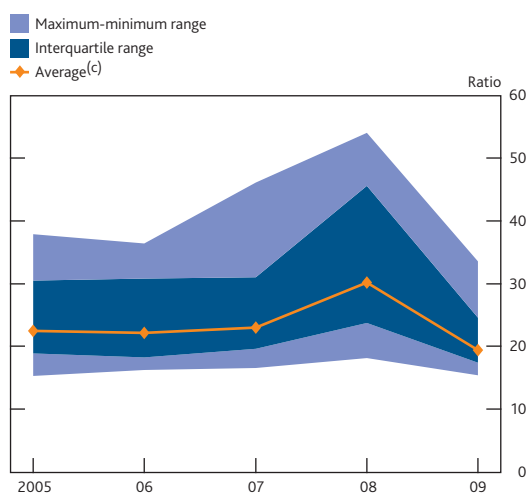


## 4 The resilience of UK banks

UK banks' resilience has continued to improve since the December 2009 Report. Leverage has fallen and the quantity and quality of liquid assets and capital has improved. But UK banks' profitability remains constrained. Loan impairments remain at elevated levels and credit quality sensitive to the economic outlook. Trading revenues recovered strongly in 2009, but may be less buoyant in the future. And the need to refinance maturing funding and to extend funding maturities remain key challenges. There is a risk that, in aggregate, banks' funding plans make optimistic assumptions about system-wide deposit growth and envisage reductions in lending that suggest tight credit conditions. Increased efforts to retain higher capital, by limiting discretionary distributions to shareholders and staff while profits are stronger, would help banks to build resilience and prepare for Basel III while sustaining lending to companies and households.

The previous two sections discussed the challenges facing the UK banks in the present fragile environment. This section discusses the longer-term challenges they face in building capital to sustain resilience and lending, while replacing and extending the term of maturing debt. Like their overseas counterparts, the major UK banks have faced a more challenging environment in recent weeks. But their success in continuing to obtain finance, albeit generally at shorter maturities, suggests that they are generally more robust than six months ago.

**Chart 4.1** Major UK banks' leverage ratio<sup>(a)(b)</sup>



Sources: Published accounts and Bank calculations.

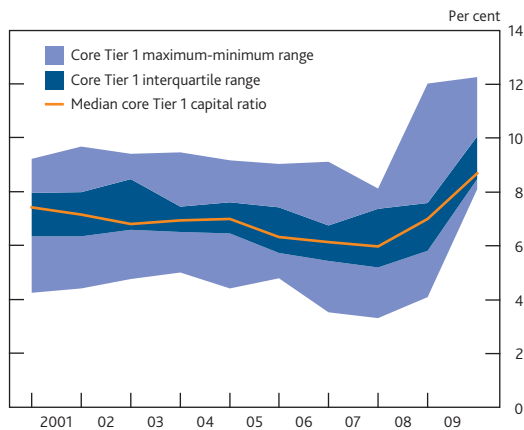
- (a) Gross leverage is calculated as total assets divided by total equity. Total reserves are used as total equity where appropriate.  
 (b) Excludes Northern Rock.  
 (c) Asset weighted.

### *Leverage continues to fall...*

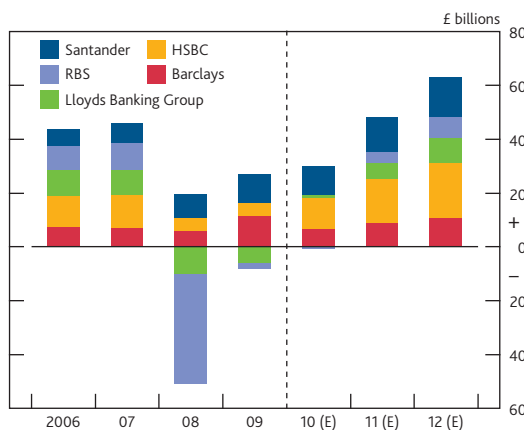
The average leverage ratio of the major UK banks<sup>(1)</sup> fell further in 2009 H2, with assets now around 19 times capital, down from 30 times at the end of 2008 (Chart 4.1). The dispersion of leverage also continued to decline, with most banks in a narrow band around 20 times capital. As noted in Section 3, this is a global phenomenon, with similarly large falls at the US and continental European LCFIs over the period.

Accounting for derivatives positions on a gross basis — which best captures the risks around the associated counterparty exposures — the reduction in UK banks' leverage has been the result of an increase in capital and a reduction in assets in roughly equal measure, with a fall in intrafinancial sector

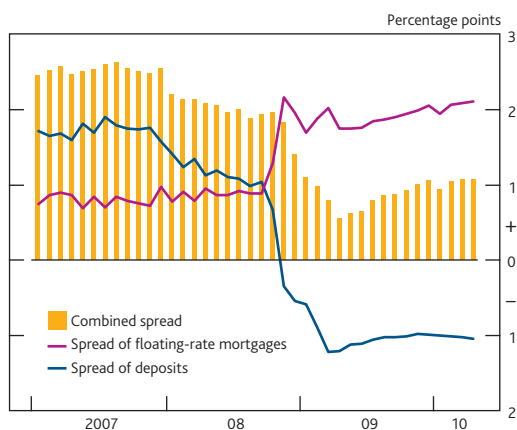
(1) Membership of the major UK banks peer group is based on the provision of customer services in the United Kingdom, regardless of the country of ownership. The following financial groups, in alphabetical order, are currently members: Banco Santander, Bank of Ireland, Barclays, Co-operative Financial Services, HSBC, Lloyds Banking Group, National Australia Bank, Nationwide, Northern Rock and RBS. The LCFIs include the world's largest banks that carry out a diverse and complex range of activities in major financial centres. The group of LCFIs is identified currently as: Bank of America, Barclays, BNP Paribas, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JPMorgan Chase & Co., Morgan Stanley, RBS, Société Générale and UBS.

**Chart 4.2** Major UK banks' core Tier 1 capital ratios

Sources: Published accounts and Bank calculations.

**Chart 4.3** Major UK banks' profits and consensus profit forecasts

Sources: 2006 to 2009 data are from published accounts. 2010 to 2012 are Bloomberg consensus forecasts.

**Chart 4.4** Major UK banks' spreads on floating-rate mortgages and deposits<sup>(a)(b)</sup>

Sources: Bank of England and Bank calculations.

