switchers for their choice of a new PCA provider. Switchers were most likely to cite branches and product characteristics as the main factors in their choice of new PCA.<sup>xiv</sup> These results are similar to the reasons given by all those who chose a new PCA provider in 2010 – not

---

32 Consumer Focus found that 75% of customers have never considered switching their current account provider. Consumer Focus, 2010, *Stick or twist*: <http://www.consumerfocus.org.uk/assets/1/files/2010/10/Stick-or-twist-for-web.pdf>.

33 Price dispersion measures the variation in prices being offered to customers. If banks are able to offer very different rates for similar products (high price dispersion), this suggests that customers are not switching to take advantage of better prices elsewhere.

34 Gallup Organisation, 2009, *Consumers' views on switching service providers: Analytical report*. Flash Eurobarometer series #243: [http://ec.europa.eu/public\\_opinion/flash/fl\\_243\\_en.pdf](http://ec.europa.eu/public_opinion/flash/fl_243_en.pdf)

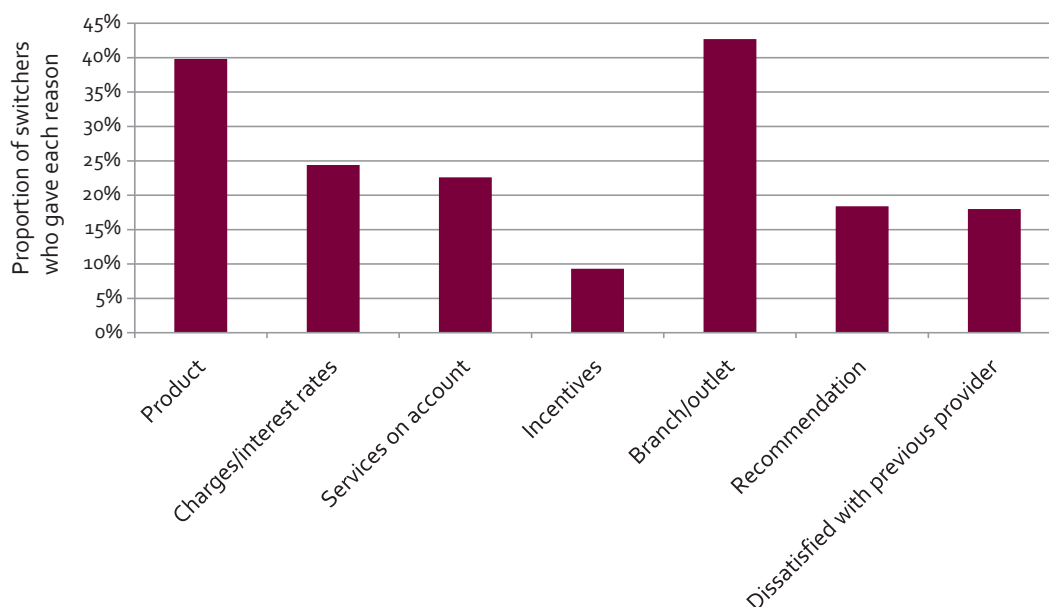
35 See OFT, 2010, *Review of barriers to entry, expansion and exit in retail banking*: [http://www.of.gov.uk/shared\\_of/personal-current-accounts/oft1282](http://www.of.gov.uk/shared_of/personal-current-accounts/oft1282). Separate research by Consumer Focus has produced somewhat different findings. In a February 2010 survey, 44% of customers who had switched had had problems with the switching process, with 27% having problems transferring direct debits. However, it is not clear what time period was covered by this question, and the same survey found that 53% of switchers rated their experience at between 8 and 10 out of 10, and only 8% rated it at 4 or below, which is relatively consistent with the OFT findings. See Consumer Focus, 2010, *Stick or twist*, <http://www.consumerfocus.org.uk/assets/1/files/2010/10/Stick-or-twist-for-web.pdf>.

just switchers. In fact, branches have been consistently the most common reason for choosing a PCA provider for the last decade.<sup>xv</sup> This is consistent with a survey by the OFT which found that PCA customers consider it important to have branches nearby, with only 30% of respondents saying that branch location is not important in their choice of PCA provider, and only 15% of respondents saying they would consider using a PCA provider with no branches.<sup>36</sup> The proportion of customers banking with internet-only brands remained low and stable between 2003 and 2010, despite their generally better prices and higher customer satisfaction ratings.<sup>xvi</sup>

**2.65** The charges and interest rates offered on other personal banking products, such as mortgages, credit cards, savings and personal loans, are the most important factor in consumers’ choice of provider. Qualitative factors are also important, including the staff, recommendations, and existing relationships with the provider.<sup>xvii</sup>

**2.66** Additionally, branches are important for SMEs’ choice of provider. In a survey the OFT found that the three most common responses for why an SME chose its bank were that the bank offered the services the SME needed, the SME director already had a personal account with the bank, and the branch location was closest to the SME’s business premises.<sup>37</sup>

**Figure 2.6: Reasons for choosing their personal current account provider given by those who switched provider in the last 12 months (2010)**



Source: Commission analysis of GfK FRS data.<sup>xviii</sup>

36 OFT, 2010, *Review of barriers to entry, expansion and exit in retail banking*: [http://www.ofg.gov.uk/shared\\_ofg/personal-current-accounts/oft1282](http://www.ofg.gov.uk/shared_ofg/personal-current-accounts/oft1282)

37 OFT, 2010, *Review of barriers to entry, expansion and exit in retail banking*: [http://www.ofg.gov.uk/shared\\_ofg/personal-current-accounts/oft1282](http://www.ofg.gov.uk/shared_ofg/personal-current-accounts/oft1282)



**2.67** Overall, it appears that the qualitative aspects of branch and service are important in choice of providers for PCAs and SME banking, while price and product features are more important in other personal banking markets. Understanding competition in the PCA and SME banking markets is important as these markets define a customer's main banking relationship and enable cross-selling of other products.<sup>38</sup>

**2.68** Part of the reason for the low importance of price factors in customers' choice of PCA may be the prevalence of the free-if-in-credit pricing model, in which customers do not incur fees or charges for account use as long as they keep a positive balance in their current account. Banks derive revenues from current account customers in various ways, including:

- net interest margins – the difference between the interest on loans enabled by deposits and the interest paid on current account deposits;
- monthly fees and transaction fees, if any;
- charges for authorised and unauthorised overdraft facilities; and
- revenues from products and services sold to current account customers alongside current account provision – savings accounts, personal loans, mortgages, credit cards, insurance, etc.

**2.69** The profitability of customers varies according to their pattern of account usage and related purchasing. Those who keep small amounts of money in their account are less profitable than others, assuming their usage of the account is otherwise the same. Those who incur high overdraft fees, buy multiple products from their bank on uncompetitive terms, or leave large balances in non-interest-bearing accounts, are more profitable. Likewise with products such as credit cards: those who clear their balances every month, thereby avoiding late fees and interest charges, tend to be less profitable than those who do not.<sup>39</sup> Introductory rates, which are prevalent on both savings and loan products, are another source of variation in profitability since those who stay beyond the introductory rate period are generally more profitable than those who switch to another provider.

**2.70** It follows that there is considerable price discrimination in markets for banking services, inasmuch as some services appear to make little money while others have

---

<sup>38</sup> This is not to suggest that customers automatically buy all of their products from the same bank, without shopping around. However, there is evidence that personal customers' main current accounts, and businesses' main bank relationships, act as gateways to other banking products. Cross-selling off these products is more effective than off other products, and banks that hold a customer's main relationship stand a greater chance of being selected for further product sales than do other banks.

<sup>39</sup> All customers, however, generate interchange fees for their card issuer. The level of interchange fees has been of concern to competition authorities, and the European Commission has conducted antitrust investigations in the payment card market. For example, see [http://ec.europa.eu/competition/elojade/isef/case\\_details.cfm?proc\\_code=1\\_34579](http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=1_34579).

high mark-ups. The question arises of whether pricing patterns should therefore be regulated.

**2.71** There have been recent efforts by the competition authorities to address seemingly highly-priced services. In 2007, following action that had reduced late fees on credit cards, the OFT began an investigation into the fairness of unauthorised overdraft fees on PCAs. The banks questioned the OFT's powers under the Unfair Terms in Consumer Contracts Regulations to do this. The fairness test in those Regulations may not be applied to the price or remuneration for the services provided, so long as the contract terms at issue are in plain intelligible language. The OFT enjoyed success, for the most part, in the lower courts, but in November 2009 lost in the Supreme Court, where the terms for unauthorised overdraft charges were declared to "constitute part of the price or remuneration for the banking services provided".<sup>40</sup> Separately, also in 2007, the OFT referred to the Competition Commission (CC) the market for payment protection insurance (PPI) services. The CC found that serious competition problems existed in the market, with prices persistently high, and has determined measures to remedy them, including greater transparency and a ban on selling PPI at the point of sale of the credit product.<sup>41</sup>

**2.72** International comparisons of prices show that on average, across a basket of products, UK banks charge similar prices to those charged in other countries.<sup>42</sup> There are also concerns in other countries about customers not understanding price structures and overpaying for banking products. For example, the Consumer Federation of America has recently filed a complaint with regulators about the marketing of overdraft products.<sup>43</sup> However, making international comparisons is complicated by the fact that there are different price structures in different countries, and in particular by the free-if-in-credit model for PCA pricing in the UK. In the UK, prices tend to vary strongly with different usage profiles, whereas in other countries there is less variation across customers.<sup>44</sup> Furthermore, it is difficult to draw conclusions from international price comparisons, as prices should vary from country to country depending on the costs faced (e.g. interest rates, branch network costs, availability of qualified staff, regulations, etc).

---

40 Page 22, *Office of Fair Trading v Abbey National plc & Others* (2009) UKSC 6: [http://www.supremecourt.gov.uk/docs/uksc\\_2009\\_0070\\_judgmentV3.pdf](http://www.supremecourt.gov.uk/docs/uksc_2009_0070_judgmentV3.pdf)

41 The latter remedy was remitted back to the CC following a partly successful appeal to the Competition Appeal Tribunal by Barclays. In October 2010 after a further stage of proceedings, the CC reaffirmed the remedy.

42 For a basket of personal banking products including an 'average balance' PCA, a 'home-mover' mortgage, a 'transactor' credit card, a savings account and a personal loan, the UK was more expensive than Canada and Sweden, less expensive than Australia and Spain, and similarly priced to US, France, Germany and Italy (as of August 2010). Oliver Wyman, 2010, *UK retail banking competitiveness study*.

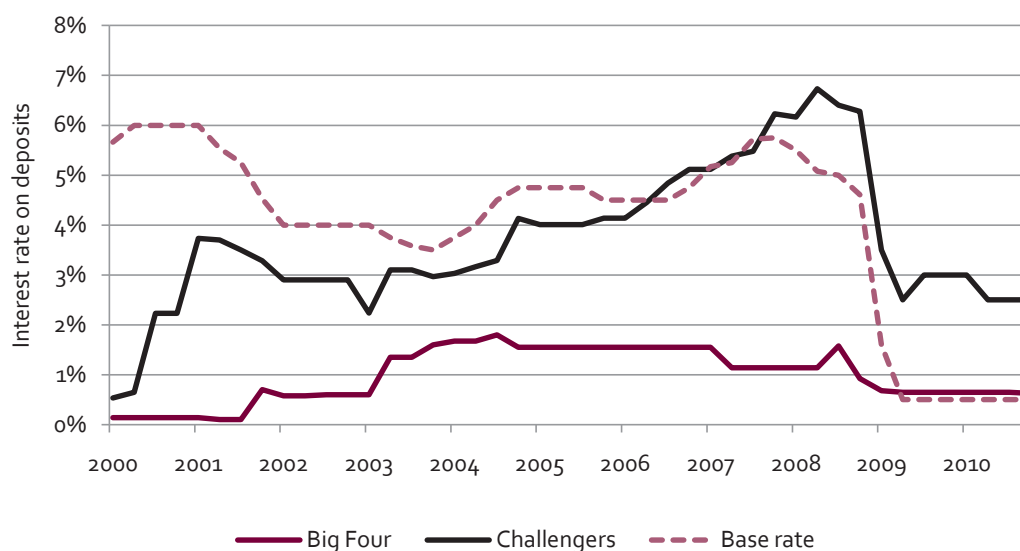
43 Consumer Federation of America, 2010, *Consumer Groups Call on the Office of the Comptroller of the Currency to End Abusive Overdraft Practices*: <http://www.consumerfed.org/pdfs/OD-OCC-Press-Release-on-OverdraftsOct-2010.pdf>

44 This can be seen by considering the combination of Figures 10 and 11 in LBG, 2011, *Lloyds Banking Group Response to the Independent Commission on Banking, Issues Paper Response, Appendix 1: Retail Markets*.

## Importance of challengers

- 2.73** Challenger banks are those that are large enough to be a threat to the incumbents, but small enough to have an incentive to compete for new customers. In 2008, the OFT took the view that HBOS, Santander and Nationwide were the main challengers to the incumbent banks in the PCA market, although Nationwide remained a smaller player with capacity constraints. Despite low switching rates, HBOS had increased its market share much more than almost all other players. Therefore, the OFT concluded that removing this challenger from the market would increase the incentive for all firms to raise their prices.<sup>45</sup>
- 2.74** At various points over the past decade, there have been up to four challenger banks competing in the PCA and/or SME banking markets: HBOS, Nationwide, Abbey and subsequently Santander, and Alliance & Leicester (from 2003 until its takeover by Santander). Figures 2.7 and 2.8 below show that challengers offered higher interest rates on PCA balances and lower personal overdraft rates than the Big Four banks. This did not appear to come at the expense of customer service. On average across the two groups, there was little difference in customer satisfaction between incumbents and challengers.<sup>xix</sup>

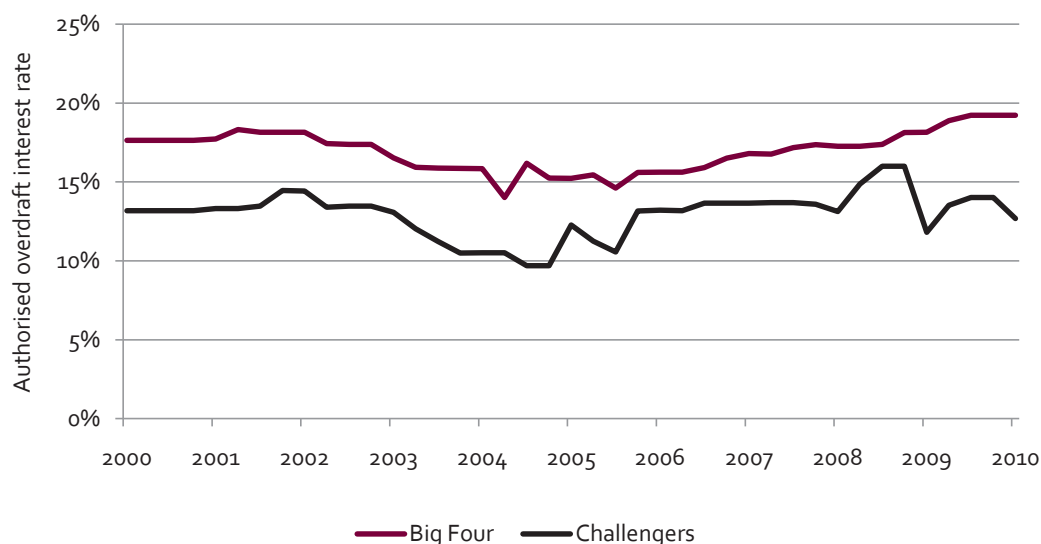
**Figure 2.7: Maximum deposit interest rates for standard personal current accounts**



Source: Commission analysis of data provided by Defaqto.<sup>xx</sup>

<sup>45</sup> OFT, 2008, *Anticipated acquisition by Lloyds TSB plc of HBOS plc*: [http://www.of.gov.uk/shared\\_of/press\\_release\\_attachments/LLloydstsb.pdf](http://www.of.gov.uk/shared_of/press_release_attachments/LLloydstsb.pdf)

**Figure 2.8: Average interest rates for authorised overdrafts on standard personal current accounts**



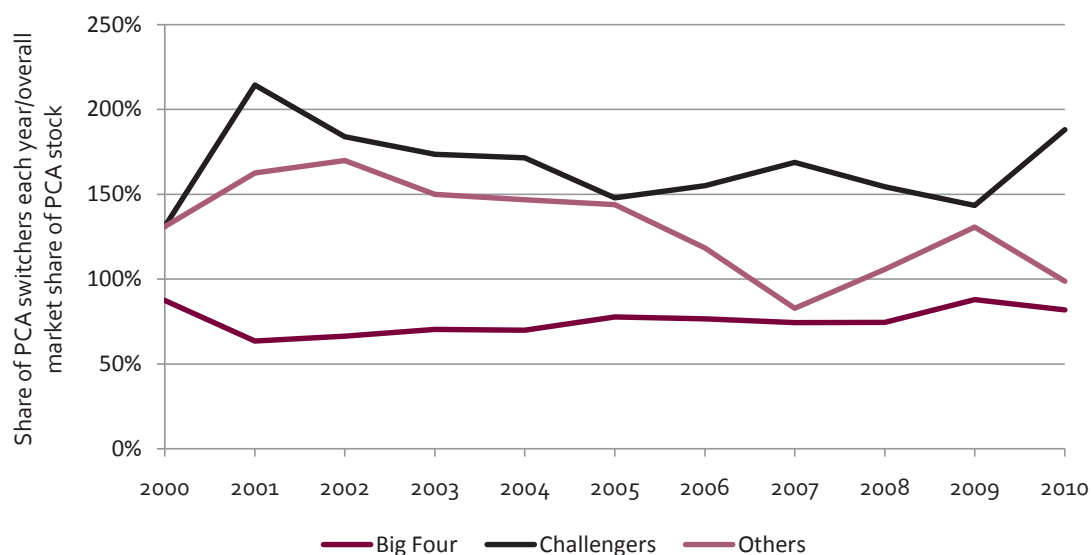
Source: Commission analysis of data provided by Defaqto.<sup>xxi</sup>

**2.75** Figure 2.9 shows that challengers attracted a greater proportion of switchers relative to their overall market share than the Big Four. Figure 2.10 shows that, as a group, challengers increased their market share in PCAs from 2000 to 2008. The same can be said for personal loans, credit cards, and SME banking.<sup>xxii</sup>

**2.76** Faced by the threat of challengers increasing their market share, the Big Four were put under pressure to offer better products and prices. By competing strongly for new customers, challengers also had an incentive to innovate, become more efficient and test out new business strategies. There is anecdotal evidence of challenger innovations being adopted by the rest of the market: for example, HBOS is said to have introduced the first regular savings account in 2004, versions of which are now offered by most banks.<sup>46</sup>

<sup>46</sup> A regular savings account is one which offers a higher interest rate if a regular amount is paid in each month.

**Figure 2.9: Ratio of switcher share to market share for personal current accounts<sup>47</sup>**



Source: Commission analysis of data provided by GfK FRS.<sup>xxiii</sup>

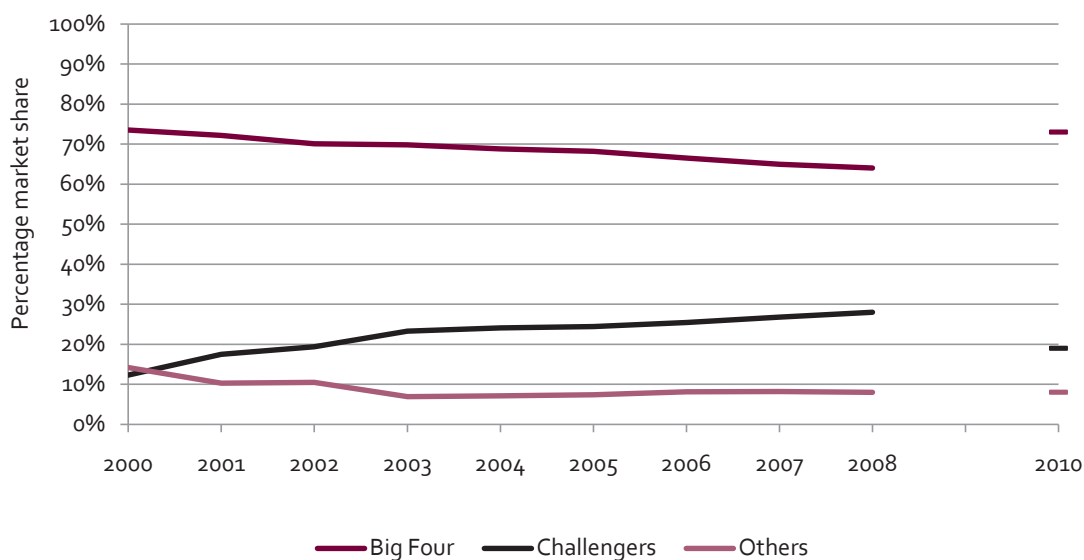
**2.77** It is clear in retrospect that one of the challenger banks – HBOS – pursued unsustainable strategies involving excessive risk taking. This risk taking was linked especially to exposure to commercial property lending and excessive reliance on wholesale funding, rather than to the PCA market.<sup>48</sup> In addition, Government support was needed in the crisis for banks of various sizes, not exclusively for the challenger banks. The need for stronger disciplines on risk taking by banks of all kinds in no way diminishes the importance for competition of challenger banks in the future, but may make it harder for them to compete effectively.

**2.78** Challenger banks can be contrasted not only with the Big Four, but also with smaller banks, which, on aggregate, failed to increase their PCA market share over the past decade (see Figure 2.10).<sup>xxiv</sup> There appears to be a distinction between a large fringe of small players, and a small number of medium-sized challengers who are able to act as a competitive force. As branch networks are important in customers' choice of banks, it seems that banks with larger branch networks stand a greater chance of attracting new customers, and therefore a larger initial size should lead to faster growth (given similar business strategies).

<sup>47</sup> Each bank's share of switchers attracted each year is divided by their overall market share in that year. Banks whose ratio is greater than 100% are attracting more switchers than their overall market share, whereas banks with a ratio of less than 100% are attracting proportionally few switchers.

<sup>48</sup> House of Commons Treasury Committee, 2009, *Banking Crisis: dealing with the failure of the UK banks*: <http://www.publications.parliament.uk/pa/cm200809/cmselect/cmtreasy/416/416.pdf>

**Figure 2.10: Market share of main personal current accounts (%)**



Source: Commission analysis of data provided by GfK FRS for 2000 to 2008 (post-2008 data from GfK FRS is excluded for confidentiality reasons) and OFT, 2010, Review of barriers to entry, expansion and exit in retail banking for 2010.<sup>xxx</sup>

**2.79** There have been up to four challengers competing in the PCA market over the past decade, but in 2010 only two of these remain in the market: Santander and Nationwide. After its recent acquisitions, Santander is also approaching the size in some markets (e.g. in PCA market share) of banks that have historically been considered ‘incumbents’ by the competition authorities, so it is questionable to what extent it will continue to act as a challenger.

## Competition in wholesale and investment banking markets

**2.80** Wholesale and investment banking is broadly defined to cover most financial products and services provided to large companies, from lending and cash management services through to fee-based security underwriting and merger and acquisition advice.

**2.81** This is not an area on which the Commission has received many representations, especially in comparison to the response it has received on competition issues in retail and SME banking. However, in order better to understand competition in wholesale and investment banking markets the Commission has engaged broadly with organisations including the Association of Corporate Treasurers, the Confederation of British Industry, the Institute of Directors, the Institute of Chartered Accountants, the Hundred Group, the National Association of Pension Funds and the Association of British Insurers, as well as with representatives from individual businesses.

- 2.82** It is clear that there is a lack of price transparency in this market and that for some products and services prices are very high. The remuneration levels of employees involved in providing some of these services does not give confidence that competition is working well for customers. One recent area of concern has been equity underwriting. In December 2010 the Institutional Investors' Council conducted an inquiry into the failure of rights issue fees to have fallen from crisis levels, despite the less risky environment for equity underwriting since mid-2009.<sup>49</sup> Subsequently, a January 2011 OFT study into equity underwriting found that companies are generally not focussed on the cost of equity underwriting services and some may also lack regular experience of raising equity capital, making it difficult to hold investment banks to account on costs. The OFT set out a number of options for companies to negotiate better deals, and also options available to shareholders to put greater pressure on companies to pay lower fees.
- 2.83** Customers in these markets, including treasurers and finance directors of large corporations and pension fund managers, typically engage multiple banks by competitive tender on a periodic basis (in some cases, as infrequently as every four or five years), and allocate work between these selected banks. Competition between banks does not appear in all cases to focus strongly on price, with services being selected as much on the basis of established relationships, provider reputation and non-price (i.e. quality or capacity) elements. Some customers believe that they receive some services, such as lending, at low cost and that this offsets high margins on more specialised products and services.
- 2.84** Despite this lack of transparency and high prices for some products and services, customers generally appear content with the functioning of these markets. While corporate customers feel that they need to remain vigilant to ensure that they are getting the best service, in general they have confidence in their ability to differentiate between different suppliers' offerings. In addition, in some of the markets new entrants have been seen to enter (and exit) over the economic cycle (for example, with many more foreign lenders joining lending syndicates to UK businesses prior to the financial crisis) and prices have in some cases appeared to be responsive to changes in supply and demand.
- 2.85** The apparently sanguine view of many customers is at odds with what some of the wider evidence suggests to the Commission about how well competition is working in these markets. Indeed, the Commission is surprised that more representations and evidence have not been provided in this area. However, the Commission observes that these are international markets, and that action at national level may have limited effect in this area.<sup>50</sup> International action may be effective, and one example of a step

<sup>49</sup> In 2009, fees remained at around 3% in contrast to the 2%-2.5% that was typical before 2007. See OFT, 2011, *Equity underwriting and associated services*: [http://www.of.gov.uk/shared\\_of/market-studies/OFT1303.pdf](http://www.of.gov.uk/shared_of/market-studies/OFT1303.pdf).

<sup>50</sup> Apart from the usual enforcement of competition law. For example, the OFT recently found RBS and Barclays in breach of the Competition Act 1998 in relation to the pricing of loan products to large professional services firms. See [http://www.of.gov.uk/about-the-of/legal-powers/enforcement\\_regulation/Cartels/loan-services/](http://www.of.gov.uk/about-the-of/legal-powers/enforcement_regulation/Cartels/loan-services/).

towards this may be the improved transparency (as well as financial stability benefits) which should result from reforms to shift more derivatives trading onto exchanges.<sup>51</sup>

- 2.86** Due to the global nature of some of these markets and the absence of strong representations from customers, the Commission's current view is that there may be limited scope for action by the UK authorities at this time. The Commission is therefore minded not to explore competition in wholesale banking markets further, but would welcome further evidence in this area.

## Summary

- 2.87** Among the retail banking markets in the UK, those for PCAs and banking for SMEs are the least competitive. These have historically been the most highly concentrated markets, and saw the least gains by challenger banks and the fewest new entrants over the past decade. These markets display the most obvious evidence of lack of competition, as prices tend to be dispersed (indicating that customers are not switching to cheaper providers) and levels of switching are lowest. They are also particularly dependent on branch networks, and the importance of branches in consumers' choice of provider is not decreasing over time. So banks with large national branch networks are more likely to be considered by new account openers, as well as having the highest stock of existing accounts. Additionally, the mortgage market, which has traditionally been less concentrated in the UK, is now moderately concentrated, and recent higher levels of price dispersion and interest margins could suggest that problems may be emerging.
- 2.88** The UK's concentrated retail banking markets can result in poor outcomes for customers, as large banks in the UK have tended to be successful even when they have offered poor deals. Competition inquiries have indicated that a bank's incentive to offer good deals to attract new customers declines as its ratio of new accounts to existing accounts falls. So the larger a bank, the less incentive it has to offer a good deal. The empirical evidence suggests that more concentrated markets lead to worse outcomes for consumers than less concentrated markets.
- 2.89** In addition to the concerns caused by increased concentration in the banking sector, the way in which much of this concentration has come about – by the absorption of two key challenger banks into larger banking groups – is in itself cause for concern. At various points over the past decade, there have been up to four challenger banks competing in the UK PCA and/or SME markets, but now only two (or arguably one) of these remain.
- 2.90** Taken together, the decrease in the number of challengers in the market, and the significant increase in concentration that has come about over the past two years,

---

<sup>51</sup> Competition authorities should be mindful that an increase in trading on a small number of exchanges does not cause competition problems in itself through the concentration of sales and information.



have seriously weakened competition in the UK banking sector. Given the pre-existing challenges to competitive banking markets from difficulties in understanding and comparing products, and low levels of switching, this deterioration gives cause for concern.

## Analytical framework

**2.91** The various reform options discussed in this *Interim Report* will be assessed by comparing their costs with their benefits. How the costs and benefits are determined will depend on what outcomes the options are seeking to achieve. Derived from its terms of reference,<sup>52</sup> the Commission is aiming to recommend reform options that will promote:

- financial stability; and
- competition in banking (including consumer choice),

while also considering:

- lending and the pace of economic recovery;
- the competitiveness of UK financial services and the wider economy; and
- risks to the Government's fiscal position.<sup>53</sup>

**2.92** A financial system is 'stable' if it can meet robustly the demand for the key services through which banks and other financial institutions can provide support for the wider economy. Improving financial stability by making banks safer imposes private costs on banks. At least some of these costs may be passed on to customers in the form of more expensive credit, which has an adverse impact on GDP growth. However, a key benefit of safer banks is that they are more able to continue to lend during economic downturns, therefore limiting declines in GDP. For as long as the social benefits of improving bank safety exceed the social costs, banks should be made safer.

**2.93** The cost/benefit trade-off varies between different reform options, some of which may be considered complements and others substitutes. In an ideal scenario it would be possible to develop a set of metrics that could be used in a simple and reliable way accurately to compare all the different options. In practice, the complex task of quantifying the costs and benefits of different reform proposals is likely to be an imprecise undertaking. Complications include:

<sup>52</sup> Set out here: <http://bankingcommission.independent.gov.uk/bankingcommission/terms-of-reference/>.

<sup>53</sup> This will include consideration of the Government's stakes in the banks, but this is only one of many risks to the Government's fiscal position in relation to the banking sector.

- the effectiveness of any one option will depend on the regulatory environment as a whole. This is not yet finalised, and may itself depend on the Commission's final recommendations;
- the potential for regulatory arbitrage, to the extent that there are differences between different jurisdictions;
- with the financial sector in a state of flux and the economy in the UK and elsewhere still vulnerable, the importance of considering the transitional impact of any reforms;
- uncertainty around (i) how the costs of higher levels of regulation will ultimately be distributed across banks' customers, investors and employees; and (ii) the effect on the economy;
- more generally, determining the extent to which costs and benefits accrue privately as opposed to socially; and
- uncertainty around the impact of regulatory reform in triggering the movement of various activities into or out of the UK banking sector, and the response of market participants more generally.

**2.94** In spite of the difficulties presented by these (and other) complexities, the Commission is conducting quantitative cost benefit analyses of the various reform options to the extent possible. But in recognition of the limitations of such assessments, the Commission has developed from the factors in Paragraph 2.91 above a set of aims and principles, set out in Paragraphs 2.95 and 2.96. These will be used as the core of an analytical framework against which potential reform options can be assessed qualitatively as well as quantitatively. Each reform option will advance one or more of these aims and principles, but may also retard others. The general approach will be to favour those options that, on balance, are judged to be most effective in advancing the aims and principles in aggregate.

**2.95** *Aims:*

The Commission's recommendations will aim to:

- 1) reduce the probability and impact of systemic **financial crises** in the future;
- 2) maintain the efficient **flow of credit** to the real economy and the ability of households and businesses to manage their risks and financial needs over time; and
- 3) preserve the functioning of the **payments system** and guaranteed **capital certainty and liquidity for small savers** including SMEs.

## 2.96 Principles:

The Commission's recommendations will achieve these aims, in the context of the wider regulatory reform agenda both in the UK and abroad, by:

- A) **curbing incentives for excessive risk taking** by neutralising subsidies and the unpriced risk of triggering financial crises, and by enabling the market to function more effectively;
- B) **reducing the costs of systemic financial crises** through increased resilience of institutions and the financial system as a whole, and through improved resolvability of institutions;
- C) **promoting effective competition** in the provision of banking services in the UK;
- D) having regard to any **impact on GDP** through the cycle, any **fiscal implications**, and the **competitiveness** of the UK financial and professional services sectors and the wider UK economy; and
- E) having regard to the possible impact of recommendations on **non-bank parts of the financial system**, and to the effects of **wider regulatory reforms** in the financial sector.

## Consultation question 2.1

Do you agree with the analysis set out in this chapter?

## Consultation question 2.2

Do you agree with the analytical framework?

## Endnotes

<sup>i</sup> SME banking analysis is based on Commission analysis of data for the year 2000 from Table 4.21 of the CC review of the proposed Lloyds/Abbey merger (CC, 2001, *Lloyds TSB Group Plc and Abbey National Plc: A report on the proposed merger*: [http://www.competition-commission.org.uk/rep\\_pub/reports/2001/458lloyds.htm#full](http://www.competition-commission.org.uk/rep_pub/reports/2001/458lloyds.htm#full)) and for the years 2005-2009 from the TNS RI Small Business Banking Survey in Great Britain (firms with a turnover up to £1 million, sample size 9064-9188). Personal banking analysis is based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010 (i.e. May-September for each year from 2000 to 2010), main current accounts (21,396-24,789), mortgages (7,586-8,518), savings (26,315-33,759), GfK loans (this excludes sub-prime and other specialist lending) (2,555 – 3,545) and credit cards (15,701-20,081). Calculated at the ownership level; for example, LBG is calculated as one brand group. (In this and all subsequent endnotes, the figures in brackets refer to the minimum and maximum sample size over the period specified.)

<sup>ii</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, current account top 2 box satisfaction (that is, customers who rated their satisfaction as 'extremely satisfied' or 'very satisfied' out of seven possible options) (21,283-24,137).

<sup>iii</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, main current accounts (21,396-24,789), mortgages (7,586-8,518), savings (26,315-33,759), GfK loans (2,555 – 3,545) and credit cards (15,701-20,081). Calculated at the ownership level; for example, LBG is calculated as one brand group.

<sup>iv</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, mortgages (7,586-8,518).

<sup>v</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, savings (26,315-33,759), GfK loans (2,555 – 3,545) and credit cards (15,701-20,081).

<sup>vi</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, main current accounts (21,396-24,789), mortgages (7,586-8,518), savings (26,315-33,759), GfK loans (2,555 – 3,545) and credit cards (15,701-20,081), and the TNS RI Small Business Banking Survey in Great Britain covering businesses with turnover of up to £1m for the years 2005-2009 (9064-9188).

<sup>vii</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, mortgages (7,586-8,518), savings (26,315 - 33,759), GfK loans (2,555 – 3,545) and credit cards (15,701-20,081).

<sup>viii</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, main current accounts opened in the last 12 months (1,061-1,487).

<sup>ix</sup> Based on Commission analysis of data from the TNS RI Small Business Banking Survey in Great Britain covering businesses with turnover of up to £1m for the years 2005-2009 (9064-9188), and the CC review of the proposed Lloyds/Abbey merger (CC, 2001, *Lloyds TSB Group Plc and Abbey National Plc: A report on the proposed merger*: [http://www.competition-commission.org.uk/rep\\_pub/reports/2001/458lloyds.htm#full](http://www.competition-commission.org.uk/rep_pub/reports/2001/458lloyds.htm#full)).

<sup>x</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS) 5 months ending September for 2000 – 2010, current accounts (25,923-34,655), mortgages (7,586-8,518), savings (26,315-33,759) and credit cards (15,701-20,081) and the TNS RI Small Business Banking Survey in Great Britain covering businesses with turnover of up to £1m for the years 2005-2009 (9064-9188).

<sup>xi</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 2000-2010, 5 months ending September for 2000-2010, current accounts (25,923-34,655), mortgages (7,586-8,518), savings (26,315-33,759) and credit cards (15,701-20,081) and the TNS RI Small Business Banking Survey in Great Britain covering businesses with turnover of up to £1m for the years 2005-2009 (9064-9188), and businesses with a turnover of up to £15 million for the years 2007-2009 (10694-12832).

<sup>xii</sup> Based on Commission analysis of data provided by Defaqto.

<sup>xiii</sup> Based on Commission analysis of data provided by Moneyfacts.

<sup>xiv</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), based on new current accounts opened in the past 12 months by switchers, 5 months ending September 2010, current account switchers (653). The Consumer Focus survey found that the main reason to switch was the pull factor of aiming to get a better deal, followed by the push factors of low service and dissatisfaction with price or value (branches were not one of the five potential answers). Consumer Focus, 2010, *Stick or twist*, <http://www.consumerfocus.org.uk/assets/1/files/2010/10/Stick-or-twist-for-web.pdf>.

<sup>xv</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, main current accounts (21,396-24,789), mortgages (7,586-8,518), savings (26,315-33,759), GfK loans (2,555 – 3,545) and credit cards (15,701-20,081).

<sup>xvi</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, current account top 2 box satisfaction over time (21,283-24,137).

<sup>xvii</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, main current accounts (21,396-24,789), mortgages (7,586-8,518), savings (26,315-33,759), GfK loans (2,555 – 3,545) and credit cards (15,701-20,081).

<sup>xviii</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), based on new current accounts opened in the past 12 months by switchers, 5 months ending September 2010, current account switchers (653).

<sup>xix</sup> Based on Commission analysis of price data provided by Defaqto and customer satisfaction data from the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, current account top 2 box satisfaction (21,283-24,137). There was variation in customer satisfaction levels within both groups, with some

challengers performing better than others, and some incumbents performing better than others. However, between 2000 and 2008 the difference in the averages of the two groups was small (post-2008 is not comparable on a like-for-like basis).

<sup>xx</sup> Based on Commission analysis of data provided by Defaqto. For this and the following three charts, the 'Big Four' banks are Lloyds TSB/LBG, RBS Group, HSBC Group and Barclays. 'Challengers' are Abbey National (2000-2003), Alliance and Leicester (2003-2008), Santander (2004-2010), Halifax Group (2000), HBOS Group (2001-2008) and Nationwide (2000-2010). For each banking group, the highest deposit rate offered by any brand for a standard PCA was taken. Here (and in Figure 2.8 below) standard PCAs are defined as those that are not packaged accounts, that have no monthly fees, no withdrawal or location restrictions, no minimum income requirement and are for all those over 18 years. The averages across the 'Big Four' and 'Challenger' groups in this chart and Figure 2.8 are not weighted by market share – the results are similar if market share weightings are used.

<sup>xxi</sup> Based on Commission analysis of data provided by Defaqto. The average overdraft rate for each group was calculated by taking the mean authorised overdraft rate of all the rates offered by each group on standard PCAs.

<sup>xxii</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS) 5 months ending September for 2000 – 2010, main current accounts (21,396-24,789), GfK loans (2,555 – 3,545) and credit cards (15,701-20,081), and the TNS RI Small Business Banking Survey in Great Britain covering businesses with turnover of up to £1m for the years 2005-2009 (9064-9188).

<sup>xxiii</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, main current accounts (21,396-24,789).

<sup>xxiv</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, main current accounts (21,396-24,789).

<sup>xxv</sup> Based on Commission analysis of the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010, main current accounts (21,396-24,789), and page 35 of OFT, 2010, *Review of barriers to entry, expansion and exit in retail banking*: [http://www.of.gov.uk/shared\\_of/personal-current-accounts/oft1282](http://www.of.gov.uk/shared_of/personal-current-accounts/oft1282).



## Chapter 3: Current reform initiatives

- 3.1** Considerable progress has been made since the crisis in enhancing the regulation of banks – in particular by the Basel Committee on Banking Supervision (BCBS) – and a number of important reform initiatives continue to be developed. The Commission’s remit is well aligned with these initiatives, which include work by the BCBS and the Financial Stability Board (FSB) on capital requirements for systemically important financial institutions (SIFIs) and improving their resolvability, and the European Commission’s proposals for a framework for bank recovery and resolution. The UK authorities are centrally involved in this international work.
- 3.2** The first section of this chapter places the Commission’s financial stability work in the context of other UK and international banking reform initiatives. It outlines measures on macro-prudential regulation, capital, resolution, liquidity, shadow banking, market infrastructure, and reform of regulatory institutions (other measures are considered in Annex 5). The second section of this chapter briefly addresses initiatives relating to competition.

### Financial stability

#### Macro-prudential regulation

- 3.3** The financial crisis exposed gaps in regulation of the banking system both nationally and internationally. This has led to an increased focus on macro-prudential frameworks to monitor movements in systemic risk over time and between institutions.<sup>1</sup> In the UK, the Bank of England’s Financial Policy Committee (FPC) has been established to perform this function and it will have a broad range of tools at its disposal to reduce systemic risk (see Paragraph 3.32). An example of such a tool could be a loan-to-value cap on mortgage lending – already in use in Hong Kong and Singapore, among others – which may be used to lean against a house price boom by shifting the balance of capital provision away from banks and towards individuals.

---

<sup>1</sup> For more details, see the FSB, IMF and BIS update for G20 Finance Ministers and Central Bank Governors, 2011, *Macroprudential policy tools and frameworks*: [http://www.financialstabilityboard.org/publications/r\\_1103.pdf](http://www.financialstabilityboard.org/publications/r_1103.pdf).

### Capital

- 3.4** The BCBS is the global standard-setter for bank capital requirements and its recommendations are largely adopted<sup>2</sup> across all major banking systems.<sup>3</sup> Following the crisis, the BCBS has announced a substantial strengthening of capital requirements (known as Basel III) to remedy the deficiencies that became apparent in its existing standards (Basel II). In short, banks took advantage of regulatory capital arbitrage opportunities under Basel II such that an appropriate level and quality of capital was not always held against risk exposures.
- 3.5** The Basel III changes will increase capital quality by placing greater emphasis on its capacity to absorb losses on a going concern basis (see Box 3 for details of Basel III). The required quantity of capital will also increase at the institutional level, with higher risk weightings to be assigned to capital market activities (such as derivatives and securitisation instruments), and a supplementary leverage ratio is to be introduced, requiring banks to have a minimum ratio of capital to unweighted assets. In addition, a capital conservation buffer (that banks can use to absorb losses, subject to having restrictions imposed on their ability to distribute earnings) and a countercyclical capital buffer (requiring banks to hold more capital in the good times that they can draw upon in a downturn) will increase the resilience of banks to shocks.
- 3.6** In December 2010 the BCBS issued the final Basel III rules text.<sup>4</sup> The overall implementation timetable for Basel III extends to the end of 2018, with most components being phased in gradually over the coming years. In the EU, amendments to the Capital Requirements Directive (CRD) have been, and will continue to be, made to bring the new Basel rules into EU legislation.
- 3.7** In January 2011, as part of the final Basel III text, the BCBS issued minimum standards<sup>5</sup> for all Additional Tier 1 and Tier 2 instruments. These standards require such instruments to be written off or converted into common equity upon a decision by the authorities that they believe the institution would become non-viable without the write-down or some form of government support, or in any case before taxpayers are exposed to loss. The rules will apply to all Additional Tier 1 and Tier 2 instruments issued after January 2013, with the aim of ensuring that all classes of capital become fully loss-absorbent at the point of non-viability.
- 3.8** Switzerland is currently moving towards a tougher approach to capital requirements (often referred to as the 'Swiss Finish'), setting out its measures for systemically

---

<sup>2</sup> Although the Basel II standards have not been adopted in the US.

<sup>3</sup> The Capital Requirements Directive implements the BCBS recommendations as binding requirements for EU member states.

<sup>4</sup> BIS, 2010, *Basel III: A global regulatory framework for more resilient banks and banking systems*: <http://www.bis.org/publ/bcbs189.pdf> and BIS, 2010, *Basel III: International framework for liquidity risk measurement, standards and monitoring*: <http://www.bis.org/publ/bcbs188.pdf>.

<sup>5</sup> BIS, 2011, *Minimum requirements to ensure loss absorbency at the point of non-viability*: <http://www.bis.org/press/p110113.pdf>



important institutions in its 'Too Big to Fail' report<sup>6</sup> published in October 2010. The recommendations focus on higher capital requirements, which are made up of three components. The first component consists of the minimum capital requirements as proposed under Basel III. The second is the capital buffer, where the Swiss approach exceeds the Basel III requirements. Finally, the Swiss Finish introduces a new capital requirement, known as the 'progressive' component, which increases with the market share and total assets of the institution. Debt that converts into equity in certain circumstances ('contingent convertible capital') can form part of the capital buffer, and all of the progressive component.<sup>7</sup>

- 3.9** Globally, the FSB is developing a policy framework<sup>8</sup> to address the role of SIFIs and the risks they pose to financial stability. The proposals include enabling failing SIFIs to be resolved safely, a loss-absorbency surcharge (to be determined by the end of 2011), effective supervisory oversight of SIFIs and robust core financial market infrastructures to reduce the risk of contagion.
- 3.10** In addition, the BCBS and the FSB are currently setting out the criteria for identifying global SIFIs (G-SIFIs). The criteria will seek to capture the global activities, complexity, size and interconnectedness of institutions that are systemically important in the global financial system. The institutions that will be covered under the proposals are due to be identified by mid-2011. The FSB's policy framework mentioned above also recommends the implementation of international supervisory colleges and mandatory international recovery and resolution plans for G-SIFIs, both to be led by the home supervisor of each cross-border firm. The G-SIFI policies adopted by the home supervisors will then be subject to appraisal by the FSB's Peer Review Council to ensure they are sufficiently robust and mutually supportive.
- 3.11** The Commission's work is fully aligned with these developments; in particular, it involves consideration of increasing loss-absorbing capacity through higher equity requirements, increasing the loss-absorbency of debt and improving resolvability.

## Resolution

- 3.12** Following the crisis, a number of national and cross-border bodies began reviewing existing frameworks for recovery and resolution of large and complex financial institutions. The work being undertaken by these bodies is aimed at enhancing banks' stability in a stressed scenario, and at making institutions more resolvable as they approach the point of failure. Resolution tools under consideration include partial or

6 Swiss Commission of Experts, 2010, *Limiting the economic risks posed by large companies*: <http://www.sif.admin.ch/dokumentation/00514/00519/00592/index.html?lang=en>

7 Sweden, Spain and Ireland are also moving towards capital ratios in excess of what is required under Basel III. See Turner, A., 2011, *Leverage, Maturity Transformation and Financial Stability: Challenges Beyond Basel III*: [http://www.fsa.gov.uk/pubs/speeches/031611\\_at.pdf](http://www.fsa.gov.uk/pubs/speeches/031611_at.pdf).