- (a) Excludes Bank of Ireland. Includes Britannia and Nationwide from 2008.  
 (b) Spreads calculated as effective stock mortgage rate less monthly average of Bank Rate; and monthly average of Bank Rate less effective rate on sight (excluding non-interest bearing) and time deposits.

exposures (including derivatives) accounting for around three quarters of the latter.

#### ... as more capital is raised.

Over the course of 2009, major UK banks increased core Tier 1 ('CT1') capital by £71 billion (net of impairments and trading losses). They now hold £273 billion of core capital against unexpected losses. This has increased the sector's CT1 ratio from 6.3% to 9.2% from end-2008 to end-2009. The majority of capital issuance was raised via public and private issuance and by debt conversion. The quality of capital also improved, with the CT1 share of total capital rising from 47% to 61%. This is a strong capital platform.

Among the major UK banks, there remains a considerable range of CT1 ratios (Chart 4.2). Close to 40% of lending to UK households and corporates by the major UK banks is currently provided by banks in the bottom quartile of the distribution of CT1 capital. That suggests future lending growth is vulnerable to capital constraints at the less well-capitalised banks.

#### But impairments largely offset rising profits.

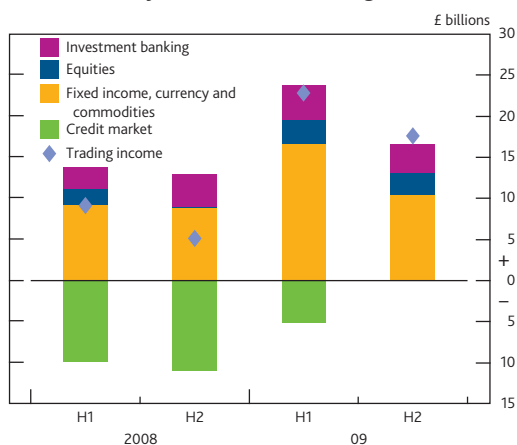
UK bank profitability recovered in 2009. The median UK bank's return on equity rose from 0.5% to 2.5%. Overall, revenues were 30% higher in 2009 than in 2008. Results were, however, heavily tiered between profitable and loss-making banks (Chart 4.3).

Profits from traditional banking activities, such as lending, were subdued. Average net interest margins remain compressed. This was particularly true for banks whose business is focused on UK lending. While spreads on new UK lending have increased, the repricing of existing loans has not yet been completed. This leaves banks with a stock of assets paying low interest rates. Competition for deposits has also pushed funding costs up significantly, so margins remain tight (Chart 4.4).

Set against that, non-interest income was significantly higher in 2009 than in 2008, driven by buoyant fixed-income, currency and commodities activity, as markets rallied. Trading revenues contributed almost £40 billion to full-year revenues — an increase of £26 billion (Chart 4.5).

Supporting the increase in revenues, write-downs on credit market instruments held in the four largest UK banks' trading books fell from £20 billion in 2008 to £9 billion in 2009. In 2009 H2, they totalled just £2 billion (Chart 4.6). Overall, the largest four UK banks' exposures to credit market instruments fell by 21% to £207 billion during 2009 (Chart 4.7). This suggests that the future threat posed by write-downs on those exposures has diminished. More broadly, non-derivative assets held at fair value reduced from seven times to five times CT1 capital during 2009. In part, this reflects the reclassification of

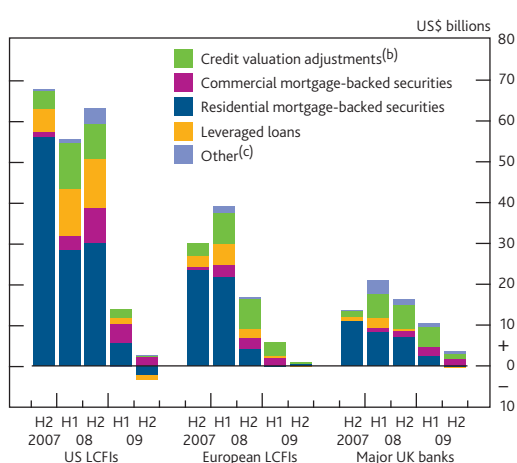
**Chart 4.5 Major UK banks<sup>(a)</sup> trading revenues**



Source: Published accounts.

(a) Chart shows data for a subset of the major UK banks peer group — Banco Santander, Barclays, HSBC and RBS.

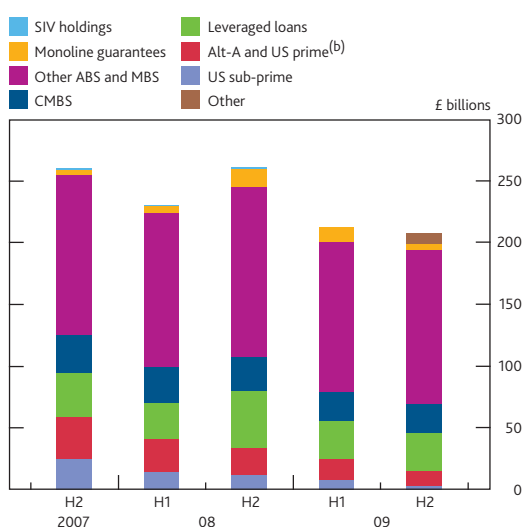
**Chart 4.6 Major UK banks' and LCFIs' write-downs<sup>(a)</sup>**



Sources: Published accounts and Bank calculations.

(a) Includes write-downs due to mark-to-market adjustments on trading book positions where details are disclosed by firms.  
 (b) On exposures to monolines and others.  
 (c) Other includes SIVs and other ABS write-downs.

**Chart 4.7 Major UK banks' net credit market exposures<sup>(a)</sup>**



Sources: Published accounts and Bank calculations.

(a) Includes banking book and trading book exposures.  
 (b) Includes private label RMBS only. RMBS issued by government-sponsored entities is included in 'Other ABS and MBS'.

over £65 billion of assets from trading to banking book between 2008 and 2009. It suggests that UK banks' capital ratios are now less vulnerable than they were, but are certainly not immune to short-term fluctuations in market prices.

Despite this, UK banks' pre-tax, pre-provision profits of £98 billion in 2009 (versus £37 billion in 2008) were largely offset by loan impairments (Chart 4.8). Impairment charges were £80 billion in 2009, up from £52 billion in 2008. This offset three quarters of pre-provision profits and reached an historic high as a proportion of net interest income. This meant that only a small share (£2.6 billion) of the increase in capital during 2009 came through profit retention.