8 FSB, 2010, *Reducing the moral hazard posed by systemically important financial institutions*: [http://www.financialstabilityboard.org/publications/r\\_101111a.pdf](http://www.financialstabilityboard.org/publications/r_101111a.pdf)

complete sale of the business, the transfer of assets and liabilities to a 'bridge bank' and orderly liquidation.<sup>9</sup> In the UK, the Financial Services Authority (FSA) intends to publish a consultation paper in the second quarter of 2011 setting out its initial policy around recovery and resolution plans.

- 3.13** On an international level, the FSB has agreed on the high-level principles for cross-border co-operation on crisis management for international financial institutions. As part of the framework, the FSB requires the relevant authorities for such firms to meet at least annually in cross-border, firm-specific 'crisis management groups' to discuss crisis management for such institutions and to identify and resolve any potential barriers to the successful execution of the crisis management arrangements. In addition, the FSB is considering, *inter alia*, the criteria for authorities to assess the resolvability of banks, as well as a legal and operational framework for contractual and statutory bail-in. In the mean time, the BCBS is in the process of conducting a survey of national resolution regimes that will assist its work on the resolution of SIFIs, which it will report on later this year. At a European level, the European Commission has recently consulted on an EU recovery and resolution framework for credit institutions and certain types of investment firms; a legislative proposal for this is expected later this year. In addition, an assessment of what reforms would be needed to create an EU-wide bank insolvency and liquidation regime will be published by the end of 2012, which will later feed into an overarching assessment of how best to deliver an integrated resolution regime (to be completed by 2014). This would include consideration of the involvement of a European Resolution Authority and whether there is a need for an EU resolution fund.
- 3.14** In the US, prior to the Dodd-Frank Act, there were different insolvency regimes for different types of financial institutions, which made it difficult to address efficiently the failure of a SIFI (for example, the Federal Deposit Insurance Corporation (FDIC) only had the power to wind down insured depositary institutions). As a result of the Act, the FDIC has had its powers extended to become the 'receiver' of failing institutions (subject to agreement from relevant parties), which in turn allows it immediately to seize, break up and wind down failing financial companies that are considered to be a threat to the financial stability of the US. The FDIC's scope now also incorporates non-bank financial institutions, and gives it the power, among other things, to set up a bridge bank and sell off certain assets of a failing firm in order to carry out an orderly wind-down.<sup>10</sup>
- 3.15** The Commission is fully supportive of these developments to improve the resolvability of financial institutions. The reforms being considered by the Commission in relation to increasing loss-absorbing capacity and the restructuring of financial institutions support these aims.

---

<sup>9</sup> The Banking Act 2009 creates a 'Special Resolution Regime' which gives the UK authorities a number of resolution tools for dealing with distressed banks and building societies.

<sup>10</sup> In March 2011 the FDIC published proposed rules on resolution plans and credit exposure reports.

### Box 3: Basel III

This box summarises the BCBS rules text on capital and liquidity published in December 2010. Banks have up to eight years to adjust to meet these new rules.

#### Capital

The rules define three types of capital, all of which must be able to absorb losses at or before resolution. Deductions are applied to gross capital levels to remove certain types of accounting equity that are considered unlikely to be available to absorb losses in practice. Banks must hold at least a minimum amount of capital, net of deductions, expressed as a percentage of risk-weighted assets (RWAs).

In addition to the minimum capital requirements, the rules introduce two capital buffers that aim to smooth the impact of the economic cycle on bank lending:

- to avoid dividend and bonus restrictions, banks must hold a Common Equity Tier 1 (CET1) capital conservation buffer of 2.5% of RWAs, over and above the minimum capital requirements. In normal times, this effectively increases the minimum CET1 requirement to 7% of RWAs and the minimum total capital requirement to 10.5% of RWAs. In a downturn, it provides a buffer to absorb losses and limits banks' ability to distribute capital rather than use it to support lending; and
- to avoid a credit boom, regulators may temporarily require banks to hold a countercyclical buffer of up to 2.5% of RWAs which effectively increases the cost – and should therefore slow the growth – of lending.<sup>[1]</sup>

**Table 3.1: Summary of Basel III minimum capital requirements**

Capital type	Quality	Typical instruments	Minimum amount (% RWAs)		
			CET1	Tier 1	Total
Common Equity Tier 1 (CET1)	Best	Common equity, retained earnings	4.5%	6%	8%
Additional Tier 1	Second best	Preference shares, contingent capital <sup>[2]</sup>			
Tier 2	Third best	Contingent capital <sup>[2]</sup>			
<i>Memo: Minimum amount including capital conservation buffer</i>			7%	8.5%	10.5%

All of the capital rules discussed above are expressed relative to RWAs. So an error in the calculation of risk weights applied to different types of assets could result in banks holding insufficient capital. To guard against this eventuality, banks must also meet a leverage ratio requirement that Tier 1 (CET1 plus Additional Tier 1) capital is at least 3% of *unweighted* assets.<sup>[3]</sup>

#### Liquidity

The rules introduce two new requirements intended to improve banks' resilience to liquidity shocks. The Liquidity Coverage Ratio protects banks against short-term shocks by requiring them to hold enough assets that can be sold easily to offset the likely outflow of cash in a crisis. The Net Stable Funding Ratio improves banks' resilience in the longer term by limiting the (privately profitable) mismatch between the effective maturity of banks' assets and liabilities.

<sup>[1]</sup> This is currently required to be met, if imposed by regulators, with CET1 but may be extended to include other 'fully loss-absorbing capital'.

<sup>[2]</sup> Here, 'contingent capital' refers to both debt that is convertible into equity and debt that can be written down.

<sup>[3]</sup> The leverage ratio is being tested by the BCBS with the intention formally to introduce it in 2018.

### Liquidity

- 3.16** In an environment of abundant liquidity prior to the crisis, insufficient emphasis was placed on managing the risk that funding sources might evaporate. In practice, this was the trigger for several bank failures. The BCBS is seeking to address this issue through a combination of qualitative and quantitative measures.
- 3.17** The qualitative measures aim to improve liquidity risk management by requiring banks to establish a liquidity risk tolerance level (and use a range of tools to monitor risk against this level), develop contingency funding plans and ensure appropriate board and senior management oversight of liquidity risk. The quantitative measures seek to ensure that banks hold sufficient high quality liquid assets to survive a net cash outflow in a one month stress scenario, and also to have an improved long-term balance sheet structure to address any potential liquidity mismatches across a one year horizon. These changes form part of the new Basel III text, which is largely consistent with the initial drafting.
- 3.18** In December 2009, the FSA introduced an enhanced liquidity regime implementing the BCBS qualitative measures and proposing quantitative requirements to be phased in as economic conditions improve. The European Commission is expected to propose its own legislative requirements (as part of upcoming amendments to the CRD) by the summer of 2011, to give effect to the liquidity material which forms part of the global Basel III agreement. In due course, this will require the UK to review (and if necessary amend) the existing FSA liquidity regime against the final text agreed at the EU level.
- 3.19** The Bank of England has also made significant progress in developing its capacity to provide liquidity to financial institutions. In October 2008, it introduced a discount window facility (DWF), which is aimed at assisting credit institutions in dealing with short-term idiosyncratic and system-wide liquidity shocks. The DWF will remain a permanent tool for banks to take advantage of in the future during times of liquidity stress.
- 3.20** In light of the advances made by the FSA and the Bank of England, the Commission will not make recommendations directly on liquidity regulations, but will take due account of them in its work. The reforms contemplated in this *Interim Report* (in particular in regard to capital and bank structure) aim to support the liquidity of banks by ensuring that they remain solvent during times of stress. The reforms relating to capital should help ensure that financial institutions are better capitalised in the first place and are therefore more resilient to shocks in the market that may otherwise have caused a liquidity shortage.

### Shadow banking

- 3.21** The crisis demonstrated that financial instability can be caused by activities outside the regulated banking sector. While additional regulatory requirements are being

imposed on banks, there is the prospect that riskier activities will shift to the shadow banking sector, which to date has received relatively little regulatory attention. As a result, the FSB has set up an international task force (co-chaired by the FSA) to define clearly what constitutes shadow banking, and to determine the potential approaches for monitoring and overseeing the shadow banking system, as well as banks' activities within that system. Among the policy options being considered is the regulation of minimum margin requirements in repo and other secured financing markets. The task force will report to the FSB, who will make initial recommendations to the G20 by the middle of this year.

## Market infrastructure

- 3.22** Financial derivatives (such as interest rate swaps) can transfer risk from one counterparty to another more willing or able to bear it. In theory, the rapid growth of derivatives in the run-up to the crisis represented an ever more efficient allocation of risk across the financial system. In practice, the growing use of derivatives for speculative purposes meant that, in the run-up to the crisis, this growth resulted in greater interconnectedness between counterparties and contributed to greater systemic risk. In addition, an absence of transparency and a lack of standardisation of derivative contracts led to ambiguity over the ultimate risk owner and overarching uncertainty in the derivatives market.
- 3.23** A number of workstreams are currently under way on the regulation of derivatives. Market participants are being encouraged to standardise over-the-counter (OTC) derivatives where possible, and clear them through a central counterparty (CCP). To support this objective, non-standardised contracts are expected to attract higher capital and margin requirements. Transparency will be improved by requiring all OTC derivative transactions to be reported to a trade repository which will collate and release certain information both to regulators and to the market. CCPs themselves will have their regulatory standards strengthened through more robust global standards with the Committee on Payment and Settlement Systems of the Bank for International Settlements (BIS) and the International Organisation of Securities Commissions leading international reforms to ensure the resilience of market infrastructure providers.<sup>11</sup>
- 3.24** The European Commission has published proposals on OTC derivatives which include mandating central clearing where appropriate, and new prudential and organisational standards for CCPs. It is also proposing several restrictions on speculative trading including a ban on such trading in credit default swaps (CDS), in effect requiring firms to have a position in the underlying entity in order to trade CDS. The European Commission has also consulted on extending the Markets in Financial Instruments Directive to cover more of the wholesale market and improve transparency and regulation in the trading of derivatives.

---

<sup>11</sup> BIS, 2011, *Principles for financial market infrastructures: Consultative report*: <http://www.bis.org/publ/cpss94.pdf>

- 3.25** In the US, the Dodd-Frank Act requires certain derivatives trading operations to be 'pushed out' into separately capitalised non-bank affiliates, which do not directly benefit from Federal assistance (e.g. lender-of-last-resort facilities). Some derivatives trading, including hedging a bank's own risk, can, however, remain within a bank.
- 3.26** The Commission will not make recommendations directly on these proposals, but has factored these developments into its considerations.

### Reform of regulatory institutions

- 3.27** The crisis highlighted the international nature of financial markets and the need for supervisory authorities to operate effectively on a cross-border basis. Following the financial crisis, the FSB emphasised the importance of the creation of supervisory colleges to enable supervisors of specific cross-border financial institutions to work together to improve information sharing, joint working and joint assessments of firms. The BCBS followed this up in 2010 by publishing best practice principles on the establishment and operation of supervisory colleges. In Europe, legislation was brought in at the start of 2011 (as part of the CRD amendments), requiring further co-operation on cross-border institutions within the EU.
- 3.28** In order to strengthen further cross-border oversight, the EU has established three new authorities to oversee banking, securities & markets, and insurance & pensions. The new authorities have the power to strengthen international co-ordination and reduce regulatory arbitrage across the EU, thus providing greater harmonisation among the member states. In addition, the EU has also established a European Systemic Risk Board which is responsible for macro-prudential oversight of the financial system within the EU.
- 3.29** The UK is in the process of replacing the existing tripartite system (which currently consists of HM Treasury, the Bank of England and the FSA) and creating a number of new bodies to enhance the supervision of financial services and strengthen the stability of the financial system.<sup>12</sup> The new regulatory architecture is to be fully in place by the end of 2012.
- 3.30** The key reforms consist of splitting up the FSA into two new agencies. The prudential supervision of deposit-takers, insurance firms and some large investment firms will be given to the Prudential Regulation Authority, a new subsidiary of the Bank of England. Having the 'micro-prudential regulation' of banking institutions and the macroeconomic oversight under one roof should assist the Bank of England in identifying and monitoring emerging risks to the financial system before they crystallise.

---

<sup>12</sup> HM Treasury, 2011, *A New Approach to Financial Regulation: building a stronger system*: [http://www.hm-treasury.gov.uk/d/consult\\_newfinancial\\_regulation170211.pdf](http://www.hm-treasury.gov.uk/d/consult_newfinancial_regulation170211.pdf)

- 3.31** Supervision of the conduct<sup>13</sup> of all systemic banking institutions will be undertaken by the newly-formed Financial Conduct Authority (FCA), which will also be responsible for both the prudential and conduct regulation of investment firms and exchanges, as well as a number of smaller institutions providing financial services.<sup>14</sup> In addition, the FCA will also be responsible for dealing with financial crime within the regulatory framework, to align with its objective of protecting and enhancing the integrity of the UK financial system.
- 3.32** Finally, the FPC will be set up as part of the Bank of England to support its objective of protecting and enhancing financial stability, through identifying and taking action to remove or reduce emerging risks to the financial system before they crystallise.<sup>15</sup>
- 3.33** As part of the Dodd-Frank Act, the US has also undertaken a number of changes in similar areas. It is currently in the process of closing down the Office of Thrift Supervision, and has established a Financial Stability Oversight Council with the aim of identifying emerging risks to financial stability through, among other measures, regulatory co-ordination. The Dodd-Frank Act has also led to the creation of the Office of Financial Research, which is charged with data collection for the identification and the reporting of systemic financial risk. The Office of Financial Research will have the authority to set out new regulations based on its findings, and will also have the mandate to collect such information directly from financial companies.
- 3.34** The Commission will not make recommendations directly on the UK's regulatory regime, except for its recommendation that the new FCA have a primary duty to promote effective competition (see further Paragraphs 5.25 to 5.30).

## Competition

- 3.35** Some current reform initiatives to improve financial stability bear directly on competition, notably those that address the 'too-big-to-fail' problem and reforms to market infrastructure.
- 3.36** Recent work by the competition authorities in relation to the banking sector was outlined in Chapter 2. The Office of Fair Trading's (OFT) work on personal current accounts (PCAs) and on barriers to entry, expansion and exit in retail banking has been of particular relevance to the Commission.<sup>16</sup> A number of voluntary initiatives have emerged from this work, some of which are still in the process of being implemented. For example, banks are introducing annual account summaries showing the costs customers have incurred on their PCAs, giving greater prominence to charges on monthly interest statements, using illustrative scenarios to demonstrate the costs of

---

13 i.e. Consumer protection and market integrity.

14 This includes independent financial advisers, investment exchanges, insurance brokers and fund managers.

15 The establishment of an interim Financial Policy Committee was announced in February 2011.

16 More information can be found in the OFT's progress updates, available at: <http://www.offt.gov.uk/OFTwork/markets-work/completed/personal/#named4>.

unarranged overdrafts, and introducing new products to enhance customer control over overdraft use. A key aspect of these initiatives was to ensure that the customer will not incur any costs if the switching process goes wrong. It is still too early to see clearly what the results of these changes will be, as they are still being introduced, and it may take time for consumers to understand and act on the new information.

**3.37** In addition, several current initiatives relating to competition are important to note. The first is the sale or potential sale of UK bank assets. Notably, the Lloyds Banking Group and Royal Bank of Scotland (RBS) divestitures required by the European Commission as a condition of receipt of state aid are underway. RBS has already agreed a deal with Santander. UK Financial Investments Ltd (UKFI) is also at an early stage of the sale process for Northern Rock plc, although no timetable for sale has yet been set.<sup>17</sup> The potential role of these disposals in enhancing competition is one focus of the Commission's work, as discussed in Chapter 5.

**3.38** Second, in February 2011 the Government proposed, as part of its reform of financial regulation, that competition should be included within the remit of the FCA.<sup>18</sup> The opportunities for pro-competitive regulation in financial services that would be created by giving the FCA a primary duty to promote effective competition are also discussed in Chapter 5.

**3.39** Third, in July 2010 the Treasury Committee of the House of Commons launched an inquiry into competition and choice in the banking sector. Among the issues considered by the Committee were:

- the impact of the financial crisis on competition and choice in both retail and wholesale markets;
- the impact of widespread consolidation among banks and mutuals;
- barriers to entry inhibiting increased competition — including regulation;
- whether competition is inhibited by difficulties faced by customers in accessing information about products;
- the Government and competition authorities' strategy to increase competition in banking, including the likelihood that new entrants will successfully enter the market;
- the relationship between competition and financial stability;
- the impact of free banking on effective competition; and

---

<sup>17</sup> See UKFI, 2011, *Expressions of interest for the provision of corporate finance advice*: [http://www.ukfi.co.uk/releases/UKFI\\_NR\\_CFA\\_20110117.pdf](http://www.ukfi.co.uk/releases/UKFI_NR_CFA_20110117.pdf).

<sup>18</sup> HM Treasury, 2011, *A New Approach to Financial Regulation: building a stronger system*: [http://www.hm-treasury.gov.uk/d/consult\\_newfinancial\\_regulation170211.pdf](http://www.hm-treasury.gov.uk/d/consult_newfinancial_regulation170211.pdf)



- the role of foreign-based operators and whether they are likely to return to the UK.

**3.40** The Commission is naturally interested in all of these questions, and the Committee's proceedings – both submissions and oral evidence – are very valuable for its work and have fed into it. When the Commission finalised the text of this *Interim Report*, the Committee's report had not been published, so the findings in this *Interim Report* have been made independently. The Commission will draw on the Committee's report as an important further source of evidence during the next stage of its analysis.

### **Consultation question 3.1**

Are there other reform initiatives, beyond those set out in this chapter and Annex 5, which you consider it essential for the Commission to examine further?



## Chapter 4: Reform options – financial stability

- 4.1** This chapter examines ways to reduce the probability and impact of bank failures by increasing the loss-absorbing capacity of banks and by structural reform to create some degree of separation between retail banking and wholesale and investment banking. The aims of both sets of measures are making the banking system better able to absorb losses, making it easier and less costly to sort out banks that get into trouble, and curbing incentives for excessive risk taking.
- 4.2** Increasing banks' loss-absorbing capacity and simplifying their structures would reduce banks' contributions to systemic risk. Monitoring and controlling systemic risk in the financial system as a whole is also the aim of 'macro-prudential regulation', which is to be conducted by the Bank of England's Financial Policy Committee. Macro-prudential regulation should help reduce, but will not eliminate, shocks to and from the financial system. The UK banking system will in any case remain exposed to global – as well as domestic – economic and financial uncertainties, and needs to be more resilient to the risks involved.
- 4.3** Bank failures are very costly for economic growth and for the public finances. Making banks safer and curtailing any implicit government guarantee may, however, increase their overall private cost of capital and funding. The extent to which this may result in an increase in the price of financial services, and the trade-off between the positive and negative effects on growth of greater financial stability, require careful examination. A further important consideration is how reforms could affect the competitiveness of UK financial services and the wider economy. Here too there are positive and negative potential effects that need to be weighed.
- 4.4** There are different ways of making banks safer. One approach would be to be sharply prescriptive about permitted structures, for example by requiring retail banking and wholesale and investment banking to be in separate non-affiliated firms.<sup>1</sup> Another would be to be *laissez-faire* about structure and to seek to achieve stability by very high capital requirements. As will be explained in this chapter, the Commission currently believes that the best way forward is a more moderate combination of these approaches by way of:

---

<sup>1</sup> The Glass-Steagall Act imposed a strict separation of certain activities in the US. The restrictions were substantially weakened before the Act's repeal in 1999.

- internal ring-fencing within universal banks to isolate UK retail banking services; and
- higher – but not very high – capital requirements, together with measures to make bank debt effectively loss-absorbing.

**4.5** This chapter is organised as follows. First, there is a section that discusses how reform options to increase the loss-absorbing capacity of banks may reduce the probability and impact of bank failures. Second, there is an analysis of the costs and benefits that may follow from reforms to the structure of banks. Third, there is an assessment of how reforms to UK banks may impact on the competitiveness of ‘the City’ and the wider economy. Fourth, the chapter concludes with the Commission’s provisional views on what an appropriate package of financial stability reform options might look like. A number of consultation questions are set out throughout the chapter.

## Reform options to increase loss-absorbing capacity

### Banks’ ability to absorb losses

**4.6** The owners of any business face the risk of loss of their capital if it does badly, just as they are rewarded if it does well. If the firm becomes insolvent and goes into bankruptcy, the owners lose their capital. Lenders to the firm and other creditors absorb losses too, in that they get back only a proportion of the funding that they supplied. These prospects discipline the risk taking that owners and lenders allow to occur, and the terms on which the firm can get funding in the first place.

**4.7** This commercial logic has not properly applied to banks. Banks differ from other businesses in at least five important respects:

- leverage;
- depositors;
- vulnerability to runs;
- high costs to others of failure; and
- state support.

**4.8** First, especially in the years preceding the crisis, banks operated with remarkably high leverage – i.e. a remarkably low ratio of equity to debt – compared with other types of business, despite the importance to society of stable banks.

**4.9** Second, a substantial proportion of lending to banks, whether or not depositors see it as such, is in the form of ordinary deposits. In the absence of ‘depositor preference’

in law, depositors have no greater claim on residual assets in the event of bankruptcy than senior unsecured creditors generally.

- 4.10** Third, the bank run problem arises because banks typically lend longer term than they borrow, and the loans cannot be liquidated in time if, in a crisis of confidence, many depositors and other funders rush to withdraw their funds. Crises of confidence can spread from bank to bank.
- 4.11** Fourth, because of this and the economic, social and political imperative to keep banking services going, governments bailed out banks in the recent crisis with taxpayer funds to stem panic and avoid highly disruptive bankruptcies. As a result, debt holders who should have borne losses did not do so.
- 4.12** Fifth, even before the crisis banks enjoyed various kinds of state support, including the effective right to create money, and access to lender-of-last-resort facilities at the central bank. Comprehensive state support was given to banks in the crisis, for fear of what would otherwise happen, and continues to benefit banks directly and indirectly on a large scale,<sup>2</sup> especially those seen as being systemically important.
- 4.13** In short, the crisis revealed many banks as being quite unable to bear the losses that their risk taking exposed them to, with the result that others bore the cost. Reform is needed to ensure that banks can absorb the losses if risks go badly. This should discipline risk taking to begin with, and allow much more orderly resolution of problems that nevertheless arise.

## How loss-absorbency reduces the probability and impact of bank failures

- 4.14** Loss-absorbing capacity can be divided into two broad categories depending on whether it increases the ability of a bank to absorb losses before it fails and goes into resolution, or only when the bank enters resolution.<sup>3</sup> An example of 'pre-resolution' loss-absorbing capacity is the 'capital conservation buffer' proposed by the Basel Committee on Banking Supervision (BCBS). The buffer absorbs losses while the bank continues to function as a going concern (albeit with some restrictions) without entering resolution.<sup>4</sup> An example of 'post-resolution' loss-absorbing capacity is the minimum equity requirement. A bank with an equity ratio below the minimum is non-viable. At this stage, the remaining equity is available for absorbing losses.

<sup>2</sup> For example, the Special Liquidity Scheme and Credit Guarantee Scheme provided by the UK authorities which together provided over £300bn of support at the peak of the crisis and continue to support several institutions.

<sup>3</sup> These are sometimes referred to as 'going concern' and 'gone concern' loss-absorbing capacity. In this *Interim Report* they are referred to as 'pre-resolution' and 'post-resolution' loss-absorbing capacity to reflect the fact that the purpose of resolution will often be to keep (at least some of) a bank's businesses operating, and so avoid insolvency.

<sup>4</sup> The markets are likely to treat the capital conservation buffer as an extension of the hard minimum requirement to some extent; a bank operating near, or in, its buffer may have restricted access to wholesale funding.

- 4.15** Pre-resolution loss-absorbing capacity directly reduces the probability of bank failure. It bolsters the ability of a bank to take losses without failing, and so makes it more resilient. Measures to increase pre-resolution and post-resolution loss-absorbing capacity can also reduce the probability of failure in a less direct way, by increasing the exposure of the bank's owners and creditors to the risks that the bank takes. This strengthens market discipline, improving the incentives to assess, monitor and control those risks, so reducing the probability of failure.
- 4.16** Increasing loss-absorbing capacity reduces the impact of bank failure by allowing more losses to be absorbed by the bank rather than spilling over to the detriment of others (including the taxpayer). This has important benefits for bank resolution, although the nature of those benefits will depend on the particular circumstances.
- 4.17** Bank resolution is likely to be achieved most easily if, on entering resolution, a bank has sufficient loss-absorbing capacity to soak up all losses that arise.<sup>5</sup> In these circumstances, negative externalities from the bank failure are minimised. Some of the bank's operations may be viable; others may go into solvent wind-down.
- 4.18** In an alternative scenario, a bank might not have sufficient loss-absorbing capacity to absorb all losses on resolution. However, it may have enough to allow one or more parts of the bank to be separated off from the remainder in viable units, with the rest falling into insolvency (in the absence of taxpayer bail-out). This would restrict the adverse impact of the failure on the rest of the financial system and the wider economy. It would also limit the scope of any taxpayer exposure, in particular if the viable parts of the bank are those that conduct essential banking services that are most likely to attract taxpayer support.
- 4.19** In the worst case scenario, on reaching the point of non-viability a bank might have insufficient loss-absorbing capacity even to enable its most essential services to be separated off into viable business units (without substantial solvency support from the government). But even in this case, starting from a position of increased loss-absorbing capacity would have been of benefit by reducing the ultimate size of any government bail-out that may be offered, or limiting the impact of bank insolvency.
- 4.20** In all these cases, more loss-absorbing capacity limits the adverse impact of failure on the rest of the financial system and the wider economy. It also curtails taxpayer exposure. This reduces the inequity arising from the taxpayer taking risks for which the private sector stakeholders enjoy the related rewards. And limiting the guarantee can mitigate the 'too big to save' problem.

---

<sup>5</sup> Through, for example, the conversion into equity (or write-down) of debt instruments at the point of non-viability.

## What type of loss-absorbing capacity?

**4.21** A bank's loss-absorbing capacity consists of the equity of the owners of the business, and non-equity liabilities or debt, which are contractual claims against the bank. This section starts with a discussion of equity, the most straightforward and well-understood form of loss-absorbing capacity. This includes an assessment of how much equity systemically important banks should be required to hold. But debt also needs to be made loss-absorbing, to improve market discipline on banks' risk taking and to ensure that creditors take losses before the taxpayer. So this section also considers ways in which the effective loss-absorbency of bank debt<sup>6</sup> can be improved. Three tools are considered:

- debt instruments that absorb loss at some point while the bank is still viable ('contingent capital');<sup>7</sup>
- liabilities that absorb loss at the point of non-viability ('bail-inable debt'); and
- depositor preference, i.e. ranking (at least some) depositors above other unsecured creditors in a bank insolvency, which can have the effect of increasing the loss-absorbing capacity of other parts of a bank's liability structure.

More detail on the characteristics and effectiveness of different types of loss-absorbing capacity is set out in Annex 6.

### Common equity

**4.22** Equity is the simplest and most effective sort of loss-absorbing capacity. It absorbs losses smoothly pre-resolution, and in resolution any remaining equity is available to soak up losses, limiting the negative externalities of firm failure. Equity is perpetual, and so does not carry any re-financing risk in stress. Because shares are familiar, established instruments, shareholders understand that they are taking risks by investing in equity.

**4.23** Equity is more expensive than debt, but to a significant extent this is down to the different tax treatment of debt and equity, which is a purely private cost. In addition, equity suffers from the 'debt overhang' problem at times of stress.<sup>8</sup> Because of the asymmetric pay-off that arises from limited liability, shareholders may have weak incentives to raise additional equity at times of crisis because debt holders get much of the benefit.

---

<sup>6</sup> This discussion is focussed on bank debt. There may be particular complications involved in increasing the loss-absorbency of the debt of building societies.

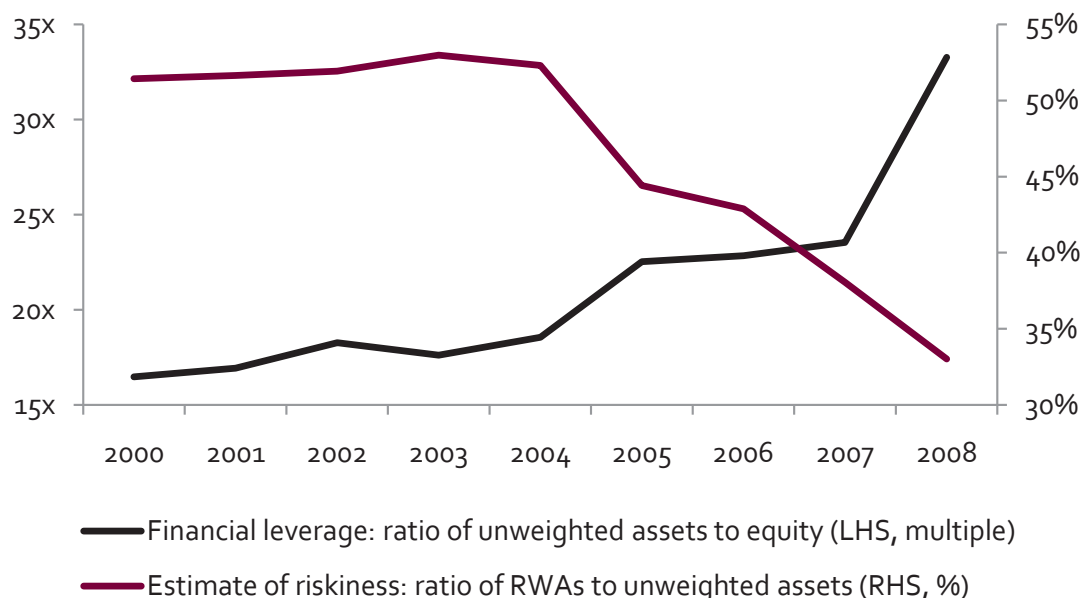
<sup>7</sup> In this *Interim Report*, contingent capital instruments that absorb loss at the point of non-viability are described as 'bail-inable debt'. Note that while this *Interim Report* considers two broad categories of trigger for debt to absorb losses – triggers while the bank is viable, and a trigger at the point of non-viability – in practice, the trigger could be set anywhere at or above the point of non-viability.

<sup>8</sup> Duffie, D., 2011, *How Big Banks Fail and What to Do About It*, Oxford, Princeton University Press

- 4.24** Equity is well understood. So the central question is not the nature of its benefits but how much of it banks should have. The question of how far to go in reducing the probability and impact of bank failures by increasing equity requirements involves a trade-off between the benefit of making banks safer and the consequential cost to society. As long as the benefits of more equity are greater than the costs, equity should be increased. So what is the right amount of equity for banks to have?
- 4.25** The most obvious way to set a minimum equity requirement would be to require banks to maintain a minimum leverage ratio, i.e. to have a minimum level below which the ratio of equity to total assets could not fall. (Box 1 in Chapter 2 discusses leverage in more detail.) Basel III does impose such a ratio, requiring banks to have Tier 1 capital that is at least 3% of total assets. The Commission is considering whether this leverage ratio is set at the appropriate level for systemically important banks.
- 4.26** However, a leverage ratio does not differentiate between assets on the basis of their riskiness. Accordingly, since its inception in 1988, the focus of the Basel Capital Accord has been on requiring banks to hold a minimum ratio of capital to risk-weighted assets (RWAs), so that more capital needs to be held against riskier assets. But this means that the amount of capital that banks are required to hold is dependent on the way in which assets are risk-weighted. This produces an incentive for banks to try and exploit this by choosing the riskiest assets for a given risk-weight. This incentive for regulatory arbitrage increases as risk-weighted capital requirements increase.
- 4.27** Whether for this or other reasons, recent history suggests that risk weights have done a poor job of assessing how much capital should be held against assets. Certain assets that had very low risk-weightings suffered large unexpected losses. And in the run-up to the crisis, while the aggregate financial leverage of the four largest UK-headquartered banks was increasing, the riskiness of their assets, as measured by risk weights, was falling (see Figure 4.1). Subsequent events have shown that those lower risk weights underestimated the true riskiness of at least some assets.
- 4.28** These points argue against relying on a minimum capital ratio to RWAs alone. However, such a ratio does make a valuable contribution to prudential regulation, and continues to form the backbone of the Basel Capital Accord. So the question arises as to what this ratio should be.
- 4.29** A number of recent studies have attempted to measure the costs and benefits of higher levels of equity as a proportion of RWAs. Each of these studies involves a considerable degree of uncertainty, both in terms of the assumptions and datasets used and in terms of how they might translate into the new Basel III definitions of capital and RWAs. Because of this, they yield a wide range of results.



**Figure 4.1: Ratio of risk-weighted assets to unweighted assets falls as financial leverage increases (aggregated for the four largest UK-headquartered banks)**



Source: Financial statements of Barclays, HSBC, LBG and RBS

**4.30** The Commission has examined these studies and notes that they yield a range for the optimal ratio of Common Equity Tier 1 (CET1) to RWAs, on a Basel III basis, of 7% to 20% (see Annex 3 for a more detailed discussion). Within this range, what is the right ratio for systemically important banks? On the one hand, there are reasons to think that a 7% ratio is too low:

- 7% is generated using an extremely conservative estimate of the costs of a crisis (a present value cost of 19% of GDP). The figure for a future crisis could plausibly be five or more times larger (the most recent crisis has probably already cost more than 20% of GDP in the UK);
- the BCBS estimates from which the 7% figure derives make no allowance for higher equity ratios to reduce the yields on bank liabilities; and they take no account of the extra tax revenue generated as a result of having less debt and more equity funding, which could be used to offset the increased cost of bank credit; and
- households prefer stable to unstable flows of consumption. As well as reducing average GDP, financial crises make the economy more volatile. The welfare

benefits of limiting financial crises therefore exceed the simple effects on the present value of GDP.<sup>9</sup>

**4.31** On the other hand, there are reasons to question requiring systemically important banks to have very high capital ratios. These relate mainly to a number of uncertainties which collectively may present a case for caution:

- the effect of more equity on GDP is highly uncertain. Rather than higher equity requirements meaning equity getting cheaper, it could perhaps get more expensive if investors' appetite for bank equity is somehow limited by institutional features of the investment industry. Bankers and investors may continue to target returns on equity in line with historical norms, and bankers may be averse to increasing capitalisation through rights issues, seeking instead to contract their balance sheets to meet higher equity requirements, raising spreads further or rationing credit;
- the relationship between the amount of capital in the banking system and the risk of financial crisis is uncertain. The definitions of both capital and risk-weighted assets have changed over time, making consistent comparisons with current definitions difficult. The amount of capital in the system will in general exceed the regulatory minimum, and banks can fail for proximate reasons other than insolvency; and
- an increase in bank capital could increase or reduce the riskiness of bank lending. On the one hand: bank shareholders' risk appetite would be attenuated to the extent that higher capitalisation exposes them to more of the downside of their investments; a better-capitalised financial system might lead to smaller, and fewer, (domestic) shocks; and if the economy became less volatile as a result of improved financial stability the cost of bank equity should fall. On the other hand, the higher regulatory requirements are, the more banks are incentivised to seek to maximise risk subject to these requirements, bringing economic capital up towards regulatory levels. These opportunities for regulatory arbitrage would reduce the stabilising effect of higher capital requirements.

**4.32** Beyond these substantive points, the Commission considers that the limits of what can be agreed in the international context may provide a practical constraint in this area.

**4.33** Weighing the evidence and the factors above, the Commission judges that while the 7% equity ratio<sup>10</sup> established by the BCBS is an important step in increasing banks' loss-absorbing capacity, it is clearly insufficient for systemically important banks. The Financial Stability Board (FSB) is currently looking at this issue, and specifically into the question of imposing an additional capital charge on systemically important banks – a 'SIFI surcharge'. The rationale behind a SIFI surcharge is to identify financial

---

<sup>9</sup> See, for example, Barlevy, G., 2005, The cost of business cycles and the benefits of stabilization, *Federal Reserve Bank of Chicago Economic Perspectives*.

<sup>10</sup> This consists of a 4.5% minimum equity requirement and a 2.5% capital conservation buffer.

institutions whose failure is likely to have significant negative externalities, and by requiring them to hold additional loss-absorbing capacity both (i) make them safer; and (ii) incentivise them to reduce their systemic importance to avoid or restrict the cost of having to hold extra capital.

- 4.34** In the Commission's view, for systemically important banks the minimum credible ratio of CET1 to RWAs on a Basel III basis is 10%. This would translate into a SIFI surcharge of at least 3%. It seems very doubtful that any figure below this can be robustly supported by the available evidence, and a case could quite easily be made for going higher.
- 4.35** The Commission therefore believes that 3% CET1 to RWAs should be agreed internationally as the minimum SIFI surcharge for all systemically important banks, including wholesale and investment banks.<sup>11</sup> However, recognising the international nature of wholesale and investment banking markets, the Commission considers that UK banks' operations in these markets should not be required by regulation to have more equity than that agreed at an international level, provided that those businesses have credible resolution plans (including effective loss-absorbing debt) so that they can fail without risk to the UK taxpayer. But regardless of what international consensus is reached on the SIFI surcharge, large retail banking operations in the UK should have an equity ratio of at least 10%.<sup>12</sup>
- 4.36** It may be the case that there should be some differentiation between systemically important banks, and that some should have CET1 ratios above 10%. Alternatively, it may be that a 10% ratio is sufficient for all such banks, but that they would require different amounts of loss-absorbing debt. A number of ways have been suggested as to how systemically important banks could be identified, and how a SIFI surcharge could be calibrated. One approach to calibration has been put forward by the Swiss Commission; it has suggested a methodology based on an assessment of an institution's balance sheet size and market share.<sup>13</sup> Other examples suggest calibrating a surcharge with reference to an institution's resolvability, business model or some market indicator.<sup>14</sup> Further, the FSB is currently drawing up a list of global systemically important financial institutions. This work entails establishing indicators of systemic

11 This SIFI surcharge would take the form of an increased equity buffer, rather than an increase to the hard minimum requirement.

12 The interaction between the SIFI surcharge equity buffer and the capital conservation equity buffer would need to be carefully considered.

13 See report by the Swiss Commission of Experts, 2010, *Limiting the economic risks posed by large companies*: <http://www.sif.admin.ch/dokumentation/00514/00519/00592/index.html?lang=en>.

14 For examples on how systemic risk might be measured, see Acharya, V.A., Browlees, C., Engle, R., Farazmand, F. & Richardson, M., 2011, *Measuring Systemic Risk*, in Acharya, V.A., Cooley, T.F., Richardson, M. & Walter, I., eds., *Regulating Wall St.*, Hoboken, Wiley; Adrian, T. & Brunnermeier, M., 2009, *CoVaR*: <http://www.princeton.edu/~markus/research/papers/CoVaR>; Huang, X., Zhou, H. & Zhu, H., 2010, *Assessing the systemic risk of a heterogeneous portfolio of banks during the recent financial crisis*: <http://ideas.repec.org/p/fip/fedgfe/2009-44.html>; and Tarashev, N., Borio, C. & Tsatsaronis, K., 2009, *The Systemic Importance of Financial Institutions*, *BIS Quarterly Review*, September: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1473007](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1473007). BIS has also recently published a paper on this – see Drehmann, M. & Tarashev, N., 2011, *Measuring the systemic importance of interconnected banks*, *BIS Working Papers*, No.342: <http://www.bis.org/publ/work342.pdf>.

importance, which could be used for calibrating a SIFI surcharge. The Commission will consider these issues further before presenting its final report.

**4.37** Note that a capital surcharge is not the only way in which regulation could incentivise banks to reduce their systemic importance, and so lower the probability and/or impact of their failure. Taxing banks on their contribution to systemic risk incentivises them to minimise it. And the revenue raised (whether kept aside for such purpose or not) makes the public finances better able to cope with the cost of any future bank bail-outs. But there is still the difficulty of how to measure systemic importance (to calibrate the tax). Further, for a given level of systemic importance, a systemic risk tax takes funds out of the bank that could otherwise be retained as additional equity. There are also moral hazard issues around having an accumulated resolution fund. Bearing in mind that capital can both correct incentives and increase loss-absorbency, the Commission's focus is on a capital surcharge.<sup>15</sup>

**4.38** An important caveat to the Commission's conclusion on the minimum level of equity that systemically important banks should be required to hold is that it assumes that bank debt can be made effectively loss-absorbing. If this does not seem to be the case, the minimum equity level would need to be considerably higher. The next section examines how the loss-absorbency of bank debt could be increased.

### *Increasing the effective loss-absorbency of bank debt*

**4.39** For the reasons set out above, in addition to higher equity requirements the debt of systemically important banks must be made credibly loss-absorbing. The rest of this section discusses how each of contingent capital, bail-inable debt and depositor preference might work, and how they might be designed (more detail is in Annex 6). Factors to be borne in mind when considering these issues include the following:

- if the conversion of debt instruments into equity avoids bank insolvency – and the costs and value destruction that entails – it could potentially be beneficial for debt investors;
- Basel III requires CET1 capital of 7% of RWAs, and another 3.5% of additional capital. It is likely that loss-absorbing debt instruments could contribute some or all of this additional capital;
- this section raises a number of design issues with contingent capital and bail-in. But it should not be assumed that all design details would need to be prescribed by regulators. There may be scope for regulators to set out broad parameters and allow the market to work out the details (at least for contingent capital); and

---

<sup>15</sup> The UK bank levy is raised on banks' liabilities (subject to some exceptions). It is designed to encourage banks to move to less risky funding profiles, and to raise contributions from the banks towards meeting the costs of risks they pose to the UK financial system and wider economy.

- mandating the issuance of loss-absorbing debt may increase the extent to which markets differentiate between banks. This may lead investors to require more disclosure from banks,<sup>16</sup> but those that are smaller, or perceived as weaker, may suffer. This may entrench the position of the largest banks, increasing their relative systemic importance and giving them an advantage over smaller banks.

**4.40** Making bank debt more able to bear losses is likely to increase its private cost. Similarly, depositor preference is likely to increase the private cost of liabilities subordinated to deposits. However, such measures will have the effect of reducing the government guarantee. In the absence of a justification for it, the social benefit of limiting this distortion should outweigh the social cost. Annex 3 includes some discussion on what the size of the government guarantee might be. The Commission will continue to investigate this area.

### *Contingent capital*

**4.41** Contingent capital is debt that is designed to convert into equity (contingent convertible capital instruments, or ‘cocos’) or suffer write-down on some trigger – for example, a bank’s CET1 ratio falling below a certain level – while a bank is still viable. This recapitalises a bank under stress, with the aim of leaving it able to continue to function as a healthy, going concern. Contingent capital is cheaper than equity both because it is senior and (on the assumption that interest payments are tax-deductible) it has a tax advantage. Contingent capital would also mitigate the ‘debt overhang’ problem (see Paragraph 4.23); the conversion (or write-down) re-capitalises the bank without requiring the shareholders to choose to undertake a capital-raising. And if the effect of any conversion would be to dilute shareholders, they would in any case have a strong incentive to raise more equity to avoid conversion, and so keep the bank well-capitalised at all times.

**4.42** But there are a number of important questions on contingent capital that remain to be answered. One such question is who would buy it? The ability and appetite of some investors – in particular insurance companies and pension funds,<sup>17</sup> who hold a lot of bank debt – to hold contingent capital instruments in large quantities is largely untested,<sup>18</sup> although a number of recent successful issues of such instruments suggest that there would be at least some market demand. It would also be important that the holders of contingent capital instruments were able to bear the risks associated with them, so that any conversion (or write-down) did not act as a channel for contagion from a failing bank to another part of the financial system. A further question concerns possible dynamic effects at or near to the trigger point. The market response to the

---

<sup>16</sup> Discussed in Goldman Sachs, 2011, *Contingent capital: Possibilities, problems and opportunities*.

<sup>17</sup> The role of insurance companies, pension funds and other financial institutions in funding the UK banking sector is discussed in Annex 2.

<sup>18</sup> Changes in regulation have limited the ability of insurance companies and pension funds to accept asset price volatility in the short term. Where regulation discourages non-banks from holding long-term assets which are a good hedge for their long-term liabilities, the result is a kind of ‘reverse maturity transformation’, which adds to the maturity transformation and associated risks for the banking system to handle.

fact that a bank is nearing the trigger point could have a negative impact on the bank, hastening its deterioration, increasing the likelihood of conversion (or write-down) and actually undermining financial stability – the so-called ‘death spiral’. So while contingent capital has attractive features, there are important questions to be answered if it is to become a significant part of banks’ capital structures.

### *Bail-in*

- 4.43** Bail-inable debt acts in a similar way to contingent capital, by recapitalising a bank through the conversion of debt into equity or through debt write-down. However, unlike with contingent capital, this occurs at the point of non-viability, and so will require intervention by the regulator. While its effect might be to allow some of a bank’s operations to continue as a going concern, it may simply facilitate a solvent wind-down in resolution. Again as with contingent capital, the prospect of any conversion diluting or wiping out existing shareholders provides a strong incentive to those shareholders to do all they can to ensure a bank remains properly capitalised, and so well clear of the bail-in trigger.
- 4.44** But which of a bank’s liabilities should be bail-inable? There are a number of practical difficulties in respect of liabilities that are secured, or that would involve a large number of counterparties. Unsecured debt seems to be most amenable to being bailed-in. But identifying certain types of liabilities that would be covered by bail-in would incentivise banks to avoid them. One way to deal with this would be to require banks to hold a minimum amount of bail-inable debt.
- 4.45** An important related issue is ensuring that the creditor hierarchy is respected. Losses first fall on equity. Further losses trigger the conversion (or write-down) of contingent capital (if any). If the bank nevertheless becomes non-viable, in resolution bail-inable debt is converted into equity (diluting or wiping out existing shareholders) or written down. So losses are borne by shareholders, holders of contingent capital, and then holders of bail-inable debt, in that order (with any differences in priority among bail-inable creditors being respected). Should all the bail-inable debt be exhausted and the bank go into insolvency, holders of other senior unsecured liabilities<sup>19</sup> would then be exposed to losses. As with contingent capital, it would be important that the holders of bail-inable instruments could bear the associated risks.
- 4.46** Bail-in may be particularly valuable as a resolution tool for wholesale and investment banking businesses. Because these businesses tend to be complex and international, the resolution challenges are exacerbated. One of the reasons for this is fundamental differences in the underlying insolvency regimes across countries – differences which appear most unlikely to be eliminated in the foreseeable future. Some degree of international agreement on a bail-in mechanism would therefore be particularly

---

<sup>19</sup> This would include derivatives counterparties, if derivatives liabilities are not bail-inable.

attractive because it may provide an alternative means of cutting through this problem and therefore allowing global trading businesses to fail more safely.<sup>20</sup>

### *Depositor preference*

- 4.47** Bank deposits – including deposits from individuals and from (some) small and medium-sized enterprises (SMEs) that are guaranteed (up to a limit) by the Financial Services Compensation Scheme (FSCS) – currently rank *pari passu* with other senior unsecured creditors. This means that losses can only be imposed on senior unsecured creditors to the same extent they are imposed on retail depositors. But retail depositors are not as well-placed as other senior unsecured creditors to monitor and discipline banks' risk taking. Further, the FSCS guarantee transfers at least some of the risk associated with a bank's activities away from that bank and its creditors to the banking system as a whole (with an effective back-up from the taxpayer).<sup>21</sup>
- 4.48** Depositor preference would subordinate the claims of other senior unsecured creditors to those of depositors,<sup>22</sup> better aligning the incentive to discipline banks with the ability to do so. It would also create a bigger buffer that would absorb losses prior to depositors, making banks easier to resolve, in particular where there is a political imperative to avoid losses for retail depositors. There may be a case for extending preference to a wider range of deposits than those that are FSCS-insured. (This is the approach that has been adopted in the US, where all domestic deposits are preferred.)