*Assets were reduced further.*

Between 2008 and 2009 H2, major UK banks' assets fell by £1.9 trillion, to £7.4 trillion (Chart 4.9). Three quarters (£1.4 trillion) of the fall reflected a reduction in derivatives portfolios. Overall, exposures within the financial sector (derivatives exposures, loans to banks and holdings of securities) declined by £1.6 trillion. Customer lending was also reduced. UK bank lending to non-UK customers fell by £270 billion (14%) and to UK PNFCs and households by £34 billion (3%). Foreign banks' cross-border lending to the United Kingdom also fell by 11% (or US\$557 billion) between 2008 Q4 and 2009 Q4 (see Section 1). This reflected a generalised scaling back of cross-border credit provision by internationally active banks. This global retrenchment means that economies, including the United Kingdom, are highly dependent on the stability of their home institutions for the provision of credit.

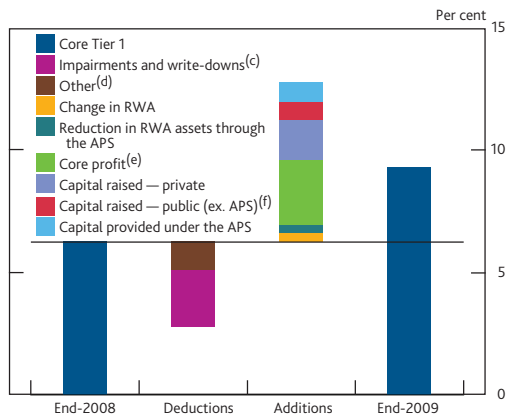
*There was a slight improvement in funding structures...*

UK banks have reduced their dependence on wholesale markets for funding. The UK banks' customer funding gap fell to £475 billion at end-2009, close to its 2005 level and a fall of over £360 billion from its peak in 2008 H2. Just 15% of customer loans are now funded through the wholesale markets, a level not seen since 2003 (Chart 4.10).

A customer funding gap is less of a concern to the extent that it is funded from long-term and stable wholesale funding sources. But there has been little improvement on this front over the past year. Banks remain heavy users of short-term funding: 60% of wholesale funding has a maturity of less than a year, 44% of less than three months (Chart 4.11). This maturity structure leaves banks vulnerable to refinancing risk driven by changes in market sentiment, as seen recently.

The major UK banks have increased their holdings of liquid assets, such as high-quality government bonds and central bank reserves, from around £175 billion to around £425 billion over the course of 2009. A significant proportion reflects the impact of Bank of England intervention. Much of the remainder was financed through the Bank's Special Liquidity

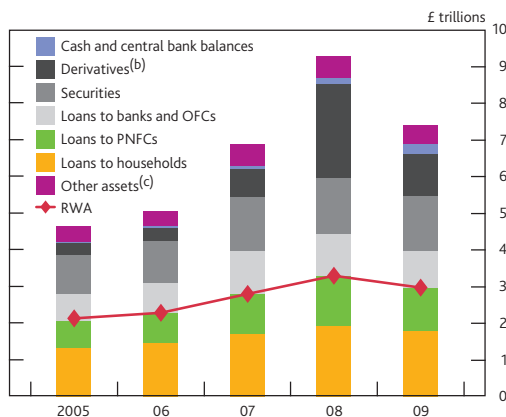
**Chart 4.8** Major UK banks' core Tier 1 capital ratios in 2009<sup>(a)(b)</sup>



Sources: Published accounts and Bank calculations.

- (a) Additions and end-2009 figure include significant completed or announced capital raisings, asset disposals and buybacks/exchanges since end-2009.  
 (b) Average core Tier 1 capital, defined as common shareholders' equity adjusted for goodwill and intangibles and regulatory reductions. Excludes contingent capital.  
 (c) Includes banking book impairments, trading book write-downs and other adjustments.  
 (d) Negative contribution to core Tier 1 reflects currency movements, dividends, taxes, and other movements in reserves.  
 (e) Based on pre-provision profit before trading book write-downs.  
 (f) Includes Lloyds Banking Groups' capital raising during the acquisition of HBOS in January 2009 and the public sector share in Lloyds' rights issue in November–December 2009.

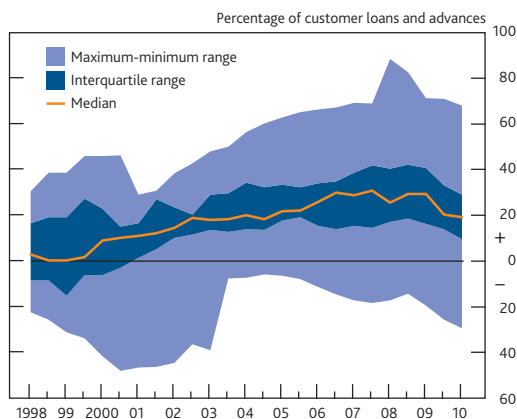
**Chart 4.9** Major UK banks' total assets<sup>(a)</sup>



Sources: Published accounts and Bank calculations.

- (a) Assets converted at year-end exchange rates.  
 (b) Derivatives are presented on a gross basis.  
 (c) Includes intangible property, investment and tax assets.

**Chart 4.10** Major UK banks' customer funding gap<sup>(a)</sup>



Sources: Dealogic, published accounts and Bank calculations.

- (a) Customer funding gap is customer loans less customer deposits, where customer refers to all non-bank borrowers and depositors.

Scheme (SLS) and HM Treasury's Credit Guarantee Scheme (CGS) and will need to be refinanced as these facilities are withdrawn.

*...to which markets initially responded favourably.*

Short-term funding markets were, until recently, relatively calm. Market intelligence suggested that unsecured funding was beginning to extend beyond the six-month horizon. The major UK banks continued to access term debt markets. Investor perceptions of an improvement in UK banks' resilience were reflected in a rise in bank equity prices (Chart 4.12) and a fall in CDS premia over the course of 2009 and the first quarter of 2010. UK banks have taken advantage of this, including through issuance of around £41 billion of senior debt and medium-term notes in 2010 to date, as well as £22 billion of covered bonds and RMBS.

More recently, however, funding conditions deteriorated significantly. As concerns over sovereign risk surfaced, UK banks' CDS spreads widened, their funding spreads over Libor increased and the maturity of their wholesale financing contracted. There was negligible issuance of senior term debt in May, although June has seen a modest recovery.