## **Consultation question 4.1**

Should systemically important banks be required to hold more equity than Basel III requirements? If so, how much?

## **Consultation question 4.2**

Should UK retail banks be required to hold more equity than Basel III requirements? If so, how much?

---

20 An FSB working group is examining the legal and operational aspects of bail-in, as well as the marketability and other issues bearing on the viability of these instruments. The European Commission has recently completed a consultation on a proposed framework for bank recovery and resolution that included a consideration of bail-in.

21 The FSCS is designed to be funded by a levy on banks and building societies, but in the recent crisis it had to rely on loans from the Government.

22 So implementing depositor preference would constitute a re-ordering of the creditor hierarchy for existing liabilities. The potential consequences of this would need to be carefully examined.

### Consultation question 4.3

Do you agree that bank debt should be made more loss-absorbing using some or all of contingent capital, bail-inable debt and/or depositor preference? If so, which of these tools do you support and how should they be designed?

## Structural reform options to promote financial stability

**4.49** Several of the major providers of retail banking in the UK are large universal banks which conduct a wide range of activities including wholesale and investment banking. At present there are very few restrictions on how different activities can be combined within UK banks.<sup>23</sup> While retail and wholesale/investment banking are both important contributors to the economy, their unrestricted combination within institutions gives rise to three potential problems:

- **high impact of failure.** Universal banks are important providers of a number of critical economic services and so their disorderly failure has very high costs for society. Yet the size and complexity of universal banks made it impossible, in the recent crisis, for governments to maintain these services without providing taxpayer support to the whole financial institution. As discussed in Chapter 2, UK banks are big enough for this to represent a real threat to the public finances;
- **increased risk of system failure.** With integrated universal banking it may be harder to stop problems spreading from one part of the system to another – for example, from wholesale/investment banking to UK retail banking. Moreover, universal banks generally hold less capital relative to assets than if they were separated. While this can provide an economic benefit in good times, it can heighten risk at times of general economic stress, when banking system resilience is most needed; and
- **increased risk taking.** To the extent that integrated universal banks extend the scope or scale of expected taxpayer support, their risk taking is subsidised. The financial system is riskier as a result of such subsidies, and competition may be distorted.

**4.50** Potential solutions to these problems are consistent with continuing to have universal banks in the UK, so long as they are appropriately structured and capitalised. This could be achieved by isolating the UK retail banking activities within a universal bank and placing them into a separately capitalised subsidiary (called a 'retail ring-fence'). Additional restrictions on this subsidiary could then also be applied as appropriate,

---

<sup>23</sup> Since 2001, the World Bank has conducted a series of cross-country surveys of how banks are regulated and supervised. The most recent survey was presented in 2008. In questions on four types of activity restrictions the UK was the only country to answer 'unrestricted' to all four categories. The project is available online at: <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20345037~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html>.



including limitations on its financial links to the rest of the group. A retail ring-fence could help tackle the problems above by:

- **making it easier and less costly to sort out universal banks that get into trouble.** Materially improving the separability of retail and wholesale/investment banking activities would make it easier and less costly to limit the impact of a universal bank's failure. It would provide the authorities with options to treat different activities in different ways, recognising that retail customers are particularly ill-equipped to deal with the consequences of the failure of their bank;
- **making the UK system better able to absorb shocks.** Ring-fencing UK retail banking activities would ensure that minimum levels of capital were available for those services in the event of a general economic stress, while preserving the possibility that different parts of a universal bank could support each other in 'normal' times; and
- **curtailing perceived government guarantees.** By making it easier and cheaper for the authorities to sort out universal banks ring-fencing could improve market discipline. Shareholders, management and particularly creditors would worry more about the risks they were running because they would view it as less likely that they would be bailed out by the taxpayer.

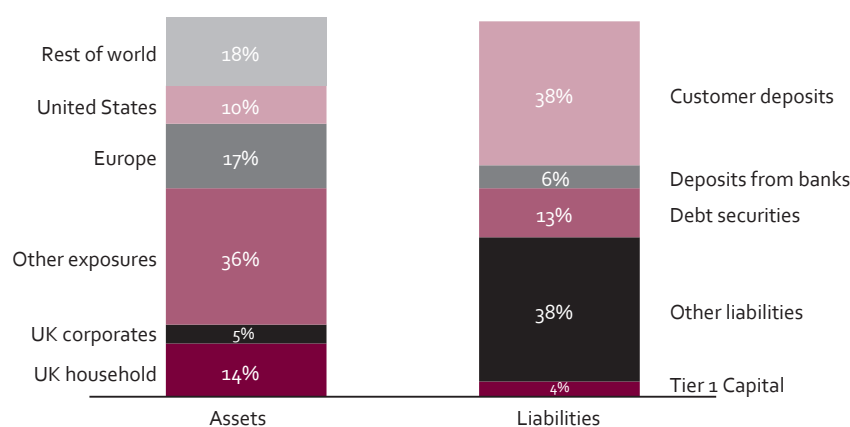
**4.51** At the same time, a retail ring-fence would allow for the continuation of universal banking and the efficiency benefits it provides. This would protect the economy and the taxpayer from the risks integrated universal banks can create without jeopardising the UK's position as a global financial centre.

**4.52** This section explores these issues in more detail. How great are the problems associated with integrated universal banking? Would a retail ring-fence address them? If so, would the benefits exceed the costs? How should a ring-fence be designed? Would other structural reforms be more effective?

**4.53** First, a note on terminology. The activities of universal banks can broadly be divided into retail and wholesale/investment banking. 'Retail banking' is taken to mean broadly the provision of deposit-taking, payment and lending services to individuals and SMEs. Similarly, in this section, 'retail customers' are taken to include both individuals and SMEs. 'Wholesale/investment banks' typically serve large corporate customers, other financial institutions and governments providing a range of services including arranging financing, trading, advising and underwriting. An important question for the design of any ring-fence is the treatment of deposit-taking, payment and lending services to mid-sized and large companies (known as 'commercial banking'). Annex 7 discusses in more detail which activities might be considered to fall inside and outside of a retail ring-fence.

**4.54** Second, a reminder of the context. Figure 4.2 shows the global nature of UK banks, and the level of capital held against their assets. A ring-fence would ensure that an appropriate proportion of this capital was held against UK retail activities.

**Figure 4.2: Major UK banks' aggregate balance sheet as at 2010 H1<sup>24</sup>**



Source: Bank of England, December 2010, Financial Stability Report

## Problem one – high impact of failure

**4.55** In the recent crisis, the UK authorities provided massive support to the banking system. Not only is this undesirable in any case, but it would be unwise to assume the state will always have the fiscal capacity to provide such support in future crises. The authorities must have the ability to cope with the severe economic consequences of a bank failure without the provision of taxpayer support. Efforts to make banks 'resolvable' aim to achieve this.

**4.56** The tools for resolving retail banking operations have been strengthened following the crisis and are now relatively well developed. In the US, it is common for the Federal Deposit Insurance Corporation (FDIC) to take over a failed retail bank and use its powers to minimise disruption for the customers.<sup>25</sup> The UK authorities now have similar powers after the introduction of the Special Resolution Regime, and other countries are following suit.<sup>26</sup> These regimes are designed to manage the disruption to customers caused by the failure of a bank while minimising the risk to the taxpayer. A sudden unexpected disruption to retail banking services, including provision of credit

<sup>24</sup> Chart excludes Northern Rock. 'Deposits from banks' includes borrowing from major UK banks. 'Other exposures' includes (among other items) loans to UK-resident banks and other financial corporations and holdings of UK government debt. 'Other liabilities' includes Tier 2 capital, short positions, insurance liabilities and derivative contracts with negative marked-to-market value. Assets are not risk-weighted.

<sup>25</sup> The FDIC resolved 140 banks in 2009 (FDIC, 2009, *Annual Report*: <http://www.fdic.gov/about/strategic/report/2009annualreport/contents.html>).

<sup>26</sup> The Special Resolution Regime was created by the Banking Act 2009. More information can be found at [http://www.bankofengland.co.uk/financialstability/role/risk\\_reduction/srr/index.htm](http://www.bankofengland.co.uk/financialstability/role/risk_reduction/srr/index.htm).

and access to deposits, is particularly damaging for retail customers because they have few or no immediate alternative financial service providers.<sup>27</sup>

**4.57** The resolution of wholesale/investment banking activities presents different challenges. The customers of a wholesale/investment bank should be better equipped to cope with its failure, and will tend to have a number of other providers of financial services. Nonetheless, Lehman Brothers' collapse demonstrated that the consequences of disorderly failure can still be highly disruptive, both for counterparties and for the wider financial system. It is essential that improvements are made, including to market infrastructure, to limit this disruption without the need for taxpayer support. For example, central clearing of derivatives will provide greater transparency around derivative exposures, and reduce the total volume of direct exposures between banks.<sup>28</sup> The large number of over-the-counter (OTC) derivatives (i.e. those traded bilaterally between two financial institutions) was a key cause of the collapse in confidence which followed Lehman Brothers' failure – there were a large number of financial institutions with direct exposures to Lehman Brothers and no one knew exactly who they were or the amounts held. A substantial cushion of debt that can be bailed in, as discussed earlier in this chapter, could also facilitate the orderly wind down of a wholesale firm, if it could allow for recapitalisation of the bank without triggering termination of OTC derivative contracts. Further, regulations concerning the exposures between banks have been strengthened with the aim of reducing the extent to which failure of one financial institution can be crippling for others. For example, the number of exemptions for interbank loans from large exposure limits has been reduced.<sup>29</sup> If regulations of this kind are properly followed and enforced then they will both reduce the actual direct damage caused by the failure of a financial institution and the impact on confidence when a failure occurs. A ring-fence can assist with these efforts as, if necessary, it allows regulators to control specifically the level of exposure between retail banks and other parts of the financial system.

**4.58** Banks which integrate retail and wholesale/investment banking create particular problems for resolution. It is difficult for the authorities quickly to separate the bank into different parts and apply the appropriate tools to each bit. The complexity of winding down wholesale/investment banking activities is mixed with the need to protect retail customers. In the recent crisis this forced the authorities to bail out

---

<sup>27</sup> A range of evidence and data collected by the Commission suggests that the majority of small businesses have only one banking relationship, whereas it is common for large multinational companies to have as many as 10. A different solution to the need for continuous retail services is the use of government-guaranteed business finance during stressed times, although this would also involve risk for the taxpayer.

<sup>28</sup> An introduction to the issues associated with central counterparties and a discussion of reform options can be found in Chapter 3 of IMF, April 2010, *Global Financial Stability Report*: [http://www.imf.org/external/pubs/ft/gfsr/2010/01/pdf/text.pdf?bcsi\\_scan\\_F1EE2C3B4B02C0B4=0&bcsi\\_scan\\_filename=text.pdf](http://www.imf.org/external/pubs/ft/gfsr/2010/01/pdf/text.pdf?bcsi_scan_F1EE2C3B4B02C0B4=0&bcsi_scan_filename=text.pdf); or in Chapter 9: Credit Default Swaps, Clearinghouses, and Exchanges in French, K. R., Baily, M. N., Campbell, J. Y., Cochrane, J. H., Diamond, D. W., Duffie, D., Kashyap, A. K., Mishkin, F. S., Rajan, R. G., Scharfstein, D. S., Shiller, R. J., Shin, H. S., Slaughter, M. J., Stein, J. C. & Stulz, R. M., 2010, *The Squam Lake Report: Fixing the Financial System*, Princeton, Princeton University Press.

<sup>29</sup> The new rules on large exposure limits have now been implemented in the UK. Further details can be found at: [http://fsahandbook.info/FSA/handbook/LI/2010/2010\\_41.pdf](http://fsahandbook.info/FSA/handbook/LI/2010/2010_41.pdf).

entire financial institutions in order to avoid the consequences of an interruption in some of their functions. More generally, if an authority can separate a bank into its different business lines it is more likely to be able to find a private sector purchaser for one or more parts of the bank, without harming competition objectives.<sup>30</sup> Resolution powers apply to particular legal entities but at present these often bear little relationship to the different business functions, making swift resale extremely challenging.

- 4.59** Key to improving the resolvability of universal banks is ensuring that their different business functions can be separated in a crisis over a matter of days.<sup>31</sup> Some functions need to be open the following working day, meaning initial resolution needs to be effected over a weekend. The surest way to make functions quickly separable is to insist upon complete separation *ex ante*. Since this may come at a high cost, the question is whether lesser forms of separation can achieve the same end.
- 4.60** A retail ring-fence could significantly improve the separability, and thus the resolvability, of universal banks. A recent IMF paper highlights the advantages which a subsidiary structure can offer for resolution: “organizing banking groups as a constellation of separate legal subsidiaries may facilitate... orderly wind-down of systemically important financial groups in the event of failures”.<sup>32</sup> Placing the UK retail functions into a separately capitalised subsidiary would improve the authorities’ ability to extract this part of a universal bank quickly. It is simpler to transfer the ownership of an existing legal entity than it is to identify from within a large integrated balance sheet all of the retail assets and liabilities and to transfer each one. When activities are completely integrated there is also no reassurance that individual activities, or groups of activities, will be viable on their own. Requiring the UK retail entity to meet regulatory requirements on a standalone basis would provide a minimum financial cushion attached to the retail functions. Importantly, it would allow the authorities to distinguish between creditors of the retail bank and creditors of the rest of the bank in a way which they cannot do if activities are conducted in the same legal entity. It would improve the authorities’ ability to implement a range of resolution tools, including its ability to use partial transfers.<sup>33</sup> Additional restrictions could be considered to assist resolution further.<sup>34</sup>
- 4.61** Some suggest that resolvability can be significantly improved through weaker forms of structural change, such as ensuring that the infrastructure which supports banking

---

30 Indeed, breaking up or restructuring a failed bank as part of resolution is an important part of market discipline.  
31 The European Commission recently consulted on a crisis management framework. The consultation document proposes that regulators should satisfy themselves that critical functions could be legally and economically separated from other functions. If necessary to do this, it says, they should be given powers to require changes to structure or to prohibit certain activities. (European Commission, 2011, *Consultation on technical details of a possible European crisis management framework*: [http://ec.europa.eu/internal\\_market/consultations/2011/crisis\\_management\\_en.htm](http://ec.europa.eu/internal_market/consultations/2011/crisis_management_en.htm)).

32 See page 19 of Fiechter, J., Ötcher-Robe, I., Ilyina, A., Hsu, M., Santos, A. & Surti, J., 2011, *Subsidiaries or Branches: Does One Size Fit All?*, *IMF Staff Discussion Note*: <http://www.imf.org/external/pubs/ft/sdn/2011/sdn1104.pdf>.

33 I.e. the transfer by the authorities of part of a bank’s assets and liabilities to a private sector purchaser.

34 Some examples of these are considered in Annex 7.

activities (for example the IT systems) are placed in a separate subsidiary, and that this would make a retail ring-fence unnecessary. This is discussed in more detail below under ‘operational subsidiarisation’.

- 4.62** In summary, one merit of a retail ring-fence is that it could improve resolvability by providing a high degree of confidence that activities could be separated in the event of a crisis. Such separability is key to improving the authorities’ ability to resolve the whole bank without the provision of taxpayer support.
- 4.63** In addition, it would give the authorities options for more targeted intervention compared with the ‘all or nothing’ decisions they faced in 2008. This is particularly important for countries like the UK whose banks are sufficiently large to threaten the integrity of the public finances – the ‘too big to save’ problem. The experience of Ireland, whose banking assets are collectively smaller in relation to GDP than the UK’s,<sup>35</sup> during the recent crisis provides a vivid example of this risk.<sup>36</sup> A ring-fence could help reduce this risk, but not necessarily because retail banking is less risky than wholesale/investment banking.<sup>37</sup> Rather, it means that the authorities can maintain the continuous provision of retail services through resolution of a smaller and simpler entity. Some preliminary estimates of the proportion of assets which would fall within the ring-fence are set out in Figure 4.3, although this would clearly depend upon the detailed design of the ring-fence.

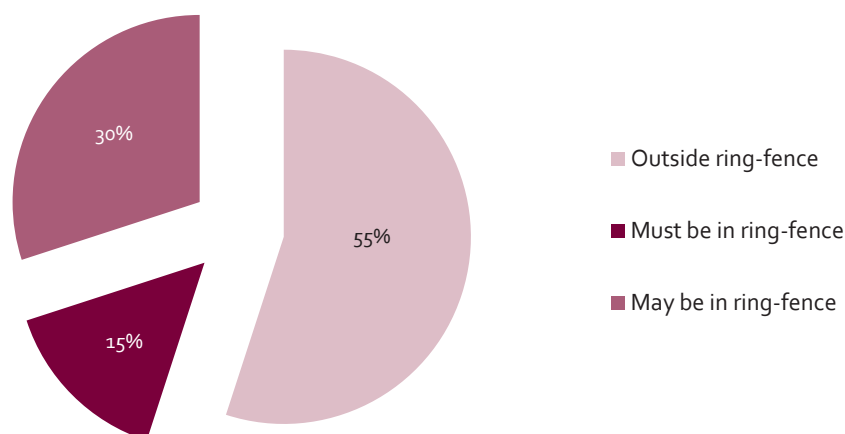
---

35 See Figure 2.2.

36 The Irish economy has contracted for three successive years, experiencing a decrease in GDP of 7.6% in 2009, and unemployment stands at over 14%. Figure 2.3 shows that, after the bail-outs were announced in 2008, the markets began to link the solvency of banks in Ireland and the UK with the solvency of their governments. Gerlach, Schulz & Wolff (2010) show that, as market perceptions of risk increase, the perceived default risk of governments of countries with large risky banking systems also increases. (Gerlach, S., Schulz, A. & Wolf, G., 2010, Banking and Sovereign Risk in the Euro Area, *CEPR Discussion Paper No. DP7833*: <http://www.cepr.org/pubs/new-dps/dplist.asp?dpno=7833>). Demirgüç-Kunt & Huizinga (2010) show that the market perceives some banks as being too large for the government to bail out effectively, in the sense that the attempt to do so would jeopardise government finances. (Demirgüç-Kunt, A. & Huizinga, H., 2010, Are banks too big to fail or too big to save? International evidence from equity prices and CDS spreads, *European Banking Center Discussion Paper No. 2010-15*: [http://papers.ssrn.com/sol3/Delivery.cfm/SSRN\\_ID1752220\\_code1201476.pdf?abstractid=1626132&mirid=1](http://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID1752220_code1201476.pdf?abstractid=1626132&mirid=1)).

37 Retail banking is clearly risky. Much of the Irish banks’ losses came from domestic property lending (both commercial and retail).

**Figure 4.3: Illustrative proportion of total assets of UK banks within a retail ring-fence (2009)<sup>38</sup>**



Source: Company accounts 2009, Commission estimates

## Problem two – increased risk of system failure

- 4.64** One of the arguments made in favour of universal banking is that it allows diversification of risks with the result that the probability of bank failure, for a given level of risk, is lower than if retail banking was in some way separated from wholesale/investment banking. The Commission has been presented with some evidence that the probability of universal bank failure has historically been similar to that of retail banks, but lower than that of wholesale/investment banks.<sup>39</sup> However, these data involve subjective judgements particularly about what constitutes ‘failure’ in the context of bail-outs. Banks of all shapes and sizes failed during the recent crisis but universal banks were far from immune – two of the largest injections of taxpayer capital went to Royal Bank of Scotland (RBS) and Citigroup, both universal banks.
- 4.65** Accepting that there are times when retail and wholesale/investment banking risks offset each other, it does not follow that a system of universal banks is the safest one. There are two reasons why universal banks can damage the stability of the system as a whole. First, universal banks can be one way in which problems spread through the financial system. In particular, this can increase the probability of failure for less risky activities. Second, universal banks typically hold less capital relative to assets than

<sup>38</sup> Figure based on provisional Commission estimates assuming the activity split outlined in Annex 7. ‘UK banks’ includes all UK-based banking subsidiaries and building societies.

<sup>39</sup> Specifically, an analysis of the world’s top 100 financial institutions between 1988 and 2009 shows a probability of default of 1.2% for universal banks, 1.5% for retail and commercial banks and 2.6% for investment banks. (Barclays Capital, January 2011, *UK banks: Break-up or shake up?*).

equivalent separate institutions. This can heighten risk at times of general economic stress, when banking system resilience is most needed.

- 4.66** There are a number of ways in which problems in one part of the financial system can spread to others. One very direct channel of contagion is when one financial institution conducts two distinct activities without any firewall between them.<sup>40</sup> In particular, the integration of UK retail banking and global wholesale/investment banking within a single legal entity increases the exposure of the UK retail banking system to external shocks. Universal banking has the advantage that a sufficiently profitable or well-capitalised wholesale/investment banking operation may be able to cover losses in retail banking. But it has the disadvantage that unsuccessful wholesale/investment banking may bring down the universal bank including the retail bank. The safety of retail banks is increased by universal banking if and only if the probability that the wholesale/investment banking operations save the retail banking operations exceeds the probability that they sink them. An important question about forms of activity separation is how this balance of probabilities can be shifted favourably.
- 4.67** Furthermore, diversification benefits do not necessarily lead to lower probabilities of default for universal banks. In reality, managers of universal banks can take more risk rather than simply having a lower default probability. In particular, banks which conduct both retail and wholesale/investment banking can, and often do, hold lower levels of capital and have access to cheaper funding than equivalent separate institutions.<sup>41</sup> This is the result of what market participants accept, rather than regulatory requirements. In other words, investors in universal banks are content for them to run riskier wholesale/investment banking operations than they would be if they were investing in a standalone wholesale/investment bank. Some say this is because investors in universal banks are more confident of a government bail-out than investors in standalone wholesale/investment banks. Others say it is purely the result of diversification benefits – retail and wholesale/investment banking are likely to do well at different times and contain some offsetting risks. The dispute is difficult to settle empirically.<sup>42</sup>
- 4.68** Either way, this private benefit of backing risk with less capital may have a social cost. The result is that, in the financial system as a whole, less capital is held against the same set of assets. This system will be less stable if the values of all asset classes fall

---

40 The advantages of structural reform in addressing contagion problems are discussed in Blundell-Wignall, A., Wehinger, G. & Slovik, P., 2009, *The elephant in the room: The need to deal with what banks do*, *OECD Journal: Financial Market Trends*.

41 In evidence presented to the Commission by the affected financial institutions and others, the principal costs of separation or ring-fencing, as explained in Annex 3, are that banks would need to hold additional capital and would experience an increase in their funding costs. Although some diversification arguments may apply simply on the basis of size – such that under any separation the total amount of capital would need to go up – the evidence presented to the Commission suggests that there are particular features of wholesale/investment banking which mean that they would need to hold higher capital on a standalone basis, beyond simply a ‘smaller size’ effect.

42 The Commission has been sent one analysis which suggests that roughly 50% of the lower balance sheet costs enjoyed by wholesale/investment banks within universal banks are the result of a government guarantee, and would welcome further evidence on this topic.

together. In particular, a universal bank will be most at risk of failure if its retail and wholesale/investment banking operations suffer losses at the same time. This is likely to occur at a time of general economic stress – just the time when stable banks are needed most. It is at such times that the failure of a bank can trigger a collapse of confidence and a wider financial crisis, the private sector will be least able to absorb the consequences of a bank failure, and fiscal risks for the government are greatest. In this case, the interests of market participants may be different from the wider public interest because of the particularly damaging consequences of a bank failure at a time of general economic stress.

- 4.69** This observation is consistent with studies on ‘systemic risk’ (the risk of significant disruption to the financial system as a whole) compared to ‘idiosyncratic risk’ (the risk of failure of a particular bank). Diversity within a bank can lower idiosyncratic risk, but what is important for lowering systemic risk is diversity of the system as a whole. There is some evidence (see Box 4) that larger and/or more complex banks increase the risk that the whole financial system will collapse at the same time. The existing evidence does not allow the effects of mixing activities to be completely disaggregated from size effects, but integrated universal banks may be one example of this phenomenon.
- 4.70** In short, without appropriate safeguards universal banks can increase the risk of failure of the financial system. Without firewalls, they are a direct way in which problems in one part of the system can spread to another. Universal banks typically run on less capital relative to assets than if they were separated. While this may provide an economic benefit in good times, it can heighten risk at times of general economic stress, when banking system resilience is most needed. Structural reform should balance each of these factors. It should aim to shift probabilities so that different parts of the bank can still save each other, but with less chance that they will sink each other. And it should minimise the risk of failure at times of general economic stress while retaining the economic benefits of universal banking in good times.



#### Box 4: Systemic risk

A number of recent studies suggest that in general large, complex, or diversified firms pose greater systemic risk.

De Jonghe (2010) finds that the ‘tail betas’, a measure of systemic risk, of diversified financial firms are higher than for specialised firms.<sup>[1]</sup>

Baele, De Jonghe & Vennet (2007) find that diversification of revenue streams from different financial activities increases the correlation between a bank’s performance and that of the market.<sup>[2]</sup>

Haldane & May (2011) apply network theory to the financial system. They suggest that one lesson from network theory is the importance of diversity across systems (rather than within institutions) and the relative stability of more modular systems. In particular, they find that, for external shocks, the fragility of a system of identical banks is maximised if those banks have a particular feature – a feature which “in some ways very roughly corresponds to banks substantially engaged in both retail and investment activity”.<sup>[3]</sup>

Richardson, Smith & Walter (2011) provide a more comprehensive review of the literature on this topic including additional evidence provided in the same book that the systemic risk of large and complex financial institutions is higher than the risk associated with simpler organizational structures. They conclude that there is a degree of consensus in the literature around the idea that expansion to multiple functions produces greater systemic risk.<sup>[4]</sup>

<sup>[1]</sup> De Jonghe, O., 2010, Back to the basics in banking? A micro-analysis of banking system stability, *Journal of Financial Intermediation*

<sup>[2]</sup> Baele, L., De Jonghe, O. & Vennet, R. V., 2007, Does the stock market value bank diversification?, *Journal of Banking & Finance*

<sup>[3]</sup> Haldane, A. G. & May, R. M., 2011, Systemic risk in banking ecosystems, *Nature*

<sup>[4]</sup> Richardson, M., Smith, R. C. & Walter, I., 2011, Large Banks and the Volcker Rule, in Acharya, V. A., Cooley, T. F., Richardson, M. & Walter, I., eds., *Regulating Wall Street*, Hoboken, Wiley

- 4.71** A retail ring-fence can preserve the possibility that the wholesale/investment banking operations of a universal bank can save the retail banking operations while curtailing the possibility that they can sink them. It would require banks to maintain a minimum level of capital within their UK retail operations. Unlike with full separation, it could be designed so that any capital above this level could be transferred internally to wholesale/investment banking. In a situation where the retail banking operations were suffering losses but the wholesale/investment banking operations were generating excess capital, this capital could still be used to support the retail operations, and *vice versa*. However, if the whole bank did not have sufficient capital, the ring-fence would prevent the wholesale/investment banking operations from depleting the resources of the retail banking operations below a minimum safeguard level.
- 4.72** Under such a design, the retail ring-fence would constrain a bank’s ability to move capital only by insisting it maintains minimum safeguard levels in its retail operations. It would not, therefore, impose requirements for extra capital on banks that would

maintain these minimum levels in any case. It would impose private costs on banks who find it profitable to drain capital below the UK retail safeguard level to put it to use in other activities. Indeed, the bank might have profit motives to shift the capital away from retail banking when it is particularly needed there in terms of the public interest, for example, at times of general economic stress. For this reason, a ring-fence may bring significant social benefits, as it represents a requirement for a bank to hold extra capital to protect against the situation where stable banks are most needed.

- 4.73** Alternatively, the extra capital may be required because investors believe that the chance of a government bail-out has been reduced. But a belief that bail-outs are likely is precisely one which can make the financial system excessively risky and so, again, there should be significant stability benefits to removing it.
- 4.74** Some banks have expressed concern that in practice a requirement to hold retail activities in a separate subsidiary would lead to additional constraints on capital flows, over and above the intended minimum safeguard levels. An important question for the detailed design of a retail ring-fence is how the rules around transfers of excess capital should be set in a way which achieves the objectives of the ring-fence while minimising unnecessary costs.
- 4.75** The merits of a retail ring-fence do not depend on retail banking being less risky than wholesale/investment banking activities.<sup>43</sup> If, however, wholesale/investment banking is significantly more risky than retail banking then a stronger ring-fence would further decrease the probability of retail bank failure. As to the empirical evidence on the relative riskiness of retail and wholesale/investment banking, studies based on the performance of diversified firms suggest that banks with a higher proportion of non-interest income tend to have more volatile earnings. For example, Stiroh & Rumble (2006) found that non-interest income generating activities were associated with higher volatility, and further that these effects more than offset the gains from diversification.<sup>44</sup> This is consistent with the view from at least one rating agency that investment banking is riskier than retail banking.<sup>45</sup> The evidence is not conclusive, however, partly because different accounting treatments can distort some results, and financial innovation and regulatory changes may limit the relevance of historical studies.
- 4.76** A ring-fence would not guarantee the safety of retail deposits, since risks would remain within the retail subsidiary. Deposit insurance is intended to address this problem, although the crisis demonstrated that it is also difficult for the authorities to allow uninsured retail deposits to suffer losses. There may be a need to promote

---

43 As a result, the arguments here are very different from those which compare the 'safe, important utility function' of banks to 'the risky, unimportant casino function'. Such arguments are unconvincing since retail banking involves significant risk taking and wholesale/investment banking is economically valuable.

44 Stiroh, K. J. & Rumble, A., 2006, The dark side of diversification: The case of US financial holding companies, *Journal of Banking and Finance*

45 Standard & Poor's, January 2011, *Industry Risk For Investment Banking Is Generally Higher Than For Other Financial Institutions*: <http://www2.standardandpoors.com/spf/pdf/media/IndustryRiskForInvestmentBankingIsGenerallyHigherThanForOtherFinancialInstitutions.pdf>

greater awareness of insurance limits, and to facilitate options for safer stores of large value retail deposits,<sup>46</sup> but mandating that all deposits are treated in this way is likely to be excessively costly.

### Problem three – increased risk taking

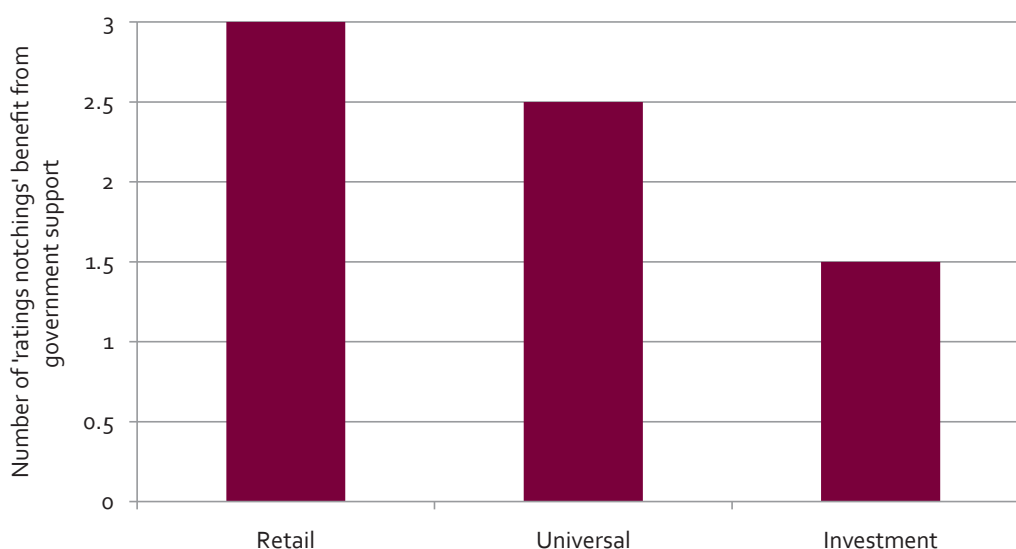
- 4.77** The issue of government guarantees to banks is discussed in Chapter 2 and Annex 3. They conclude that systemically important banks do enjoy a *de facto* government guarantee and that at times this can provide an incentive for them to take excessive risks, largely as a result of the availability of cheaper funding.
- 4.78** How can the structure of financial institutions affect these perceived government guarantees? First, as we have seen, because structure affects the separability, and so the resolvability, of financial institutions. Improving the authorities' ability to resolve a bank without taxpayer support would substantially reduce any expectation by market participants that they would be bailed out. Ring-fencing, by improving the resolvability of universal banks in a way which is transparent to all creditors, would therefore reduce perceived government guarantees. Ring-fencing may also improve market discipline more generally because of a greater degree of transparency around the financial resources available to each business line.
- 4.79** Second, different activities may enjoy different levels of perceived government guarantee. Retail deposit-taking, at one extreme, is partially backed by explicit insurance. Proprietary trading of financial instruments, at the other, is not something anyone would expect a government to support for its own sake. How much a government would feel compelled to intervene to save different activities is a matter of degree. Combining financial activities in a way which makes it hard for the authorities to treat each activity differently in resolution can extend the scope of the strongest perceived government guarantees. Figure 4.4 illustrates that retail banks appear to benefit from a higher level of government support in ratings than wholesale/investment banks, and universal banks are somewhere in between. Ring-fencing, by providing the authorities with the option to resolve retail and wholesale/investment activities in different ways, would curtail perceived government guarantees.
- 4.80** Further, structural change could help to address a time inconsistency problem in addressing the 'too big to fail' problem – authorities in the heat of a crisis will always face enormous pressure to support banks despite the negative consequences this has for moral hazard in the future. Separating retail banks, where the political pressure

---

<sup>46</sup> Reflecting this, the European Commission have suggested that EU member states may decide to extend insurance to deposits arising from real estate transactions and deposits relating to particular life events above an insured limit. (See page 6 of the European Commission's legislative proposal for revisions to the Directive on Deposit Guarantee Schemes: [http://ec.europa.eu/internal\\_market/bank/docs/guarantee/20100712\\_proposal\\_en.pdf](http://ec.europa.eu/internal_market/bank/docs/guarantee/20100712_proposal_en.pdf)).

will always be greatest, from other activities should help to alter the incentives of the authorities so that they are less likely to support these other activities.

**Figure 4.4: Difference between support and standalone ratings, by bank type (2010)<sup>47</sup>**



Source: Moody's, Standard & Poor's

**4.81** One argument against separation is that perceived government guarantees do not apply only to retail banking. The disruption caused by the collapse of Lehman Brothers is said to contradict the idea that wholesale/investment banking services can be allowed to fail. However, this does not mean a retail ring-fence is unnecessary or ineffective. First, a ring-fence can curtail government guarantees to the extent that the benefit of expected government support is lower for wholesale/investment banks – even if that benefit is not reduced to zero. Second, the ring-fence can make a significant contribution to limiting the disruption caused by the failure of wholesale/investment banks by introducing a firewall between their activities and retail activities. Third, other measures in progress or proposed alongside a retail ring-fence will address some of the other issues highlighted by Lehman Brothers. As mentioned above, the move towards central clearing of derivatives, the development of bail-inable debt, and strengthened limits on intrabank exposures are important in this regard.

<sup>47</sup> Rating agencies provide two separate ratings for banks: 'standalone' is a rating based on the financial strength of the bank; while 'support' takes into account expected government support for the bank. Figure 4.4 is for a sample of 11 banks to give a mix of business type (BBVA, LBG and Wells Fargo (retail), Barclays, HSBC, JPMorgan, Deutsche Bank, UBS and Credit Suisse (universal), Goldman Sachs and Morgan Stanley (investment)).

## Forms of separation compared

**4.82** There are a number of ways in which some separation between different financial activities could be introduced. In particular, there are questions around the strictness of the split which should be introduced and around which activities should be targeted. In addition, some proposals focus on geography rather than function. This section outlines some apparent advantages of a retail ring-fence over other separation proposals.

### *Full separation*

**4.83** Some have proposed a much stricter form of separation between retail and wholesale/investment banking, where the legal entities conducting these activities cannot be in the same corporate group. The original implementation of the US Glass-Steagall Act imposed a strict separation of this kind (although the division between activities was drawn in a different place). Would full separation be a better way of addressing the problems outlined than a retail ring-fence?

**4.84** The benefit of full separation is that it would guarantee separability in a crisis. Should the need arise, the retail and wholesale/investment banks could be dealt with in isolation, using the appropriate resolution tools or insolvency procedures. This would be totally clear to creditors from the outset. A number of additional possible channels of contagion would be mitigated, such as the triggering of a crisis of confidence in a retail bank if a wholesale/investment bank of the same brand ran into difficulties. For the most part, full separation would increase the confidence that the problems described above would be successfully addressed.

**4.85** But the costs of full separation could be higher than is necessary to address the problems outlined earlier. Structural change should not impose restrictions which are more stringent than needed, so that banks can organise themselves in the most efficient way possible within the required constraints. There may be economies of scope between retail and wholesale/investment banking which can be preserved within one financial group.<sup>48</sup> For customers who require both retail and wholesale/investment banking services, there may be advantages in being able to source these from a single provider.<sup>49</sup> Moreover, full separation would remove all intra-bank diversification benefits and so eliminate the possibility that one part of the group could save another part. Provided the activities are conducted in a way which is properly structured and capitalised, it may be possible to retain some of the

---

48 Most studies have not found strong evidence of scope economies, however. (Mester, L. J., 2008, Optimal Industrial Structure in Banking, in Thakor, A. V. & Boot, A., eds., *Handbook of Financial Intermediation and Banking*, Amsterdam, Elsevier). Indeed, some studies find that financial conglomerates trade at a discount to separate institutions, rather than a premium. (Leaven, L. & Levine, R., 2007, Is there a diversification discount in financial conglomerates?, *Journal of Financial Economics*).

49 This point was made by a number of banks in their evidence to the Commission, see: <http://bankingcommission.independent.gov.uk/bankingcommission/responses/>.

benefits of mixing retail and wholesale/investment banking while still addressing the problems outlined above.

- 4.86** One concern about retail and wholesale/investment banking being in the same corporate group is that, in a crisis, managers of a corporate group will typically seek to support all entities within that group even if they are not legally obliged to do so.<sup>50</sup> Severing legal obligations is arguably not sufficient to prevent problems in one part of the bank spreading, because reputational concerns will lead banks to provide support to the troubled part even if it causes distress across the group. In the recent crisis, a number of banks provided greater support to their off-balance sheet entities than they were required to legally. To address this concern through a ring-fence alone, it would be important that the rules around transfers of capital are sufficiently robust to prevent bank managers from depleting the capital of the retail bank below minimum safeguard levels. In addition, the contagion caused by the failure of one bank, or by part of one bank, should be more limited as a result of the package of measures considered in this *Interim Report* and being progressed internationally to improve the resilience of the financial system.
- 4.87** Some form of retail ring-fencing appears therefore preferable to full separation to the extent that: a) the rules around the subsidiary are firm enough to secure most or all of the benefits of the reform; and b) the costs of ring-fencing are substantially lower than those of a full split. Unless both of these conditions hold, however, the balance of arguments might favour strict separation.

### *Operational subsidiarisation*

- 4.88** Some have suggested that a retail ring-fence is unnecessary because operational changes and the development of recovery and resolution plans can address the problems outlined.<sup>51</sup> One specific proposal is to require that the infrastructure needed for a bank to keep operating should be placed in a separate subsidiary from the rest of the group. The computers, data, intellectual property, staff and buildings which are needed for the bank to continue to process transactions, for example, would all be placed in this arm's-length 'operational subsidiary'. This subsidiary would contain sufficient funds to ensure that it could continue to operate for a period of time even if other parts of the banking group went into insolvency. Some banks already choose to place their operations in one entity. Operational subsidiarisation would be less expensive for banks to implement than the retail ring-fence.
- 4.89** This proposal could make a useful contribution to making all kinds of banks more resolvable. One challenge in resolution is that if part of the bank goes into insolvency then all of the operational functions supported by this part of the bank will also

---

<sup>50</sup> For example, this is an issue raised by Lord Lawson in his evidence to the Commission: <http://bankingcommission.independent.gov.uk/bankingcommission/wp-content/uploads/2011/01/Nigel-Lawson-Issues-Paper-Response.pdf>.

<sup>51</sup> See Paragraphs 3.12 to 3.15 for further details on the development of recovery and resolution plans.

stop. This is one factor which can force governments to bail out a whole financial institution in order to ensure the continuation of some of its functions. Banks should be organised in a way which means that the infrastructure required to support its key economic functions can be separated from the rest of the bank in the event of failure. Operational subsidiarisation makes a helpful contribution to this and the authorities should develop the idea with banks as part of their ongoing work to improve the resolvability of all banks.

- 4.90** Can operational subsidiarisation alone address the three problems outlined above? Problem one is that universal banks have a high impact when they fail and are difficult to resolve. While operational subsidiarisation helps with resolution, it does not address the same problems as a retail ring-fence. If the systemic consequences of failure are to be avoided the financial assets and liabilities of the bank will also need to be separated and/or restructured. For a depositor to have access to their savings a bank needs to have sufficient funds to pay out depositors, as well as the staff and machines to process the payment. Operational subsidiarisation alone does nothing to address the separability of financial assets and liabilities and significant challenges remain in this area. Banks would need to be able to produce the quantity and quality of information required rapidly to value and to separate entire balance sheets. Resolution planning and testing of information systems can help to ensure that the relevant data is available, although significant further investment is needed before these requirements can be adequately met. Further, even with perfect information the authorities would be constrained in their ability to separate financial assets and liabilities in practice. For example, under the Special Resolution Regime the authorities cannot (subject to limited exceptions) separate assets and liabilities which are held with the same counterparty if the bank has written a contract allowing these positions to be offset. Thus, in this regard, operational subsidiarisation and a retail ring-fence should be considered complements, not alternatives.
- 4.91** Problem two is that, in the absence of any restrictions, universal banks can have the effect of increasing the risk of system failure. Losses in one part of the bank can cause the failure of the whole bank, and universal banks generally hold capital levels which can heighten risk at times of general economic stress. Operational subsidiarisation does not address this problem. The financial assets and liabilities of a universal bank would still be mixed meaning that high levels of losses in one would cause the whole bank to fail. There would be no arrangements to ensure that retail banking operations were supported by a minimum level of financial resources.
- 4.92** Problem three is that the perception of government guarantees to the financial system encourages risk taking. Operational subsidiarisation may help reduce these guarantees by improving resolvability. But because it does not address the same resolution challenges as a ring-fence, further action would still be needed to curtail these guarantees.
- 4.93** The Commission welcomes the development of operational subsidiarisation as a helpful contribution to improving the resolvability of all banks. However, at

present the retail ring-fence addresses a number of issues which are not dealt with by operational subsidiarisation alone. The Commission would welcome views on alternative ways in which the benefits of a ring-fence could be achieved, including through further development of the operational subsidiarisation idea. Additional operational changes may also help improve resolvability – for example by making it easier for customers to switch retail banking provider (discussed further in Chapter 5).

### *The Volcker rule*

- 4.94** A retail ring-fence would isolate certain activities within a universal bank and require minimum levels of capital to be held against them. Alternative proposals focus on carving out certain kinds of activities from any deposit-taking bank. In particular, Paul Volcker has proposed a form of separation ('the Volcker rule') which prevents deposit-taking banks from engaging in 'proprietary trading' (own account trading activities unrelated to customer needs).<sup>52</sup> A form of this rule has been introduced in the US by the Dodd-Frank Act. This prohibits deposit-taking banks from conducting proprietary trading and limits their investments in hedge funds and private equity funds.<sup>53</sup>
- 4.95** Similar to a retail ring-fence, a Volcker rule aims to curtail government guarantees and the instability they can create by subsidising risk taking. Under a Volcker rule, because deposit-taking banks benefit from some explicit and implicit government guarantees, they should not be able to conduct trades or invest in funds purely for the purpose of making money on their own account. Socialising part of the risk of these activities while privatising their benefits encourages excessive risk taking that may damage the bank's stability.
- 4.96** It is unlikely that the impact of the Volcker rule would be significant in the UK. The activities of dedicated proprietary trading units within UK universal banks have typically represented a very small component of bank assets. While trading activities in client-facing units are typically much larger, it is not always straightforward to isolate proprietary trades from those related to customer needs. Some have suggested that this will make the Volcker rule difficult to enforce, although potential solutions are currently being explored by the US authorities.<sup>54</sup>
- 4.97** To the extent that a reform package involving a retail ring-fence combined with greater loss absorbency successfully curtails government guarantees, the case for a

---

<sup>52</sup> Paul Volcker is a former Chairman of the Federal Reserve and was Chairman of President Obama's Economic Recovery Advisory Board from February 2009 to January 2011.

<sup>53</sup> Financial Stability Oversight Council, 2011, *Study & Recommendations on Prohibitions on Proprietary Trading & Certain Relationships with Hedge Funds & Private Equity Funds*: <http://www.treasury.gov/initiatives/Documents/Volcker%20sec%20%20619%20study%20final%201%2018%2011%20rg.pdf>

<sup>54</sup> For example they are looking at prohibiting the solicitation of trades by banks, mandating some form of hedging for all exposures, imposing inventory risk limits, or legislating the invalidity of any non-client-focused trading contract (Financial Stability Oversight Council, 2011, *Study & Recommendations on Prohibitions on Proprietary Trading & Certain Relationships with Hedge Funds & Private Equity Funds*: <http://www.treasury.gov/initiatives/Documents/Volcker%20sec%20%20619%20study%20final%201%2018%2011%20rg.pdf>).



Volcker rule is weakened. Increasing loss absorbency and implementing a retail ring-fence would reduce perceived government guarantees across all banking activities by making the resolution of banks easier, less costly, and less disruptive to essential retail banking activities. This would address a major motivation for a Volcker rule. Furthermore, while proprietary trading and investment into hedge funds would not be prohibited, these activities would be outside the ring-fence and so isolated from retail banking where implicit government guarantees appear strongest.

- 4.98** The Volcker rule is also designed to remove the conflicts of interest between a bank's own trading activities and those it conducts on behalf of clients. Such conflicts can arise, for example, if a bank were to provide merger advice to a client which was influenced by its own exposure to a particular company, or simply in the ordering in which client and proprietary trades are processed. Existing regulations are in place to protect clients and govern how banks should manage conflicts, and it will be the responsibility of the Financial Conduct Authority (FCA) to enforce these in the UK. Such regulations will always be required since separation does not prevent other market abuses such as the passing of 'inside information' (specific price sensitive information not publically available) between individuals for their personal gain.
- 4.99** In summary, the Volcker rule shares a common motivation with the retail ring-fence in that it aims to curtail government guarantees. The ring-fence addresses some of the financial stability concerns which motivate the Volcker rule (though does not tackle conflicts of interest).

### *Other forms of subsidiarisation*

- 4.100** A retail ring-fence would require entities seeking authorisation to conduct retail banking in the UK to place those activities in a separate subsidiary from their wholesale/investment banking operations. The intention of a retail ring-fence is that the location of a universal bank's global headquarters would not affect the applicability of the ring-fencing rules. So the rules would not apply to a global universal bank based in London which does not conduct UK retail activities. The rules would apply to any bank seeking authorisation from the UK regulator to conduct UK retail activities, regardless of the location of its global headquarters.
- 4.101** Alternative options would impose global separation on UK-headquartered banks, either along purely functional or purely geographic lines. The Commission is not attracted to either approach, in both cases because it considers that authorities in other jurisdictions should be free to act according to their own views and needs. The *quid pro quo* for this must be that the authorities in the regulating jurisdiction are clearly responsible for the resolution of the entities they regulate, and where the UK authorities are the home regulator for the group they will need to be satisfied that they can conduct their duties without posing a fiscal risk to the UK taxpayer. In addition, purely geographic subsidiarisation does nothing to address the risks created by the comingling of retail and wholesale/investment banking activities. This does

not imply that the Commission doubts that these may be sensible ways for banks to choose to organise themselves, but rather that it does not see the case for the UK authorities to mandate such reforms.

### The costs of separation

- 4.102** If a UK retail ring-fence has important financial stability benefits, what would be the cost of introducing one?
- 4.103** Before addressing this question, it is important to make two general points. First, the private costs to banks of a UK retail ring-fence should be measured relative to the capital and other requirements that would apply in the absence of a ring-fence. Put another way, the costs of a ring-fence depend upon the starting level of capital in the bank and so the costs of different measures are not additive. Second, important elements of the private costs of a ring-fence also increase its social benefit. Private cost arises largely from the bank being free to transfer capital from UK retail banking activities only so far as is consistent with maintaining the capital requirement for UK retail banking. The loss of the option to run down the capital backing its UK retail operations below the level required by the ring-fence may increase the bank's overall cost of capital, for example if it has to replace some debt finance with equity or if the price of its debt finance increases. This is more costly to the bank the greater the market's assessment is of the frequency and extent to which the bank would need to deplete UK retail banking capital below the required level, given the riskiness of all the bank's activities.
- 4.104** The introduction of a UK retail ring-fence could be expected to generate private costs for those banks which have chosen to operate as integrated universal banks. These costs would arise largely because it is thought that in some cases the rest of the group would need to raise additional capital and would experience higher debt funding costs. The Commission has received a wide range of estimates of these costs, including from the banks themselves on a confidential basis. One number which has been reported publicly placed the cost at £12-15bn per year for affected UK banks. This estimate is higher than those received from the banks themselves and a number of factors suggest that the actual costs of a ring-fence are likely to be smaller still. In particular, most estimates assume that diversification benefits are lost and that the costs are largely the same as for complete separation. In addition, some estimates include costs which will be incurred by banks in order to meet new regulatory requirements and so do not represent the incremental cost of a ring-fence.
- 4.105** To some extent these costs may represent a transfer within the economy which do not have overall costs for society, for example a shift to banks of costs that taxpayers are currently bearing. However, measures can have a social cost either if they reduce

the competitiveness of the UK as a place to conduct financial services or if they result in an inefficient<sup>55</sup> increase in the price of financial services for UK consumers.

- 4.106** Competitiveness is discussed in detail in the next section of this chapter. Importantly, structural reform could enhance the attractiveness of London as a place to do business for some financial institutions. In particular, if the stability of UK retail banks can be isolated from other activities then the need for super-equivalent regulation on all parts of the financial system might be reduced.
- 4.107** The Commission has not seen evidence which would suggest a substantial increase in costs for UK retail banks. Any increases in price are most likely to fall on wholesale/ investment banking services given how the additional costs arise, but scope for price increases here is limited because these services are traded in international markets. So the proportion of the private cost which represents true social cost is likely to be low. Much of the private cost will reflect the loss of an inefficient public guarantee. Initial modelling accordingly suggests that the implications for the overall economy of the costs of a retail ring-fence are likely to be small.
- 4.108** Based on its work so far, the Commission's current view is that the social benefits of a retail ring-fence are likely to outweigh its social costs. The offsetting benefits of a ring-fence may be large, and a ring-fence would only have to be judged to have a relatively modest impact on the probability and/or impact of financial crises in order to produce a net long run increase in UK GDP. Annex 3 sets out a preliminary approach to cost-benefit analysis in more detail. The Commission would welcome views on how this should be developed.

## The design of a retail ring-fence

- 4.109** A ring-fence would need to be designed in a way which strikes a balance between benefits and costs. There may be a number of areas where careful design may be able to lower the costs of reform without negating the benefits. Annex 7 illustrates some of the key design issues associated with a retail ring-fence. The Commission would particularly welcome views on the questions set out there. These again concern the severity, type and geography of a split.
- 4.110** Ring-fencing could include a series of restrictions above and beyond the requirement for segregated capital. Some additional rules would certainly be needed for the ring-fence to achieve its objectives. For example, without some limits on the exposures between the retail subsidiary and the rest of the bank, the ring-fence would not act as an effective firewall. In other cases, additional rules could enhance the financial stability benefits of a ring-fence but might have additional costs. For example, additional restrictions on the transfer of capital between entities would reduce the

---

<sup>55</sup> I.e. an increase which does not result from the removal of a subsidy.

chances of contagion from one part of a bank to another, but might reduce efficiency in normal times.

- 4.111** Some have suggested that even if a ring-fence is desirable, it is simply not practical. In particular, there is a question as to whether financial activities can be sufficiently clearly defined for a line to be drawn and enforced. In this context, the gradual erosion of the division imposed by the Glass-Steagall Act through financial innovation is cited as an example of why it is difficult to maintain activity restrictions in banking. The Commission does not find this argument persuasive.<sup>56</sup> First, it is important to recognise that developments in finance mean that the appropriate division of activities is likely to have changed since Glass-Steagall. Second, there are other examples where activity restrictions have been maintained over long periods of time, such as those which apply to building societies in the UK.
- 4.112** Nonetheless, definitional issues would be crucial for any ring-fence. Definitions would need to be robust against attempts both to conduct additional activities within the retail ring-fence and to re-define retail activities so that the ring-fence requirement did not apply. For example, the US authorities bailed out mutual funds during the crisis despite the fact that these had been created in part to avoid restrictions around retail deposit-taking.
- 4.113** Annex 7 provides an illustrative example of the financial activities which might be included in 'retail'. This example also demonstrates that, subject to regulatory oversight, some flexibility could be allowed – with some activities being permitted both within the ring-fence and outside it. This would limit the need to define a precise cut-off point at which activities would need to migrate from one entity to another. The Financial Services Authority (FSA) already operates a licensing regime which requires banks to seek authorisation for specific financial activities and the definitions within this regime could provide a good basis for a ring-fence. In designing a retail ring-fence, it would be important to balance the potential benefits of additional restrictions on the retail subsidiary with the additional incentives for arbitrage which this might create.
- 4.114** Another question is how a ring-fence of the kind discussed in this *Interim Report* would operate in the context of EU law. A ring-fence is designed to fit within the EU legal framework and the Commission is satisfied that it can be imposed on UK-authorized banks, including UK subsidiaries of foreign banks. However, within the European Economic Area (EEA)<sup>57</sup> a banking entity incorporated in one member state is entitled to branch into other member states (host states) using its home licence. These branches remain primarily regulated by their home authorities who are also responsible for running their deposit insurance scheme. The implications of European

---

<sup>56</sup> Indeed, some have argued that structural reform is no less challenging or costly to implement than alternative solutions to the 'too big to fail problem' (Avgouleas, E., 2010, *The reform of 'too big to fail' bank: A new regulatory model for the institutional separation of 'casino' and 'utility' banking*: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1552970](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1552970)).

<sup>57</sup> The EEA is made up of the members of the EU plus Norway, Liechtenstein and Iceland.

rules around branching for a ring-fence are considered further below (see Paragraphs 4.166 to 4.169).

## Other structural reform ideas

**4.115** Other structural reform ideas propose radical limits on the type or quantity of bank assets and liabilities and would significantly alter the nature of the UK banking sector. The first set of such reform proposals, including ‘narrow banking’, ‘full reserve banking’ and ‘limited purpose banking’ seek, to varying extents, to reform the fractional reserve banking model that underpins the present banking system. Another structural reform idea – size limits – seeks to restrict the absolute size of banks’ assets or liabilities. While some of these proposals have sensible aims and could be welcome developments if banks chose to adopt them, the benefits of mandating these structures across the sector do not appear to outweigh the costs and risks. Accordingly, the Commission does not propose to pursue them further.

### *Narrow banking*

**4.116** Under narrow banking proposals, retail deposits would be held in distinct ‘narrow banks’, and be backed entirely by safe, liquid assets, of which government bonds of short-to-medium maturity are the prime example.<sup>58</sup> Proponents argue that narrow banking would make retail deposit insurance unnecessary, eliminate government guarantees from the rest of the financial system, and possibly boost the public fiscal position by increasing the demand for government bonds.<sup>59</sup>

**4.117** Unlike the retail ring-fence model mentioned above, in narrow banking lending to households and businesses would be excluded from deposit-taking institutions because of the credit risk it carries. Lending would have to be undertaken by separate financial institutions (which may be sister subsidiaries under the same parent). This raises two strong objections to the narrow banking model:

- the social costs would be significant. In preventing deposit-taking banks from lending to individuals and businesses, narrow banking destroys the synergies of such financial intermediation – lowering deposit interest rates and increasing lending rates and credit rationing; and
- government guarantees would not be curtailed. In focussing purely on the protection of deposits, the banks created would be too narrow. The experience of 2007-2009 suggests governments would not allow all kinds of ‘lending banks’ to fail, and so the benefits of narrow banking would not be realised.

<sup>58</sup> Although Government bonds are still subject to inflation risk and sovereign credit risk.

<sup>59</sup> Kay, J., 2009, *Narrow Banking: The Reform of Banking Regulation*: <http://www.johnkay.com/wp-content/uploads/2009/12/JK-Narrow-Banking.pdf>

**4.118** Narrow banking would not be immune to institutional or systemic crises either. Narrow banks remain exposed to interest rate fluctuations and decisions by depositors to transfer their funds between narrow and lending banks *en masse* in times of crisis. There are also practical problems in finding sufficient UK government bonds to back retail deposits.<sup>60</sup>

### *Full reserve banking*

**4.119** Full reserve banking goes further than narrow banking, requiring banks to retain sufficient funds in cash to cover all of their depositor liabilities.

**4.120** Like narrow banking, a complete move from fractional to full reserve banking would drastically curtail the lending capacity of the UK banking system, reducing the amount of credit available to households and businesses and destroying intermediation synergies. To its proponents, this shrinkage of credit is a benefit, as it removes the current ability of banks to 'create money', a prerogative they consider should be reserved for the state.

**4.121** Some have argued that full reserve banking should be mandated as an option for all deposits, so that depositors could choose whether or not their money was lent on. It is important to find safe deposit options and having these options might help to reduce the need for a government guarantee applicable to all deposits. However, safer deposit options than bank deposits do already exist (such as National Savings & Investments or safety deposit boxes), although these do not offer the same transactional capabilities as a current account. There is no prohibition on the establishment of a full reserve bank (or a narrow bank) which could provide such capabilities, though it would likely have to charge for them. In light of deposit insurance, mandating that all depositors have such an option appears unnecessary.

### *Limited purpose banking*

**4.122** Under limited purpose banking (LPB), loans are brokered by specialist companies who match borrowers with mutual funds. These funds issue shares, effectively securitising all debt. These mutual funds would target different levels of risk and return, with riskier funds offering securitised pools of mortgages and commercial loans and safer funds holding government bonds or cash. A single regulator would oversee the appraisal of the assets in which funds would invest.<sup>61</sup>

**4.123** A move to LPB would require every UK bank and other financial intermediary to change its business model radically. Existing retail brands might continue to operate

---

<sup>60</sup> While the total volume of UK Government bonds in issue is comparable in size to total UK retail deposits, there are significant demands for these bonds from financial institutions such as pension funds.

<sup>61</sup> Kotlikoff, L., 2010, *Jimmy Stewart is Dead: Ending the World's Ongoing Financial Plague with Limited Purpose Banking*, Hoboken, John Wiley & Sons Inc.

as brokers, advising customers on how to recreate their portfolio of financial products from a variety of specialised mutual funds offering everything from simple cash protection and mortgage lending to insurance. Investment banking would become a pure consulting business and trading would become a matching business with zero exposure at all times.

- 4.124** To its proponents, LPB is a means of removing moral hazard from the financial system. Mutual funds cannot become insolvent or illiquid, and intermediary advisors and brokers cannot directly own assets. The money supply under LPB would be driven exclusively by the government or central bank.
- 4.125** The LPB model is open to the same criticisms as narrow banking. There would be a decrease in economic value added from intermediation, especially for products that are not easily securitised, such as revolving loans for SMEs. LPB eliminates relationship banking because loans are always sold once they have been issued. However, these relationships can have significant benefits for customers as they allow banks to make loans which they would otherwise consider too risky. Again, existing stocks of government bonds may prove insufficient for demand. On top of this, deposits would become less liquid, especially in a crisis. Regardless of the costs and benefits, the LPB model is one which it would be particularly difficult to implement on a unilateral basis and the prospect of international agreement to mandate such a reform is extremely slim.

### *Size limits*

- 4.126** A limit on the total size of a bank's assets or market share has also been proposed – primarily as a means of reducing the impact of failure of any individual bank, but also to improve competition or to reduce political influence. This section deals with the former. The competition motivation for size limits is discussed in Paragraph 5.31.
- 4.127** The phrase 'too big to fail' describes the idea that size is a key factor in determining impact of failure, and reducing this impact is necessary to curtail perceived government guarantees for banks. A bank's size does appear to be an important – though imperfect – determinant of the systemic risk it creates.<sup>62</sup> A size cap is designed to address this directly, and would reduce systemic risk to the extent that big banks produce proportionally more systemic risk than small banks. A smaller bank may be more manageable in resolution, and so especially if many banks do not fail at once, a size limit could therefore contribute to addressing the 'too big to save' problem.
- 4.128** However, hard size limits are blunt tools. They are difficult to set, calibrate and change, and, if applied to organic growth, they risk distorting incentives for banks approaching the maximum limit. They pose legal challenges if applied retrospectively

---

<sup>62</sup> Drehmann, M. & Tarashev, N., 2011, Systemic importance: some simple indicators, *BIS Quarterly Review*, March 2011: [http://www.bis.org/publ/qtrpdf/r\\_qt1103e.pdf](http://www.bis.org/publ/qtrpdf/r_qt1103e.pdf)

below the level of the current largest bank, and they are not without cost, especially in the transition.<sup>63</sup> In the US, the Dodd-Frank reforms introduced a prohibition on new mergers and acquisitions that would result in a bank with more than 10% market share.<sup>64</sup> The Commission considers that the financial stability motivations for introducing limits on bank size or market share are adequately satisfied by other measures proposed in this *Interim Report*, and, as discussed in Paragraph 5.31, thinks competition authorities are already well placed to rule on mergers that could result in a lessening of competition.

### *Payments system*

- 4.129** In recognition of the vital role of the smooth flow of payments to the stability of the financial system and wider economy, there have been suggestions that the resilience of the payments system – which held up well throughout the recent financial crisis – should be further increased through some kind of structural reform.
- 4.130** The payments system consists of aggregated clearing of transactions between accounts controlled by various banks, either directly with each other or indirectly through a tiered relationship between correspondent/agent banks. While banks have some shared infrastructure to settle payments, in a functional sense, the payments system is indivisible from banks.
- 4.131** One proposal for increasing the resilience of the payments system is a structural separation of the payments system from other banking activities. This bears some resemblance to the ‘operational subsidiarisation’ discussed in Paragraph 4.88 onwards. However, structural separation of the payments infrastructure would be insufficient to ensure its continued function. The infrastructure merely transmits instructions between two parties, and could not operate if one of those parties was absent. Maintaining continuous payment services is therefore mostly an issue of efficient bank resolution, and is likely to be covered by existing work on recovery and resolution plans, and other measures proposed in this *Interim Report*. The possibility of FCA oversight of the payments system on competition grounds is discussed in Paragraph 5.24.

---

<sup>63</sup> Although there is little evidence of economies of scale in banking beyond a size much smaller than any of the major UK banks. (For example see Amel, D., Barnes, C., Panetta, F. & Salleo, C., 2004, Consolidation and efficiency in the financial sector: A review of the international evidence, *Journal of Banking and Finance*).

<sup>64</sup> Section 622 of the Dodd-Frank Act prohibits a financial company from merging or acquiring control of another company if the resulting company’s consolidated liabilities would exceed 10% of the aggregate consolidated liabilities of all financial companies: <http://www.treasury.gov/initiatives/Documents/Study%20on%20Concentration%20Limits%20on%20Large%20Firms%2001-17-11.pdf>.



### Consultation question 4.4

In relation to structural reforms to promote stability, do you agree that the Commission should focus its work on a UK retail ring-fence?

### Consultation question 4.5

What are the costs and/or benefits of a UK retail ring-fence, and what approaches could be taken to analysing them (noting Annex 3)?

### Consultation question 4.6

How should a UK retail ring-fence be designed (noting Annex 7)?

### Consultation question 4.7

Should the Commission pursue any other structural reforms to promote stability?

## Impact on competitiveness

**4.132** The Commission is paying particular attention to the potential impact on the competitiveness of the UK financial and professional services sectors and the wider UK economy of the reforms contemplated in this *Interim Report*. This section is organised as follows:

- first, it sets out some definitions of competitiveness in the context of financial services;
- second, it describes the financial and professional services sectors in the UK and how they might be affected by the reforms discussed in this *Interim Report*;
- third, it examines the impact of the reforms on the attractiveness of the UK as a place to locate international financial services activity – in particular, how much of the UK's international financial services market would be directly affected, the relative importance of the affected part of the sector and the impact of the reforms on firm location decisions; and
- finally, the section looks at the impact of changes in bank domicile on the retail and domestic financial services sector.

**4.133** This section focuses primarily on the financial and professional services sectors. In many instances the distinction between the competitiveness of those sectors and

the competitiveness of the wider economy will not be material. However, there are important instances in which the effects on the competitiveness of the financial services sectors may not be the same as the effects on the competitiveness of the wider economy. Where this is the case, this is noted in the text.

### What is 'competitiveness'?

- 4.134** There is no single definition of 'competitiveness'. To say that a market is competitive is to say that there is effective competition among firms within it to give customers good deals (the competitiveness of UK retail banking in that sense is discussed in Chapters 2 and 5). To say that a firm is competitive is to say that it is well-placed to compete, which largely depends on its efficiency. For an economy, 'competitiveness' is largely a matter of productive potential,<sup>65</sup> which is the ultimate determinant of a country's long-run economic well-being. Popularly, 'competitiveness' is often taken to mean the attractiveness of a country or city as the location of economic activity.<sup>66</sup>
- 4.135** From this perspective there is very little reason to favour one sector of the economy over another. A subsidy to one sector, in the name of improving its 'competitiveness', effectively entails higher taxes on others, to the detriment of their competitiveness.<sup>67</sup> This point is unaffected by whether other countries subsidise their firms in the sector – a foreign subsidy does not justify a domestic one.
- 4.136** The banking system matters for UK productive potential, and hence for competitiveness, in several important ways. First, efficient systems for payments, deposits and intermediation between savers and borrowers are vital for households and businesses (especially SMEs) throughout the economy. The stability of the UK banking system, especially retail banking, is therefore of paramount importance for UK competitiveness. Competition is important too – as a spur to innovation and efficiency. Thus the Commission's primary objectives of stability and competition are perfectly consistent with competitiveness in these terms.
- 4.137** Second, banks potentially affect UK competitiveness through productivity and tax effects. Banking yields tax revenue through corporation tax and through the income tax paid by bank workers. A sector with a relatively high tax yield can help wider competitiveness by enabling lower taxation elsewhere in the economy. If the UK banking sector were to contract in size, the tax take from it would decline too. But, to

---

<sup>65</sup> Some might say that 'competitiveness' is a matter of (quality-adjusted) cost relative to foreign producers. On that view, a low exchange rate is good for 'competitiveness', but it is bad for domestic consumers. It makes more sense to think of competitiveness in terms of productivity.

<sup>66</sup> This is the context in which various studies of international financial centres use the term. It is far from clear that financial centres are really always in 'competition' with each other in the same way as firms might be. See Bischoff (2009), for a discussion of this point. (Bischoff, W., 2009, *UK financial services – the future, A report from UK based financial services leaders to the Government*, HM Treasury: [http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/ukinternational\\_financialservices.htm](http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/ukinternational_financialservices.htm)).

<sup>67</sup> For example, for a given aggregate trade balance, intervention to increase net exports of say, cars, reduces net exports of something else.

the extent that people and resources were redeployed to other sectors rather than relocated abroad, the tax take from those other sectors would increase. The net fiscal effect depends on whether the tax yield from the people and resources transferring from banking is higher or lower as a result of them moving from banking to other sectors.<sup>68</sup> Likewise the effect on GDP of such shifts may be positive or negative depending on whether the people and resources are less or more productive outside banking.<sup>69</sup> Finally on taxation, as the current economic downturn illustrates, financial crises can be extraordinarily damaging to a government's fiscal position. If tax rises are required to repair the public finances, this adds to the fiscal burden on, and hence undermines the competitive position of, the banking sector and other parts of the economy. Again, the importance is underlined of banking stability and of containing risks to the fiscal position from banking.

**4.138** Third, the UK, especially London, is a very important centre for international financial services, which directly benefit the UK economy through, for example, employment and tax revenues. There are numerous related reasons for the UK's pre-eminent position, including historical factors, time zone, language, the legal system and the professional services infrastructure. Taxation and sound regulation are other factors that may affect the location decisions of firms and individuals.

## What are the UK's financial and professional services sectors and how might their competitiveness be affected?

**4.139** The UK financial services sector encompasses a wide variety of activities. These range from providing deposit-taking, savings, credit and insurance products to individuals, households and SMEs (retail) to providing advice and financial services to domestic and international companies and institutions seeking to raise and place funds, insure themselves against risks and make acquisitions and disposals (wholesale).

**4.140** In the context of competitiveness, it can be helpful to consider the financial services sector as these two separate parts.<sup>70</sup> Much of the wholesale financial services activity that goes on in the UK (mainly in London) provides services to firms stretched across the globe, and often does not directly touch the UK's non-financial economy at all, while the domestic and retail sector is focussed on UK households and firms.

---

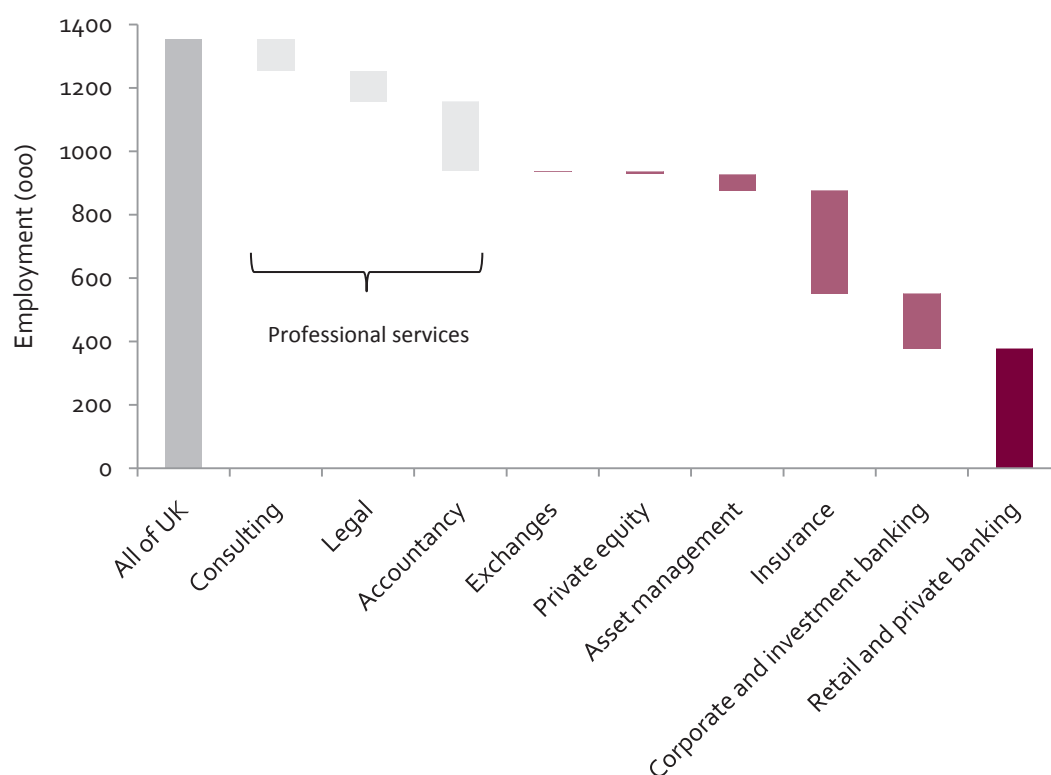
<sup>68</sup> If some workers in the sector were to relocate outside of the UK, their tax contribution would be lost, but so would their consumption of public services. The net effect would depend on whether the individual contributed more in taxes than he or she consumed.

<sup>69</sup> If in the long run, for example, fewer bankers meant more engineers, it is not clear whether that would mean higher or lower GDP. The point is that it is the *net* effect that matters, and that is not measured by the current *gross* contribution of banking to output or tax revenue.

<sup>70</sup> This distinction is useful, but in practice there will be some overlap between the sectors. UK firms will need to raise loans and financing for activities within the UK, and many financial services firms undertake activities facing both the UK domestic economy and international wholesale clients. However, broadly speaking, the domestic and retail sector can be thought of as the banking sector that would exist if the UK were not an international financial centre. The approach here is consistent with other studies of the competitiveness of the UK financial services sector (cf. HM Treasury, 2003, *The location of financial activity and the euro*: [http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/d/uk\\_internationalfinancialservices070509.pdf](http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/d/uk_internationalfinancialservices070509.pdf)).

International wholesale financial activity is dominated by highly mobile firms, who can choose a number of locations from which to do business, while the retail and domestic sector tends to be more geographically bounded. In terms of employment, there are about 300,000 jobs in the wholesale financial services sector, and around 700,000 jobs in the retail sector. A further 400,000 professional services jobs (legal, accountancy and consulting) directly support financial services, of which around 160,000 support wholesale financial services.<sup>71</sup> Retail financial services account for approximately £30-36bn of the £54bn in all taxes, including employment taxes, paid by the financial services sector last year.<sup>72</sup> Figure 4.5 shows some of the major segments within the financial and professional services sectors.

**Figure 4.5: Breakdown of financial services and financial services related jobs in the UK (2008)<sup>73</sup>**



Source: Wigley, B., 2008, London: *Winning in a Changing World – Review of the competitiveness of London’s financial centre*

71 See Annex 8 for sources of estimates of the decomposition of financial services employment.

72 PwC, City of London Corporation, HMRC, annual reports, Companies House filings, Oliver Wyman estimates and analysis. See Annex 8 for further details of the relative tax contribution of different parts of the financial services sector.

73 The sub-sector breakdown in Figure 4.5 cannot be translated directly into wholesale and retail parts, because it does not present estimates of wholesale insurance and retail insurance separately, nor split out wholesale professional services from retail. The data in Figure 4.5 is also one of multiple sources from which the estimates in Paragraph 4.140 are compiled. See Annex 8 for further details.

**4.141** Within the financial services sector as a whole the reform options discussed in this *Interim Report* are most likely to affect only those banks authorised by the UK authorities. In practice this is likely to mean UK-authorised banks with significant UK retail operations. In relation to a retail ring-fence, it is likely to mean UK-authorised banks with both significant wholesale and retail operations in the UK. If the reforms were materially to increase firms' operating costs, they could respond by relocating some or all of their activities outside the UK.<sup>74</sup> Were they not to be replaced by equally productive activity, this could affect the UK's long-run productive potential. But the possible impact of reform on the two parts of the sector would be different, which is why it is useful to treat them separately.

### *Domicile and operations*

**4.142** For both the domestic and international parts of the sector, UK-authorised firms may try to change domicile if they believe their new home would allow them to operate more profitably. The competitive impact of such a move would depend directly on the amount of net tax revenue foregone through the change in domicile, plus the amount of employment and activity that would have to go with it to make such a shift viable. This issue is considered in Paragraphs 4.160 to 4.165.<sup>75</sup> The financial stability implications of such a scenario are considered in Paragraphs 4.166 to 4.169.

**4.143** Additionally, firms may relocate some of their operations. This would most likely only be relevant to the internationally-mobile, wholesale financial services sector. Most retail financial services activity is limited in its ability to operate across borders, with most of the branches, customer services, loan officers etc. tending to remain located in the same country as their customers. In international financial services, however, firms have a certain level of choice over where to do business. Therefore, in the domestic and retail part of the sector, the size of the UK-located sector may not change for a given level of demand,<sup>76</sup> but its composition might, with more services provided by non-UK firms. The size and composition of the UK-located wholesale and international financial services sector could change, however, with fewer services, and/or a higher proportion of those services provided by non-UK firms.

---

74 If the firms choose not to relocate, but instead lost market share to unaffected competitors, the issues and impacts to be considered would be economically equivalent to firms simply ceasing to undertake certain activities.

75 Affected banks may seek to relocate the UK headquarters to carry on either wholesale and investment banking or retail services. As the issues are more or less identical (except for some of the financial stability concerns) the impact of headquarter relocation is considered under retail services to avoid repetition.

76 The price of retail services may or may not rise as a result of the reforms discussed, which could lead to a reduction in the overall size of the sector if demand drops. In the context of competitiveness of the domestic sector, the key issue is the proportion of services produced in the UK, not the overall size. This latter point is discussed in Annex 3. There may also be some loss of activity related to the headquarters of the UK business, an issue which is covered in Paragraphs 4.160 to 4.165.

### Impact on the UK as an international financial centre

**4.144** First, we consider the possible impact of any reforms on the competitiveness of the UK's international financial services sector. This sector includes activities such as:

- raising finance, through syndicating loans, underwriting the issuance of debt or equity and creating structured financing and investment products;
- providing advisory services on financing, mergers and acquisitions, corporate restructuring and disposals etc.;
- trading of securities, derivatives, currencies and commodities on behalf of clients and as principal;
- management of funds (pensions, insurance, hedge funds and private equity);
- providing wholesale insurance and reinsurance (including maritime insurance in London); and
- the management of markets and exchanges (including the London Stock Exchange, the London Metal Exchange and ICE Futures Europe).

Although other UK centres play important roles (for example, Edinburgh is one of the world's leading centres for fund management), the overwhelming majority of this activity takes place within London, colloquially known as the 'City'.

**4.145** These activities are undertaken by a wide array of firms, including foreign and domestic wholesale and investment banks, the wholesale and investment banking divisions of universal banks, brokerages, hedge funds, private equity firms, investment managers, underwriters and a large number of boutique research and advisory firms. A host of professional services, including law, accountancy, management consulting, financial PR and specialist IT, support the provision of these financial services.

**4.146** The UK hosts a share of international financial markets activity that is very large relative to the size of its domestic economy. Some indication of London's relative importance and internationalisation can be given in its shares of global, cross-border activities:<sup>77</sup>

- the UK is the largest centre for foreign exchange trading (35% market share) and OTC derivatives trading (47%);
- the UK is the largest centre for international debt issuance (60%) and secondary trading (70%);

---

<sup>77</sup> From TheCityUK, Bank for International Settlements, Bloomberg and World Federation of Exchanges. See Annex 8 for more details of UK market shares.

- the UK is the second-largest centre for fund management and hedge fund management after the US;
- the UK has the third-largest insurance market in the world, including the largest market share of maritime insurance (21%); and
- the UK is home to some of the largest law and accountancy firms in the world.

**4.147** London is an attractive financial centre for firms to locate their global activities in for a number of reasons, including its existing deep pools of labour and liquidity, its market infrastructure, time zone and its regulatory and legal frameworks. These factors encourage firms to locate in the UK, wherever their international clients may be based.

**4.148** The focus for consideration of competitiveness as discussed in this section is on those firms directly affected by the reforms discussed in this *Interim Report*, that is, UK-authorized banks with significant wholesale and retail activities in the UK (the ‘affected banks’). The central question for the Commission is whether any impact of the reforms on the wholesale and investment banking activities of these firms is likely to affect the attractiveness of the City as a place to do international business more generally. This has been assessed by examining:

- how much of the City these firms account for;
- the role of these firms in securing and maintaining the City’s position as a leading financial centre; and
- the extent to which the reforms being considered by the Commission affect the factors that make the City an attractive location for financial services.

**4.149** First, the potential impact on competitiveness of the reforms discussed in this *Interim Report* will to some extent depend on the relative size of the affected banks’ wholesale and investment banking operations within the City. If the amount of activity that affected banks undertake is small relative to the overall level of activity, the direct impact would be limited were those firms to reduce their activity or withdraw from the market. The knock-on effect on the businesses of associated firms who rely on those banks’ activities (as suppliers or clients etc.) would also be likely to be small, as a critical mass of clients, suppliers etc. would remain. Moreover, to the extent that the City remains a competitive, and attractive, market place, if only a relatively small proportion of institutions ceased to undertake certain activities, there is a greater probability that unaffected firms would be able to absorb those activities, reducing the impact even further. If, on the other hand, the share of the market of the affected banks is relatively large, other firms would be less able to expand to absorb any activity foregone, which would increase the probability of additional displacement effects due to linked firms reducing their own levels of activity.

- 4.150** No official data on the size of the UK's wholesale financial services sector exist, and estimates are therefore subject to considerable uncertainty. Nonetheless, using employment and fees data, estimates of the proportion of wholesale financial services activities in the City provided by the affected banks can be derived. These estimates suggest a range of between 7% and 18%, with a central estimation band of between 14% and 16%.<sup>78</sup> This central estimation band is reached by making assessments of the reasonableness of the assumptions behind the overall range of estimates, for example on the proportion of wholesale and investment banking that relates to the domestic economy. This band has been cautiously positioned towards the top of the range in order to reduce the risks of underestimating the proportion of the City directly affected by the reforms, given the uncertainties around the estimates. The rest of the wholesale financial services sector (other banks, insurance firms, hedge funds etc.) is unlikely to be directly affected by the reforms discussed in this *Interim Report*, and may in fact benefit from greater stability. Further details of these estimates can be found in Annex 8.
- 4.151** The second important consideration is the role of the affected banks in securing the City's position. It could, for example, be the case that the affected banks play a particular role in facilitating the clustering of financial services in the City which is greater than their share of employment and activity (for example, leading the development of market infrastructure). It is plausible that banks in general might have a larger than proportionate effect on financial services clustering. However, there is scant evidence of the magnitude of this effect, if it exists.<sup>79</sup> Moreover, the Commission has seen little evidence to demonstrate that the affected banks in particular play any more significant a role in the financial services cluster than banks in general. Most of the historical evidence suggests that the City's growth was not driven by UK-headquartered banks' success but by its openness to foreign firms and their success in entering the market. As set out in Box 5, the City's emergence as the pre-eminent centre of international finance after the Second World War can largely be decoupled from both the fortunes of the domestic economy and the fortunes of the UK's domestic banks. Seen in this light, the British banks and the City have important linkages, but the historical record does not suggest that the participation of the former is obviously key for the success of the latter.

---

<sup>78</sup> If ancillary services are included, this proportion drops, but, to the extent that ancillary services are dependent on financial services for employment, it would not be appropriate to include ancillary services in the overall total. This measure excludes any direct impact from the relocation of the headquarters function, which is discussed in relation to retail financial services in Paragraphs 4.160 to 4.165.

<sup>79</sup> Nonetheless, the central estimates presented in Paragraph 4.150 have been given a cautious bias, partly to reflect this possibility. See Annex 8 for further details.



### Box 5: The growth of the City

The City of London has been a leading financial centre ever since England supplanted the Netherlands as the leading trading nation in the latter half of the 17<sup>th</sup> Century. Over the next two centuries, London became the metropolitan centre of a global empire, the place from where capital for the development of business around the world was organised. By the end of the 19<sup>th</sup> Century, London-originated bills were used as credit between traders across the globe, even when neither transacting party was British, and the pound was the world's reserve currency. Due to a number of factors, including the emergence of the United States as the world's leading economy and the dollar as the global reserve currency, the City declined in the first half of the 20<sup>th</sup> Century.

What Roberts & Kynaston (2002) refer to as the 'dual City' of the 1960s rose to become the leading financial centre of the 21<sup>st</sup> Century.<sup>[1]</sup> On one side was the 'old City', characterised by the close triangle of merchant banks, brokers and jobbers, broking on the Stock Exchange and arranging corporate issuance, mainly for domestic, wholesale clients. Functions were separated by law and stock market participants had to be British. On the other side was the new 'international City' made up of a small number of international offices of foreign banks, the vanguard of the re-internationalisation of London. Outside of the City were the clearing banks, focused on domestic retail business, with historically very little role in wholesale activities.<sup>[2]</sup>

The international City's growth from the 1960s was driven by the rise of Euromarkets – foreign currency transactions, like bond issuance, taking place outside the currency's home country. London became the dominant place for these markets for offshore US dollars, but the marketplace was mainly driven by American, European and Japanese banks. There were 77 foreign banks in London in 1960; by 1970 there were 163.<sup>[3]</sup> British merchant bank balance sheets were too small to exploit this opportunity effectively.

The removal of exchange rate controls in 1979 and the Big Bang accelerated London's re-internationalisation.<sup>[4]</sup> British merchant banks, British clearing banks and foreign firms scrambled to buy brokers and jobbers in order to offer a full service investment bank. The capital-light British merchant banks proved vulnerable to competition and rivals soon took them over. By 2000, all but Rothschild had either failed or been subsumed into a larger, usually foreign, banking group.<sup>[5]</sup> The biggest British clearing banks fared little better. Previously excluded from the business, Barclays, NatWest and Midland all tried to build wholesale banking franchises by buying brokers and jobbers. By 1997 all three had largely exited this business and by 2000 both Midland and NatWest had been bought by rival clearing banks.<sup>[6]</sup> But despite the near-total disappearance of the independent merchant banking sector, and the limited entrance of the clearers, the City was by the turn of the millennium ahead of New York across a range of businesses.<sup>[7]</sup>

Consequently, the leading banks in London in 2000 were American, European and Japanese. They had been better placed – culturally, financially and operationally – to exploit the opportunities of the Big Bang, and in doing so pushed London further towards its place at the centre of the global financial system. The authorities implicitly and explicitly encouraged this,<sup>[8]</sup> and London was consolidating its position as the leading place for financial services without particularly large domestic players.

### Box 5: The growth of the City (continued)

After their initial setbacks, around the turn of the millennium three of the UK clearing banks once again tried to enter the wholesale business on a large scale. Barclays, RBS and HSBC expanded their businesses in London significantly and, before the financial crash of 2008, gained notable share in some markets.

<sup>[1]</sup> Roberts, R. & Kynaston, D., 2002, *City State: a Contemporary History of the City of London and How Money Triumphed*, London, Profile Books

<sup>[2]</sup> See Glossary for definitions of different types of firm.

<sup>[3]</sup> Roberts, R. & Kynaston, D., 2002, *City State: a Contemporary History of the City of London and How Money Triumphed*, London, Profile Books

<sup>[4]</sup> The Big Bang reforms liberalised membership of the stock exchange to all comers; ended 'open-outcry' in favour of electronic trading; removed fixed commissions; and removed a ban on the functional separation of banks, brokers and jobbers.

<sup>[5]</sup> For a modern history of merchant banks in London, see Augar, P., 2000, *The Death of Gentlemanly Capitalism: the Rise and Fall of London's Investment Banks*, London, Penguin. The London House of Lazard remained largely independent for most of the 20<sup>th</sup> Century, but was increasingly integrated with the US and French Houses from the 1980s until 2000, when all three Houses were unified as Lazard LLC.

<sup>[6]</sup> Barclays retained the debt business of BZW which became part of today's Barclays Capital.

<sup>[7]</sup> Capital City, *The Economist*, 19 October 2006

<sup>[8]</sup> For example, regulators did not intervene to bail out Barings Bank when it collapsed, partly lest they be seen as favouring a domestic firm. "If the impression got around that domestic banks could be counted on to be baled [sic] out by their central bank, that would suggest a playing field so tilted as to drive out every non resident bank ... where would the City be then?" Bill Jamieson *Sunday Telegraph* 5 March 1995, page 765 of Kynaston, D., 2002, *City Of London Volume 4: Club No More, 1945-2000*, London, Pimlico.

**4.152** Third, the effect of the reforms discussed in this *Interim Report* on the wide range of factors that drive financial services clustering must be considered. Some of the factors that make the UK an attractive place to locate financial services activity may be weakened, while others may be unchanged, or even strengthened by the reforms. Crucially, the incentives on affected banks to relocate activity, or for unaffected firms to continue to invest in the UK, will depend on whether on balance the clustering factors that are unchanged, or strengthened, outweigh any factors which are weakened.

**4.153** International financial services firms tend to cluster in a limited number of locations. In recent years, London and New York have emerged as the two leading international financial centres as measured by market share, while other larger regional centres, most notably Tokyo, have fallen behind in relative terms. A number of factors are frequently cited to explain London's emergence as a global centre. The most frequently cited are:<sup>80</sup>

<sup>80</sup> See Cook, G. A. S., Pandit, N. R., Beaverstock, J. V., Taylor, P. J. & Pain, K., 2007, The role of location in knowledge creation and diffusion: Evidence of centripetal and centrifugal forces in the City of London financial services agglomeration, *Environment and Planning* and Z/Yen, 2011, *The Global Financial Centres Index 9*, London, Z/Yen.

- a propitious time zone for global markets;
- the use of English as the language of business;
- transactions underpinned by English law;
- access to deep, liquid markets;
- deep, skilled labour markets;
- predictable and robust regulation;
- high quality market infrastructure;
- good quality of life;
- macroeconomic and financial stability;
- tax;
- access to a range of high quality professional services; and
- political stability.

**4.154** It is clear that some of these factors are the result of history and what are known as ‘clustering effects’ – that is, once a number of firms have located in the same place, it becomes more attractive for new firms. Firms benefit from the spillovers of sharing a deep pool of skilled labour and knowledge, from shared market infrastructure and from the co-location of suppliers. Others can be thought of as the UK’s endowments, like time zone and language. Others still are factors that governments can affect, like taxation and regulation. The UK has at times been an attractive place to locate because of both the development of sound regulation locally, and because of the imposition of regulation elsewhere (for example the ‘Interest Equalisation Tax’ – effectively a tax on the export of capital – in the US). There is little evidence on the relative importance of these factors, although there is some empirical evidence to show that taxation plays a relatively strong role in the likelihood of relocation.<sup>81</sup>

**4.155** The international financial services landscape is evolving, with new Asian centres such as Singapore and Hong Kong moving up various subjective ‘competitiveness’ rankings to close the gap on London and New York. Other centres have begun to market themselves aggressively, either as regional centres, such as Dubai and Qatar, or as niches, such as Switzerland for asset management. China’s State Council has also endorsed a plan for Shanghai to become a global financial and shipping centre by

---

<sup>81</sup> Voget, J., 2010, Headquarter relocations and international taxation, *Oxford University Centre for Business Taxation Working Paper 1008*

2020.<sup>82</sup> Much of the growth in new financial centres is related to wider economy shifts, particularly in Asia. It is likely that financial deepening will accompany GDP growth in Asian economies, leading to a greater share of financial services. These are factors over which policymakers have little control.

**4.156** The growth of other international financial centres may mean that international financial services firms begin to make a relatively greater proportion of their investments in new financial centres as those markets become relatively more sophisticated, and more clients are based there. However, this does not mean an inevitable diminution of the UK's position as an international financial centre, and may present opportunities. First, in spite of recent challenges, London has remained an attractive international financial centre, with low reliance on domestic demand, especially when compared to other centres such as New York. The location of the economic centre of gravity is not necessarily central to the UK's success. Second, the growth of other financial centres is not a 'winner takes all' race. The UK is well-placed to take advantage of increased global capital flows from emerging centres across the globe. Third, just as financial centres emerge, so will their banks, seeking, as they do so, international locations from which to support their clients' international growth. Should banks from emerging financial centres emerge as new global players, the UK will also be well-placed to act as a hub for their international activities. Finally, in the recent crisis, there has been some evidence of a 'flight to quality', as firms retrenched in centres perceived to be less deeply rooted, suggesting the importance of well-established, well-regulated markets in the sustained growth of financial centres. For example the share of global equity trading conducted in the four major financial hubs jumped from 60% to 70% at the height of the financial crisis.<sup>83</sup>

**4.157** The Commission has examined the factors that affect the UK's attractiveness as a financial centre, to see how far the reforms discussed in this *Interim Report* would have a significant negative impact on these factors. Clearly, the reforms would require some potentially costly adjustments and expose to increased regulation those banks directly affected, which may affect the attractiveness of the UK for some parts of those firms. However, the Commission has received little evidence to suggest that these or other factors would change materially for unaffected firms, nor that the other factors that make the UK attractive would worsen materially for affected banks. Rather, it may be the case that the effect on some factors would be positive if the reforms succeeded in improving domestic financial stability, allowing for a more predictable fiscal and regulatory environment.

**4.158** The benefits of reform to City attractiveness come from direct and indirect effects. The direct effect comes from increased stability. International businesses cite

---

82 Reported in Bischoff, W., 2009, *UK financial services – the future, A report from UK based financial services leaders to the Government*, HM Treasury: [http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/ukinternational\\_financialservices.htm](http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/ukinternational_financialservices.htm).