*The challenges ahead are little changed.*

Looking ahead, the challenges facing the UK banks remain much the same as those identified in the December 2009 Report. They need to build capital through issuance and retention of profits to maintain resilience, while sustaining the supply of credit to support the recovery. And they need to refinance the significant concentration of funding falling due over the coming years, while reducing reliance on, and extending the term of, their wholesale funding. There remain a number of potential headwinds to the achievement of those objectives.

*Income is constrained...*

Taken as a whole, banks' margins remain under pressure (Chart 4.4). As discussed in Section 1, competition for retail deposits has pushed up spreads over Bank Rate. Margins are likely to remain depressed as long as interest rates remain low and demand for credit constrained. The impact of low margins has been particularly pronounced on the building society sector (see Box 6).

UK banks, like their counterparts overseas, have relied heavily on non-interest income, and particularly on income derived from activities in the fixed-income markets, to support earnings. As discussed in Section 3, this may not prove sustainable, particularly if market volatility or heightened economic uncertainty reduce activity levels in financial markets.

## Box 6 The building society sector

The building society sector has assets of £314 billion. It accounts for 15% of the stock of the UK mortgage market, and 20% of the retail deposit market. Taken as a whole, the sector's resilience matters for the provision of financial services to the UK economy. It also plays a role in maintaining a competitive and diverse banking sector. Average core Tier 1 capital ratios in the sector of 15% at end-2009 provide societies with a buffer against shocks. But they have limited options for replenishing capital in the event of balance sheet stress. This box discusses challenges to the sector and highlights actions that might improve resilience.

### Structural and cyclical vulnerabilities

The capital structure of building societies is different from that of banks. As mutual organisations, societies are owned by members rather than by external shareholders. But as depositors, member shareholders benefit from depositor protection and so face little risk of loss.

Each member has one vote, regardless of how much they have invested. This dilutes the incentive for larger investors to monitor management and makes it hard for active shareholders to exert any influence. Wholesale creditors' incentive to exercise market discipline on management is also diminished because, unlike in banks, they rank above retail depositors in the capital structure.

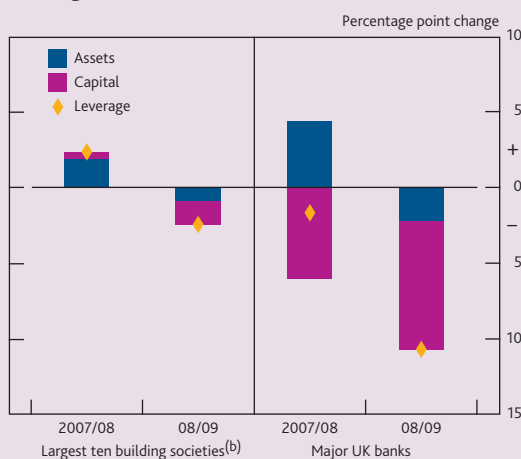
In a number of cases, the incentives created by this capital structure seem to have resulted in societies taking risks without appropriate controls being in place. For example, in the run-up to the crisis several societies expanded into risky lending activities, such as commercial property and sub-prime lending, without understanding the risks involved and holding too little capital to cope with the resulting losses.

Such behaviour was not exclusive to building societies. But societies' mutual structure means that their options for replenishing core Tier 1 capital are very limited in the event of balance sheet stress. They lack a viable core Tier 1 capital instrument: demand for equity-like capital issued by non-profit maximising firms will inevitably be limited. Work is under way within the sector to try to design an instrument. In the meantime, however, societies are reliant, to a much higher degree than banks, on retained earnings. This is an inflexible form of capital at times of stress, as it takes time to accumulate. Partly as a consequence, societies have found it harder to reduce leverage than the major UK banks (Chart A).

Cyclical challenges have put further downward pressure on building societies' earnings during the course of the crisis.

Interest income accounts for over 70% of the sector's earnings. The low interest rate environment has squeezed interest margins, an effect exacerbated, in some cases, by contractual limits on societies' ability to raise interest rates on existing loans. This has eaten into building societies' profitability (Chart B).

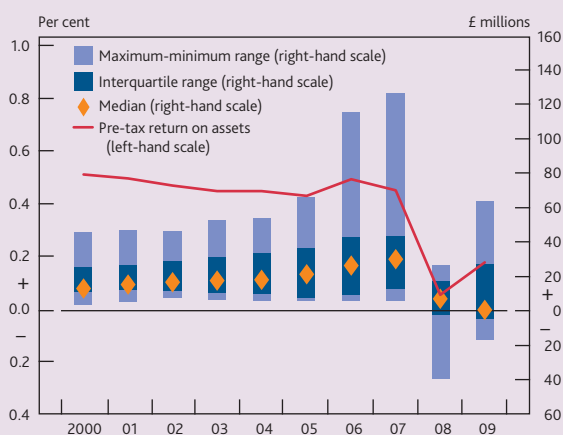
Chart A Changes in UK bank and building society leverage<sup>(a)</sup>



Sources: Published accounts and Bank calculations.

- (a) See footnotes (a) and (b) in Chart 3.17.
- (b) Largest ten building societies as at April 2010 excluding Nationwide, measured by balance sheet size.

Chart B Largest ten building societies<sup>(a)</sup> pre-tax profits



Sources: KPMG Building Societies Database, published accounts and Bank calculations.

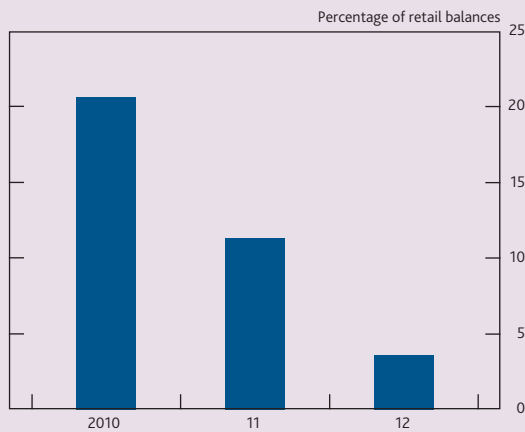
- (a) Largest ten building societies as at April 2010 excluding Nationwide, measured by balance sheet size.