83 London, New York, Hong Kong, Singapore. (Deutsche Bank Research, 2010, *Global financial centres after the crisis*). Developing financial centres fell further behind established centres as measured by investor perceptions (see Z/Yen, 2011, *The Global Financial Centres Index 9*, London, Z/Yen).

stability as an important determinant of firm location, as stability allows firms to plan ahead and make investment decisions.<sup>84</sup> The ‘flight to quality’ during the most recent crisis suggests that well-regulated and stable financial systems can attract more business to the sector. The indirect effect comes from the reduced frequency with which the government may have to bail out banks. Government bail-outs of banks headquartered in their jurisdictions often result in a build-up of government indebtedness, due to both the direct costs of bail-outs, and the effect of financial crises on government finances.<sup>85</sup> Governments are often forced to raise taxes to meet the fiscal gap, as is happening in the UK today. In the context of competitiveness, this means the whole financial sector, including the City, ends up bearing a portion of the costs for dealing with national bail-outs, making the UK a less attractive place to locate business. Reducing the probability of large bail-outs of UK banks should, all else being equal, reduce the potential tax burden on the rest of the financial sector and help maintain London’s position as a leading financial centre. Tax is the most obvious of these effects, but financial crises also lead to increased regulation and a public and political backlash which affects the City generally. Targeted reforms which reduce the probability and/or impact of future crises should therefore enhance City competitiveness.

- 4.159** Based on these observations, the Commission’s current view is that reforms of the kind contemplated in this *Interim Report* should have a broadly neutral effect on City competitiveness.

### Impact on the competitiveness of UK domestic financial services

- 4.160** The reforms discussed in this *Interim Report* may increase the costs of doing business for certain firms within the domestic financial services sector. This might create incentives for them to change their domicile,<sup>86</sup> in which case the proportion of domestic financial services provided by firms whose UK business is headquartered in the UK would shrink. Presuming that the overall amount of ‘front-line’ domestic financial services activity stays the same,<sup>87</sup> the question becomes one of the impact of the re-domiciling of the UK headquarters. This question has two aspects: the direct economic impact of moving headquarters, and any financial stability implications.
- 4.161** Headquarters may benefit the economy through taxes (both on profits and employment), jobs and also indirect benefits, such as the purchasing of legal, accountancy and consulting services. The size of the loss to the economy depends on how much activity would have to accompany a firm changing domicile to make the

---

84 Z/Yen, 2011, *The Global Financial Centres Index 9*, London, Z/Yen

85 The recent crisis has demonstrated this vividly, but it is not a new phenomenon (see Reinhart, C.M. & Rogoff, K., 2010, *This Time Is Different: Eight Centuries of Financial Folly*, Oxford, Princeton University Press).

86 As explained in Paragraph 4.100, it is not clear that the reforms contemplated would in fact create such an incentive, but it is considered here nonetheless.

87 See Paragraph 4.143.

shift viable. This would depend on a number of factors, including the requirements of a new home regulator.

- 4.162** The biggest tax contribution from headquarters comes from corporate taxes on profits and employment taxes. The amount of taxes contributed by the UK headquarters of banks, as opposed to the UK operations, is not known, but the corporation taxes lost from UK headquarter relocation may be relatively small, and increasingly so in the future. Banks pay corporation tax on profits earned within the UK, and some taxes on foreign profits remitted through branches. However, the UK, along with most other countries, is moving towards a territorial tax system. This means that only profits arising from activities in the UK will be subject to corporation tax.<sup>88</sup> In effect, the taxes arising from two identically profitable industries, one foreign and one UK-headquartered, will be almost identical.<sup>89</sup>
- 4.163** Corporation tax is anyway a relatively small proportion of taxes paid by financial services firms. It has been estimated that the entire financial services sector contributed around £53.4bn in taxes to the Exchequer in 2009/10, of which £30-36bn came from domestic financial services.<sup>90</sup> This includes all direct and indirect taxes, as well as employment taxes, across all financial services. Of this, around £6bn came from corporation taxes, around 11% of all taxes paid by the sector. The proportion paid by the affected banks is unknown.
- 4.164** The relocation of UK headquarters may have an economic impact due to the relocation of employment and loss of attendant taxes. Employment taxes constituted 45% of all taxes paid in the UK by financial services firms (£25bn) in 2009/10, of which between £8bn and £10bn is estimated to have been paid by the domestic retail sector. The precise amount of any lost employment would depend on the amount of activity that moves. At the lower end, only the relevant senior managers might move location. At the upper bound, all of those employed by a firm's global headquarters could leave, if that were economically sensible. Where they provide the data, UK-headquartered banks employ between 1,000 and 3,000 staff in their global headquarters, representing, by way of example, around 2% of the UK work force for one of the major UK universal banks. The overall impact of any staff departures would depend on the extent to which those individuals are net fiscal contributors, as individuals will consume public services as well as pay taxes.
- 4.165** In addition to the tax loss, there may be some losses from the additional services purchased by the UK headquarters. There is very little evidence on the size of this effect. However, to the extent that much of the significant activity remains in the UK, the overall effect may be small. Further examination of these issues will be required as the Commission consults on its reforms.

---

<sup>88</sup> This will leave the US as the only major economy taxing worldwide profits (see Devereux, M. & Loretz, S., 2011, *Corporation tax in the United Kingdom*, Oxford University Centre for Business Taxation).

<sup>89</sup> With the removal of taxation on foreign dividends, the only other source of corporate taxation may be on the mark-up on recharges of head office functions such as HR and IT services.

<sup>90</sup> PwC, 2010, *The total tax contribution of UK financial services*, Third edition, City of London Corporation

- 4.166** There may be reasons other than the direct economic costs why policymakers would be concerned with the composition of financial services providers, particularly providers to the domestic retail market. These relate to financial stability, the ability of regulators and governments to intervene quickly in times of stress, and the concern that a foreign-owned bank might repatriate capital at times of crisis. An important factor here is the ability of foreign banks located within the EEA to branch into the UK under their home licence. A question is therefore to what extent the reforms contemplated in this *Interim Report* could lead to a greater proportion of the UK's domestic banking system being branched in.
- 4.167** A number of considerations need to be weighed in relation to this question. First, it should be noted that the entry of foreign players into the domestic market could be beneficial for competition. Second, it is notable that some successful foreign retail banks have chosen to incorporate a subsidiary rather than branch in when entering markets including the UK – for retail banking businesses the subsidiarised model appears to be preferred by some banks for purely commercial reasons.
- 4.168** Third, careful examination is required of the extent to which the proposed reforms could put a UK-authorized retail bank at a competitive disadvantage to a bank branching into the UK retail market, or make UK retail banks attractive targets for EEA universal banks to purchase and run through a branch. In relation to capital, this will to some extent depend on what regulators and/or the market require foreign banks to hold, but the Commission's current view is that in relation to retail banking this constraint is only likely to arise at much higher capital levels than those contemplated in this *Interim Report*. In relation to structure, the costs of a ring-fence appear likely to accrue mainly or wholly on the wholesale and investment banking operations of universal banks. It would therefore seem far from clear that UK-authorized retail banks would be at any significant disadvantage to retail or universal banks branching in. It can be observed that to date there does not seem to be any obvious relationship between the size of banks' wholesale and investment arms and their success in the UK retail market, and indeed some banks with small or no wholesale and investment banking operations have been able to secure significant market share in retail banking.
- 4.169** Finally, in theory, existing UK retail banks could try to avoid measures to make UK retail banking more stable by transferring ownership of their UK business to an entity sited elsewhere in the EEA and branching back in. While this would make overseas, rather than UK, taxpayers contingently liable for insured deposits in those banks, such regulatory arbitrage by a number of banks would not be desirable. The Commission is unconvinced by assertions that such moves would be attempted on a large scale as a response to the reforms discussed in this *Interim Report*. EU law contains provisions to constrain such behaviour (e.g. a bank relocating to avoid stricter prudential standards requiring improved resolvability) and banks would also face significant practical obstacles. Such moves could also attract large political and reputational risks and could potentially jeopardise a bank's stability (e.g. if UK depositors withdrew their custom in large numbers).

## Consultation question 4.8

Do you agree with the Commission's assessment of the impact on the competitiveness of the City and the UK economy of the reforms it is considering? Can you provide further data and analysis in this area?

## Conclusions

**4.170** In view of the evidence gathered and its analysis so far, the Commission proposes to focus its work on financial stability reforms on further consideration of:

- introducing over time greater loss-absorbing capacity for systemically important banks comprising: an equity surcharge of at least 3% above Basel III requirements for systemically important banks; additional loss-absorbency provided by debt through bail-in mechanisms and possibly contingent capital; and some form of depositor preference; and
- a UK retail ring-fence, in which UK retail banking activities can continue to be provided by universal banks but must be contained within separately capitalised subsidiaries.

The Commission is also strongly supportive of ongoing initiatives to improve the resolvability of banks more generally, including through the development of recovery and resolution plans, increasing the clearing of derivatives through central counterparties and limiting exposures between banks.

**4.171** In combination, these measures appear to have potential to make the banking system better able to absorb losses, to make it easier and less costly to sort out banks that get into trouble, and to curb incentives for excessive risk taking. They should therefore reduce the probability and/or impact on the UK (including on the fiscal position) of financial crises in the future. At the same time they appear likely to maintain the efficient flow of credit to the economy, protect basic banking services and support the ongoing competitiveness of the UK economy including the City.

**4.172** These measures are designed to strike an appropriate balance between the costs and benefits of reform. The current judgement of the Commission is that milder measures may not deliver adequate benefits in terms of financial stability, and that more radical options might impose costs, including to UK competitiveness, disproportionate to their benefits.

**4.173** The Commission favours a combination of measures for several reasons. First, because there is inherent uncertainty about the nature of the next financial crisis, and therefore about exactly how individual measures will operate. Second, because measures may be mutually reinforcing. For example, one of the ways in which increased loss-absorbing capacity limits the impact of crises is to make resolution less



costly, and a ring-fence also helps secure this objective. Third, this complementarity may provide a way to economise on some costs. For example, without a ring-fence there may well be a case for capital requirements higher than those set out above.

**4.174** Further analysis is needed of the relationship between different measures and their relative cost and benefits. In addition, the timing for the possible implementation of any of these measures will be need to be carefully considered.

### **Consultation question 4.9**

Do you agree with the Commission's intention to consider a package of measures, and do you think that some elements could be relaxed if others were strengthened?

### **Consultation question 4.10**

Over what timeframe should any reforms be implemented?



## Chapter 5: Reform options – competition

- 5.1** The reform options set out in the previous chapter, while primarily aimed at promoting financial stability, would improve conditions for competition by reducing the ‘too big to fail’ subsidy that gives big banks an advantage over their smaller competitors. However, this will not be sufficient to lead to robust competition in the UK retail banking market. A key issue is the current structure of the market, with few challengers, high concentration, and one bank with an outsized position in personal banking. Further, there are restrictions on consumer choice arising from difficulties in comparing, and switching between, accounts. Additionally, barriers to entry reduce the contestability of the market. This chapter examines measures to address these issues.
- 5.2** This chapter is organised as follows. First, it considers how structural measures to reduce concentration could improve competition in UK retail banking. Second, it investigates how competition could be increased through improving conditions for consumer choice through easier switching and better information. Third, it examines how reducing barriers to entry may enhance competition in UK banking markets. Fourth, it assesses the role that regulatory authorities could play in promoting competition more actively than in the past. Fifth, it discusses a number of other options for improving competition that were considered in the *Issues Paper*. The chapter concludes with a summary of reform proposals that the Commission believes would be likely to promote competition in UK banking and sets out a number of consultation questions.

### Structural reform options to promote competition

#### Lloyds Banking Group divestiture

- 5.3** In 2008, the UK Government, the European Commission and Lloyds Banking Group (LBG) agreed to a divestiture as one of the remedies to the distortion of competition caused by government support to LBG during the financial crisis.<sup>1</sup> LBG committed to divest the TSB brand with a retail banking business of at least 600 branches located in England and Wales, and at least 4.6% of the UK personal current account (PCA) market and 19.2% of LBG’s retail mortgage assets. The group also made commitments on the average quality and profitability of the divestiture and its branches. It must demonstrate that it has approached potential buyers by 30 November 2011. The sale

<sup>1</sup> European Commission, 2009, *State Aid No. N 428/2009 - United Kingdom Restructuring of Lloyds Banking Group*: [http://ec.europa.eu/eu\\_law/state\\_aids/comp-2009/n428-09.pdf](http://ec.europa.eu/eu_law/state_aids/comp-2009/n428-09.pdf)

must be completed no later than 30 November 2013. The buyer of the divestiture may not have more than 14% of the PCA market in the UK after the purchase.

**5.4** Royal Bank of Scotland (RBS) also committed to divest assets as part of its remedies to the distortion of competition due to the government support it received. RBS announced on 4 August 2010 that it had agreed to sell 318 branches and other small and medium-sized enterprise (SME) banking assets to Santander.<sup>2</sup>

**5.5** Table 5.1 below provides a comparison of the levels of concentration pre-crisis, currently and prospectively after the divestitures in various banking markets. These estimates assume that none of the divested customers revert to their old banks. As there is little historical experience of divesting customers, it is not clear how the divested customers will react – if the divestitures suffer from a high rate of customer reversion, the actual levels of concentration might be higher.

**Table 5.1: Levels of HHI before the crisis, currently and after the planned divestitures**

	Main PCAs	Savings accounts	Mortgages	Personal loans	Credit cards	SME banking
Pre-crisis HHI (2008)	1290	1120	800	1060	820	1720
Current HHI (2010)	1830	1220	1260	1620	1040	1920
HHI after divestitures	1570	1120	960	1340	980	1720

Source: Commission analysis of data provided by GfK FRS and TNS (note 'Current HHI' for SMEs is from 2009).<sup>3</sup>

**5.6** Even with no reversion, the divestitures will leave concentration in all retail banking markets higher than it was before the crisis, apart from the savings and SME banking markets, where concentration will be about the same. The PCA and SME markets will still be particularly concentrated, with the PCA market being considerably more

<sup>2</sup> See <http://www.rbs.com/media/news/press-releases/2010-press-releases/2010-08-04-sale-of-branches.ashx>.

<sup>3</sup> Based on Commission analysis of personal banking data from the GfK NOP Financial Research Survey (FRS), 5 months ending September for 2000 – 2010 (i.e. May-September for each year from 2000 to 2010), main current accounts (sample size 21,396-24,789), mortgages (7,586-8,518), savings (26,315-33,759), GfK loans (this excludes sub-prime and other specialist lending) (2,555-3,545) and credit cards (15,701-20,081). (The figures in brackets refer to the minimum and maximum sample size over the period specified.) Calculated at the ownership level; for example, LBG is calculated as one brand group. SME banking data (for 2008 and 2009) is from the TNS RI Small Business Banking Survey in Great Britain (businesses with turnover of up to £15m, sample size 10,694-12,431). It has been assumed that no customers return to their previous bank after being transferred as part of the divestiture, and that the divestiture is not combined with any other banking assets.

concentrated than pre-crisis (after both divestitures, the Herfindahl-Hirschman index (HHI) in the PCA market will be 1570, compared to 1290 on the eve of the crisis).<sup>4</sup>

**5.7** Table 5.2 below demonstrates that LBG will remain the clear leader across a number of key retail banking markets even after the divestitures.

**Table 5.2: Estimated market shares after planned RBS and LBG divestitures**

	Personal current accounts	Gross mortgage lending	Unsecured personal loans	Saving accounts	SME banking services
LBG	25%	19%	21%	18%	21%
RBS	15%	12%	8%	9%	24%
HSBC	14%	11%	7%	8%	15%
Barclays	13%	10%	13%	10%	18%
Santander	13%	19%	11%	13%	10%
Nationwide	7%	8%	4%	9%	n/a

Source: Commission analysis of market shares for personal banking products taken from OFT (2010) and market shares for SME banking services taken from Mintel (2008).<sup>5</sup>

**5.8** There are few historical comparators to define clearly how large a bank needs to be in order to be able to challenge effectively. However, with 4.6% of the market for PCAs and around 5% of the mortgage market,<sup>6</sup> the LBG divestiture would be smaller than most of the banks that have been identified in studies by the Office of Fair Trading (OFT) and the Competition Commission (CC) as challengers.

<sup>4</sup> For context, if this increase in HHI from 1290 to 1570 had come about through a single merger, it would have been the equivalent of a firm with 24% of the market acquiring a firm with a 6% market share, or a merger between two firms with 14% and 10% market shares.

<sup>5</sup> The Commission's primary data source for its competition analysis, used for the calculation of HHI figures and other analyses, contains proprietary information and cannot be presented in a disaggregated form. Therefore, to demonstrate the relative market positions of different banks, the Commission has used market share data published by the OFT, and SME market share data from Mintel used in the *Issues Paper*, adjusted for the estimated impact of the divestitures. OFT data is from OFT, 2010, *Review of barriers to entry, expansion and exit in retail banking*: [http://www.oft.gov.uk/shared\\_offt/personal-current-accounts/oft1282](http://www.oft.gov.uk/shared_offt/personal-current-accounts/oft1282). These figures are slightly different from the data used elsewhere, and other data sources suggest that they may overstate RBS's share of SME banking.

<sup>6</sup> Figures for the divestiture are based on European Commission, 2009, *State Aid No. N 428/2009 - United Kingdom Restructuring of Lloyds Banking Group*: [http://ec.europa.eu/eu\\_law/state\\_aids/comp-2009/n428-09.pdf](http://ec.europa.eu/eu_law/state_aids/comp-2009/n428-09.pdf) and the data in Table 5.2 above.

- 5.9** Moreover, the divestiture as currently structured has a weak balance sheet, which could pose significant difficulties. As a standalone institution, it would need to cope with a high ratio of loans to deposits, which would require it to raise substantial funding in order to finance the mortgage assets. This stems from HBOS's high reliance on wholesale funding prior to the financial crisis. However, it is now much more difficult to raise funding than it was in 2007, particularly for a small player without an established reputation. As a consequence of this imbalance, there is a serious prospect that the structure of the divestiture will be different from the 4.6% of PCAs and 19.2% of LBG's mortgage assets set out in the state aid agreement – in particular that the mortgage assets will be scaled back.<sup>7</sup> Even if a third party is found to finance the funding gap, the divestiture seems likely to have a high loan-to-deposit ratio relative to its UK peers.
- 5.10** If the divestiture were to stand alone as a new market entrant, it would therefore face three major problems:
- the usual challenges facing all new entrants;
  - a fragile balance sheet and weak funding position; and
  - being below the scale required to mount an effective competitive challenge to the incumbents (particularly if part of the solution to the funding problem involves shrinking the divestiture further).
- 5.11** The divestiture might be combined with existing UK banking assets, either through purchase of the LBG assets by an existing small player, or through purchase by a new entrant of the LBG assets alongside purchase of other assets in the market.<sup>8</sup> Depending on the buyer, either of these situations might mitigate the balance sheet weaknesses of the divestiture and/or increase its scale. However, they would not address the problem of LBG's uniquely large share of the PCA market.
- 5.12** This picture suggests that the LBG divestiture would be unlikely to give rise to a strong challenger, at least in its early years. In addition, as currently constituted, the divestitures will leave the PCA and SME banking markets particularly concentrated, and with LBG in a uniquely strong position in retail banking. As a result, the Commission's current view is that the planned LBG divestiture is insufficient and that it will have a limited effect on competition unless it is substantially enhanced.
- 5.13** The Commission therefore suggests that the Government seek agreement with LBG to enhance the divestiture substantially. An enhanced divestiture could give an improved outcome for competition, both by reducing market concentration and

---

<sup>7</sup> Under the terms of the state aid agreement, LBG is able to reduce the stock of mortgage assets in the divestiture at the request of the buyer and within certain limits. European Commission, 2009, *State Aid No. N 428/2009 - United Kingdom Restructuring of Lloyds Banking Group*, [http://ec.europa.eu/eu\\_law/state\\_aids/comp-2009/n428-09.pdf](http://ec.europa.eu/eu_law/state_aids/comp-2009/n428-09.pdf).

<sup>8</sup> Subject to the limit that the resulting entity could not have more than a 14% share of the PCA market. This would exclude all of Barclays, HSBC, RBS and Santander.

by strengthening the divestiture's ability to act as a challenger. These competitive pressures should lead to improved prices, products and choice for customers, and to greater efficiency and innovation in the long run.

## Market investigation by the competition authorities

- 5.14** The main option available when faced with an apparently uncompetitive market is for the competition authorities to conduct a market investigation. They have powers to investigate the market thoroughly and the CC can require remedies by market players if competition is found to be seriously impaired. This can be a lengthy process, especially if the decisions are challenged in the Competition Appeals Tribunal. Therefore, it would be preferable if a more rapid solution could be found by enhancing the planned LBG divestiture. However, if a substantially enhanced divestiture does not result, there could be a strong case for the competition authorities to conduct a market investigation of the personal banking and SME markets in the UK. This would be in line with the commitment made by the Government in 2008 that the OFT could continue to monitor the impact on competition of the Lloyds TSB/HBOS merger.

## Improving the switching process

- 5.15** The proportion of PCA customers who switch accounts each year is low. Within this group of customers, only a minority experience technical difficulties with the process, and the OFT has recently taken steps to improve the process further (see Chapter 3). However, further improvements could speed the process and give customers (both personal and businesses) greater confidence in switching. Increased willingness to switch would put greater pressure on banks to offer good products and services. However, it would need to be accompanied by greater transparency so that customers can better compare the products on offer.
- 5.16** The switching process could be improved in the short term by mandating a set time period within which banks would guarantee that the switch would be completed (e.g. seven working days), and improving the speed and efficacy of the current system. A more fundamental and valuable improvement, which could take a year or two to implement, would be the creation of a redirection system to transfer debits and credits from the old (closed) account automatically to the new account without inconveniencing the customer. This kind of redirection function could also have financial stability benefits, by making it easier to transfer accounts and thus resolve failing banks. Such an improvement to the switching process could increase both consumer confidence and the ease of the switching process for consumers, without requiring fundamental changes to the payments system. However, it would be important not to impose disproportionate costs on smaller banks and small business direct debit originators.

- 5.17** Beyond improvements to the existing system, full account number portability would enable customers to change banking service providers without changing their bank account number. This would remove the need to transfer direct debits and standing orders, which remains the main area where problems may arise. In the past, portability has been rejected as overly costly, but if no other solutions appear effective and practicable, it should be reconsidered to see if this remains the case given improvements in IT and the payments system infrastructure.
- 5.18** In addition, improving transparency is vital to increase customers' willingness and ability to switch to a better deal. In particular, although interest foregone on positive account balances is one of the key sources of customer cost (especially when interest rates are higher than in the current environment), this element of cost is not visible to the customer. The OFT has agreed some voluntary initiatives with current account providers, which are still being phased in. It is still too early to tell what impact these will have, but there may be steps that could increase transparency yet further, particularly on the visibility of interest foregone. The Commission would welcome evidence on additional improvements that would make it easier to compare accounts on offer.

## Barriers to entry

### Prudential regulation

- 5.19** There is widespread agreement that all providers of banking services, large and small, should be safe, and indeed it is important that small banks do not acquire a reputation for being less safe or more lightly regulated than others. However, there appear to be ways in which small banks and new entrants are more severely affected by prudential regulation. New banks are generally required to hold more capital as a proportion of their assets, as they do not have a track record of good performance. In addition, small banks do not reach the scale at which it pays to invest in advanced risk management systems which tend to lead to banks holding less capital in aggregate. As prudential regulation is strengthened, the additional requirements may exacerbate this difficulty for small and new banks.
- 5.20** The appropriate solution is not simply to lower prudential requirements for small banks or new entrants. However, it should be investigated further whether there is any way to mitigate the costs to smaller competitors, while ensuring safe practices in all banks. This might include finding a less costly way to allow smaller banks to use advanced risk management systems, sharing capabilities between larger and smaller banks, or some form of support for new entrants to meet high capital requirements. The Commission would welcome further evidence in this area to inform its analysis. In any event the regulatory burden on smaller banks should be kept in mind when considering the question of higher capital requirements on systemically important banks.



- 5.21** In addition, the Commission has received some evidence from parties concerned that prudential requirements may disadvantage specific business models – in particular, mutual models of bank ownership. Regulators should take care that prudential requirements do not result in the unintended consequence of reducing consumer choice and business diversity by rendering certain business models unviable.

## Cash handling

- 5.22** An additional obstacle faced by smaller banks is their lack of a national branch network, which is particularly a problem in serving those small business customers (and some large businesses) who need to withdraw and deposit large amounts of cash and cheques every day. The Commission received evidence that access to branches for cash handling was important for many small businesses, and that some smaller banks struggle to provide the infrastructure to serve this need. The Post Office fills part of this gap, but does not appear to be a complete solution for this barrier to expansion. As the small business market is particularly important for the functioning of the economy, and seems to suffer from particularly high obstacles to competition, it should be investigated further whether there are arrangements that could improve smaller banks' ability to serve business customers, perhaps through improving the Post Office service or sharing cash-handling services with branches of larger banks.

## Payments system

- 5.23** Accessing the payments system can potentially be a barrier to new entrants, since there are demanding requirements for full membership. Therefore smaller banks often access the payments infrastructure via agency agreements with larger banks. This presents an inherent risk to competition, as larger banks may deny access, or provide poor service, to potential competitors.
- 5.24** The Commission has received limited evidence to indicate that the structure of the payments system is currently acting either as a barrier to entry for new banks, or as a significant disincentive to innovation which would benefit end-users. However, there remain reasons for concern about the payments system, particularly its system of governance and oversight (in which the owners of the networks set the rules). There may be a case for the Financial Conduct Authority (FCA) to play a leading role in monitoring the payments system, in particular in relation to innovation and competition, with oversight of both the Payments Council and the individual UK retail payment schemes. It could play a role in regulating third party access, to ensure that all banks have the access they require to essential services.

## Promotion of competition by the Financial Conduct Authority

- 5.25** Regulation is a particularly important aspect of banking services markets, and can itself be a barrier to entry. Therefore, regulatory authorities should take care not to impede competition themselves. Beyond that, financial regulation can promote competition provided that the relevant regulator(s) have pro-competitive objectives and suitable tools.
- 5.26** The Government is currently reforming the regulation of the financial sector, and creating two new agencies to undertake prudential regulation, and consumer protection and market supervision. This presents a unique opportunity to ensure that financial services are regulated in a pro-competitive way. The Commission has noted the Government's recent consultation document,<sup>9</sup> and its proposal to include competition in the remit of the FCA. It is important that the FCA – unlike the Financial Services Authority in the past – should have a clear primary duty to promote competition. Of critical importance is how the new regulator would then discharge its competition duty, and what initiatives it would undertake in pursuit of this objective.
- 5.27** One issue that might merit investigation by the FCA, charged with a duty to promote competition, is price discrimination. Chapter 2 sets out how banks can earn money under a free-if-in-credit pricing model, and the potential areas where price discrimination might arise. It also sets out how the OFT attempted to use consumer law to regulate unauthorised overdraft charges, one particular aspect of this pricing model.
- 5.28** Efforts such as these using general competition and consumer law can be worthwhile, but they are piecemeal, and in the important case of unauthorised overdraft fees the consumer law route did not succeed. General hostility to price discrimination would not be a sensible policy approach. Many costs in banking service provision are joint and incapable of being allocated to individual services. Some forms of price discrimination are an efficient way to cover fixed costs and can even be pro-competitive, and there are obvious dangers of unduly detailed regulation.
- 5.29** It is also possible that a radical improvement in customers' ability to switch between service providers, coupled with greatly improved information provision to customers, would eliminate pricing structure distortions of concern. But there is no guarantee that this will happen within a reasonable timescale. The new FCA, if empowered with a clear competition mandate, would appear to be the natural body to pursue a review of such matters. Moreover, the FCA will have regulatory tools not available to the general competition authorities.

---

<sup>9</sup> HM Treasury, 2011, *A new approach to financial regulation: building a stronger system*: [http://www.hm-treasury.gov.uk/d/consult\\_newfinancial\\_regulation170211.pdf](http://www.hm-treasury.gov.uk/d/consult_newfinancial_regulation170211.pdf)

- 5.30** The FCA might also be tasked with monitoring conflicts of interest arising from non-retail banks trading both on behalf of their clients and on their own accounts, to address the incentive problems identified in the Chapter 4 discussion of the Volcker rule.

## Other options

- 5.31** There are additional options for improving competition that were considered in the *Issues Paper*, including capping market share or balance sheet size, automatically blocking mergers that would take a bank over a certain threshold, or requiring banks to divest assets (beyond the enhancements of the LBG divestiture set out above). In some cases, the Commission has found that these options would not result in substantial improvements to competition in retail banking. It would not improve competition to impose hard rules such as limiting balance sheets to, say, a certain percentage of GDP, or automatically blocking any merger that would take an institution above a certain market share. In the case of the former, this is because a bank approaching a balance sheet limit would have little incentive to compete for new business. In the case of automatic blocks on mergers, the competition authorities are already well placed to rule on mergers that could result in a lessening of competition.
- 5.32** In the case of structural remedies such as the divestiture of branches and/or accounts going beyond the enhancement of the LBG divestiture mentioned above (e.g. by all of the Big Four banks), the Commission's current view is that these would be more disruptive and costly than the main options set out in this chapter. Therefore, the Commission is currently minded to pursue alternative options which seek to improve competition at lower cost, but would welcome further evidence and views on this subject and on the related possibility of a referral to the competition authorities, which would have the power to impose such remedies should they appear attractive following further investigation.

## Reversing the Lloyds TSB/HBOS merger

- 5.33** The acquisition of HBOS by Lloyds TSB was facilitated by a decision on 31 October 2008 by the Secretary of State for Business not to refer the merger to the CC.<sup>10</sup> Normally merger reference decisions are for the OFT to determine. The OFT's view was that there was a realistic prospect that the merger might result in a substantial lessening of competition in PCAs, banking services to SMEs and mortgages such that further inquiry by the CC was warranted.<sup>11</sup> Thus the merger would have been referred to the CC but for the Government intervention. That intervention was made possible

<sup>10</sup> BERR, 2008, *Decision by Lord Mandelson, the Secretary of State for Business, not to refer to the Competition Commission the merger between Lloyds TSB Group plc and HBOS plc under Section 45 of the Enterprise Act 2002 dated 31 October 2008*: <http://www.bis.gov.uk/files/file48745.pdf>

<sup>11</sup> OFT, 2008, *Anticipated acquisition by Lloyds TSB plc of HBOS plc*, [http://www.offt.gov.uk/shared\\_offt/press\\_release\\_attachments/LLloydstsb.pdf](http://www.offt.gov.uk/shared_offt/press_release_attachments/LLloydstsb.pdf)

by speedy Parliamentary approval of an Order making the maintenance of stability in the UK financial system a 'public interest consideration' in UK merger law. Ministers have no power to intervene in the normal workings of merger law except when defined public interest considerations apply.

- 5.34** Although the acquisition by Lloyds TSB gave temporary respite to HBOS, it jeopardised Lloyds TSB.<sup>12</sup> Large sums of public money had to be injected into the merged entity, which was renamed LBG, with the result that the Government now owns 41% of the group.
- 5.35** It is impossible to predict what might have happened had the merger been prohibited in 2008. But the fact is that it occurred, and the HBOS business has been largely integrated into the Lloyds TSB business in the two-and-a-half years since the merger. The situation in 2011 is therefore very different from that in the autumn of 2008. In particular, the investment in business integration over the past two years would make it costly to reverse the Lloyds TSB/HBOS merger. LBG estimates that annual savings due to merger synergies are currently £1.4bn, and that this will have grown to £2bn by the end of 2011. While this is not the same as the cost of undoing the merger, it shows the scale of business integration that has taken place.
- 5.36** In addition to the costs of reversing the merger being high, the benefits are not clear-cut. Reversing the merger would achieve the aims of reducing market concentration and LBG's position as market leader. However, it would not re-create HBOS's position earlier in the decade as a strong challenger. Given the difficult financial position HBOS found itself in at the time of the merger, recreating this could require it to be taken into Government ownership (and hence no longer to be a strong competitor) or wound down under the UK's Special Resolution Regime.
- 5.37** There is cause for regret that the Government in 2008 amended competition law to facilitate the Lloyds TSB/HBOS merger, but the facts in 2011 have to be taken as they are. In the light of those facts, reversing the merger does not appear to be a sensible course to pursue. Rather, in the Commission's current view, policy attention towards LBG should focus on pro-competitive possibilities arising in connection with – and in addition to – the divestiture of LBG assets required by the state aid approval of the European Commission.

## Enhancing the RBS divestiture

- 5.38** Further, the Commission has given specific consideration to whether or not there would be merit in recommending that the RBS divestiture be enhanced, along similar lines to the LBG divestiture. This, too, could have had the potential to introduce a challenger, and reduce concentration, particularly in SME banking.

---

<sup>12</sup> The merger contrasted with efforts elsewhere to separate 'good' banks from 'bad' banks.

- 5.39** However, the case for enhancing the RBS divestiture does not appear to be as strong as for the LBG divestiture. After the current unenhanced divestitures, LBG will have a 25% share of the PCA market, 19% of gross mortgage lending and 21% in SME banking (see Table 5.2). RBS on the other hand will have 15% of the PCA market, 12% of the mortgage market, and up to 24% of the SME banking market (possibly less than 24% according to other data sources). Hence, LBG has a higher combined share in the markets that appear to be the least competitive. LBG also has a much greater market share than the second-largest firm in the PCA market, whereas RBS's lead in SME banking is much lower.
- 5.40** The Commission also notes that while the SME banking market is more concentrated than the personal banking markets, its post-divestiture level of concentration is not higher than the pre-crisis level – unlike PCAs and most other personal banking products (see Table 5.1). However, the Commission's scope is not limited to the effect of the crisis.
- 5.41** In any event, a basic problem with enhancing the RBS divestiture is the fact that the sale has already been agreed with Santander and the merging of systems is already taking place. It is not clear that transferring further assets and liabilities from RBS to Santander would have a significant impact on competition given Santander's now strong position in the market. To create a new challenger out of the planned divestiture, this deal would need to be undone, requiring RBS to find a new buyer without a significant presence in the UK market, or to create the divestiture as a stand-alone new market entrant. The costs of this would be substantially higher than enhancing the LBG divestiture at this stage in the sales process, given that integration work is already underway on the RBS divestiture.
- 5.42** It would also be possible for RBS to make an additional divestiture of SME or other retail banking assets to a different buyer (or as a standalone entrant), without re-opening the deal with Santander and in addition to it. As with the other structural solutions set out above (Paragraph 5.32), the Commission's current view is that this would be more disruptive and costly than other options, and that the benefits in terms of creating a challenger might be limited if the additional assets were not packaged with the existing divestiture.

## Other Government assets

- 5.43** In addition, various ideas have been mooted for using the Government assets of Northern Rock plc and UK Asset Resolution<sup>13</sup> to promote competition. In general, these assets are too small to make a very substantial difference in the national market on their own. However, the Government should have regard to competition considerations in its management and disposal of these assets. In particular, the

---

<sup>13</sup> UK Asset Resolution Limited is the holding company established on 1 October 2010 to bring together the Government-owned businesses of Bradford & Bingley plc and Northern Rock (Asset Management) plc.

Commission would not want to preclude the possibility of Northern Rock plc being used to strengthen competition at a national level, for example by being combined with the LBG divestiture in order to strengthen a new challenger bank.

## Conclusions

- 5.44** The Commission's current view is that structural and behavioural changes are both necessary to improve conditions for competition in UK retail banking, not least to redress the increased concentration and loss of challengers as a result of the crisis. The planned LBG divestiture represents an opportunity for entry of a strong, effective challenger in the retail banking market. However, as currently structured, it is unlikely to give rise to a credible challenger. Substantially enhancing the LBG divestiture would make it more likely that the new institution would exert a competitive constraint on the large incumbent banks in the short term, and would reduce LBG's market share. If a substantially enhanced divestiture does not result, there could be a strong case for the competition authorities to conduct a market investigation of the personal and SME banking markets in the UK.
- 5.45** Enhancing the divestiture would be more economically efficient than reversing the Lloyds TSB/HBOS merger. The costs of reversing a merger once it has taken place are high – hence the *ex ante* nature of normal merger policy – and the benefits of recreating the ailing HBOS are questionable. Creating a new, effective and stable challenger would give similar or improved benefits, without undoing the merger synergies for LBG.
- 5.46** Besides increased concentration, conditions are generally poor for consumer choice in the banking sector, due to (real and perceived) difficulties in switching accounts, difficulties in understanding and comparing products, and barriers to entry facing new players who might have a better customer offering. There is reason to believe that a radically improved system for switching accounts could and should be introduced at a reasonable cost within a short timescale. This would help to reduce obstacles to switching, which constitute one of the main barriers to entry as well as blunting competition between established banks. This could be less costly and simpler to introduce than full account number portability, while delivering many of the benefits.
- 5.47** Finally, it is important that competition in the sector is the subject of more active regulatory monitoring and improvement. The FCA has the opportunity to be a strong force for competition in a way that has not previously been possible in this sector. Giving the FCA a primary duty to promote competition could be a vital spur to competition in UK retail banking.

### **Consultation question 5.1**

Do you agree with the three broad measures proposed in this chapter (structural change, improvements to switching and barriers to entry, and pro-competitive financial regulation)?

### **Consultation question 5.2**

Should the Commission pursue any other measures to promote competition?

### **Consultation question 5.3**

What factors make smaller banks more likely to exert competitive pressure on larger incumbents?

### **Consultation question 5.4**

Where are the limitations on customers' abilities to understand banking costs, compare different accounts, and switch between them?

### **Consultation question 5.5**

What costs might an improved switching process impose on banks and direct debit originators?

### **Consultation question 5.6**

How could the costs of meeting prudential requirements be mitigated for small banks and new entrants, while ensuring safe practices in all banks?

### **Consultation question 5.7**

How could small banks' ability to offer a national network of cash handling services be improved?

### **Consultation question 5.8**

How should the Financial Conduct Authority discharge its duty to promote competition?





## Chapter 6: Consultation questions

- 6.1 This chapter brings together the consultation questions contained in this *Interim Report* and provides information on how to respond to them.

### Consultation question 1.1

Do you agree with the general position set out in this *Interim Report*?

## Chapter 2: The need for reform

### Consultation question 2.1

Do you agree with the analysis set out in Chapter 2?

### Consultation question 2.2

Do you agree with the analytical framework?

## Chapter 3: Current reform initiatives

### Consultation question 3.1

Are there other reform initiatives, beyond those set out in Chapter 3 and Annex 5, which you consider it essential for the Commission to examine further?

## Chapter 4: Reform options – financial stability

### Consultation question 4.1

Should systemically important banks be required to hold more equity than Basel III requirements? If so, how much?

### **Consultation question 4.2**

Should UK retail banks be required to hold more equity than Basel III requirements? If so, how much?

### **Consultation question 4.3**

Do you agree that bank debt should be made more loss-absorbing using some or all of contingent capital, bail-inable debt and/or depositor preference? If so, which of these tools do you support and how should they be designed?

### **Consultation question 4.4**

In relation to structural reforms to promote stability, do you agree that the Commission should focus its work on a UK retail ring-fence?

### **Consultation question 4.5**

What are the costs and/or benefits of a UK retail ring-fence, and what approaches could be taken to analysing them (noting Annex 3)?

### **Consultation question 4.6**

How should a UK retail ring-fence be designed (noting Annex 7)?

### **Consultation question 4.7**

Should the Commission pursue any other structural reforms to promote stability?

### **Consultation question 4.8**

Do you agree with the Commission's assessment of the impact on the competitiveness of the City and the UK economy of the reforms it is considering? Can you provide further data and analysis in this area?

### **Consultation question 4.9**

Do you agree with the Commission's intention to consider a package of measures, and do you think that some elements could be relaxed if others were strengthened?

### **Consultation question 4.10**

Over what timeframe should any reforms be implemented?

## **Chapter 5: Reform options – competition**

### **Consultation question 5.1**

Do you agree with the three broad measures proposed in this chapter (structural change, improvements to switching and barriers to entry, and pro-competitive financial regulation)?

### **Consultation question 5.2**

Should the Commission pursue any other measures to promote competition?

### **Consultation question 5.3**

What factors make smaller banks more likely to exert competitive pressure on larger incumbents?

### **Consultation question 5.4**

Where are the limitations on customers' abilities to understand banking costs, compare different accounts, and switch between them?

### **Consultation question 5.5**

What costs might an improved switching process impose on banks and direct debit originators?

### **Consultation question 5.6**

How could the costs of meeting prudential requirements be mitigated for small banks and new entrants, while ensuring safe practices in all banks?

### Consultation question 5.7

How could small banks' ability to offer a national network of cash handling services be improved?

### Consultation question 5.8

How should the Financial Conduct Authority discharge its duty to promote competition?

## How to respond

- 6.2** The closing date for responses is 4 July 2011. Responses should be sent by e-mail, if possible, to [feedback@bankingcommission.gsi.gov.uk](mailto:feedback@bankingcommission.gsi.gov.uk). Alternatively, they can be posted to:

Interim Report Feedback  
Independent Commission on Banking  
Victoria House  
Southampton Row  
London  
WC1B 4AD

- 6.3** All written representations and evidence provided to the Commission will be made public unless specifically requested otherwise. If you would like any of the information provided in your response to be treated confidentially, please indicate this clearly in a covering note or e-mail (confidentiality language included in the body of any submitted documents, or in standard form language on e-mails, is not sufficient), identifying the relevant information and explaining why it is confidential. Note that even where such requests are made, the Commission cannot guarantee that confidentiality will be maintained in all circumstances, in particular if disclosure should be required by law. Although the Commission has been advised that it is not subject to information requests under the Freedom of Information Act 2000, once it has completed its work its papers are likely to be passed to the Government and may then be subject to such requests. If you have any particular concerns about confidentiality that you would like to discuss, please contact the Commission using the e-mail address provided above.
- 6.4** Any personal data provided to the Commission will be held and processed only for the purposes of the Commission's work, and in accordance with the Data Protection Act 1998. Personal data will not be published or disclosed to a third party except as required by law. Once the Commission has completed its work then any personal data held by it is likely to be passed to the Government for the purpose of public record-keeping.

# Glossary

## **Bail-in / bail-inable debt**

Bail-in refers to the imposition of losses at the point of non-viability (but before insolvency) on bank liabilities ('bail-inable debt') that are not exposed to losses while the institution remains a viable, going concern. Whether by way of write-down or conversion into equity, this has the effect of recapitalising the bank (although it does not provide any new funding).

## **Basel Capital Accord / Basel Committee on Banking Supervision (BCBS)**

The Basel Capital Accord is the agreement first reached in 1988 by central banks from 12 countries, including the UK and the US, to establish consistency in international capital standards. It has been subsequently amended in 2004 (Basel II) and in 2010 (Basel III). The Basel Committee on Banking Supervision (BCBS) provides a forum for regular co-operation on banking supervisory matters among its members, and develops international guidelines and supervisory standards.

## **Big Four**

Barclays, HSBC, Lloyds TSB (LBG from 2009) and RBS.

## **Bond**

Essentially, a loan that can be traded as an asset in itself. Governments, companies and others issue bonds to raise money; in doing so, they incur an obligation to repay the bondholder in accordance with the terms of the bond, which will typically provide for repayment of principal after a certain period of time, and payment of interest while the bond is outstanding. Once issued, bonds – including the right to receive repayments of principal and payments of interest – can be traded on established markets.

## **Broker**

Trading on stock exchanges can only be done by licensed 'brokers'. Brokers buy and sell shares on behalf of clients, and earn a commission for doing so.

## **Building society**

A building society is a legal entity which, instead of being owned by external shareholders (like a company), is a mutual society owned by its members – its savers and borrowers. Building societies undertake similar activities to those of retail and commercial banks. However, their business model has (in part because of statutory restrictions) tended to be more conservative, consisting principally of taking in retail deposits and making loans in the residential mortgage market. One consequence of building societies being owned by their members rather than by external shareholders is that building societies are not able to boost their capital positions by issuing fully loss-absorbing capital instruments (comparable to banks' common equity) to external investors.

### **Capital**

A bank's capital comprises equity and debt instruments that absorb losses before depositors and other creditors. Regulators require banks to hold minimum amounts of capital relative to their (risk-weighted) assets to cover unexpected losses.

### **Capital conservation buffer**

The capital conservation buffer is an extension to the Basel III minimum Common Equity Tier 1 requirement, designed to absorb losses during periods of stress. While banks are allowed to operate within the buffer, doing so imposes constraints on their ability to make distributions (e.g. dividends, employee bonuses). The closer their capital ratio is to the regulatory minimum, the greater the constraints on distributions.

### **Challenger bank / challenger**

A challenger bank is one that has a strong incentive to compete for new market share combined with the ability to be a significant competitive constraint on the major incumbents.

### **Clearing bank**

'Clearing' involves processing a request for a payment transfer so that funds are deducted from the payer's account at one bank and put into the payee's account at another. Clearing banks undertake this activity, and are able to do so through membership of the relevant payments systems.

### **Collateral**

Property provided by one party to a loan or other financial transaction to the other to provide protection against default. If the party providing collateral does default, the other party has recourse to the collateral.

### **Commercial banking**

The provision of banking services – principally deposit-taking, payment and lending – to companies. However, the provision of banking services to SMEs is typically included in 'retail banking', and for large companies it is included to some extent in 'wholesale and investment banking'.

### **Common Equity Tier 1 (CET1)**

A component of Tier 1 capital, which is made up of shares that are in possession of the institution's stockholders and the retained earnings of the firm.

### **Contingent convertible capital / contingent capital**

Contingent convertible capital is bank debt that converts into equity upon the breach of a trigger, for example when a bank's capital ratio falls below a given level. Unless otherwise indicated, in this *Interim Report*, 'contingent capital' refers to debt that converts into equity or is written down while an entity is still a viable, going concern, well before the point of non-viability, and debt that converts (or is written down) at the point of failure is 'bail-inable debt'.

### **Counterparty**

A person who is a party to a contract.

**Covered bonds**

Debt securities backed by cashflows from underlying assets, often residential mortgages. However, unlike securitisations, covered bonds issued by a bank remain on the bank's balance sheet, providing the owner of the bonds with a secondary claim on the bank ('dual recourse') in the event that the bonds suffer losses.

**Credit default swap (CDS)**

A credit default swap (CDS) is a financial contract under which one party sells protection to another party against the occurrence of a defined 'credit event' – including restructuring and default – in respect of a specified reference entity. The CDS buyer pays a premium to receive protection against default by the reference entity; the CDS seller receives the premium and in return guarantees the credit risk of the reference entity. If a party holds a security issued by the reference entity, it may want to protect itself against default by the reference entity on that security by entering into a CDS to buy credit protection. Alternatively, a party may simply choose to speculate on the performance of the reference entity by buying or selling a CDS without having any other exposure to the reference entity.

**Depositor preference**

Under depositor preference, the claims of other unsecured creditors of a bank are subordinated to those of depositors. This means that in an insolvency, depositors will be paid out ahead of other unsecured creditors.