Societies depend less heavily on wholesale markets for funding than banks, and have further reduced their reliance in recent months. Nevertheless, in 2009, rising impairments and credit rating downgrades caused creditors to reassess building society risk, cutting credit lines and/or demanding higher rates of return. This raised the cost of wholesale funding for building societies.

Pressures on margins are likely to persist so long as interest rates remain low. In addition, like the banks, the sector faces a

refinancing challenge (**Chart C**). In 2010 the sector (excluding Nationwide) needs to refinance £22 billion of fixed-rate bonds, around 16% of total liabilities. Banks are competing intensively for retail deposits so it is possible that the building society sector will either face further pressure on profits or need to reduce balance sheet size, tightening credit conditions. Most societies have already cut back on lending sharply: net lending flows by building societies to households fell by 61% in 2008 and were negative throughout 2009.

**Chart C** Fixed-rate retail bond maturities<sup>(a)(b)</sup>



Sources: FSA and Bank calculations.

- (a) Excludes Nationwide.  
 (b) Percentage figures represent cumulative refinancing requirements each year as a percentage of end-2009 retail balances.

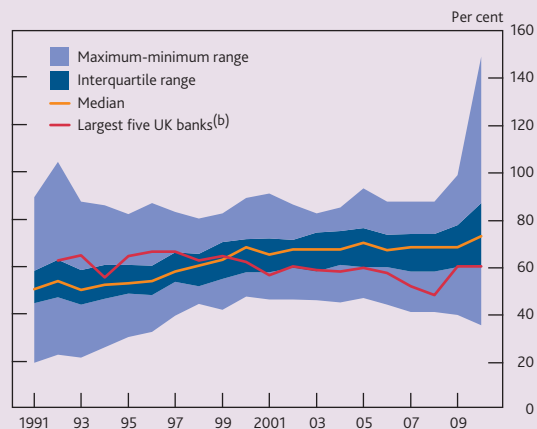
### What might improve the resilience of the sector?

There are a number of measures that societies could take to improve their resilience and provision of financial services to the UK economy.

1. **Capital retention.** The sector needs to continue to work on the design of other viable core Tier 1 capital instruments. In their absence societies will need to continue to build up retained earnings. Given the rigidity of their capital structure and the incentives created by their governance structure, societies should be required to hold higher levels of capital and/or face tighter limits on the range of activities they can undertake than banks.
2. **Strengthened governance.** Eliminating wholesale creditors' preferential status, by implementing the relevant provisions of the Building Societies (Funding) and Mutual Societies (Transfers) Act 2007, could help to reinforce market discipline on societies' management. The Walker Review identified a number of other lessons which could be applied in tackling shortcomings in building society governance.<sup>(1)</sup> The previous Government's *Pre-Budget Report 2009* proposed a new governance code for building societies and other financial mutuals.

3. **Use of pooled securitisation for funding.** One means by which societies could, in principle, diversify funding sources is through further RMBS or covered bond issuance. For smaller societies, however, this may require collective action through the use of pooled funding vehicles to achieve the scale required for marketable issuance. Any such vehicle would need to be bankruptcy remote to prevent contagion in the event of default.
4. **Cost efficiency.** The sector has traditionally had a high cost base (**Chart D**), partly reflecting high customer service but in some cases weaker cost control. In 2009, the sector's average cost to income ratio was 73% compared with the average for the larger UK banks of 61%. The stronger societies have tended to be those that maintain cost-income ratios below 50%. There may be scope for societies to contain costs through increased co-operation, for example by sharing back-office services.<sup>(2)</sup>

**Chart D** Building societies' cost to income ratios<sup>(a)</sup>



Sources: Capital IQ, KPMG Building Societies Database, published accounts and Bank calculations.

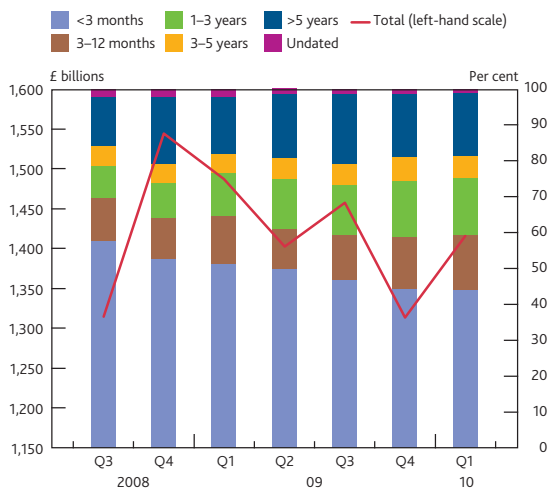
- (a) Non-interest expense over revenues.  
 (b) As measured by total assets at 2009 H2. Chart shows data for a subset of the major UK banks peer group — Barclays, HSBC, Lloyds Banking Group, RBS and Santander.

5. **Consolidation.** This offers another means of achieving lower costs through economies of scale. In 1990, there were 101 building societies. This number had fallen to 67 by 2000 and there are now just 50. In the long term, it is possible the industry could coalesce around a small number of stronger, larger societies. But in the near term cyclical pressures and the fact that most large societies have recently been involved in mergers are likely to limit the scope for further consolidation somewhat.

(1) Walker, D (2009), *A review of corporate governance in UK banks and other financial industry entities*.

(2) Precedents for co-operation exist with Mutual One, Newcastle Intermediary Services and Yorkshire Key Services.

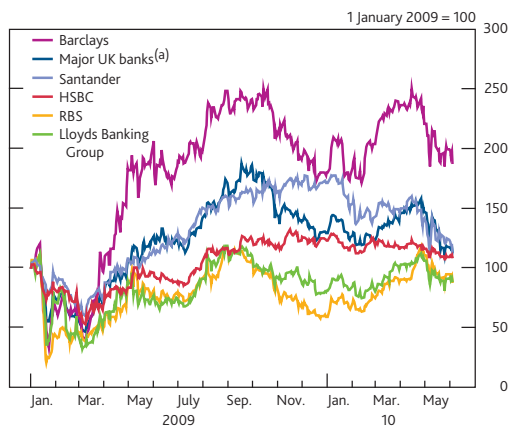
**Chart 4.11** Term structure of major UK banks' wholesale funding<sup>(a)</sup>



Sources: FSA regulatory returns and Bank calculations.