**Discount Window Facility (DWF)**

An exchange facility typically provided by a central bank, which is intended to assist credit institutions deal with short-term idiosyncratic and system-wide liquidity shocks. A DWF recently introduced by the Bank of England allows a bank (for a fee) to exchange a wide range of collateral (which may be untradeable at the time) for gilts, which the bank would then be able to lend out in the market (thus helping maintain its liquidity levels).

**Dodd-Frank Act**

The Wall Street Reform and Consumer Protection Act (known as the 'Dodd-Frank Act') was signed into law in the US in July 2010. The aim of the Act is to promote financial stability and address the 'too big to fail' problem in the US financial sector. Among others, the key changes to financial regulation include an overhaul of the regulatory and supervisory structure, introduction of formal liquidation responsibilities, increased transparency, and the implementation of the 'Volcker rule', which limits the extent to which insured deposit-taking institutions can carry out proprietary trading.

**Equity**

The shareholders' interests in a company, equal in value to the net assets of the company. It is through their equity holdings that shareholders are entitled to the company's profits (in the form of dividends) and a measure of control over the running of the company (through shareholder voting rights).

### **Financial intermediation**

The activity of channelling funds from lenders (savers) to borrowers by intermediating between them.

### **Financial Services Compensation Scheme (FSCS)**

The Financial Services Compensation Scheme (FSCS) provides compensation to customers of deposit-taking financial institutions primarily authorised in the UK that are no longer able to meet their claims. The amount reimbursed by the FSCS will depend on the claim and the type of customer (e.g. retail deposits receive 100% compensation up to £85,000, and certain retail investments up to £50,000).

### **Financial Stability Board (FSB)**

The Financial Stability Board is made up of a number of national financial authorities and international standard setting bodies. Its aim is to co-ordinate the development of effective regulatory, supervisory and other financial sector policies.

### **Funding**

The financing of a bank's operations. Most funding for retail and commercial banking activities is usually provided by customer deposits. Where a bank has a funding gap – fewer deposits than loans – it will typically meet this through borrowing in the wholesale funding markets, using, for example, interbank lending and repos.

### **Hedge fund**

An investment fund (often organised as a private partnership) that has few restrictions on the nature of its investments and transactions. Accordingly, a hedge fund enjoys significant latitude in the investment techniques (such as the use of derivatives and short positions) and broader aspects of its business model (such as charging structure and investment lock-in periods) that it can employ in attempts to generate profits and manage risk.

### **Herfindahl-Hirschman Index (HHI)**

The Herfindahl-Hirschman Index (HHI) is a measure of market concentration that takes account of the differences in the sizes of market participants, as well as their number. The HHI is calculated by adding together the squared values of the percentage market shares of all firms in the market. Higher numbers indicate more concentrated markets.

### **Jobber**

'Stockjobbers' or 'jobbers' were market-makers on the floor of the London Stock Exchange. They acted as intermediaries between stockbrokers (who could not trade directly) and made a return on the bid-ask spread. Jobbers ceased to exist after 1986.

### **Lender-of-last-resort**

The lender-of-last-resort for a financial institution is an entity that is willing to lend to that financial institution (typically on a fully-collateralised basis) when no-one else will. It is often the central bank of the jurisdiction in which the financial institution is based.



**Leverage**

The ratio of debt to equity finance used by a firm. In banking, leverage often refers to the ratio of assets to equity or a measure of capital. (See Chapter 2, Box 1 for more details).

**Liquidity**

A measure of how readily an asset, or a portfolio of assets, can be bought or sold in the market without affecting its price. Liquidity in a market is characterised by a high level of trading activity. Assets that can be easily bought or sold are known as liquid assets.

**Mark-to-market**

Under mark-to-market accounting, the value at which an asset or liability is accounted for is based on its current market price (rather than the price at which it was acquired).

**Maturity transformation**

Activity performed by financial institutions in using short-term (often demand) liabilities to fund longer-term assets.

**Merchant bank**

Merchant banks started to become established in the UK in the mid-18<sup>th</sup> Century. Prior to the Big Bang reforms (in 1986), merchant banks specialised in equity issuance, asset management, corporate advisory and overseas financing. Since then, they have largely been subsumed within wholesale and investment banks.

**Moral hazard**

Moral hazard is the risk that a party will alter its behaviour because it is not fully exposed to the consequences of its actions.

**Non-viable**

A bank becomes 'non-viable' when its regulator determines that it is failing, or is likely to fail, to meet its minimum regulatory requirements. For a UK bank that is licensed to accept deposits, the test would be likely to be the trigger for putting the bank into resolution under the Special Resolution Regime established by the Banking Act 2009.

**OTC derivative**

A derivative is a financial contract the value of which is derived from one or more underlying assets or indicators such as equities, bonds, commodities, currencies, interest rates and market indices. An 'over-the-counter' (OTC) derivative is a type of derivative that is entered into directly between two parties, without going through an exchange.

***Pari passu***

Two (or more) securities or obligations are *pari passu* when they have equal rights to payment in liquidation.

**Proprietary trading**

Own account trading activities unrelated to customer needs.

### **Re-financing risk**

The risk that a borrower cannot raise funds to re-finance existing debt as it falls due.

### **Repurchase agreement (repo)**

An agreement whereby one party sells a security to another party, and agrees to buy it back at a later time (often the following day). The economic effect of a repurchase agreement is therefore similar to that of a secured loan. For the party selling the security (and agreeing to repurchase it in the future) it is a repurchase agreement; for the party on the other end of the transaction (buying the security and agreeing to sell in the future), it is a reverse repurchase agreement.

### **Resolution / resolvability**

In general terms 'resolution' refers to the process whereby the authorities seek to manage the failure of a bank in a safe and orderly way that minimises any adverse impact on the rest of the financial system and the wider economy. Measures to improve the ease with which banks can be put into resolution – their 'resolvability' – are central to several ongoing financial regulatory reform initiatives.

### **Retail banking**

The provision of banking services – principally deposit-taking, payment and lending – to retail customers and SMEs.

### **Retail ring-fence**

The isolation of retail banking activities from non-retail banking activities by placing them in a separately capitalised subsidiary.

### **Risk-Weighted Assets (RWAs)**

Risk-weighted assets (RWAs) refer to a bank's assets adjusted for risk. The BCBS sets minimum capital requirements relative to RWAs rather than unweighted assets as the former are considered a better indicator of potential unexpected losses. Risk weights for each asset may be determined by standardised criteria or calculated using a bank's risk management model, subject to verification of the model by the regulator.

### **Securities dealer**

A non-bank firm the principal activities of which are dealing in securities on its own account and/or acting as a securities broker for clients, and giving advice to clients.

### **Securitisation**

The process of originating or purchasing cash flows from a pool of assets, packaging them into securities and selling these to investors. The assets that are most commonly securitised are residential mortgages, but many other types of financial assets can also be securitised, such as commercial mortgages and credit card loans.

### **Shadow banking sector**

Not all firms that conduct banking activities are banks, and non-bank institutions that conduct such activities are collectively referred to as the 'shadow banking' sector. Examples

of such institutions include hedge funds, securities dealers, insurers and SIVs (see Annex 2 for more details).

### **SIV**

A structured investment vehicle (SIV) is a company which funds the purchase of long-term instruments through the successive issuance of highly rated short-term debt securities, typically commercial paper that is continuously renewed or rolled over. A SIV attempts to profit from the spread between the incoming cashflows it receives on the long-term securities it purchases, and the outgoing cashflows it pays to service the commercial paper it has issued. SIVs tend to be highly leveraged in order to maximise returns (see Annex 2 for more details).

### **State aid**

State aid is the provision of government support to private companies. A company which receives government support typically obtains an advantage over its competitors. Therefore, the EC Treaty generally prohibits state aid unless it is justified by reasons of general economic development.

### **Systemic risk**

The risk of significant disruption to the financial system as a whole. Systemic risk is exacerbated by dependencies and interconnections between financial institutions and markets.

### **Tier 1 / Tier 2 capital**

Classification of different types of regulatory capital. Tier 1 capital comprises common equity, retained earnings and some types of debt instruments that convert into equity or can be written down. Tier 2 capital comprises other types of debt instruments that convert into equity or can be written down. 'Additional Tier 1 capital' is Tier 1 capital other than CET1 Capital. (See Chapter 3, Box 3 for more details).

### **Too big to fail / too big to save**

Financial institutions whose collapse would have such adverse impacts on the financial system and the wider economy that they will be bailed out by the government rather than be allowed to become insolvent are 'too big to fail'. If a country has such a large banking system that there is a risk that a taxpayer-funded bank bail-out would threaten the public finances, banks that are 'too big to fail' become 'too big to save'.

### **Universal bank**

A bank that undertakes a combination of retail, commercial, wholesale and investment banking activities.

### **Wholesale and investment banking**

The principal activities of wholesale and investment banking are the provision of wholesale lending to large corporations (wholesale banking) and the provision of assistance (including underwriting) to institutions such as governments and corporations in raising equity and debt finance, providing advice in relation to mergers and acquisitions, acting as counterparty to client trades and market-making (investment banking). An investment bank may also

undertake trading on its own account (proprietary trading) in a variety of financial products (such as derivatives, fixed income instruments, currencies and commodities). Note that 'investment bank' is sometimes used to refer to financial institutions that conduct these activities; they may not in fact be 'banks' in the sense of institutions that accept deposits.

## Annex 1: Summary of *Issues Paper* responses

1. The Commission received over 150 separate submissions in response to its *Issues Paper*, amounting to over 1500 pages of views and evidence from a wide range of financial sector industry groups, academics, financial sector companies, small and medium-sized enterprises, charities, think tanks, and members of the public. The Commission extends its thanks to all those who made contributions. This annex provides a high-level summary of the responses.
2. There was considerable interest, both positive and negative, in the question of splitting 'retail' and 'investment' banks. Many in favour of a split argued that there is a funding subsidy provided by retail deposits, and that there should not be separation of risk and reward for universal bank employees risking shareholder capital. Others in favour of a split argued that the implicit 'too big to fail' guarantee was market distorting. Others, however, were against a split, based on the impact on businesses needing access to a range of complex financial products as well as more basic services, the cost of a split to the sector, and the impact on the UK's competitiveness as a location for financial services. It was also argued by some that a split would not increase financial stability.
3. There was general support for the 'living will' process, though some respondents would go further and ensure *ex ante* structural separation of banks into separately capitalised subsidiaries, thereby providing additional protection for the retail part of the bank. Some argued that this would reduce the opportunity for cross-subsidies between parts of the banks, though others disagreed, saying synergies would still operate.
4. There was little support for the notion of narrow or limited purpose banks, for reasons including the lack of feasibility and the value destruction such a measure might bring. However, some did view fractional reserve banking as a problem, and called for the Bank of England to be the only creator of money in the economy.
5. The Commission also received views on issues relating to bank capital, liquidity and loss-absorbency in banks. A majority, though not all, of responses on this issue saw Basel III as insufficient. Others were concerned that risk-weighted asset measures are not sufficiently robust. Liquidity restrictions were seen as enhancing stability by some, but as increasing costs to consumers by others. The super-priority of repo counterparties was also of concern for respondents. While some respondents would like to see more equity, there was general acceptance in principle of the benefit of contingent capital and bail-in, though caveated by the observation that there has

been limited testing of loss-absorbing debt instruments and that the potential market may still be unclear.

6. There were respondents who saw proprietary trading by banks being of limited value to the economy and who hence promoted a complete ban on this activity by banks, or at least restrictions on the level permitted, but most respondents saw difficulty in identifying proprietary trading as opposed to hedging and market-making activity. Some did argue, however, that the feasibility of making such identifications should be investigated further. Connected to this was a general view that more transparency would be beneficial across the sector, in particular in fees and charges for retail customers, in specialised derivative instruments and in the balance sheet disclosures of banks, particularly in relation to wholesale market activities.
7. Retail market competition was the most popular topic for respondents. Much of this interest focused on the Lloyds TSB/HBOS merger, with views split between concerns it has had market distorting effects and those who considered the state aid divestments as sufficient to counteract these. The level of concentration in the retail market more generally was a concern for many, though some argued that the UK market remained competitive despite this. Switching behaviour was seen as a significant barrier to entry by many respondents, though views were more mixed on access to the payments system. The 'free-if-in-credit' personal current account model was also seen as a barrier to new entrants by a number of respondents. There were also some who wanted to see greater diversity in the sector, with more support for credit union membership and mutual models, and an increase in financial education and inclusion to ensure better informed consumers. There were also some concerned with concentration in the wholesale sector, and who argued for greater competition measures in this part of the banking industry.
8. Finally, on the complex issue of the link between financial stability and competition, most responses reaffirmed the position outlined in the *Issues Paper*, that the link between the two is uncertain and empirical evidence inconclusive. There was a view that there was no reason why the two could not coexist, but that this relied on the presence of good regulation and transparency.
9. The Commission has published all the responses that it received to the *Issues Paper* that were not labelled confidential by the sender. They can be viewed on the Commission's website.<sup>1</sup>

---

<sup>1</sup> Responses can be viewed at: <http://bankingcommission.independent.gov.uk/bankingcommission/responses/>.

## Annex 2: Non-bank financial institutions

1. Households ultimately hold all of the wealth in society, so must bear all of the risk. The financial system exists in part to help households manage this risk, but at best can only transfer risk from one place to another. When regulating one part of the financial system, such as banks, careful attention must be given to the effect that this will have elsewhere in the system: risks that are removed from banks may just be shifted elsewhere.
2. Financial intermediaries such as banks create externalities. In other words, the impact of failure of a bank can extend well beyond the firm itself. Banks will therefore in general not act precisely in the public interest. Prudential regulation (e.g. capital and liquidity requirements) is intended to bring the behaviour of banks more closely into line with what is best for society.
3. The natural response of banks is to minimise the constraining impact of regulation. This might mean maximising risk levels within regulatory constraints, or seeking ways to circumvent them ('regulatory arbitrage'). Banks did both of these in the run-up to the crisis. Figure 4.1 in Chapter 4 shows how banks, constrained by capital requirements denominated in risk-weighted assets, increased their leverage by shifting into assets with lower risk weights. But many banks went even further, taking on risk outside of the regulatory perimeter (and therefore more cheaply) through various off-balance sheet entities.
4. Banks created special purpose entities (SPEs) – such as structured investment vehicles and conduits – which invested in debt issued by other companies, including other banks, and financed these investments by issuing their own debt. Because these entities were not regulated, banks did not need to hold regulatory capital against risk, which lowered the hurdle rate for determining profitable investments. But by the same token, these entities did not benefit from the banking safety net despite carrying out significant maturity transformation. Indeed, they were a significant part of the 'shadow banking' system, as discussed in Pozsar et al. (2010).<sup>1</sup>
5. So, rather than relying on central banks as liquidity providers of last resort, many non-banks relied instead on private banks to provide them with insurance. And when the crisis struck, risks that had apparently been shifted outside of the banking system returned. When SPEs became unable to re-finance their assets – because investors

---

<sup>1</sup> Pozsar, Z., Adrian, T., Ashcraft, A. & Boesky, H., 2010, Shadow Banking, *Federal Reserve Bank of New York, Staff Report no. 458*: [http://www.newyorkfed.org/research/staff\\_reports/sr458.pdf](http://www.newyorkfed.org/research/staff_reports/sr458.pdf). The authors define shadow banks as "financial intermediaries that conduct maturity, credit, and liquidity transformation without access to central bank liquidity or public sector credit guarantees" (page 11).

became wary of the quality of those assets – this had three detrimental consequences for banks. First, banks that were heavily reliant on SPEs as funding providers (e.g. Northern Rock, HBOS) faced a sudden liquidity problem as they could not re-finance their maturing debt. Secondly, banks were strained further by providing liquidity support to their SPEs, who could not re-finance their own maturing debt. This was partly motivated by a common desire to avoid a ‘fire sale’ of SPEs’ assets, many of which were similar to those held by banks and would therefore have conferred significant losses on banks. Finally, as SPEs’ assets fell in value, banks provided capital support to SPEs. This was also intended to prevent ‘fire sale’ losses and to avoid any stigma that might have been attributed to a bank that allowed an SPE to fail.<sup>2</sup>

6. A key question for financial stability is therefore how the non-bank financial system and its relationship with the banking system will evolve. Limiting the implicit subsidy of banks should encourage some activity to migrate away from the banking system, and this may in some cases be positive for financial stability. Pozsar et al. note that some components of the shadow banking system were driven by genuine economic gains from specialisation and comparative advantage relative to banks, rather than regulatory arbitrage. However, it will only be positive to shift risk away from the banking system if the negative externalities associated with non-banks, as opposed to the private costs, are smaller.
7. Furthermore, policies to increase the loss-absorbency of bank liabilities must pay due attention to the effect of imposing losses on bank investors and creditors. For example, most UK household financial wealth is held in insurance companies and pension funds (ICPFs), who accordingly provide, directly or indirectly, the vast majority of UK non-deposit funding to UK banks. But ICPFs’ policy commitments amount to a form of leverage, limiting their ability to absorb losses. So care must be taken to ensure that bank investors can bear the risks that increased bank loss-absorbency shifts onto them.
8. A potential drawback to imposing stronger regulation on banks is that it may generate even greater incentives for banks to engage in regulatory arbitrage, especially when private sector risk aversion recedes. This may be mitigated by designing regulation that limits the potential for such arbitrage. To this end, the Financial Stability Board has formed a task force that will set out potential approaches for the monitoring of, and regulatory tools to address the risks posed by, shadow banks. And the Basel III reforms address many of the regulatory loopholes which banks exploited prior to the crisis. For example, the new liquidity requirements make it much more expensive for banks to back-stop an off-balance sheet entity. Direct regulation of shadow banks and/or regulation of banks’ interactions with shadow banks could lean strongly against incentives to engage in regulatory arbitrage.

---

<sup>2</sup> Banks were concerned about the reputational impact of allowing an SPE to fail – perhaps as a negative indicator of their own solvency – even though SPEs were typically bankruptcy-remote.



9. Financial innovation and reform of banking regulation will cause the financial system to evolve in unpredictable ways. The advent of macro-prudential regulation will therefore be crucial in limiting the associated risks, by flexibly adjusting the perimeter of regulation, and perhaps by limiting the overall rate of growth of credit in the economy. Additional reforms including central clearing of derivatives, large exposure limits and restrictions on the provision of non-contractual support to failing entities should also increase the resilience of banks to shocks arising elsewhere in the financial system. Further, the structural reform discussed in this *Interim Report* should limit the potential for contagion from non-banks to the retail banking system to some degree.



## Annex 3: Cost-benefit analysis of financial stability reforms

1. This annex analyses the costs and benefits of the following reform options to improve financial stability:
  - increased loss-absorbency of bank liabilities through higher equity capital requirements; and
  - structural reform, notably a ring-fence around banks' UK retail activities.

### The costs of financial crises

2. Banks provide valuable services to the rest of the economy: they facilitate payments, transform savings into loans, and enable their customers to manage risks. A financial crisis constitutes an actual or threatened interruption to these services. As recent events have shown, this can be highly damaging to the economy and public finances. The damage to the economy can be large and permanent, in the sense that GDP never fully recovers to the path that would have obtained in the absence of a crisis.
3. Relative to continuation on the latter path, the net present value (NPV) of the GDP loss can exceed a year's GDP. For example, a permanent loss of 5% of initial GDP discounted at a real interest rate of 4% would have an NPV of 125% of annual GDP.<sup>1</sup> The extensive survey of the Basel Committee on Banking Supervision (BCBS (2010a)) gives a range of 19-163% of annual GDP for the NPV cost of a financial crisis, with a median cost estimate of 63% of GDP.<sup>2</sup> The BCBS study also estimates that major financial crises occur in 4.5% of years – i.e. every two decades or so. On that basis, purely in GDP terms (so excluding other costs of crises) based on the median cost estimate, it would be worth paying an annual insurance premium of about 3% of GDP if the probability or impact of financial crises could be reduced to zero (because  $4.5\% \times 63\% = 2.8\%$ ). A premium of about 1.5% would be worth paying to halve the probability or impact of financial crisis, and so on.
4. So while the costs to banks of financial crises are undoubtedly large, they are nowhere near as great as to the economy and society generally, especially if vital retail banking

<sup>1</sup> If the level of GDP is reduced by 5% in every year relative to the level that would have obtained in the absence of a crisis, and GDP ordinarily grows at 2%, the present value of this loss doubles to 250% of annual GDP.

<sup>2</sup> The classification and dating of banking crises are not straightforward and can vary between studies. A representative definition is in Laeven & Valencia (2008), page 5: "...in a systemic banking crisis, a country's corporate and financial sectors experience a large number of defaults and financial institutions and corporations face great difficulties repaying contracts on time".

services are in jeopardy. That is the most basic reason why the capital structures of banks cannot safely be left to market forces alone.

### **The private and social costs and benefits of higher capital requirements**

5. Whereas the cost of crises to the public exceeds the cost to banks, the social cost of measures to reduce their probability and impact is likely to be significantly lower than their private cost to banks. That is in good part because the prospect of governments intervening to bail out systemically important banks effectively subsidises them. Correcting that subsidy shifts costs to banks from the wider public. Moreover, the tax system discourages (stability-enhancing) equity finance. In the absence of regulation, banks will therefore hold much less equity than the public interest requires.
6. Higher capital requirements raise banks' costs as they have to substitute some higher-cost funding (e.g. equity) for lower cost funding (e.g. senior debt). But such a shift in funding, by reducing risk, will to some extent lower the return banks need to pay suppliers of finance.
7. Indeed, there is a well-known theoretical benchmark in which changes in yields could exactly offset changes in funding composition, leaving average funding costs unchanged. Modigliani & Miller (1958) set out sufficient conditions for this 'neutrality' result to hold. The intuition behind their result is that an increase in equity capital makes both equity and debt less risky, reducing the returns required on them. It follows that the extra cost to banks of higher capital requirements is less than it seems from comparing the historical cost of debt and equity, because an increase in equity reduces the cost of both. This intuition is common sense and does not hinge on the assumptions in the paper, although the size of this effect is a matter for debate.
8. The conditions that underpin the Modigliani-Miller neutrality result do not hold in practice, for reasons relating to bankruptcy costs, taxes, and incentive problems. In respect of all three, the interests of banks and the public interest are likely to diverge. As to bankruptcy, the high social cost of financial crises has already been mentioned. The tax point arises from the fact that interest payments on bank debt are deductible as an expense against corporation tax, whereas distributions to shareholders are not. The incentive problem is that decision-makers in banks, and banks' creditors and shareholders, have too much incentive to take risk – and/or too little incentive to assess and guard against risk – if they keep a greater portion of the upside returns if things go well than of the downside if not.
9. Moreover, in the case of systemically important banks, there is the important question of the implicit – and for some categories of debt explicit – government guarantee. The size of this subsidy is addressed in Box A below. It concludes that the prospect of government support cheapens bank funding by considerably in excess of £10bn per year.

10. Correcting this effective subsidy will increase the cost of capital to banks. But it will be offset by an improvement in the public finances and, most importantly, by a reduction in the risk of a sovereign debt crisis. Large banking systems can threaten the perceived creditworthiness of governments, through the presence of an implicit guarantee.<sup>3</sup> The social costs of sovereign default, or even the risk of it, are very large indeed.<sup>4</sup> So bank guarantees, by placing the creditworthiness of the government in question, can risk costs for society that would dwarf the direct cost or value of the subsidy to the banks.
11. To the extent that higher capital requirements raise funding costs, the cost will be passed through to bank customers in the form of higher lending rates, unless they are absorbed elsewhere in banks' cost structures. This increase in the price of credit will tend to make investment funded with bank debt more expensive, and so reduce the capital stock and output (relative to a hypothetical crisis-free scenario). It does not follow that economic efficiency is lower: better pricing of risk should promote efficiency; part of the increase in costs reflects the removal of a subsidy, the case for which is unclear; and more expensive bank credit may just change the price at which certain assets, such as houses, transact, rather than how many there are or who owns them.<sup>5</sup> The impact on GDP is a useful benchmark, but an over-estimate of the effect on welfare.
12. Turning to the benefits of capital, banks with more common equity on their balance sheets can remain solvent in the face of larger shocks to their assets. Other things equal, a better-capitalised banking system can therefore be expected to encounter solvency crises less frequently. This is the principal social benefit of higher bank equity capitalisation.
13. Two recent studies that bring together the long-run GDP costs and benefits of capital requirements merit particular attention.<sup>6</sup> BCBS (2010a) uses a suite of models to link the equity capitalisation of the banking system to the probability of crisis. When combined with an estimate of the net present value cost of a financial crisis, an estimate of the increase in average GDP from an extra unit of capital can be derived. BCBS (2010a) then assumes that a 1 percentage point increase in capital requirements (on a Basel II definition) raises bank funding costs, as equity replaces cheaper long-term debt, and that lending rates rise by 13 basis points (bps) to keep the return on

---

3 Figures 2.2 and 2.3 in Chapter 2 show how the markets began to link the solvency of banks in Ireland and the UK with the solvency of their governments after bailouts were announced in late 2008. Gerlach, Schulz & Wolff (2010) show that, as market perceptions of risk increase, the perceived default risk of governments of countries with large risky banking systems also increase. Demirgüç-Kunt & Huizinga (2010) show that the market perceives some banks as being too large for the government to bail out effectively, in the sense that the attempt to do so would jeopardise government finances.

4 Levy-Yeyati & Panizza (2006)

5 Indeed, Sheila Bair, Chairman of the US Federal Deposit Insurance Corporation, notes how capital that could have been productively invested in energy, infrastructure or industry was misallocated towards an unproductive house price boom: <http://www.ft.com/cms/s/0/a1dfbd02-ae8-11df-8e45-00144feabdc0.html#axzz1HscJHR4W>.

6 IIF (2010), FSB & BCBS (2010) and OECD (2011) look at only short-run costs, and do not assess benefits.

equity unchanged.<sup>7</sup> A suite of models is then employed to estimate the marginal effects on GDP of higher bank capital. The median estimate of the loss of output is 0.09% for a 13bp rise in lending spreads, with a range from 0.02% to 0.35%.

14. A study by Miles et al. (2011) uses a similar conceptual framework. The authors estimate a probability distribution of GDP growth and assume that risk-weighted assets (RWAs), appropriately defined, vary one-for-one with GDP and hence obey the same distribution. The study identifies a banking crisis as a situation in which the net worth of the banking system is negative – an extremely narrow definition – and thereby generates a relationship between the normal level of capital in the system and the probability of financial crisis. Miles et al. assume that a financial crisis costs 140% of GDP. They then perform a sensitivity analysis by varying the extent to which higher equity reduces the returns on bank liabilities, how the extra tax revenue from equity returns is deployed, and how dependent investment is on bank lending.
15. Figure A3.1 brings together the estimated marginal costs and benefits of extra capital in these two studies. GDP is maximised where the marginal benefit of extra capital, in terms of reducing the expected losses from financial crises, is equal to the marginal cost, in terms of the reduction in GDP from more expensive intermediation in normal times. Taken at face value, the studies suggest that minimum Common Equity Tier 1 (CET1) requirements should be between 7% and 20% of RWAs. It should be remembered that welfare, as distinct from GDP, may be maximised at a different, probably higher, level of capital.
16. This range is wide because of uncertainty about several factors:
  - the effect of more bank equity on GDP is highly uncertain. It will be smaller to the extent that: yields on bank liabilities fall as the share of equity financing increases, making them less risky; other forms of financing substitute easily for bank lending; and the Government uses the associated extra tax revenues to offset the costs.<sup>8</sup> On the other hand, equity could perhaps get more expensive if investors' appetite for bank equity is somehow limited by institutional features of the investment industry. Bankers and investors may continue to target returns on equity in line with historical norms, rather than revising return targets down to reflect the reduction in risk associated with higher capitalisation. And bankers may be averse to increasing capitalisation through rights issues, seeking instead to contract their balance sheets to meet higher equity requirements, raising spreads further or rationing credit. Many of these additional costs could perhaps be mitigated with a sufficiently long transition period, although Smithers (2011)

---

<sup>7</sup> Table A3.1 below presents a range of external estimates of the impact that higher capital requirements might have on bank lending spreads and GDP.

<sup>8</sup> Furthermore, to the extent that national saving does not change, risk-free interest rates will have to fall to offset the rise in bank spreads, muting the effect on GDP. This effect will be more powerful if higher capital ratios are put in place globally, as the UK is too small to affect world interest rates by itself. On the other hand, greater economic stability may discourage precautionary saving, raising risk-free interest rates and compounding the rise in lending spreads.

has argued the opposite, suggesting that a short transition period will shift more of the transition burden onto equity-raising rather than a reduction in risk-weighted assets;

- the relationship between the amount of capital in the banking system and the risk of financial crisis is uncertain. The definitions of both capital and risk-weighted assets have changed over time, making consistent comparisons with current definitions difficult.<sup>9</sup> The amount of capital in the system will in general exceed the regulatory minimum. The distribution of capital and losses within the financial system will be key. In addition, banks can fail for proximate reasons other than insolvency; and
- an increase in bank capital could increase or reduce the riskiness of bank lending. On one hand, bank shareholders' risk appetite will be attenuated to the extent that higher capitalisation exposes them to more of the downside of their investments, and to the extent that creditors exact a more appropriate price for risk if they believe they are more likely to bear losses rather than be bailed out. The financial system can create and magnify shocks to the value of its assets, so a better-capitalised system might need to absorb less volatility. And if the economy (and hence bank asset values) becomes less volatile as a result of improved financial stability, the cost of bank equity will fall as the amount of risk falls throughout the economy. On the other hand, the more that regulatory requirements exceed the levels that bankers feel would be appropriate, the more that bankers will seek to maximise risk subject to these requirements, bringing economic capital up towards regulatory levels. These opportunities for regulatory arbitrage will reduce the stabilising effect of higher capital requirements.

**17.** These studies have informed the Commission's view that an appropriate minimum ratio of CET1 capital to RWAs, on a Basel III basis, is at least 10% for all systemically important banks. In particular, a 7% ratio is likely to be too low because:

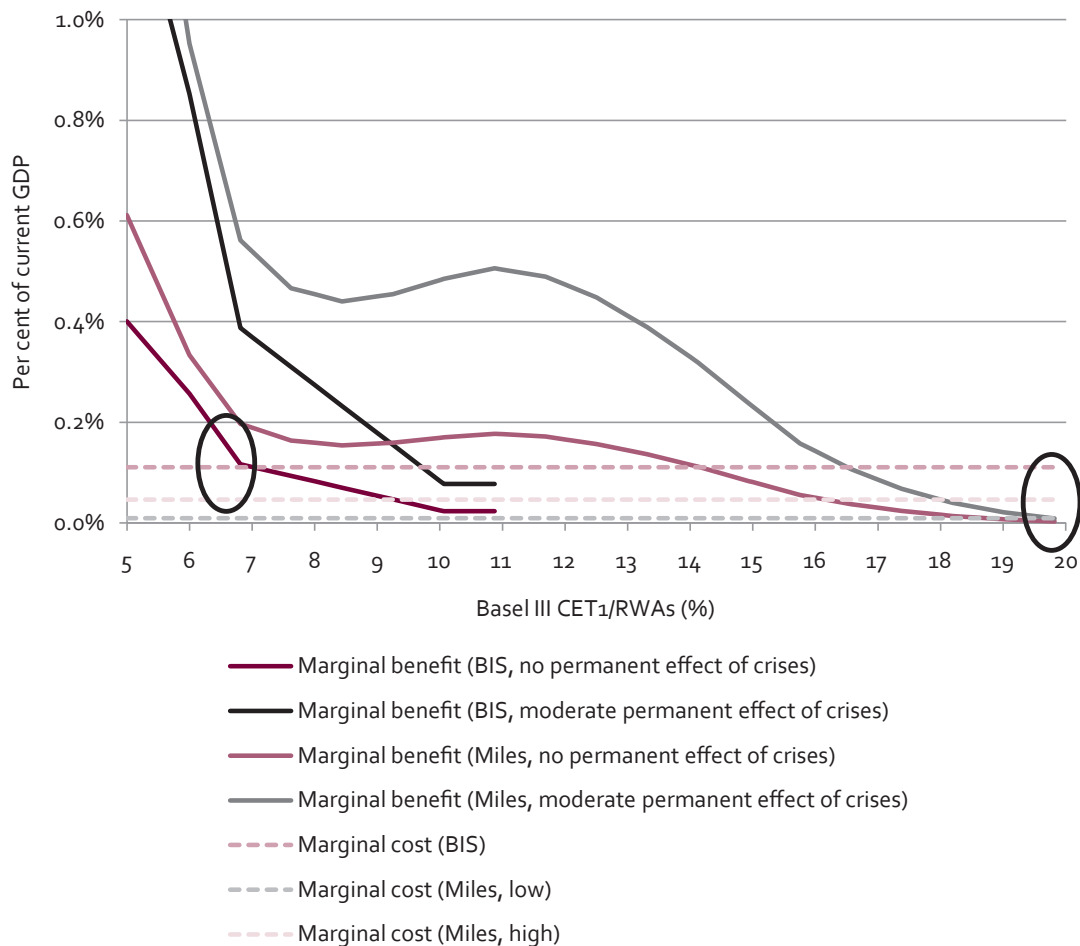
- 7% is generated using an extremely conservative estimate of the costs of a crisis (a present value cost of 19% of GDP). The figure for future crises could plausibly be five or more times larger. The most recent crisis has probably cost more than 20% of GDP in the UK already;
- the BCBS estimates make no allowance at all for higher equity ratios to reduce the yields on bank liabilities, nor for the extra tax revenue they generate to be used to offset the increased cost of bank funding;

---

<sup>9</sup> BCBS (2010a) uses Basel II definitions of tangible common equity and RWAs, so the headline numbers have been lowered to be consistent with a Basel III CET1 capital to RWAs ratio. Miles et al. (2011) do not translate exactly into a Basel III ratio, but rather into a ratio definition that has the property of measuring losses in recessions proportional to cumulative GDP losses. But neither this, nor their use of a Tier 1 leverage ratio in the regression analysis, appears to introduce a bias either way in their implied optimal regulatory capital ratio.

- households prefer stable to unstable flows of consumption. As well as reducing average GDP, financial crises make the economy more volatile. The welfare benefits of limiting financial crises therefore exceed the simple effects on the present value of GDP;<sup>10</sup> and
- the redistribution of resources in a crisis from the government to bank shareholders and creditors is costly in aggregate to the extent that there are costs of levying taxation and that the creditworthiness of the government comes into question. These factors are likely to be particularly important in the UK, because the banking system is large.

**Figure A3.1: Marginal costs and benefits per percentage point of bank capital**



Source: BCBS (2010a) and Miles et al. 2010

<sup>10</sup> See, for example, Barlevy (2005).



**Table A3.1: Summary of external studies of the impact of higher capital requirements on bank lending spreads**

Study	Modelled change	Published study results		Normalised results for a 1% increase in Basel III CET <sub>1</sub> /RWAs	
		Impact on cost of credit	Annual lost GDP	Impact on cost of credit	Annual lost GDP
Barrell et al. (2009)	1% increase in total capital/RWAs	18bps	0.08%	22bps	0.10%
BCBS (2010a)	1% increase in Tangible Common Equity/RWAs	0-13bps	0.00-0.09%	0-16bps	0.00-0.11%
Elliott (2009)	4% increase in equity/assets	0-77bps	<i>Not reported</i>	0-13bps	<i>Not reported</i>
Hanson et al. (2011)	10% increase in equity/assets	25-45bps	<i>Not reported</i>	2-3bps	<i>Not reported</i>
Miles et al. (2011)	8.4% increase in Tier 1 capital/RWAs	8-38bps	0.06-0.32%	1-6bps	0.01-0.05%

*Notes*

1. Where ranges are shown, these reflect the different results arising from a variety of modelling assumptions. In general, the top end of the range reflects the impact assuming that all costs are passed through to customers and the bottom end of the range reflects the impact assuming that some or all costs are absorbed elsewhere (e.g. by lower bank operating expenses or a lower cost of debt/equity). The ranges shown here do not incorporate the additional uncertainty about the effect of a given rise in spreads on GDP.

2. The published study results have been normalised to reflect the impact of a 1% increase in the ratio of Basel III CET1 to RWAs. Assets have been converted to RWAs using a Basel II 53.9% risk weight (Source: BCBS (2010a)). Basel II RWAs have been converted to Basel III RWAs by applying a 23% uplift (Source: BCBS (2010b), Table 6). Additional units of CET1 capital are assumed to be common equity/retained earnings and treated consistently for all studies.

## UK retail ring-fence

18. The introduction of a UK retail ring-fence may generate private costs for those banks which have chosen to operate as integrated universal banks. The policy questions are:

- What are the nature and scale of these private costs?
- How might these translate into social costs?
- How do any social costs compare to any social benefits?

### Private costs

19. The Commission has seen a number of estimates of the costs of ring-fencing, some in the form of confidential submissions from individual institutions which might be affected by such a reform, and others in the form of estimates from other market participants of various kinds. There is broad agreement about the possible nature of the private costs for a bank:
- the market would require the bank to hold more capital. This is because pure investment banks tend to have higher capital ratios than universal banks, reflecting a market judgement of the risks involved. Consistent with this, a number of rating agencies ascribe lower ratings to pure wholesale/investment banks;
  - the cost of the bank's debt funding may go up. Pure wholesale/investment banks have higher funding costs than universal banks and, depending on the additional capital raised, may have a lower rating. In addition, pure wholesale/investment banks may require a higher average term of funding than universal banks. Additional capital will replace debt funding and to some extent offset these effects;
  - the bank may need to hold additional liquid assets;
  - the bank may lose business, for example if part of it is downgraded; and/or
  - the bank may incur additional operational costs.
20. In the evidence received, the first two points represent the vast majority of the private costs. In terms of scale, the Commission has seen a very wide range of estimates. One set of figures which has been put into the public domain is an estimate of the annual cost to the major UK banks of £12-15bn. The bottom end of this range is significantly higher than the sum of the tops of the ranges of more detailed assessments received individually by the Commission from those banks which appear most likely to be affected. Furthermore, a number of factors suggest that the top of those estimates received is also too high:
- some banks already need to raise capital to meet other regulatory requirements, but this has not been taken into account in some cases;

- except in one case, top-end estimates assume that all diversification benefits are lost in the event of subsidiarisation.<sup>11</sup> But a ring-fence should preserve many diversification benefits;<sup>12</sup> and
  - some estimates assume a global split along functional lines for affected institutions, rather than a ring-fence limited to the UK.
- 21.** On balance, the Commission's current view is that the private costs of a UK retail ring-fence may be material but are likely to be much smaller than the £12-15bn estimate referred to above.

## Social costs

- 22.** The Commission is examining the extent to which any private costs might translate into social costs. Higher capital and funding costs might arise from a loss of diversification benefit, and/or from a reduction in the strength of any government guarantee. Costs from reduced guarantees and higher tax payments (as equity forms a greater proportion of liabilities) are not social costs of themselves, but rather represent a transfer from banks to taxpayers. Lost diversification benefits, in contrast, do not yield an offsetting reduction in costs elsewhere. The private costs of a ring-fence are likely to be some combination of the two.
- 23.** As with higher capital requirements, policies which raise the cost of financial intermediation may generate costs for the rest of the economy.<sup>13</sup> Wholesale/investment banking activities would bear the brunt of higher costs,<sup>14</sup> and these services are traded in international markets. The passthrough from increased costs for some producers (UK universal banks) to prices would therefore be limited by the presence of other, unaffected providers (non-banks and foreign banks) in the markets where costs increase the most. So the supply of financial services to UK users – which is what matters for the impact of the ring-fence on the real economy – might not be affected a great deal.

---

11 In a world of zero bankruptcy costs, investors could achieve any desired diversification benefits with portfolios of separated firms' liabilities, obviating the need for corporate integration for reasons of diversification. Merton (1973) shows that, in the absence of operating synergies, equity investors are disadvantaged by mergers, as the protection afforded to them by limited liability is diluted. In practice, the substantial real-world size of financial distress costs weakens the force of these arguments.

12 Fiechter et al. (2011) examine the capital required by 25 European cross-border banking groups to deal with a credit shock affecting their affiliates in Central, Eastern and Southern Europe. Their research suggests that more severe forms of subsidiarisation could require 1.5-3 times more capital than less severe forms. Note that the least severe form considered in the paper is referred to as 'no ring-fencing', but this is nevertheless a subsidiarised model with separate capital and so falls within the definition of 'retail ring-fence' considered in this *Interim Report*.

13 See Annex 8 on competitiveness for a discussion of the impact of these reforms on the UK financial services industry itself.

14 The requirement for additional capital and more expensive funding set out above falls mainly, in the view of some analysts wholly, on the wholesale/investment banking arms of affected institutions.

24. There are a number of ways to model these impacts, but each is subject to drawbacks. The methods used in BCBS (2010a) and Miles et al. (2011) are aimed at analysing the social costs of a reduction in capital investment due to more expensive bank financing in closed economic systems. They will therefore overstate the translation from private to social costs in this case, as increased costs are concentrated on a subset of producers in an internationally tradable market. Another approach is to think of financial services as an input to production, and to examine the fall in potential output as a result of an increase in the price of financial services. Estimates produced this way suggest the social costs of a retail ring-fence will be small.

### Social benefits

25. The potential benefits of a UK retail ring-fence are straightforward to characterise, but difficult to quantify.
26. Ring-fenced banks may be easier for the authorities to resolve in the event of distress. The separation of functions which need to be operated continuously from those which do not may be logistically or legally too complicated for the authorities to be confident they can achieve it smoothly. *Ex post* separability may thus only be credible with *ex ante* separation of some kind. To the extent that the external costs of bank failure were thus minimised, the impact of bank distress would be reduced directly, and the public guarantee would be credibly limited.
27. Limiting the public guarantee of bank liabilities would mean that the risks that banks take would be subsidised less, reducing the amount of risk that is taken. The inequity of taxpayers bailing out bank creditors would be avoided to some extent. And the deadweight costs of the higher taxation and, in the extreme, a fiscal as well as financial crisis, would be curtailed.
28. Abstracting from the existence of a public guarantee, the separation of UK retail banking functions within universal banks would affect the probability of retail bank failure and the circumstances in which this occurs. In particular, ring-fencing may help to insulate UK retail banking functions from global systemic shocks. This may be valuable because the disruption to the availability of financial services in the economy is larger if a set of banks fail simultaneously than if they fail at different times.
29. It is difficult to translate these benefits directly into changes in the probability and impact of financial crises. Unlike for capital requirements, there is no large empirical dataset on which to base such a model. Structural changes have been made in the past in other countries (e.g. Glass-Steagall in the US), but the nature of the changes was different to the reforms being considered by the Commission.

## Summary

30. To summarise, a number of factors suggest that the private costs of a ring-fence are likely to be smaller than the estimates in the public domain. Moreover, the proportion of these costs which represent true social costs is likely to be low, as much will reflect the loss of an inefficient public guarantee, and the services whose costs increase the most are traded in international markets, limiting price increases. The offsetting benefits of a ring-fence may be large. A ring-fence would therefore only have to be judged to have a relatively modest effect on the probability and/or impact of financial crises in order to be positive for the UK economy.
31. Furthermore, if capital requirements are increased, it would be cheaper to introduce a ring-fence. One of the main costs of a ring-fence is likely to be an increase in the amount of capital the affected bank must hold to meet market requirements. This increase would be smaller if regulation makes banks start from a higher initial level of capital.

### **Box A: How large is the government guarantee of the UK banking system?**

The UK Government provides a number of explicit support measures to banks. For example, certain categories of bank deposits are guaranteed under the Financial Services Compensation Scheme (FSCS), and the Bank of England operates a framework to provide liquidity to the sterling markets.

During the recent financial crisis, the measures in place at the time were felt to be insufficient to ensure the stability of the banking system. Deposit insurance and liquidity support were extended. And additional measures were introduced: some bank assets and bank debt received explicit guarantees; the liquidity of certain private asset markets was supported through direct intervention; and a number of banks were either recapitalised by the public sector or nationalised outright.

These measures were introduced because authorities preferred to incur their costs rather than risk the costs of a deeper financial crisis. In the event of a future crisis, the authorities may again feel compelled to intervene to prevent banks from collapsing. The expectation of a future rescue gives rise to an implicit guarantee of bank liabilities that exceeds the explicit measures.

A number of studies have attempted to estimate the size of the public guarantee of the banking system and the effect that it has on bank behaviour around the world.<sup>[1]</sup> However, the size and effects of the government guarantee of banks will depend on the institutional environment, and hence will tend to vary a great deal across countries and over time.

Two recent studies have attempted to quantify the guarantee in the UK. Haldane (2010) attempts to estimate how much bank funding costs have been reduced by the government guarantee. Rating agencies produce ratings for banks that factor in the prospect of external support, along with separate ratings that estimate banks' stand-alone financial strength. Haldane compares the yields typically paid by financial companies with each of these two ratings to derive an estimate of the reduction in funding costs support brings, and finds that costs of funding were reduced by around £57bn per year on average over 2007-9 for the UK banks in aggregate. The reduction was proportionally larger for bigger banks, and bigger at end-2009 than in 2007-8. The value of the guarantee on this measure has fallen somewhat between end-2009 and end-2010, but remains very high.

Oxera (2011), in work commissioned by Royal Bank of Scotland, take a different approach. Oxera effectively attempt to quantify the cost of a promise to buy up the banking system's assets and pay off its debts in the event of a systemic banking crisis. With this method, Oxera value the guarantee at around £6bn per year on UK banks' £7tn assets. This is around one-tenth of the £57bn per year average over 2007-9 estimated with Haldane's method.

A number of factors may help to explain the large difference between these two measures:

- when a bank becomes insolvent or nearly insolvent, extra damage is done to the value of its business. For example, James (1991) finds bank bankruptcy costs of around 30% of bank assets. The Oxera (2011) method assumes that no such extra costs are generated by the event of a systemic banking crisis;

- the Oxera (2011) headline estimate assumes that bank asset returns are distributed normally. However, their research shows that allowing for fatter tails – i.e. a greater proportion of extreme events than the normal distribution assumes – can increase the value of the guarantee many times over. In contrast, Haldane (2010) makes no assumption about the nature of this distribution, relying instead on rating agencies' estimates of bank returns;
- Oxera (2011) assume that the only capital guarantees provided to the banking system are systemic. In other words, no value is placed on the possibility of any of the banks receiving support in the event of idiosyncratic problems. Oxera show that allowing for individual guarantees can increase their total cost fivefold.<sup>[2]</sup> Haldane, in contrast, sums the estimated guarantees of individual banks;
- the average maturities of the bond indices used to calculate spreads in Haldane (2010) are around 7-10 years, very much higher than the average maturity of the banks' 'ratings sensitive liabilities' whose cost the indices are attempting to measure. To the extent that the difference between funding costs of borrowers with differing credit ratings increases with the maturity of debt, this will lead to an overestimate of the value of the guarantee;
- on the other hand, Haldane (2010) excludes any underpricing of the explicit guarantee of deposits provided by the FSCS, whereas Oxera (2011) do not. Including the deposit guarantee would tend to increase Haldane's estimates; and
- Haldane (2010) estimates the value of the guarantee in a relatively turbulent period, whereas Oxera (2011) attempt to measure the guarantee on average over the cycle.