(a) Chart shows data for a subset of the major UK banks peer group — Banco Santander (Santander UK only), Barclays, HSBC, Lloyds Banking Group, National Australia Bank (Clydesdale only) and RBS. Includes bank deposits, OFC deposits, debt securities and subordinated liabilities. Excludes repos.

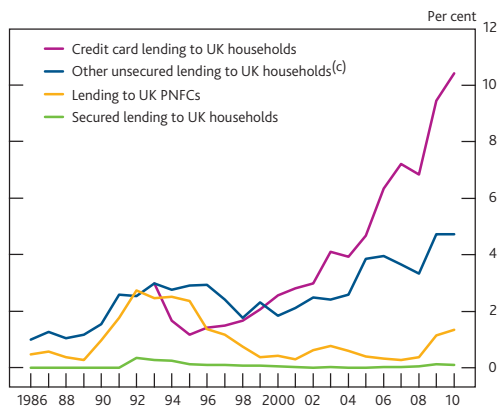
**Chart 4.12** Major UK banks' equity prices



Sources: Bloomberg, Thomson Reuters Datastream and Bank calculations.

(a) Series represents an average of the entire major UK banks peer group.

**Chart 4.13** UK banks' and building societies' annual write-off rates<sup>(a)(b)</sup>



Sources: Bank of England and Bank calculations.

(a) Building societies are included from 2008 onwards.  
 (b) Write-offs of unsecured lending to UK households and lending to UK PNFCs series were estimated from 1986–92, and for secured lending to UK households from 1992–96. See Cattermole, A (2004), 'UK banks' write-offs of bad debt', Bank of England Monetary and Financial Statistics.  
 (c) Prior to 1992, all write-offs to individuals were allocated to 'other unsecured lending'.

*...and impairments remain a headwind to profitability.*

Non-performing loans (NPLs) amount to two thirds of banks' CT1 capital. Write-off rates are high and continue to rise (Chart 4.13). There is substantial tiering across institutions: the range in NPLs between the strongest and weakest bank is around 140 percentage points of CT1 capital. At an aggregate level, UK banks' coverage ratio — provisions relative to NPLs — fell from 60% in 2008 to 54% in 2009. The December 2009 Report highlighted how UK banks' coverage ratios are systematically lower than their continental European or US counterparts. Most banks believe that the level of impairments has peaked, but that it will remain at around the current high level for at least the remainder of 2010. Impaired assets are likely to continue to act as a brake on profitability (Chart 4.14).

*Although banks are well placed to absorb further losses...*

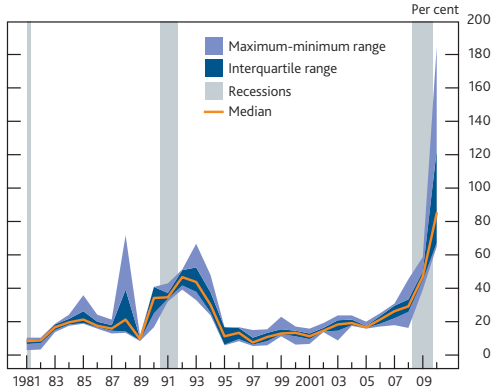
Impairments and write-downs seem unlikely, of themselves, to threaten major UK banks' solvency. Ignoring future profits (on the upside) and the impact of new lending and impairments (on the downside), UK banks currently hold enough capital to be able to sustain over £150 billion of further losses, while remaining above the FSA's current 4% CT1 minimum. That compares with the £175 billion of banking book provisions and trading book write-downs over the crisis to date. Stress tests undertaken in 2008–09 subjected UK banks to a scenario with a severe and prolonged recession, high unemployment rates, and substantial house and commercial property price falls.<sup>(1)</sup> This provides some assurance that UK banks should be adequately capitalised against plausible downside risks in the current environment, although not necessarily against a conflagration of risk associated with a collapse of confidence in sovereign debt solvency around the world. More recently, the Committee of European Banking Supervisors has undertaken an EU wide macroeconomic stress-testing exercise with major EU banks. The results of this exercise will be released in July.

*...replacing maturing funding remains a substantial challenge.*

The December 2009 Report highlighted the refinancing challenge the major UK banks face over coming years. They are estimated to have around £480 billion of unsecured senior debt, subordinated debt, covered bonds and securitisations maturing or callable over the period to end 2012 (Chart 4.15). The withdrawal of extraordinary public support means that over the same period £165 billion of high-quality collateral supplied under the SLS will be repaid.<sup>(2)</sup> All of the £120 billion in remaining guarantees issued under the CGS will also expire, but banks have the option to roll over up to one third of their

(1) The scenario featured a peak to trough fall in GDP of 6.9%, a rise in unemployment to a peak of 12.5%, a peak to trough fall in residential property prices of 50%, and in commercial property prices of 60%. See FSA, *Financial Risk Outlook 2010*, pages 22–24.  
 (2) See Bank of England *Annual Report*, page 17.

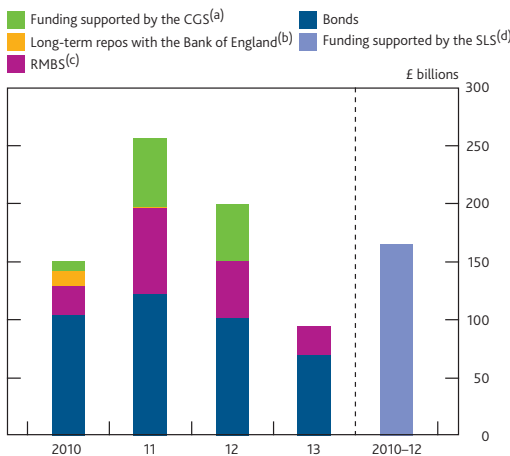
**Chart 4.14** Major UK banks' impairment charges as a percentage of net interest income<sup>(a)</sup>



Sources: ONS, published accounts and Bank calculations.

(a) Chart shows data for a subset of the major UK banks peer group — Barclays, HSBC (from 1993), Lloyds TSB (until 2008), Lloyds Banking Group (2009), Midland (until 1992), Natwest (until 1999) and RBS (from 2000).

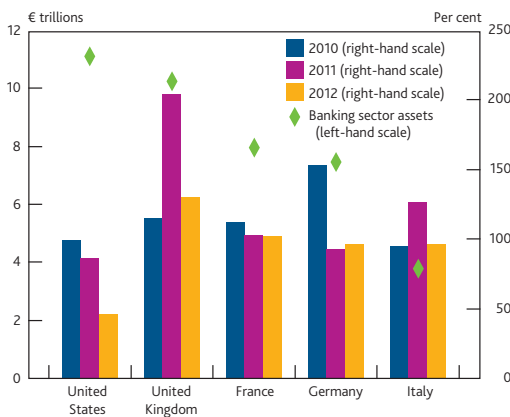
**Chart 4.15** Major UK banks' maturing funding



Sources: Bank of England, Bloomberg, Dealogic, Deutsche Bank, DMO and Bank calculations.

(a) Based on publicly known issuance for the major UK banks from the DMO's list of liabilities guaranteed under the scheme.  
 (b) Allocation of long-term repos across all counterparties accessing the scheme.  
 (c) Shows the date at which markets expect the residential mortgage-backed securities to be called. Excludes Britannia, Co-operative Financial Services and HSBC.  
 (d) Shows the total SLS drawings for all 32 counterparties as per the Bank of England's Annual Report from 2 June 2010.

**Chart 4.16** Banking system refinancing requirements<sup>(a)</sup>



Sources: Bank of England, Dealogic, ECB, FDIC, Fitch, SoFFin, UK DMO and Bank calculations.

(a) Calculated as a percentage of average issuance between 2005 and 2007. Only senior unsecured debt, subordinated debt, covered bonds, RMBS (public and retained) and official sector support (government-guaranteed debt issuance and asset swap facilities) have been included in the calculations. RMBS issued in the United States and EU have been assumed to mature, on average, around four and five years respectively, following origination. Only issuance to end-2009 is included in calculations.

initial limit of CGS drawings (as fixed at the inception of the scheme) until April 2014.<sup>(1)</sup>

This means that the major UK banks will need to refinance or replace around £750 billion to £800 billion of term funding and liquid assets by end-2012.<sup>(2)</sup> On a straight-line basis, that would imply over £25 billion would need to be raised every month for the next two and a half years. This is significantly ahead of the £12 billion average monthly public issuance so far this year, or the monthly run-rate between 2001 and 2007 (around £15 billion).

UK banks are not alone in facing a significant refinancing challenge. Global banks<sup>(3)</sup> are estimated to have around US\$5 trillion of medium to long-term funding maturing over the next three years, with the Italian, French and German banking systems facing large maturities relative to historic issuance (Chart 4.16). Issuance this year has been relatively lower in the United States, with banks issuing US\$230 billion (61% of the required run-rate) in the first five months of 2010, than in the euro area where banks have issued US\$133 billion (71% of the required run-rate) over the same period. At over US\$363 billion, total issuance by US and euro-area banks dwarfs UK issuance (of around \$60 billion), underlining the scale of competition for funds in global markets that banks face.

*The banks are developing strategies for addressing this challenge.*

The UK authorities are working with the UK banks to assess the individual and collective credibility of their strategies for meeting the refinancing challenge. And internationally they have been actively encouraging the FSB and Basel authorities to co-ordinate exchanges of information between countries.

There is a risk that UK banks collectively assume strong growth in retail deposits relative to lending growth to meeting funding needs. That would rely on a higher savings ratio generating increased deposits, whereas past experience suggests that growth in lending is the main driver of higher deposits. Even when the savings ratio has risen, deposit growth has rarely exceeded loan growth. For example, following the early 1990s recession, the increase in household deposits was smaller than the increase in household loans, despite the savings ratio averaging 11% for three years (Chart 4.17).

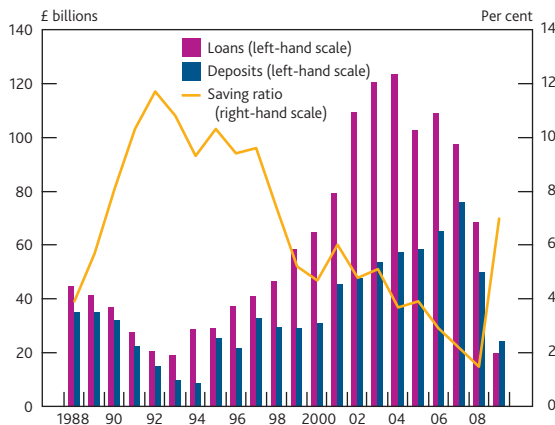
Moreover, households and companies have a choice over where to invest their savings. Recent data show that competition for retail deposits is fierce, not only among banks but from alternative instruments such as mutual funds, which

(1) See Debt Management Office market notice 'European Commission State Aid Approval for Extension of the Drawdown Window and Rules Amendments for the UK Government's 2008 Credit Guarantee Scheme', 17 December 2009.

(2) This excludes privately issued debt.

(3) Figures here are for the US, UK, German, French and Italian banks.

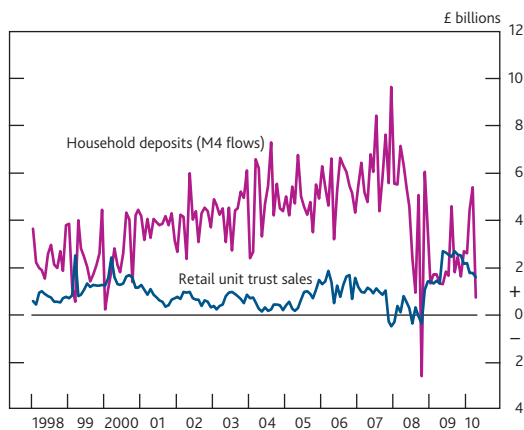
**Chart 4.17 UK historical saving ratio<sup>(a)</sup>**



Sources: Bank of England, ONS and Bank calculations.

(a) Chart shows annual household sector sterling deposits with UK-resident banks, and sterling loans to the household sector from UK banks.

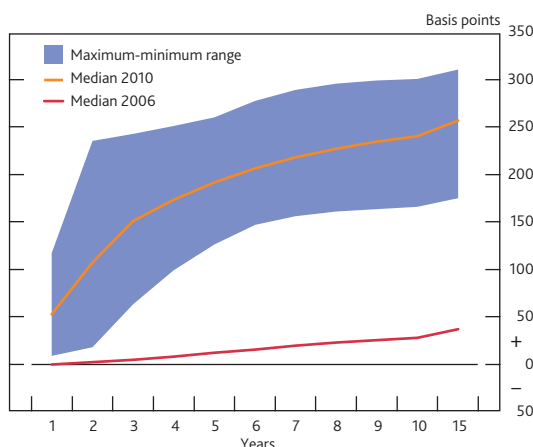
**Chart 4.18 Retail flows to UK unit trusts<sup>(a)</sup>**



Source: Bank of England.