Taken together, these arguments suggest that the Oxera and Haldane studies are both likely to be consistent with a public guarantee reducing bank funding costs by considerably more than £10bn per year.

<sup>[1]</sup> For example, O'Hara & Shaw (1990) find that the shareholders of bigger, riskier banks benefited most from the announcement in 1984 that certain US banks were 'too big to fail'. Brewer & Jagtiani (2007) find that US banks are willing to pay premia when merging to become too big to fail, while Penas & Unal (2004) corroborate this with evidence from the bond market. Gandhi & Lustig (2010) find that large US banks' cost of equity capital is substantially reduced by the presence of a government guarantee.

<sup>[2]</sup> The estimate of £6bn – 8bps on UK banks' £7tn liabilities – is hard to square with the very much larger spreads banks must pay on wholesale funding, even in the presence of a partial guarantee. This suggests that the caveats noted above – on the normality of bank asset returns, the focus on systemic default, and the assumption of zero bankruptcy costs – are material, and/or that a Merton model may do a poor job of valuing bank liabilities or guarantees on them.

## References

Barlevy, G., 2005, The cost of business cycles and the benefits of stabilization, *Federal Reserve Bank of Chicago Economic Perspectives*

Barrell, R., David, E.P., Fic, T., Holland, D., Kirby, S. & Liadze, I., 2009, *Optimal regulation of bank capital and liquidity: how to calibrate new international standards*: <http://www.fsa.gov.uk/pubs/occpapers/op38.pdf>

BCBS, 2010a, *An assessment of the long-term economic impact of stronger capital and liquidity requirements*: <http://www.bis.org/publ/bcbs173.pdf>

BCBS, 2010b, *Results of the comprehensive quantitative impact study*: <http://www.bis.org/publ/bcbs186.pdf>

Brewer, E. & Jagtiani, J., 2007, How much would banks be willing to pay to become “too-big-to-fail” and to capture other benefits?, *Federal Reserve Bank of Kansas City 07-05*: <http://www.kc.frb.org/Publicat/RESWKPAP/PDF/RWP07-05.pdf>

Demirgüç-Kunt, A. & Huizinga, H., 2010, Are banks too big to fail or too big to save? International evidence from equity prices and CDS spreads, *European Banking Center Discussion Paper No. 2010-15*: [http://papers.ssrn.com/sol3/Delivery.cfm/SSRN\\_ID1752220\\_code1201476.pdf?abstractid=1626132&mirid=1](http://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID1752220_code1201476.pdf?abstractid=1626132&mirid=1)

Elliott, D., 2009, *Quantifying the effects on lending of increased capital requirements*: [http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Economic\\_Mobility/Elliott-Capital-final.pdf](http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Economic_Mobility/Elliott-Capital-final.pdf)

Fiechter, J., Ötoker-Robe, I., Ilyina, A., Hsu, M., Santos, A. & Surti, J., 2011, Subsidiaries or Branches: Does One Size Fit All?, *IMF Staff Discussion Note*: <http://www.imf.org/external/pubs/ft/sdn/2011/sdn1104.pdf>

FSB & BCBS, 2010, *Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements*: <http://www.bis.org/publ/othp10.pdf>

Gandhi, P. & Lustig, H., 2010, Size Anomalies in U.S. Bank Stock Returns: A Fiscal Explanation, *NBER Working Paper No. 16553*: <http://www.nber.org/papers/w16553.pdf>

Gerlach, S., Schulz, A. & Wolff, G., 2010, Banking and Sovereign Risk in the Euro Area, *CEPR Discussion Paper No. DP7833*: <http://www.cepr.org/pubs/new-dps/dplist.asp?dpno=7833>

Haldane, A., 2010, *The \$100bn Question*: <http://www.bankofengland.co.uk/publications/speeches/2010/speech433.pdf>

Hanson, S., Kashyap, A. & Stein, J., 2011, A Macroprudential Approach to Financial Regulation, *Journal of Economic Perspectives*



IIF, 2010, *Interim Report on the Cumulative Impact on the Global Economy of Proposed Changes in the Banking Regulatory Framework*: <http://www.iif.com/download.php?id=i/Q+9bBo/j8=>

James, C., 1991, The Losses Realized in Bank Failures, *The Journal of Finance*

Laeven, L. & Valencia, F., 2008, Systemic Banking Crises: A New Database, *IMF WP/08/224*: <http://www.imf.org/external/pubs/ft/wp/2008/wp08224.pdf>

Levy-Yeyati, E. & Panizza, U., 2006, The Elusive Costs of Sovereign Defaults, *IADB Working Paper 681*: [http://www.iadb.org/research/pub\\_hits.cfm?pub\\_id=845952](http://www.iadb.org/research/pub_hits.cfm?pub_id=845952)

Merton, R. C., 1973, Theory of Rational Option Pricing, *Bell Journal of Economics and Management Science*

Miles, D., Yang, J. & Marcheggiano, G., 2011, Optimal bank capital, *External MPC Unit Discussion Paper No. 31*: <http://www.bankofengland.co.uk/publications/externalmpcpapers/extmpcpaper0031.pdf>

Modigliani, F. & Miller, M., 1958, The Cost of Capital, Corporation Finance and the Theory of Investment, *American Economic Review*

O'Hara, M. & Shaw, W., 1990, Deposit Insurance and Wealth Effects: The Value of Being 'Too Big to Fail', *Journal of Finance*

OECD, 2011, *Macroeconomic impact of Basel III*: <http://www.oecd-ilibrary.org/content/workingpaper/5kghwnhkkjs8-en>

Oxera, 2011, *Assessing state support to the UK banking sector*: <http://www.oxera.com/main.aspx?id=9454>

Penas, M. F. & Unal, H., 2004, Gains in bank mergers: Evidence from the bond markets, *Journal of Financial Economics*

Smithers, A., 2011, Tug of war over equity ratios, *Financial World*: [http://www.smithers.co.uk/news\\_article.php?id=107](http://www.smithers.co.uk/news_article.php?id=107)



## Annex 4: Competition and concentration

1. This annex provides a summary of a review of the literature on the empirical link between competition and concentration in banking. Three types of analysis are reviewed. These are summarised in Tables A4.1, A4.2 and A4.3 below.
2. The first type of analysis compares prices for banking products across time and in different places. Much of this analysis suggests that greater concentration in banking leads to higher prices for consumers. In summarising the empirical work on the effect of concentration on bank interest rates, Degryse & Ongena (2008) conclude that greater concentration leads to wider spreads in deposit and loan markets. In the same vein, Scherer (2010) finds that the structure of banking markets is important. He concludes that “higher levels of local market bank concentration lead to lower rates for depositors and, with some complex exceptions, higher interest rates for borrowers”.<sup>1</sup>
3. There have been a small number of these studies focusing on the UK. Heffernan & Fu (2009) analyse interest rates for a number of different banking markets in the UK from 1993 to 2004. The authors find that either a greater market concentration or a higher market share for a particular bank led to higher (lower) interest rates on loans (savings) from that bank in 79% of the markets considered. Similarly, Gondat-Larralde & Nier (2006) find that for personal current accounts (PCAs) there was a positive relationship between market share and overdraft rates in the UK from 1996-2001 and a negative relationship between market share and deposit rates.
4. The second type of analysis compares empirical measures of competition with the level of concentration across countries. The measures of competition are not easy to use or interpret, and there is not a consensus on which is best. Research from the early to mid-2000s finds conflicting results on the link between empirical measures of competition and concentration across countries. However, there have been papers showing that the models used to estimate the degree of competition in some of that research were mis-specified, and cross-country comparisons are particularly difficult.
5. Lastly, researchers have looked at the effect of mergers in banking markets. Berger, Demsetz & Strahan (1999) review many papers regarding financial services industry consolidation and find evidence consistent with increases in market power from some types of consolidation. A more recent review is provided by DeYoung, Evanoff & Molyneux (2009). The authors find that early US studies tended to show that consolidation in the 1980s resulted in market power effects, with lower deposit rates

---

<sup>1</sup> See page 16, Scherer (2010).

and higher loan rates in more concentrated markets. In reviewing the literature since 2000, the authors conclude that the bulk of the evidence suggests that credit becomes more expensive post-merger. They also find that bank mergers and banking market consolidation tend to impact some deposit rates more than others.

**Table A4.1: How do changes in concentration over time affect outcomes for consumers?**

Study	Results
<p>Beck, Demirgüç-Kunt, Levine &amp; Haubrich (2004)</p>	<p>Typical empirical studies of bank concentration and competition as of the early 1990s find that US banks in more concentrated local markets charge higher rates on loans to small and medium-sized enterprises (SMEs) and pay lower rates on retail deposits.</p> <p>Concentration measures have only very weak relationships with measures of profitability when the market share of the firm was also included in the regression equation. So it may be the case that more efficient firms grow and become more profitable.</p>
<p>Carbo, Humphrey, Maudos &amp; Molyneux (2009)</p>	<p>European banking studies tend to find more evidence than US studies that concentration leads to bad outcomes for consumers.</p>
<p>Corvoisier &amp; Gropp (2001)</p>	<p>Increasing concentration in a sample of EU countries (not including the UK) may have resulted in less competitive pricing by banks. However, for savings and time deposits, evidence that concentration affects interest rates was not found.</p>
<p>Heffernan &amp; Fu (2009)</p>	<p>A number of UK banking markets were investigated from 1993 to 2004. The authors find that the results varied depending on the market investigated. The authors also find that in 79% of cases, either larger banks offered worse interest rates or higher concentration led to worse interest rates. Overall, market power is present more often with credit than deposit products.</p>
<p>Gondat-Larralde &amp; Nier (2006)</p>	<p>The authors study overdraft rates and deposit rates for PCAs in addition to the deposit rates for instant access savings accounts in the UK from 1996-2001. They find marked dispersion in prices which persisted over time. To understand the reason for this, they investigate the relationship between prices and market shares. For PCAs, the authors find a positive relationship between market share and price, which they conclude is evidence of the importance of switching costs in this market.</p>

**Table A4.1: How do changes in concentration over time affect outcomes for consumers? (continued)**

Study	Results
Scherer (2010)	This literature review finds that higher levels of local bank market concentration lead to lower interest rates for depositors and, with some complex exceptions, higher interest rates for borrowers.
Degryse & Ongena (2008)	This includes a review of 12 papers on the effect of concentration on deposit markets and 18 on loan markets. For loan rates, the authors find that increased concentration tends to lead to higher loan rates, but that the magnitude of this result varies widely depending on the study. For deposit rates, they find that overall most papers find a negative impact of an increase in concentration on time and savings deposit rates. However, demand deposits seem less affected by market concentration.
Berger & Hannan (1998)	The authors attempt to estimate the reduction in cost efficiency brought about by the lack of competitive pressure in concentrated markets. They use data from the commercial banking industry, which produces very homogeneous products in multiple markets with differing degrees of market concentration. Their main finding is that the estimated efficiency cost of concentration was several times larger than the cost from mispricing.
Heffernan (2002)	This paper shows that, with the exception of mortgage products, deposit and loan rate setting by UK financial institutions is best described by the Salop-Stiglitz model of bargains and rip-offs. Heffernan concludes that financial firms exhibit different types of price setting behaviour depending on the banking product and that firms should be required to produce comparable information for consumers, thereby helping to contain the loss of consumer surplus in imperfectly competitive markets.
Heffernan (2003)	For SME banking in the UK, Heffernan finds a marked disparity in prices for particular products. Although some of the price dispersion could be attributed to non-price features, there was a residual which Heffernan interprets to be strongly suggestive of switching costs and imperfect information. Hence, the Salop-Stiglitz model was thought to fit well.

**Table A4.2: What is the relationship between competition and concentration across countries?**

Study	Results
Bikker & Haaf (2002)	To test the effect of concentration on competition, the authors regress the H-Statistic (an empirical measure of competition) on a variety of concentration indices and the number of banks in a sample of 23 industrialised countries and found that increasing concentration significantly decreased competition (reduces the H-Statistic). This appears to confirm the observation that a few large banks can restrict competition and that a multitude of small competitors is unable to engender competition.
Bikker & Spierdijk (2008)	The authors use the H-Statistic to study bank competition, allowing the degree of competition to vary over time and over the 101 countries covered. They find that competition had reduced over time and attribute this to the process of consolidation, which generally creates larger banks with greater market power. Furthermore, the authors suggest that the continuous shift over time from traditional intermediation to more sophisticated and complex products may also have reduced competition.
Claessens & Laeven (2004)	The authors find no evidence that their measure of competition decreases with increasing banking system concentration in their study of 50 countries' banking systems.
Beck, Demirgüç-Kunt & Levine (2005); Schaeck & Čihák (2007); and Schaeck, Čihák & Wolfe (2006)	These papers have found that concentration is not related to the H-Statistic when analysing the link between financial stability and competition.
Bikker, Spierdijk & Finnie (2006a)	Based on a large sample of almost 18,000 banks in 101 countries over more than 15 years, the authors use the H-Statistic to show that large banks have substantially more market power than small banks in many countries, including the UK. Their results contradict some previous findings that measures of competition increased with bank size. The authors show that the latter result is due to mis-specification of the models used to derive the H-Statistic in the previous literature.
Bikker, Spierdijk & Finnie (2006b)	There have been some considerable doubts expressed recently about the validity of findings using the H-Statistic. <sup>1</sup> As a result, the authors claim that all of the empirical papers using the H-Statistic they study suffer from mis-specification and thus the results are under serious doubt.
Claessens (2009)	It is shown that there are large differences between the measures in the H-Statistics reported by Claessens & Laeven (2004) and Bikker & Spierdijk (2008) for individual countries (the correlation is only 0.38, and the rank correlation only 0.29). This is another indicator that caution must be taken in using the H-Statistic to capture the degree of competition.

<sup>1</sup> See, for example, Bikker, Shaffer & Spierdijk (2009) and Goddard & Wilson (2009).

**Table A4.3: What is the effect of mergers on competition in banking?**

Study	Results
Berger, Demsetz & Strahan (1999)	<p>This review of the literature regarding financial services industry consolidation finds evidence consistent with increases in market power from some types of consolidation. The study also finds that mergers led to improvements in profit efficiency and diversification of risks, but little or no cost efficiency improvements on average; relatively little effect on the availability of services to small customers; potential improvements in payments system efficiency; and potential costs on the financial system from increasing systemic risk or expanding the financial safety net. The authors report that the data are consistent with significant market power consequences of some types of in-market consolidation. However, they raise questions as to the importance of these effects. The static analyses suggest that concentration is associated with less favourable prices for some retail customers. However, the dynamic analyses suggest that prices become less favourable for consumers when market concentration increases dramatically, but the evidence is mixed for other types of mergers and acquisitions.</p>
DeYoung, Evanoff & Molyneux (2009)	<p>This is a recent review of articles on the effect of bank mergers. It finds that early US studies tended to show that consolidation in the 1980s resulted in market power effects, with lower deposit rates and higher loan rates in more concentrated markets. In reviewing the literature since 2000, the authors conclude that the bulk of the evidence suggests that credit becomes more expensive post-merger. Regarding deposit rates, the authors find that bank mergers and banking market consolidation tend to impact some deposit rates more than others. The authors highlight the cross-country study by Corvoisier &amp; Gropp (2001) and its result that increased banking sector concentration between 1993 and 1999 resulted in less competitive pricing on demand deposits, but not on other types of deposits. Craig &amp; Dinger (2009) replicate the findings of earlier studies that found only modest effects from US bank mergers on deposit prices; using improved econometric techniques they show that checking account interest rates actually fell substantially (while money market deposit account rates held steady) in the two years following bank mergers. DeYoung, Evanoff &amp; Molyneux (2009) note that these findings are limited to the main checking accounts of businesses and households and suggest that post-merger banks are able to exploit the price inelasticities and switching costs associated with these accounts.</p>

## References

- Beck, T., Demirgüç-Kunt, A. & Levine, R., 2005, Bank Concentration and Fragility: Impact and Mechanics, *NBER Working Papers*
- Berger, A.N. & Hannan, T.H., 1998, The efficiency cost of market power in the banking industry: a test of the quiet life and related hypotheses, *Review of Economics and Statistics*
- Berger, A.N., Demirgüç-Kunt, A., Levine, R. & Haubrich, J.G., 2004, Bank Concentration and Competition: An Evolution in the Making, *Journal of Money, Credit and Banking*: [http://siteresources.worldbank.org/DEC/Resources/84797-1114437274304/jmcb\\_intro\\_final.pdf](http://siteresources.worldbank.org/DEC/Resources/84797-1114437274304/jmcb_intro_final.pdf)
- Berger, A.N., Demsetz, R. S. & Strahan, P.E., 1999, The Consolidation of the Financial Services Industry: Causes, Consequences, and Implications for the Future, *Journal of Banking & Finance*
- Bikker, J. & Haaf, K., 2002, Competition, concentration and their relationship: An empirical analysis of the banking industry, *Journal of Banking & Finance*: [http://www.dnb.nl/en/binaries/ot030\\_tcm47-146046.pdf](http://www.dnb.nl/en/binaries/ot030_tcm47-146046.pdf)
- Bikker, J., Shaffer, S. & Spierdijk, L., 2009, Assessing Competition with the Panzar-Rosse Model: The Role of Scale, Costs, and Equilibrium, *Working Papers 09-27, Utrecht School of Economics*
- Bikker, J. & Spierdijk, L., 2008, How Banking Competition Changed over Time, *DNB Working Papers*: [http://www.dnb.nl/binaries/Working%20Paper%20167-2008\\_tcm46-170649.pdf](http://www.dnb.nl/binaries/Working%20Paper%20167-2008_tcm46-170649.pdf)
- Bikker, J., Spierdijk, L. & Finnie, P., 2006a, The impact of bank size on market power, *DNB Working Papers*: [http://www.dnb.nl/binaries/Working%20Paper%20120-2006\\_tcm46-146777.pdf](http://www.dnb.nl/binaries/Working%20Paper%20120-2006_tcm46-146777.pdf)
- Bikker, J., Spierdijk, L. & Finnie, P., 2006b, Misspecification of the Panzar-Rosse Model: Assessing Competition in the Banking Industry, *DNB Working Papers*: [http://www.rug.nl/staff/l.spierdijk/panzar\\_rosse.pdf](http://www.rug.nl/staff/l.spierdijk/panzar_rosse.pdf)
- Carbo, S., Humphrey, D., Maudos, J. & Molyneux, P., 2009, Cross-country comparisons of competition and pricing power in European banking, *Journal of International Money and Finance*
- Claessens, S., 2009, Competition in the Financial Sector: Overview of Competition Policies, *World Bank Research Observer*: <http://www.imf.org/external/pubs/ft/wp/2009/wp0945.pdf>
- Claessens, S. & Laeven, L., 2004, What Drives Bank Competition? Some International Evidence, *Journal of Money, Credit, and Banking*: [http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2003/09/16/000094946\\_03082804014223/Rendered/PDF/multi0page.pdf](http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2003/09/16/000094946_03082804014223/Rendered/PDF/multi0page.pdf)



Corvoisier, S. & Gropp, R., 2001, Bank Concentration and Retail Interest Rates, *ECB Working Paper*: <http://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp072.pdf>

Craig, B. & Dinger, V., 2009, Bank mergers and the dynamics of deposit interest rates, *Journal of Financial Services Research*

Degryse, H. & Ongena, S., 2008, Competition and Regulation in the Banking Sector: A Review of the Empirical Evidence on the Sources of Bank Rents, in Thakor, A. V. & Boot, A., eds., *Handbook of Financial Intermediation and Banking*, Amsterdam, Elsevier

DeYoung, R., Evanoff, D.D. & Molyneux, P., 2009, Mergers and Acquisitions of Financial Institutions: A Review of the Post-2000 Literature, *Journal of Financial Services Research*

Goddard, J. & Wilson, J.O., 2009, Measuring Competition in Banking: A Disequilibrium Approach, *Journal of Banking & Finance*

Gondat-Larralde, C. & Nier, E., 2006, Switching costs in the market for personal current accounts: some evidence for the United Kingdom, *Bank of England Working Paper*: <http://www.bankofengland.co.uk/publications/workingpapers/wp292.pdf>

Heffernan, S., 2002, How do UK financial institutions really price their banking products?, *Journal of Banking and Finance*

Heffernan, S., 2003, UK Bank Services for SMEs: Are they Competitively Priced?, *Cass Business School Working Paper*

Heffernan, S. & Fu, X., 2009, The structure of retail markets: what do we learn from bank-specific rates?, *Applied Financial Economics*

Schaeck, K. & Čihák, M., 2007, Banking Competition and Capital Ratios, *IMF Working Paper*: <http://www.imf.org/external/pubs/ft/wp/2007/wp07216.pdf>

Schaeck, K., Čihák, M. & Wolfe, S., 2006, Are More Competitive Banking Systems More Stable?, *IMF Working Paper*: <http://www.imf.org/external/pubs/ft/wp/2006/wp06143.pdf>

Scherer, F.M., 2010, A Perplexed Economist Confronts 'Too Big to Fail', *HKS Faculty Research Working Paper Series*: <http://web.hks.harvard.edu/publications/getFile.aspx?Id=547>



## Annex 5: Other regulatory reform developments

1. The financial crisis exposed a number of significant weaknesses in the financial system. A number of initiatives have subsequently been launched at global, regional and national levels to address these weaknesses and to reduce both the probability and impact of future crises. The initiatives most relevant to the Commission's work are outlined in Chapter 3. This annex briefly summarises some of the other relevant regulatory developments.

### Hedge funds

2. The European Commission is in the process of reviewing the regulatory requirements around hedge fund managers, and in November 2010 approved the text for the Alternative Investment Fund Managers Directive (AIFMD). This is aimed at enhancing investor protection and the identification, mitigation and monitoring of systemic risks arising from the activities of the alternative investment fund management industry, particularly hedge funds and private equity funds. Following its implementation in 2013, the AIFMD will introduce: authorisation and regulation requirements for AIFMs and regulatory standards for depositaries and administrators; minimum capital requirements related to portfolio size, governance and risk management requirements for fund managers; and enhanced transparency for investors and supervisors. The AIFMD will also allow EU-wide marketing of hedge funds through a passport scheme – initially for EU AIFMs only, then to be extended to non-EU based AIFMs two years later (subject to advice from the European Securities and Markets Authority).
3. In the US, the Dodd-Frank Act requires advisers to funds of over \$100m to register with the Securities and Exchange Commission (SEC) as investment advisers and to be subject to reporting and record-keeping requirements.

### Accounting standards

4. The crisis raised concerns that accounting standards were inadequate, unco-ordinated and pro-cyclical. The highly-specific, rules-based US Generally Accepted Accounting Principles (US GAAP) allowed novel and hybrid securities to remain off US bank balance sheets. This has given extra emphasis to the drive to converge US GAAP with the principles-based International Financial Reporting Standards (IFRS), which are themselves being revised to account better for financial instrument exposures, hedges and controlled or special purpose entities.

5. Convergence is currently being progressed in four areas: recognition and measurement of financial instruments (with a shift in the Financial Accounting Standards Board's (FASB) focus from its original fair value to a proposed mixed measurement approach); an expected, rather than incurred, loss approach for the impairment of financial assets; fair value measurement standards; and similar treatments to offsetting/netting of derivatives and other financial instruments. These convergence standards are expected to be finalised by June 2011, with other discrepancies to be resolved by the end of 2011. The SEC is expected to confirm during 2011 whether it will adopt IFRS as mandatory for US-listing companies from around 2014.

## Credit rating agencies

6. The crisis also showed credit rating agencies (CRAs) to be systemically important given the reliance placed on ratings by both investors and regulators (through capital requirements). Ratings assigned to structured financial instruments proved to be inaccurate, often by a wide margin, raising concerns about the effectiveness of CRAs' financial models and the management of conflicts of interest inherent in the 'issuer pays' business model. The EU Regulation on CRAs and the Dodd-Frank Act have both introduced a number of reform measures including granting regulators supervisory powers over CRAs, imposing activity restrictions and enhancing transparency requirements. Rating integrity is addressed in the EU by a requirement for effective systems and controls around financial models and in the US by the empowerment of the SEC to fine or revoke licences of poorly performing CRAs.
7. In addition, in October 2010, the Financial Stability Board (FSB) published its principles on reducing reliance on CRAs.<sup>1</sup> These call for central banks, investors and market participants to move away from the use of CRA credit rating methodology and carry out their own internal assessments of credit risk. The FSB also recommends that once alternative credit risk measures have been established, reference to CRA ratings should be removed from laws and regulation, as well as collateral calls in margin agreements between market participants and central counterparties. The national authorities are currently considering these principles, and the FSB will report to the G20 on its progress later on in the year.
8. At an EU level, the European Commission is in the process of consulting on initiatives to strengthen further the regulatory framework for CRAs that came into force in December 2010. It is seeking views on over-reliance upon, competition between, and conflicts of interest within CRAs.
9. In the US, the Dodd-Frank Act has brought CRAs under the oversight of a new Office of Credit Ratings. In addition, the Act has imposed new disclosure requirements of

---

<sup>1</sup> FSB, 2010, *Principles for Reducing Reliance on CRA Ratings*: [http://www.financialstabilityboard.org/publications/r\\_101027.pdf](http://www.financialstabilityboard.org/publications/r_101027.pdf)

ratings methodologies, and mandates an SEC review of the standardisation of these methodologies across the different CRAs.

## Deposit insurance

10. On 31 December 2010, new EU legislation came into force which protects retail deposits up to the value of €100,000 (£85,000). Further amendments to the Deposit Guarantee Schemes Directive are expected to change the way that the Financial Services Compensation Scheme (FSCS) is funded, including: the introduction of mandatory pre-funding; the calculation of individual banks' contributions to the FSCS on a risk-adjusted basis; and the extension of compensation cover to large and medium-sized firms.

## Tax

11. In the UK, a tax of 50% on bonuses over £25,000 paid to banking employees between 9 December 2009 and 5 April 2010 was introduced. This was followed by similar measures in France and Germany.
12. On 1 January 2011, the UK Government introduced a bank levy, which will affect the biggest banks and building societies in the UK. The tax will take effect as of May 2011, and is expected to raise over £2.5bn in yearly tax revenue. The levy is intended to encourage banks to move to less risky funding profiles and to ensure that they make a fair contribution in relation to the risks they pose.
13. The levy is calculated at 0.075% (to rise to 0.078% as of January 2012<sup>2</sup>) on all short-term liabilities and 0.0375% (to rise to 0.039% in 2012) on all long-term liabilities exceeding in aggregate £20bn, with the exclusion of Tier 1 capital, insured retail deposits, repos secured on sovereign debt, and policyholder liabilities of retail insurance business within banking groups. The levy will apply to all consolidated UK banking groups and building societies, aggregate subsidiaries and branches of foreign banks and banking groups, as well as UK banks within non-banking groups, where the relevant entities' liabilities (as mentioned above) exceed £20bn. The banks currently captured under this levy are Royal Bank of Scotland, Lloyds Banking Group, HSBC and Barclays.
14. France, Germany and the US (among others) are at various stages of putting together similar proposals to the levy. Sweden has introduced a banking tax to finance a resolution fund. In the US, President Obama announced plans in January 2010 for a 'financial crisis responsibility fee' to pay for the costs of the recent crisis. There is also some discussion (both within the UK and internationally) of a financial activities tax.

<sup>2</sup> In the initial proposal, the bank levy was to rise to 0.076% in 2012. However, following the Chancellor's Budget announcement in March 2011, the levy has been increased to 0.078% as of January 2012 in order to offset the upcoming reductions in corporation tax.

## Remuneration

15. Weaknesses in the capital and accounting frameworks prior to the crisis enabled some bank employees to be remunerated on the basis of reported profits that were neither time-adjusted nor risk-adjusted and led to employee incentives that were not always aligned with the long-term interests of the bank. The Financial Services Authority first introduced its Remuneration Code in August 2009 to address these issues. A revised Code came into effect in January 2011 to take account of provisions on remuneration contained in the amendments to the Capital Requirements Directive. The Code requires remuneration policies and practices to be consistent with and promote effective risk management. Restrictions on the mix (e.g. salary vs. bonus), form (e.g. cash vs. shares) and timing of employee remuneration will apply to all senior management and staff “whose professional activities have a material impact on the firm’s risk profile”.<sup>3</sup>

---

<sup>3</sup> FSA Handbook, Senior Management Arrangements, Systems and Controls, 19A.3.4R: <http://fsahandbook.info/FSA/html/handbook/SYSC/19A/3>

## Annex 6: Tools for increasing loss-absorbing capacity

1. Chapter 4 of this *Interim Report* provides a brief description of a number of tools for increasing banks' loss-absorbing capacity. This annex sets out a more detailed discussion of the characteristics and possible effectiveness of these tools, which are as follows:

- common equity;
- contingent capital;
- bail-in; and
- depositor preference.

This annex does not attempt to quantify the extent to which banks' loss-absorbing capacity should be increased using one or more of these tools. (Annex 3 discusses cost-benefit analysis of the financial stability reform options considered in this *Interim Report*.)

### Common equity

2. Equity is the simplest and most effective sort of loss-absorbing capacity. It absorbs losses smoothly while an institution is a going concern. And on resolution, any remaining equity can be used to soak up losses that would otherwise have to be borne by the bank's counterparties, thereby limiting the negative spillovers from a bank's failure. In addition, equity is perpetual. It does not have a maturity date, and cannot be redeemed by its holders (although on share buy-backs funds are effectively taken out of the business and distributed to shareholders, reducing the firm's loss-absorbing capacity).
3. Equity also has the advantage of being established and well-understood. Share prices provide a high degree of transparency on the market's view of how risky an institution is. And shareholders understand that they are taking risks by investing in equity. However, moving to a world with equity requirements that are substantially higher than Basel III would require market demand to absorb the additional equity.

4. Equity is more expensive than debt, in part because it is subordinated.<sup>1</sup> The differential tax treatment of debt and equity also has a significant effect, but this is a purely private cost. If this different tax treatment results in the price of credit to borrowers increasing with higher equity requirements, it is open to the government to choose to offset this by reducing the tax burden on households and firms.
5. Further, equity suffers from the 'debt overhang' problem at times of stress. Because of the asymmetric pay-off that arises from limited liability, shareholders may have weak incentives to raise additional equity at times of crisis (just when more loss-absorbing capacity is most needed), because debt holders get much of the benefit. In addition, discretionary equity issuance tends to suffer from problems of asymmetric information at such times.
6. Equity can act as either pre-resolution loss-absorbing capacity, or post-resolution loss-absorbing capacity. An equity buffer in which a bank can operate (with restrictions) constitutes pre-resolution loss-absorbing capacity. Minimum equity requirements, breach of which would result in a bank being put into resolution, provide post-resolution loss-absorbing capacity only. However, the markets may treat any equity buffer (perhaps depending on how big it is) as a hard increase to the minimum equity requirement, so that as an institution approaches its buffer it may find that it is no longer able easily to access the wholesale funding markets.

## Contingent capital

7. Contingent capital instruments are debt instruments that on the occurrence of a particular trigger event – which should occur while the institution is a viable, going concern<sup>2</sup> – re-capitalise the issuer (although it does not provide any new funding), either by being written down or by converting into common equity. Contingent capital instruments therefore provide pre-resolution loss-absorbing capacity and aim to reduce both the probability and impact of bank failure accordingly.
8. Contingent capital will be cheaper than equity, in part because it ranks senior.<sup>3</sup> On the assumption that interest payments on such instruments are tax-deductible, this will make them cheaper still (although as discussed above, this is a private benefit, not a social one). In addition, contingent capital helps address the debt overhang problem by shifting shareholder incentives, and (if triggered) automatically re-capitalising the bank. These benefits suggest that contingent capital may have the potential to be a valuable tool in reducing the probability and impact of bank failures. However, these

---

<sup>1</sup> But more equity may make other (senior) liabilities cheaper, by making the bank less risky. This is discussed in more detail in Annex 3.

<sup>2</sup> In this *Interim Report*, contingent capital instruments that absorb loss at the point of non-viability are described as 'bail-inable debt' (see 'Bail-in', below). Note that while this *Interim Report* considers two broad categories of trigger for debt to absorb losses – triggers while the bank is viable, and a trigger at the point of non-viability – in practice, the trigger could be set anywhere at or above the point of non-viability.

<sup>3</sup> As above, more equity may make other (senior) liabilities cheaper, by making the bank less risky. This is discussed in more detail in Annex 3.



instruments are still new, and there are a number of serious questions that remain to be answered.

9. One important question concerns the market for contingent capital. It seems likely that contingent capital instruments could be structured to meet the criteria for Basel III compliant Additional Tier 1 and/or Tier 2 capital instruments.<sup>4</sup> The largest UK banks<sup>5</sup> in aggregate currently have approximately £130bn (around 5% of risk-weighted assets<sup>6</sup>) of hybrid securities and subordinated debt in issue as non-equity capital. If the existing investors in such securities were to transition over time to contingent capital, this would clearly represent a very significant market.<sup>7</sup> However, the ability of some investors – in particular insurance companies and pension funds,<sup>8</sup> who hold a lot of bank debt – to hold contingent capital in large quantities may depend on the instruments achieving investment grade ratings and being included in benchmark bond indices. Any such transition would in any case take some time, as the markets become more familiar with contingent capital. Further, changes in regulation have limited the ability of insurance companies and pension funds to accept asset price volatility in the short term. Where regulation discourages non-banks from holding long-term assets which are a good hedge for their long-term liabilities – such as long-term bank debt – the result is a kind of ‘reverse maturity transformation’, which adds to the maturity transformation and associated risks for the banking system to handle.
10. If contingent capital is to find a broad investor base, the markets would need to be able to price it. Price would be a function of the trigger (the likelihood of the occurrence of which is the probability of conversion or write-down) and distribution of losses across creditors and shareholders at the trigger point (which would determine the loss given trigger activated for holders of the instruments). Uncertainty makes pricing difficult; accordingly, it would be important to provide as much clarity and predictability as possible around both triggers and loss distribution.
11. Triggers can be divided into two broad categories – those that are primarily rules-based (driven by, for example, a market indicator, or an accounting or book value trigger) and those that are discretionary (for example, a decision made by the regulator, within certain parameters).<sup>9</sup> Each type has its drawbacks. Triggers derived

---

4 See Box 3 in Chapter 3 for a description of types of capital under Basel III.

5 Barclays, HSBC, LBG, RBS and Standard Chartered.

6 On a Basel III basis, assuming that Basel III risk-weighted assets are 23% greater than Basel II risk-weighted assets (from BIS, December 2010, *Results of the comprehensive quantitative impact study*: <http://www.bis.org/publ/bcbs186.pdf>).

7 There have also been proposals to pay some elements of employee remuneration in contingent capital. This may have the additional benefit of better aligning incentives for risk taking across a bank's staff and shareholders. See speech by Andrew Haldane in January 2011, *Capital Discipline*: <http://www.bankofengland.co.uk/publications/speeches/2011/speech484.pdf>.

8 The role of insurance companies, pension funds and other financial institutions in funding the UK banking sector is discussed in Annex 2.

9 A trigger need not be limited to a single event. It could be that two (or more) conditions need to be met for the trigger to be activated (see, for example, Pennacchi, G., 2010, A Structural Model of Contingent Bank Capital, *Federal Reserve Bank of Cleveland Working Paper*: <http://www.clevelandfed.org/research/workpaper/2010/wp1004.pdf>).

from market indicators may be subject to manipulation, or otherwise introduce volatility (see Paragraph 13 below), while the utility of accounting or book value triggers may be undermined by their lagging real time events. But discretionary triggers are dependent on the exercise of judgement, and so are inherently uncertain.

12. A key question on loss distribution is whether the holders of contingent capital should be issued with shares<sup>10</sup> in exchange for taking losses on their debt instruments (the approach taken by Lloyds Banking Group and Credit Suisse in their issues of contingent capital in 2009 and 2011, respectively), or simply suffer write-downs (the approach taken by Rabobank in its first issue in 2010). An important advantage of the former approach is that it allows for existing shareholders to be diluted on conversion, incentivising them to ensure that the bank remains well-capitalised – and so clear of the trigger – at all times. This suggests that on conversion the aim should be to engineer a transfer of (some) value from shareholders to bondholders.<sup>11</sup> The extent to which existing shareholders are diluted would depend on the conversion ratio – i.e. the ratio between the value of write-downs imposed on the holders of the contingent capital instruments and the conversion price that is used to determine the quantity of shares (if any) that are issued to them.
13. A further important question concerns the possible dynamic effects at or near to the trigger point. This would depend on the interaction between the trigger and the loss distribution. If this is not carefully addressed, damaging incentives could be created. The market response to the fact that a bank is nearing the trigger point could have a negative impact on the bank, hastening its deterioration, increasing the likelihood of the trigger being activated and actually undermining financial stability – the so-called ‘death spiral’.<sup>12</sup> Such concerns would be most acute if a trigger was driven off market indicators. However, there are ways in which they could be mitigated, for example by using market indicators over a period of time (such as a volume weighted average share price over a period of months),<sup>13</sup> rather than at one point in time.<sup>14</sup>
14. There are other concerns. It would need to be established:
  - that conversion (or write-down) would not trigger cross-default clauses (including in derivatives contracts);

---

10 There would need to be sufficient pre-authorised share capital to allow new shares to be issued. Any pre-emption rights of existing shareholders would also need to be addressed.

11 On the other hand Sundaresan & Wang 2010 argue that on conversion there must be no transfer of value between the existing shareholders and the contingent capital holders (Sundaresan, S. & Wang, Z., 2010, Design of Contingent Capital with a Stock Price Trigger for Mandatory Conversion, *Federal Reserve Bank of New York Staff Report*: [http://www.newyorkfed.org/research/staff\\_reports/sr448.pdf](http://www.newyorkfed.org/research/staff_reports/sr448.pdf)).

12 If contingent capital holders hedge their positions by shorting equity, this would produce a downward pressure on share prices. This might be taken as a signal of concerns about the bank's solvency.

13 Calomiris recommends a conversion trigger based on the moving average of the market equity ratio (Calomiris, C., 2011, *An Incentive-Robust Program for Financial Reform*: [https://editorialexpress.com/cgi-bin/conference/download.cgi?db\\_name=res2011&paper\\_id=1395](https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=res2011&paper_id=1395)).

14 Pennachi et al. discuss giving the original shareholders the option to buy back shares that are issued to the holders on conversion as a way to address the ‘death spiral’ (Pennachi, G., Vermaelen, T. & Wolff, C., 2010, *Contingent Capital: The Case for COERCs*: <http://knowledge.insead.edu/documents/TVcocobonds.pdf>).

- that conversion (or write-down) would happen sufficiently smoothly, and in sufficient quantity, to leave the bank well-capitalised and able to issue replacement contingent capital in due course;<sup>15</sup>
  - that the fact that contingent capital instruments are not perpetual would not create de-stabilising funding shocks in a situation where a bank was unable to replace them at maturity – they would need to have sufficiently long terms to mitigate these concerns;
  - that any possible change in control of a group brought about by conversion would not be de-stabilising; and
  - crucially, that the holders of the instruments could bear the risks associated with them, and that imposing losses on them would not disrupt wholesale funding markets and so prevent other institutions from continuing to fund themselves.
15. So while contingent capital may be a useful tool for increasing banks' loss-absorbing capacity, there are significant issues to be resolved. Note, however, that not all the design details would need to be prescribed by regulators. Regulators could set out broad parameters and allow the market to work out the details.<sup>16</sup>

## Bail-in

16. 'Bail-in' refers to the imposition of losses at the point of non-viability (but before insolvency) on bank liabilities that are not exposed to losses while the institution remains a viable, going concern. Whether by way of write-down or conversion into common equity, this has the effect of recapitalising the bank.<sup>17</sup> Bail-inable liabilities therefore provide post-resolution loss-absorbing capacity and reduce both the probability and impact of bank failure accordingly.
17. As a measure to increase loss-absorbing capacity, bail-inable liabilities have many of the same characteristics as contingent capital, and they are likely to receive the same tax treatment. So some of the issues discussed above for contingent capital will also apply to bail-in. However, there are some additional questions that need to be addressed, and also some advantages.

---

15 It would not necessarily be the case that all of a bank's contingent capital instruments would convert at the same time. They could be set to convert at different triggers, or at the same trigger but sequentially.

16 As discussed in Flannery, M., 2009, *Stabilizing Large Financial Institutions with Contingent Capital Certificates*: <http://ssrn.com/abstract=1485689>.

17 As with contingent capital, this re-capitalisation does not provide any new funding.

18. One question is which of a bank's liabilities should be bail-inable.<sup>18</sup> In theory, bail-in could extend to all liabilities. But interfering with the recourse that holders of secured liabilities (such as covered bonds and repos) have to the underlying collateral would fundamentally undermine the nature of such instruments. And including deposits insured by the Financial Services Compensation Scheme (FSCS) could potentially increase taxpayer exposure.<sup>19</sup> Of the remaining liabilities, those that seem most obviously suited to bail-in are unsecured debt. There is a question as to whether short-term debt should be included; the risk with doing so is that at the first sign that a bank might be in trouble, it would immediately lose access to short-term funding, including uninsured customer deposits, bank deposits and interbank lending.<sup>20</sup> In addition, applying bail-in to liabilities – such as derivatives – where the number of contracts may number in the many hundreds of thousands would be an enormously complex task.<sup>21</sup>
19. Prescribing a narrow range of liabilities – such as unsecured term debt – that would be subject to bail-in effectively subordinates those liabilities to non-bail-inable debt, and so makes them more expensive. This would incentivise banks to shift their funding away from such debt towards alternatives such as secured funding, deposits and derivatives.<sup>22</sup> Banks' ability to move to secured funding would be constrained by pressure from the regulators and the markets to maintain a certain proportion of their balance sheet free of encumbrance. But in order to ensure that banks maintain a minimum amount of bail-inable debt, it may nevertheless be necessary to require them to have a certain amount of such debt outstanding at all times. Depending on whether the mechanism through which bail-in is achieved is statutory or contractual (see Paragraphs 20 and 21 below), some form of prescription may in any case be necessary in order to restrict banks from avoiding statutory bail-in through issuing debt governed by foreign law. Note that to the extent liabilities are not bail-inable, it would still be desirable to limit any perception of a government guarantee for them. So it would be important to have a credible resolution regime that in some circumstances puts liabilities that are not covered by a bail-in regime at risk of bearing losses; see Paragraph 23 below.
20. As with contingent capital, the question of the trigger is a key one. With contingent capital, the focus is on rules-based triggers. But bail-in is designed to recapitalise a bank at the point of non-viability, which will be determined by the regulator. There is the additional question, which does not arise with contingent capital, of whether the

---

18 In a recent consultation paper, the European Commission considers two approaches to identifying liabilities for bail-in: a 'comprehensive approach' which allows all senior debt in issue to be bailed-in, and a 'targeted approach' under which the resolution authorities require banks to issue a fixed amount of bail-inable debt (European Commission, 2011, *Technical Details of a Possible EU Framework for Bank Recovery and Resolution*: [http://ec.europa.eu/internal\\_market/consultations/docs/2011/crisis\\_management/consultation\\_paper\\_en.pdf](http://ec.europa.eu/internal_market/consultations/docs/2011/crisis_management/consultation_paper_en.pdf)).

19 Should the FSCS need a loan from the Government to meet its obligations; see Paragraph 27 of this annex.

20 See J.P.Morgan, 2010, *The Ins and Outs of Bail-Ins*.

21 Derivatives present a number of potential difficulties. The question of how to avoid the bailing-in of other liabilities from triggering cross-default provisions in derivatives contracts would have to be carefully examined. And bailing in derivatives liabilities would also be likely to give rise to particular complications.

22 If none of these liabilities are bail-inable.

legal force of the bail-in regime is set out in statute ('statutory bail-in') or incorporated into the contractual terms of the relevant debt instruments ('contractual bail-in'). The latter may be useful in mitigating any potential problems in enforcing bail-in under foreign law contracts, or in foreign courts.

21. An important issue for statutory bail-in is whether it should apply to liabilities already in issue at the time the bail-in regime is introduced, or whether such liabilities should be exempt ('grandfathered'). Grandfathering means that the first debt to be issued under the bail-in regime would be effectively subordinated to all outstanding senior unsecured liabilities. Applying bail-in to liabilities already in issue avoids this, but could bring other problems. In either case, there is the risk of banks finding their ability to issue liabilities that may be subject to bail-in severely constrained.
22. The question of loss distribution at the trigger point again arises. With bail-in, the trigger is the point of non-viability of the bank. It may be appropriate to provide an extremely strong incentive for shareholders to avoid this. The strongest incentive is provided by ensuring that should the trigger point be reached, the existing shareholders are wiped out and the bank is handed to bailed-in creditors, with their liabilities being written down sufficiently to ensure that the bank is left well-capitalised. This is a different situation than the triggering of contingent capital at a point when the bank is a viable business, when there is likely to be considerable value in the bank. Then, transferring all the value from the shareholders to the holders of the contingent capital instruments would be a dramatic re-distribution of value. Such an approach may risk creating de-stabilising incentives.
23. An important related issue is ensuring that the relative ranking of liabilities is clear and consistent. Losses first fall on equity. Further losses trigger the write-down or conversion of contingent capital instruments (if any). If the bank nevertheless fails, in resolution the bail-inable debt (or a portion of it) is converted into equity (possibly with all existing shareholders wiped out) or written down (with any differences in priority among bail-inable creditors being respected). Should all the bail-inable liabilities be exhausted, remaining creditors would be exposed to losses if the bank went insolvent. A corollary of this is that if a bank's condition deteriorates so swiftly that triggering contingent capital is not quick enough, or substantial enough, to prevent a bank from failing, the holders of the contingent capital instruments are wiped out (even if the contingent capital instruments were designed to convert into equity, rather than simply be written down).
24. As a resolution tool, bail-in is likely to be particularly valuable in dealing with wholesale and investment banking businesses. The complexity of some of their operations is a serious constraint on other resolution tools. One aspect of this complexity is that wholesale and investment banking tends to be international. Different jurisdictions have different insolvency regimes, so in the absence of a common, international resolution regime for banks, dealing with failing cross-border banks is extremely complex. A well-designed bail-in regime could address this problem by re-capitalising an institution at the point of non-viability, so avoiding

insolvency. In addition, wholesale and investment banking businesses are typically largely (if not entirely) wholesale funded, so the liability structure of such businesses is likely to be particularly suitable for bail-in.<sup>23</sup> However, an institution that has been subject to bail-in is likely to find it difficult to fund itself in the market, certainly in the short term. Provision of lender-of-last-resort liquidity might be one way of addressing this, as long as the institution was solvent. But if the institution was solvent and/or a significant tranche of bail-inable debt remained, it might be the case that the most effective way of ensuring access to liquidity for the bank would be for the authorities to provide a limited guarantee to certain classes of liability.

25. But it should not be assumed that bail-in is a resolution panacea for wholesale and investment banking businesses (or indeed, any other). Many of the concerns that are discussed in relation to contingent capital, above, apply to bail-in. Again, a principal concern is ensuring that the holders of the instruments can bear the risks associated with them. If the holders are themselves of systemic importance, imposing losses on them through triggering bail-in could create a channel for contagion.<sup>24</sup> An additional issue is that the bail-in trigger will require the exercise of a degree of discretion by the authorities. Concerns around regulatory forbearance (or exuberance) in triggering bail-in, and the susceptibility of the process to political pressures, not only inject a degree of uncertainty that makes pricing bail-inable debt difficult, they also give rise to risks that the trigger might be pulled at the wrong time. If regulatory discretion is exercised in a situation where the judgement appears to have been finely balanced, or is not exercised in a clear, transparent way, it may give rise to fears that other, solvent institutions may be seized from their shareholders and have liabilities bailed-in. This could disrupt the wholesale funding markets and result in a run on other banks (in particular any that are anything other than extremely well-capitalised).
26. That said, some of the significant complications associated with contingent capital instruments are less of an issue with bail-in. There is likely to be less concern about possible dynamic effects at or near the trigger point driving a bank that would otherwise have been a viable, going concern towards failure. By the time a bank is near a bail-in trigger, it will clearly already be well on its way to non-viability, and the authorities in any case have the power to put a non-viable bank into resolution. And conversion (or write-down) of contingent capital has the ambitious aim of bolstering the position of a struggling bank, enabling it to continue as a viable, going concern and regain the confidence of the markets without recourse to other resolution tools. It is possible that in some circumstances bail-in may aim to achieve something similar. But it is more likely that it will be used as one of a suite of tools to facilitate the orderly resolution of a failed bank, by providing clarity on the distribution of losses across the liability structure. Used in this way, bail-in expands the range of options available to authorities dealing with a bank in resolution.

---

<sup>23</sup> Although less so to the extent an institution has a lot of wholesale deposits (if they are not bail-inable) and secured funding (including repos).

<sup>24</sup> As discussed in a speech by Lord Turner in March 2011: *Leverage, Maturity Transformation and Financial Stability: Challenges Beyond Basel III*: [http://www.fsa.gov.uk/pubs/speeches/031611\\_at.pdf](http://www.fsa.gov.uk/pubs/speeches/031611_at.pdf).

## Depositor preference

27. The FSCS provides compensation to customers of deposit-taking financial institutions primarily authorised in the UK that are no longer able to meet their claims. The amount reimbursed by the FSCS will depend on the claim and the type of customer (e.g. retail deposits receive 100% compensation up to £85,000; and certain retail investments up to £50,000). The FSCS is designed to be funded by a levy on banks and building societies. But in the recent crisis it had to rely on loans from the Government. The intention is that future levies on deposit-taking institutions will enable the FSCS to repay these loans, but in the meantime the taxpayer remains exposed.
28. The Deposit Guarantee Schemes Directive is likely to require some pre-funding of the FSCS, with institutions split into categories based on their perceived level of riskiness, with riskier institutions making larger contributions. But unless this risk-based pre-funding is accurately calibrated to ensure each bank makes the correct contribution, it will not require each bank to pay the appropriate amount – bearing in mind its riskiness – for deposit insurance. In addition, by the time the guarantee crystallises for an institution, the burden of funding this guarantee has shifted to the FSCS, and so to other financial institutions (with the risk of exposure for the taxpayer if the FSCS requires a loan from the Government). It requires safe, well-run banks that survive a crisis to pay for the failure of risky banks. In such a case, because banks (and their creditors) do not bear all the risk arising from the activities conducted, this could incentivise excessive risk taking and so potentially increase the probability of bank failure.
29. In addition, retail depositors are not well-placed to monitor and discipline banks for excessive risk taking. And yet they rank *pari passu* with senior unsecured creditors,<sup>25</sup> who are able to exert such discipline by demanding higher returns if a bank pursues riskier activities. This means that losses can only be imposed on other senior unsecured creditors to the same extent they are imposed on retail depositors, and imposing increased losses on insured depositors means increased liabilities for the FSCS. This impedes resolution of failed financial institutions and potentially extends taxpayer exposure, so increasing the impact of bank failure.
30. Depositor preference aims to address these problems by making (at least some) deposits rank senior to other unsecured claims. There appear to be particularly strong arguments for preferring insured deposits. Subordinating the unsecured claims of wholesale depositors, derivatives counterparties and senior debt holders to those of insured depositors better aligns the incentive to discipline banks with the ability to do so, and should therefore reduce the probability of bank failure. By creating a buffer that will absorb losses prior to insured depositors, depositor preference also

---

25 Note that in building societies many FSCS-insured deposits rank below senior unsecured creditors. This is therefore where the FSCS would rank in insolvency following any pay-out under the deposit guarantee scheme. The Building Societies (Funding) and Mutual Societies (Transfers) Act 2007 allows for secondary legislation to be made that would have the effect of ranking depositors who are members *pari passu* with senior unsecured creditors, but this has not yet been enacted.

reduces the impact of bank failure. Because insured deposits would rank senior to all other unsecured claims, in resolution it would increase the chances that those deposits together with matching assets could be split off from the rest of the bank's assets and liabilities (without regard to any shortfall between assets and liabilities in the remainder of the bank). This makes it easier to impose losses on other creditors, makes banks easier to resolve and reduces the prospect of the FSCS having to make pay-outs.

31. But whether it is all deposits, just insured deposits or some other subset that should be preferred is an important question. It might be desirable to enhance the position of depositors generally, including businesses that are outside the scope of the FSCS guarantee, charities, local authorities etc. A possible downside of broadening the scope of depositor preference in this way is that it could undermine the value of the measure. In the US all domestic deposits are preferred; the result has been to incentivise banks to structure more of their funding as 'deposits', reducing the buffer of liabilities underneath preferred deposits.
32. Making insured deposits senior also limits FSCS – and so potentially taxpayer – exposure, and so mitigates the 'too big to save' problem. So aligning the ranking in legal priority of insured deposits with the requirement that such deposits be protected in all circumstances appears to offer significant benefits. In the Commission's consultations thus far, a number of interested parties have said that they see aligning the legal ranking of liabilities with the desired economic outcome as a common sense approach, in explaining why they expect depositor preference to be implemented.<sup>26</sup>

---

<sup>26</sup> So it may be that depositor preference is already priced in to the cost of other bank liabilities to some extent. However, the imposition of depositor preference would constitute a re-ordering of the creditor hierarchy for existing liabilities. The potential consequences of this would need to be carefully examined.



## Annex 7: Illustration of structural reform

- Chapter 4 discusses how functional separation might help to reduce some key problems which give rise to financial instability. It concludes that a UK retail ring-fence may have a number of potential benefits. Broadly, this involves isolating the UK retail banking activities within a universal bank and placing them into a separately capitalised subsidiary. This annex provides an illustration of one way in which such a ring-fence could be designed. Its purpose is only to surface some of the design issues which would arise in taking forward any such measure, and it does **not** in any way represent a specific proposal from the Commission.<sup>1</sup> Views on how a UK retail ring-fence could be best designed to achieve the potential benefits or to reduce the potential costs are welcome and some specific questions are posed.

### Type of separation

- The illustrative split outlined in Figure A7.1 separates activities into three broad categories:
  - those which **must** take place within the ring-fence. At a minimum this would include taking insured deposits given these are explicitly guaranteed;
  - activities which **may** take place within the ring-fence, comprising other services which are typically required by individuals and small and medium-sized enterprises (SMEs); and
  - activities which **may not** take place within the ring-fence are the provision of capital markets services, trading and hedging services. These services are primarily used by large corporations, financial institutions and governments but a bank would also be free to provide them to small businesses and consumers (from the non-retail subsidiary).
- In each case, it may be appropriate to change the activities which fall in each category:
  - one important question is the extent to which non-insured deposits should be included within the ring-fence, because of the consequences for individuals and companies if they suddenly cannot gain access to their funds. However, it is likely

<sup>1</sup> For an alternative illustration see evidence sent to the Commission by Pringle, H. & Sandeman, R.: <http://bankingcommission.independent.gov.uk/bankingcommission/wp-content/uploads/2011/01/Robert-Pringle-and-Hugh-Sandeman-Issues-Paper-Response.pdf>.

that wholesale/investment banks will need to have some ability to take deposits, in part so that they can extend committed lines of credit;

- recognising the high economic impact that interruption in credit provision could have, it may also be desirable to mandate that if a bank provides credit and related services to retail customers they must do so within the ring-fence. Mandating the inclusion of these activities might be particularly important if regulatory capital requirements incentivise the provision of credit outside the ring-fence. Nevertheless, it is likely that banks would wish to include some of these activities within the ring-fence for commercial reasons. Allowing some flexibility in implementation institution-by-institution could reduce private costs; and
  - note that Figure A7.1 considers which activities the retail entity would be able to provide to its customers, not all the activities which it would be permitted to engage in as part of its own Treasury operations. It is likely that some non-customer activities might require a different treatment – for instance retail entities would need to be able to purchase hedging instruments against their own risks; and careful consideration would need to be given to rules around the ring-fenced subsidiary lending to other financial institutions.
4. Figure A7.1 outlines a separation based on activities; entities are limited to providing particular financial services regardless of the customer. An alternative approach would be to separate by customer type, so that certain customers can only receive services from certain types of entities. The latter model is more in line with how banks tend to be organised, but limits customer choice and may require there to be an arbitrary cut-off point within the corporate client base. An attraction of a separation based on activities is that it might avoid these downsides while allowing banks effectively to implement the ring-fence along customer lines should they choose to do so.
  5. One particular issue is whether the payments system should be located within the ring-fence. The payments system itself is not really one system and wholesale/investment banks are likely to need access to at least parts of it. For example, channelling all wholesale market transactions through a retail subsidiary would present additional credit and liquidity risks for this subsidiary.
  6. In addition, the scope of regulatory and resolution powers may need to be reviewed in light of any activity split.
  7. Key questions:
    - Should a split be designed according to customer or activity, and does a flexible activity split allow banks to implement it by customer should they wish to?
    - Are there other activities which **must** take place in the retail entity?
    - Are there other activities which **should not** take place in the retail entity?

- Are there other activities which should be **permitted** in the retail entity? In particular, what rules should govern the Treasury operations of the retail entity?

**Figure A7.1: Illustrative separation of activities**



\* Retail deposits could include all deposits from persons who would be eligible for the Financial Services Compensation Scheme protection, or be limited to insured deposits only.

\*\* Except where these involve retail deposit-taking, for example in the case of personal current accounts.

## Severity of separation

8. Consider how a ring-fence would need to be enforced. As discussed in Chapter 4, there may be advantages to allowing the ring-fenced entity to be part of a financial group because it would allow some genuine diversification benefits to continue. However, the ring-fence would need to be strong enough to deliver a material improvement in resolvability and limit contagion from the rest of the group. Ideally, it would be possible for the rest of the group to support the retail entity but not to jeopardise it, and *vice versa*. Importantly, the separation would have to be clear to investors *ex ante* so that it reduced incentives for excessive risk taking.
9. For illustrative purposes only, the retail ring-fence might require rules such as:
  - if a subsidiary seeks a licence from the regulator to conduct retail deposit-taking, that subsidiary can only conduct activities which are permitted to take place in a retail ring-fence. The subsidiary must meet all regulatory requirements on a standalone basis;
  - under no circumstances can the parent company transfer capital out of the retail entity if it would result in a drop below the minimum regulatory capital ratio prescribed;
  - the retail subsidiary cannot own equity in other parts of the group;
  - intragroup exposures by, or guarantees from, the retail subsidiary will be treated as third party exposures for regulatory purposes. Cross-defaults between the retail subsidiary and the rest of the group may also need to be limited;
  - the retail subsidiary must have access to operational services which will continue in the event of insolvency of the rest of the group; and/or
  - the retail subsidiary and the rest of the group must enter into separate master netting agreements.
10. A ring-fence could involve other and/or more stringent rules, for example imposing further constraints on the level of wholesale funding allowed in the retail bank, or requiring regulatory approval for transfers of capital out of the retail bank.
11. Key question:
  - What rules would need to be imposed in order to strike the right balance between the costs and benefits of a ring-fence?

## Scope of separation

12. Finally, consider the geographic scope of a ring-fence. There is a question as to which entities the restrictions should apply and, when they do apply, whether they should constrain the activities of those entities abroad. Partly, this is a question of legal jurisdiction of the UK authorities.
13. On which entities the restrictions should apply to, regardless of legal limitations, given that a purpose of structural reform is to limit the risk to the UK taxpayer and UK economy there do not seem to be advantages to imposing limitations on the world-wide activities of banking groups headquartered in the UK. The UK authorities are most concerned with the provision of UK retail services but provided that these are sufficiently protected there does not seem to be a need to impose functional separation on the non-UK activities of UK-headquartered banking groups.
14. Another issue is the extent to which the UK retail subsidiary should be allowed to conduct retail banking in other parts of the world. On the one hand, allowing this would extend the liabilities of the UK taxpayer. On the other, preventing it could constrain cross-border flows and reduce the attractiveness of being a UK retail bank.
15. Key questions:
  - Is it appropriate to apply the restrictions to all UK-authorized retail subsidiaries?
  - Should UK retail subsidiaries also be allowed to conduct these activities abroad?



## Annex 8: Competitiveness

1. This annex sets out further details on estimates of the proportion of the wholesale financial services sector affected by the reforms discussed in this *Interim Report*, as well as supplementary data on the history of British firms in the City and the relative position of the UK as a financial services centre.

### Measuring the size of the wholesale financial sector

2. To estimate the proportion of the sector affected by the reforms discussed in this *Interim Report*, the size of the entire wholesale financial services sector, and the size of the internationally mobile wholesale and investment banking operations conducted by the 'affected banks' (see Paragraph 7) must be estimated. Reliance on estimates means that the results are necessarily subject to considerable uncertainty.
3. The size of the sector is measured using different metrics, including employment, fees, tax contribution and gross value added (GVA).<sup>1</sup> The size of the wholesale and investment banking operations of the affected banks as a proportion of all City activity is considered using employment and fees data.

### Employment

4. Survey data suggest that around one million people work directly in financial services in the UK.<sup>2</sup> A large proportion of these will be employed in retail financial services, unrelated to the UK's role as an international financial centre. From these data, it is possible to estimate the proportion employed in wholesale financial services.<sup>3</sup> These

---

1 GVA = GDP – taxes on products + subsidies on products.

2 Office for National Statistics (ONS): Annual Business Inquiry (2008); Business Register and Employment Survey (2008).

3 Two methods are used. The first is to take the total number of financial services and related jobs in Inner London, and deduct the number of retail and private banking jobs that would be expected given the size of the population in that area. The second is to identify the level of financial services employment that would be expected if the UK had no international financial services sector, deriving an employment figure for the whole of the UK, and deduct this from the total number of UK financial services sector jobs. The former is likely to generate an under-estimate of the level of employment in UK-based international wholesale financial services, because there will clearly be some international-facing activity outside of London, the latter an over-estimate, because such estimates are not able to separate out UK-facing commercial banking (e.g. conventional lending to firms) from international business.

estimates suggest direct employment in wholesale financial services is around 300,000 people, approximately one third of all financial services sector employment in the UK.<sup>4</sup>

5. If ancillary services (legal, accountancy and consulting) are included, a further 400,000 people are indirectly employed by the financial services sector across the UK, with 160,000 of these employed supporting wholesale financial services.<sup>5</sup> Wholesale financial services therefore constitute around 35% of the total number directly or indirectly employed by the financial services sector in the UK.
6. There are a number of uncertainties around the estimates of the size of the wholesale financial services sector, and, more precisely, the proportion of activity that may be considered genuinely internationally mobile. These include:
  - corporate banking, which may be more domestically focussed, and investment banking which may be more international, tend to be treated together in most data;
  - there may be inconsistencies in the inclusion of back and middle office functions across employment estimates;
  - the data often do not distinguish between the number of people employed in banking activities and the number employed by banks – the former will include staff employed in boutique firms, independent trading and brokerage companies etc.; and
  - in geographically based estimates of wholesale financial services, the location of domestic banking headquarters functions may distort the estimates of the wholesale financial services sector.
7. Given the reforms being considered by the Commission, the key issue is what proportion of wholesale financial services are carried out by the relevant divisions of UK-authorized banks which operate significant wholesale and retail businesses in the UK (the ‘affected banks’). The affected banks’ wholesale and investment banking divisions may conduct between 7% and 18% of all wholesale financial services. The Commission has taken 14% to 16% as a central estimation band.<sup>6</sup> The central estimation band has been deliberately skewed somewhat towards the upper end of the range to reflect caution.

---

4 ONS: Annual Business Inquiry (2008); Business Register and Employment Survey (2008); and mid-year population estimates; Wigley, B., 2008, *London: Winning in a changing World – Review of the competitiveness of London’s financial centre*: <http://legacy.london.gov.uk/mayor/economy/docs/london-winning-changing-world.pdf>; CEBR, 2008, *The Importance of Wholesale Financial Services to the EU Economy*, London, City of London Corporation; Bischoff, W., 2009, *UK international financial services: the future – A report from UK based financial services leaders to the Government*: [http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/ukinternational\\_financialservices.htm](http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/ukinternational_financialservices.htm); Commission analysis.

5 ONS: Annual Business Inquiry (2008); Business Register and Employment Survey (2008); Mid-year population estimates; Wigley, B., 2008, *London: Winning in a changing World – Review of the competitiveness of London’s financial centre*; Commission analysis.

6 Estimates based on Companies’ data and annual reports and sources listed in Footnote 4.



**Table A8.1: Estimated employment shares of affected banks**

Affected banks' share of wholesale financial services employment	Total estimate range (%)	Central estimation band (%)
Low estimate	7	14
High estimate	18	16

8. The upper bound of the range is reached by applying very cautious assumptions to the estimates of both the size of the affected banks' internationally mobile wholesale financial services activities and the size of the entire wholesale financial services sector. It is reasonable to expect that the actual proportion made up by the affected banks is some way below this bound for a number of reasons, including:
- no allowance has been made for the fact that some of the employment in the affected banks will be UK-facing wholesale and investment banking, i.e. covering UK corporate clients and more geographically bounded;
  - the estimates of employment in the affected banks have deliberately included some banks which are unlikely to have their business models affected by the reforms; and
  - the higher bound assumptions use a definition of wholesale financial services which is highly restrictive.
9. The lower bound is reached by retaining the cautious assumptions regarding employment in the affected banks, but by removing some of the caution around the size of the wholesale financial services sector. Nonetheless, to establish a central estimation band, a further degree of caution is introduced. This is to allow for the possibility that, for example, some domestic activity may be captured in reported wholesale financial services. This additional degree of caution suggests a central estimation band of 14% to 16% – towards the upper end of the range of 7% to 18% – may be appropriate.
10. If ancillary services are included in determining the total number of people employed by the wholesale financial services sector, this proportion obviously drops, but, to the extent that ancillary services are dependent on financial services for employment, it would not be appropriate to include them. It could be argued that for 'City competitiveness', a smaller 'core' of City employment should be used, rather than all wholesale financial services jobs. This is because banks may have a disproportionate impact on financial services clusters (either as clients or suppliers of business, or acting as talent pools or training centres for other firms). However, while it is plausible that banks in general may play a relatively important role in financial services clustering, the Commission has not received any conclusive evidence on this point, nor the size of the effect if it exists. Moreover, the estimates make no assumptions about unaffected firms picking up any activity that affected banks cease to undertake. To the extent that the UK remains an attractive location to do business, unaffected firms may

simply take over any wholesale financial services activities that the affected banks stop carrying out, reducing the net effect of the reforms discussed in this *Interim Report*. The uncertainty over which effect dominates supports taking a conservative approach on the central estimation band.

## Fees and revenues

11. Another way of looking at the affected banks' share of wholesale financial services activities in the UK is to look at their share of fees. Figure A8.1 shows banks' total global fees from four key investment banking activities: mergers and acquisitions (M&A), equity issuance, debt issuance and loans.<sup>7</sup> Fee reporting tends to follow the location of the client, not the location of the activity, so measuring where a deal actually took place (i.e. the location of the banking activity) is difficult.<sup>8</sup> The affected banks' global share of fees in these business lines is on average 9% for the last ten years.<sup>9</sup> This relates to business that was carried out across all of these banks' global locations.

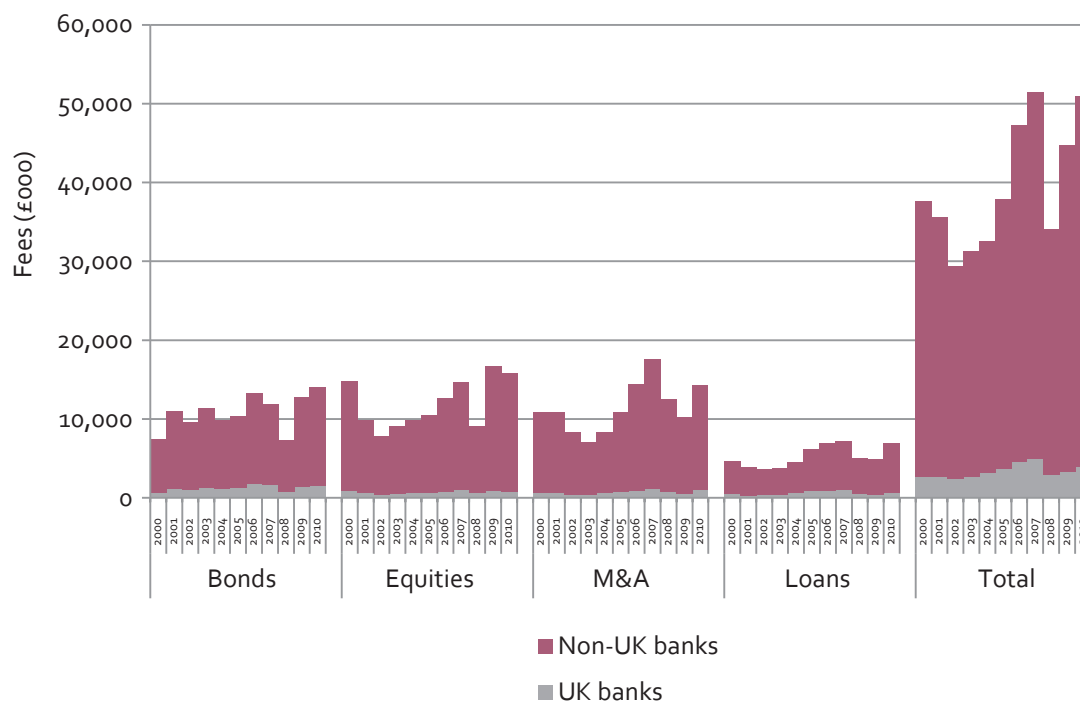
---

<sup>7</sup> 'M&A' is defined as all transactions where a change in economic ownership has taken place (at least 5% of total capital or 3% with a value of US\$1m or more); 'equity issuance' is defined as all equity and equity-linked offerings sold via a distribution process including underwritten rights issues and open offers; 'debt issuance' is defined as all underwritten bond offerings in excess of US\$10m with maturity of at least 360 days; 'loans' is defined as all loans syndicated by two or more banks with maturity of at least 90 days.

<sup>8</sup> For example, if a Korean company issues a foreign currency denominated bond, some of the deal may be arranged using banking staff based in Korea, other Asian centres and London, but it is likely to be registered as Korean for the purposes of market share data. There are further complications in using fees data, including differences between where a deal is actually run and where it is booked, multinational deals operating out of a number of locations, as well as opacity in the reporting geographies of financial firms.

<sup>9</sup> Data from earlier years may not give an accurate representation of the market share between UK and non-UK banks at the time as the historic market share of acquired companies is retrospectively assigned to the new owner following mergers or acquisitions.

Figure A8.1: Global fees from key investment banking lines



Source: Thomson Reuters

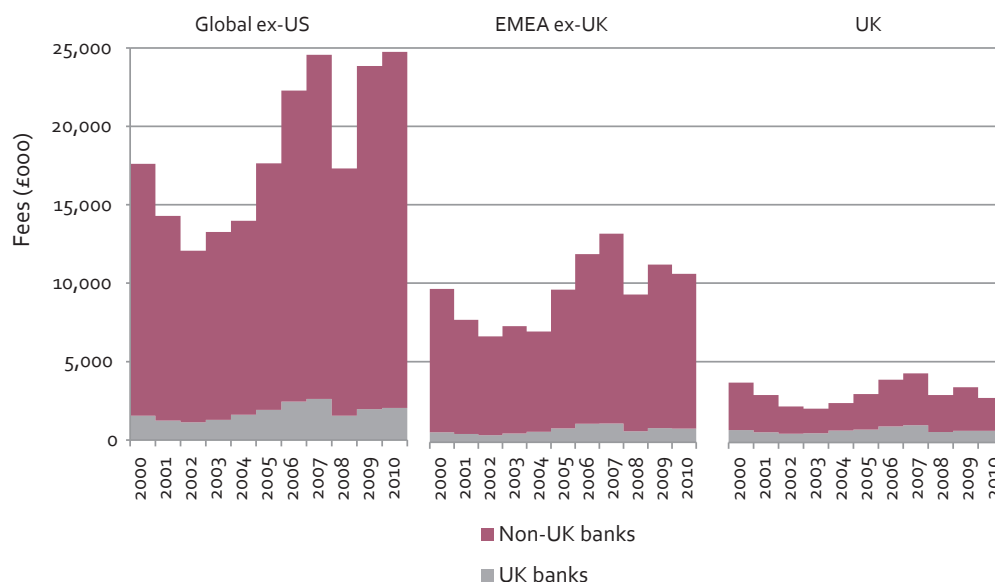
12. To estimate the proportion of activity that actually took place in the UK (i.e. deals run out of the UK), it is necessary to make assumptions about the proportion of combined fees earned from different geographic markets. If it is assumed that all fees earned from US corporates were earned in the US, and the US market is excluded, the affected banks' share of all other global fees is 10%. This can be thought of as a lower bound for the affected banks' share of fees from UK-based activity.<sup>10</sup> An upper bound might be estimated by looking at the affected banks' shares of fees from UK-based corporate clients.<sup>11</sup> Affected banks have around 25% of this market. To establish a central estimate of the proportion of fees from UK-based key investment banking activities that are earned by the affected banks it is assumed that, in addition to all UK corporate work, half of all European, Middle East and African (EMEA) client fees are earned in the UK.<sup>12</sup> The affected banks' share of all UK and half of EMEA fees is 15%. The fee shares for the four business lines combined across the different geographies are shown in Figure A8.2.

10 It is reasonable to assume that the UK banks' share of the London market is not less than their share of the global market, given the relative strength of the UK as an international centre.

11 This presumes that the UK banks are strongest in the market for UK corporate clients, and that all UK corporates do all their banking business in the UK.

12 This is consistent with estimates cited in Roberts, R., 2008, *The City: A Guide to London's Global Financial Centre*, The Economist and Profile Books, London and TheCityUK, 2010, *Financial Markets in the UK*: [http://www.thecityuk.com/media/191876/financial\\_markets\\_in\\_the\\_uk%2011\\_2010.pdf](http://www.thecityuk.com/media/191876/financial_markets_in_the_uk%2011_2010.pdf).

**Figure A8.2: Total fees from global (excluding US), EMEA (excluding UK) and UK clients**



Source: Thomson Reuters

13. These estimates do not include banks’ trading activities.<sup>13</sup> These activities can account for most of a bank’s earnings (and volatility). The estimates above may underestimate the affected banks’ shares of fees if those banks have particularly large market share in UK-based activities which are excluded from the calculations.<sup>14</sup> Transparent data on the location and size of the trading activities are not easily available, so any estimates are subject to uncertainty and should not be compared directly with the estimates presented. However, preliminary estimates from a range of sources suggest that inclusion of the trading businesses may at most increase the upper bound of the affected banks’ share of UK-based investment banking revenue by five percentage points.
14. To translate the fee shares estimated above into a share of all wholesale financial services revenues earned in the City, scenarios in which banking represents 50%, 75% and 100% of all earnings are examined. Retaining conservative assumptions, the affected banks’ share of all earnings from wholesale financial services may be between 10% and 18%. These estimates are presented in Table A8.2.

<sup>13</sup> Activities which typically come under the umbrella of ‘Fixed Income, Currency and Commodities.’

<sup>14</sup> This is likely to be the case for some of the affected banks, as they have relatively high global market shares.

**Table A8.2: Affected banks' shares of all UK-based fees earned in wholesale financial services**

	Affected banks' share of fees in loans, equity, bonds and M&A (%)	Affected banks' share of all earnings (all banks' share of revenues: 75%)	Affected banks' share of all earnings (all banks' share of revenues: 50%)
Low estimate	10	7	5
Central estimate	15	11	7
High estimate	25	18	12

Source: Thomson Reuters, Commission analysis

## Taxation

15. Another way of looking at the relative contribution of different parts of the financial sector is to look at tax. Due to the way taxation is reported and limitations on publicly available material, it is not possible to draw conclusions about the tax share of the affected banks' wholesale and investment banking divisions in the same way as for fees or employment. However, the data nevertheless provide a useful insight into the relative size of the domestic and international sectors.
16. Estimates have been made for the total tax contribution of the financial services sector.<sup>15</sup> These include direct taxes paid by financial services firms, as well as employment taxes paid by staff and indirect taxes. The total tax paid by the financial services sector – including the retail financial services sector – in 2009/10 was estimated to be £53.4bn.
17. Table A8.3 is based on analysis undertaken on behalf of TheCityUK, showing the breakdown of taxes paid in 2009/10. This analysis separates out the contribution between domestic financial services for which it is 'hard-to-impossible' for the operations providing these services to leave the UK, international financial services which are 'sticky but not immovable', and those international financial services which have the 'lowest hurdles to departure'. Banks – including foreign banks – are the largest taxpayers within the sector, accounting for between half and two-thirds of all taxes borne and collected.<sup>16</sup>

15 PwC, 2010, *The total tax contribution of financial services*, Corporation of London: [http://217.154.230.218/NR/rdonlyres/68F49A7E-8255-415B-99A8-1A8273D568D9/0/TotalTax3\\_FinalForWeb.pdf](http://217.154.230.218/NR/rdonlyres/68F49A7E-8255-415B-99A8-1A8273D568D9/0/TotalTax3_FinalForWeb.pdf).

16 Taxes borne are taxes levied directly on the sector, like corporation tax, while taxes collected are those levied on workers, but collected by the sector, e.g. through Pay-As-You-Earn (PAYE) and National Insurance Contributions (NICs).

**Table A8.3: Breakdown of financial services tax contribution 2009-10 (£bn)<sup>17</sup>**

Tax type	Domestic financial services	International financial services		Total
	'Hard-to-impossible to leave'	'Sticky but not immovable'	'Lowest hurdles to departure'	
Corporation tax	2-3	2-3	<0.5	6
Employment taxes (PAYE, NICs)	8-10	12-13	2-3	25
Other business taxes (irrecoverable VAT, Stamp Duty, Business Rates)	9-11	<1	<0.5	11
Indirect taxes (Interest tax collected at source, SDRT, IPT, net VAT)	11-13	1-2	n/a	13
Total	30-36	15-20	3	55

Source: PwC, City of London Corporation, HMRC, annual reports, Companies House filings, TheCityUK, Oliver Wyman estimates and Commission analysis.

- 18.** The data are difficult to compare to the fees and employment data, because the tax contributions of the affected banks are split across two categories: the corporation tax paid by the affected banks is counted primarily within the domestic financial services category, while employment taxes are divided between their retail and wholesale divisions (with the wholesale divisions assigned to the 'sticky but not immovable' category). As corporation and other business taxes are paid in one lump, it is difficult to discern the relative contribution of the wholesale and investment banking divisions of the affected banks. As a result, the total contribution from the wholesale sector may be understated. This categorisation also means that some of the services described in the body of the *Interim Report* in the context of relocation are here described as 'sticky but not immovable'.
- 19.** However, the data show that the biggest tax contribution comes from the retail financial services sector overall. Retail services constitute between 55% and 65% of all taxes paid by the sector. Within this, indirect and other business taxes are the biggest contributors by tax type, with corporation tax playing a relatively small part.
- 20.** Within the wholesale financial services sector, the biggest contribution is from employment taxes.<sup>18</sup> Corporation tax plays a relatively small part here too.

<sup>17</sup> There is inevitably a degree of uncertainty and subjectivity about the apportionment between the sub-sectors of different types of tax. Ranges are provided to reflect this uncertainty. SDRT is Stamp Duty Reserve Tax. IPT is Insurance Premium Tax.

<sup>18</sup> This is a larger absolute contribution than that from the retail sector, reflecting higher average wages.

## GVA contribution

21. GVA is another way to measure the contribution of financial services to the UK economy.<sup>19</sup> In 2008 financial intermediation represented 8.4% of UK GVA.<sup>20</sup>
22. It is not possible to separate out the GVA share of the affected banks from that of the entire financial services sector, but the proportion of GVA contributed by wholesale financial services in general can be estimated by computing the portion of GVA that would be expected to be contributed if the economy had a predominantly domestic-facing financial services sector. Two estimates using somewhat different methodologies give expected contributions from wholesale financial services in 2008 of 3.2%<sup>21</sup> and 4.9%.<sup>22</sup> This suggests that wholesale financial services contribute somewhere between 38% and 58% of the GVA of the financial services sector. This compares to the estimates of its tax contribution of 35-45%.

## British firms and the City

23. Chapter 4 also examined the history of British banks in the City. This is part of a wider picture of internationalisation of the City, in which British firms were largely taken over by foreign ones. Tables A8.4, A8.5 and A8.6 below chart the history of some of these firms since the 1980s.
24. The few remaining jobbers after the Big Bang – market makers on the stock exchange floor – were quickly bought up. Many of the buyers were initially British merchant banks, as Table A8.4 demonstrates.

---

19 There are particular technical difficulties in measuring the economic value of financial services. It has also been argued that measured estimates of financial sector value added may be overstated as they are not adequately adjusted for the risks taken by financial firms (see speech by Mervyn King, *Banking: From Bagehot to Basel, and Back Again*: <http://www.bankofengland.co.uk/publications/speeches/2010/speech455.pdf>).

20 London Economics, 2009, *The Importance of Wholesale Financial Services to the EU Economy 2009*, London, City of London Corporation

21 ONS Blue Book 2010: [http://www.statistics.gov.uk/downloads/theme\\_economy/bluebook2010.pdf](http://www.statistics.gov.uk/downloads/theme_economy/bluebook2010.pdf); ONS Population Statistics Bulletin; Commission analysis. The methodology here focuses on the proportion of financial services GVA in inner London relative to the GVA of the rest of the UK economy.

22 London Economics, 2009, *The Importance of Wholesale Financial Services to the EU Economy 2009*, London, City of London Corporation. The methodology used here is to estimate the GVA contribution of financial services within EU countries which are not heavily reliant on financial services, and deduct this from the GVA contribution of financial services in other countries in the EU to derive a wholesale residual.

**Table A8.4: Fate of British jobbing firms after 1986<sup>23</sup>**

Jobber	Bought or taken over by (year)	Current parent / owner	Nationality
Akroyd & Smithers	Warburg (1984)	UBS	Swiss
Wedd Durclacher	Barclays (1983)	Credit Suisse	Swiss
Pinchin Denny	Morgan Grenfell (1984)	Deutsche Bank	German
Smith Brothers	Merrill Lynch (1995)	Bank of American Merrill Lynch	American
Bisgood Bishop	County Natwest (1984)	RBS	British
Charles Pulley	Security Pacific (1984)	Bank of American	American

25. The fate of major stockbrokers was similar. Again, merchant banks were often buyers. Table A8.5 offers further detail.

**Table A8.5: Fate of major British brokering firms after 1986<sup>24</sup>**

Broker	Bought or taken over by (year)	Current parent / owner	Nationality
Hoare Govett	Security Pacific (1984)	RBS Hoare Govett	British
James Capel	HSBC (1986)	HSBC	British
Scrimgeour Kemp Gee	Citicorp (1986)	Citigroup	American
Phillips & Drew	UBS (1986)	UBS	Swiss
Cazenove	JP Morgan (2009)	JPMorgan Cazenove	American
De Zoete	Barclays (1986)	Credit Suisse (among others)	Swiss
Rowe & Pitman	Warburg (1984)	UBS	Swiss
Wood Mackenzie	Hill Samuel (1984)	Deutsche Bank	German
Grieverson Grant	Kleinwort (1986)	RHJ International	Belgian
Greenwell	Midland Bank (1986)	HSBC	British

26. The merchant banks themselves were then largely subsumed into larger firms or failed. Table A8.6 charts each bank's experience.

23 Monopolies and Mergers Commission, 1978, *Smiths Bros Limited and Bisgood, Bishop & Co Limited: A report on the proposed merger*, London, HMSO and Augar, P., 2000, *The Death of Gentlemanly Capitalism: The rise and fall of London's investment banks*, London, Penguin.

24 Based on composite rankings across equities, gilts, research and corporate broking, in Augar, P., 2000, *The Death of Gentlemanly Capitalism: The rise and fall of London's investment banks*, London, Penguin. Where original ownership has been split between multiple owners, ownership of the major part of the relevant business has been registered.



**Table A8.6: Fate of British merchant banks after 1986<sup>25</sup>**

Merchant Bank	Bought or taken over by (year)	Current parent / owner	Nationality
Schroders	Citigroup (2000) (investment banking business)	Citigroup	American (British asset manager remains)
Morgan Grenfell	Deutsche Bank (1990)	Deutsche Bank	German
Kleinwort Benson	Dresdner Bank (1995)	RHJ International	Belgian
Lazards	None <sup>[2]</sup>	Lazards	American
SG Warburg	Swiss Banking Corporation (1995)	UBS	Swiss
Samuel Montagu (wholly owned subsidiary)	Midland Bank (1974)	HSBC	British
Robert Fleming	Chase Manhattan (2000)	JPMorgan	American
County Natwest (wholly owned subsidiary)	Deutsche Morgan Greenfell and Bankers Trust (1997)	Deutsche Bank	German
Charterhouse Japhet	Royal Bank of Scotland (1985)	RBS	British
NM Rothschild	None	NM Rothschild	British
Barings	ING (1995)	ING	Dutch

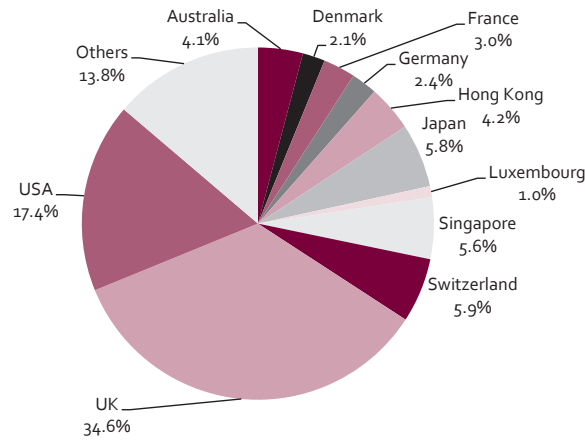
<sup>[1]</sup>The London House of Lazard remained largely independent for most of the 20<sup>th</sup> Century, but was increasingly integrated with the US and French Houses from the 1980s until 2000, when all three Houses were unified as Lazard LLC.

## London and the UK's position in relation to other major financial centres

27. London continues to feature at, or very near, the top of professional and academic surveys and rankings tables.
28. The UK is a leading location for a huge range of financial activities. Figures A8.3, A8.4, A8.5 and A8.6 demonstrate its leading position in over-the-counter (OTC) derivatives, foreign exchange, M&A and loan issuance.

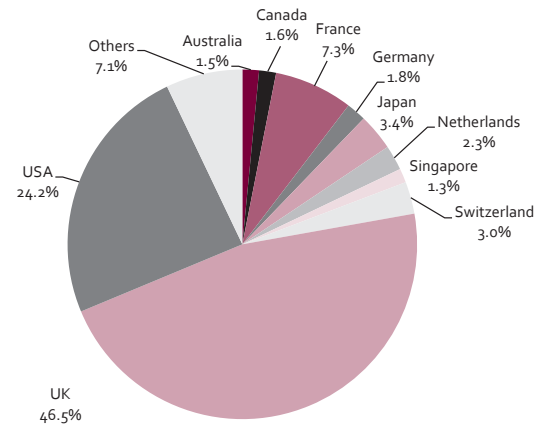
25 Augar, P., 2000, *The Death of Gentlemanly Capitalism: the Rise and Fall of London's Investment Banks*, London, Penguin; Lisle-Williams, M., 1984, Merchant Banking Dynasties in the English Class Structure: Ownership, Solidarity and Kinship in the City of London 1850-1960, *The British Journal of Sociology*; Thompson, P., 1997, The Pyrrhic Victory of Gentlemanly Capitalism: The Financial Elite of the City of London 1945-90, *Journal of Contemporary History* and RBS, HSBC, UBS, Citigroup, Rothschild, Lazard, JPMorgan websites.

**Figure A8.3: Market share of OTC derivatives business, 2010**



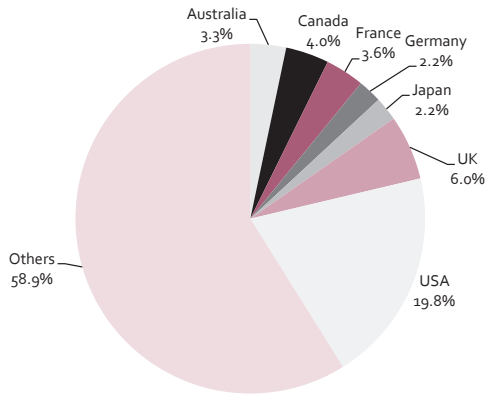
Source: BIS

**Figure A8.5: Market share of Forex business, 2010**



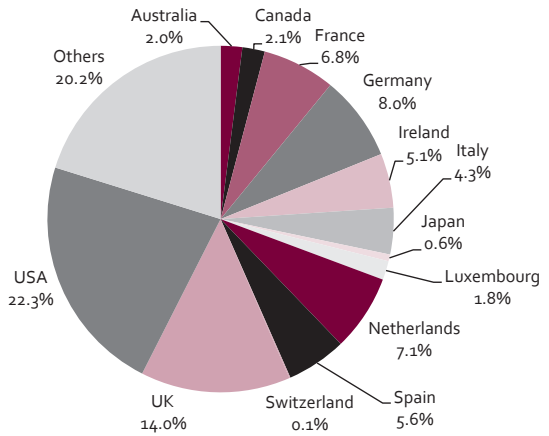
Source: BIS

**Figure A8.4: Market share of M&A activities, 2010**



Source: Bloomberg, Commission calculations

**Figure A8.6: Market share of international debt issuance, 2010**



Source: BIS

29. The UK's leading position is also recognised in professional rankings and assessments. While these assessments are by their nature subjective, they give some indication of investor sentiment. The UK is currently ranked by the World Economic Forum as second in its Financial Development Report. Table A8.7 shows the final report rankings.

**Table A8.7: World Economic Forum Financial Development Report rankings 2010<sup>26</sup>**

Rank	Country	Score
1	USA	5.12
2	UK	5.06
3	Hong Kong SAR	5.04
4	Singapore	5.03
5	Australia	5.01
6	Canada	4.98
7	Netherlands	4.73
8	Switzerland	4.71
9	Japan	4.67
10	Belgium	4.65

30. Another major ranking exercise, the Global Financial Centres Index (GCFI), ranks London even higher, with the City first or joint first since the report was produced. Table A8.8 reproduces the results of the most recent GCFI rankings (GCFI 9). This recognised London's leading role for asset management, wealth management, government and regulatory and professional services.

**Table A8.8: Global Financial Centres Index 9 rankings<sup>27</sup>**

Rank	City	Score
1	London	775
2	New York	769
3	Hong Kong	759
4	Singapore	722
5=	Shanghai	694
5=	Tokyo	694
7	Chicago	673
8	Zurich	665
9	Geneva	659
10=	Sydney	658
10=	Toronto	658

<sup>26</sup> World Economic Forum, 2010, *Financial Development Report 2010*: [http://www3.weforum.org/docs/WEF\\_FinancialDevelopmentReport\\_2010.pdf](http://www3.weforum.org/docs/WEF_FinancialDevelopmentReport_2010.pdf)

<sup>27</sup> Z/Yen, 2011, *The Global Financial Centres Index 9 March 2011*: <http://www.zyen.com/GFCI/GFCI%209.pdf>.

31. Chapter 4 noted that there are non-financial sector related factors that contribute to London’s comparative advantage as a place to locate financial services activities. Clustering and connectivity factors are particularly important in this. London is a place from where to organise and deploy skilled labour and capital in an efficient manner, thereby making London a major node in the global financial economy. This in turn attracts more firms to locate within the City, amplifying the clustering effects, reinforcing linkages with the rest of the world and deepening and widening the cluster. This ‘virtuous circle’ is the product of sustained growth and change over long periods of time. The consequence is that, on a measure of connectedness to other major centres, only New York matches London, as research by the Globalisation and World Cities Group (GaWC) reproduced in Table A8.9 shows. Over time, some of the less connected cities have seen their average connectedness grow; this is, however, not due to losses in connectedness of London and New York, demonstrating that this is not a zero sum game.

**Table A8.9: Globalisation and World Cities Group world city rankings<sup>28</sup>**

Ranking	Average Connectiveness	Cities
Alpha +	0.998	London New York
Alpha	0.734	Hong Kong Paris Singapore Tokyo Sydney Milan Shanghai Beijing
Alpha -	0.617	Madrid Moscow Seoul Toronto Brussels Buenos Aires Mumbai Kuala Lumpur Chicago

32. London also performs well in other key measures, including the European Cities Monitor Business Friendly Rankings (1<sup>st</sup>), and HubCulture top cities for culture (9<sup>th</sup>).<sup>29</sup>

28 Taylor, P.J. et al. 2008, Measuring the World City Network: New Results and Developments, *GaWC Research Bulletin 300.a*

29 Wakefield European Cities Monitor 2009: <http://www.cushwake.com/cwglobal/jsp/newsDetail.jsp?repId=c27300017p> and HubCulture Zeitgeist Rankings 2011: <http://www.hubculture.com/groups/hubnews/news/545/>.



ISBN 978-1-84532-867-2



9 781845 328672 >