(a) Data are seasonally adjusted.

**Chart 4.19 Spread curve for senior debt of the six largest UK banks<sup>(a)(b)(c)</sup>**



Sources: British Bankers' Association data obtained from Bloomberg, UBS Delta and Bank calculations.

(a) Spreads to maturity-matched swap rates.  
 (b) Six largest banks as at end-2009: Barclays, HSBC, Lloyds Banking Group, Nationwide, RBS and Banco Santander.  
 (c) One-year spread calculated as the average between bank specific six-month Libor quotes minus six-month Libor and two-year debt spreads. Nationwide was assumed to obtain six-month funding at Libor.

have seen strong inflows in 2010 (Chart 4.18). Aggregate funding plans are also predicated on sizable asset disposals which rest on the assumption that these assets could be sold outside of the UK banking sector, to foreign banks or non-banks, if they are to reduce the UK banks' funding burden.

*The impact on banks' margins is likely to be material...*

If, in aggregate, banks' assumptions about retail deposit growth and asset disposals were to prove optimistic, larger amounts of wholesale funding would be needed, potentially at a higher cost. Term funds are far costlier, relative to short-term funding, than was the case prior to the crisis (Chart 4.19). Those costs are likely to mount the longer banks are perceived to be taking to develop and implement credible funding strategies. This underlines the importance of prompt and determined action by banks to term out their funding. The alternative of banks relying increasingly on short-term wholesale markets for funding is undesirable. It would perpetuate the structural fragilities in funding profiles that have caused disruption over the past three years.

*...and issuance plans are sensitive to shocks.*

To meet their refinancing challenge, banks will need to maintain a steady flow of issuance of term funding. In practice the pattern of issuance in 2010 has been lumpy. January saw strong public issuance of around £25 billion of unsecured, secured and securitised term debt by the major UK banks. Issuance was also strong in March at around £20 billion. But total public issuance was around £18 billion for February, April and May combined. The lack of issuance in May largely reflected the emergence of concerns over euro-area sovereign risk. This illustrated the vulnerability of banks' issuance plans to disruption by wider events and the importance of banks taking a far-sighted and strategic approach to treasury management.

Any broadening of sovereign concerns to non euro-area economies could further affect international banks' funding costs. Past correlations suggest that the cost of bank debt rises by around 80 basis points for every 100 basis points rise in government bond yields. And any fall in banks' debt ratings, for example as a consequence of a sovereign downgrade, may increase banks' debt costs by around 30 basis points for every notch lost, judging from past relationships.

*UK banks remain reliant on dollar funding...*

As discussed in Section 3, recent events also reinforced concerns over global banks' reliance on dollar funding. These concerns were reduced by the reintroduction of swap lines with the Federal Reserve which, in the event, have not been intensively used. But large UK banks — like their counterparts overseas — remain vulnerable to loss of access to dollar funding markets. Around 40% of UK banks' international claims are dollar denominated. In aggregate, those assets are fully funded by dollar liabilities. But some of those liabilities —

such as the US\$80 billion (£50 billion) of deposits and other instruments held by the top ten prime US money market mutual funds (MMMFs) — have proved to be unstable at times of financial market stress. Recent changes to MMMF regulation, noted in Section 3, could reduce the maturity of deposits and other investments they provide to banks. That would tend to heighten fragilities in dollar funding of the international banking system.

*...and planned changes in capital regulation remain a challenge...*

On top of funding challenges, banks will need to hold materially more high-quality capital in future due to the effects of tighter regulation. Changes to the regulatory framework for market risk agreed by the Basel Committee on Banking Supervision (BCBS) in July 2009 will require UK banks to hold more capital against trading activities, particularly securitisations. All the elements of this trading book package will need to be implemented by 31 December 2011.

*...that an extended transition period would help.*

Further improvements to capital and liquidity standards are planned by the BCBS as part of a package of reforms known as Basel III. The period over which these new requirements will be introduced has yet to be agreed. Section 5 discusses work under way in more detail. It is unlikely that all the major UK banks will be able to acquire the capital needed through retention of profits alone, other than over an extended transition period. The December 2009 *Report* urged banks to add to capital, both through issuance and by reducing discretionary distributions to staff and shareholders, to ease the transition to higher regulatory standards.

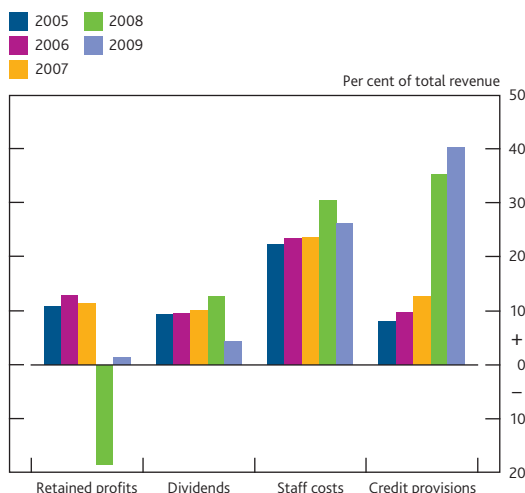
*Discretionary distributions are little changed...*

Since the December 2009 *Report*, UK banks have made some progress towards raising capital through increased retention of income. Excluding loss-making banks, the dividend payout ratio of UK banks was 39% in 2009, compared with an average of 50% between 2005 and 2008. This allowed profitable banks to retain an extra £2 billion of earnings. The average staff cost to revenue ('compensation') ratio was 26% in 2009 — down from 30% in 2008 (Chart 4.20). This was driven by higher revenue rather than reduced costs, with costs rising by 14% to £52 billion. Between 2005 and 2007, the average compensation ratio was only 23%.

*...and should be contained as maintaining lending remains important for banks' risks.*

The December 2009 *Report* also emphasised the importance of an adequate supply of credit to the UK economy. Other things being equal, stronger lending should support recovery, bolstering banks' balance sheets and improving access to capital and funding. With unleveraged investors withdrawing risk capital, the need for supportive lending by the banking sector has, if anything, increased since the December *Report*.

Chart 4.20 Major UK banks' use of total revenue<sup>(a)</sup>



Source: Published accounts.

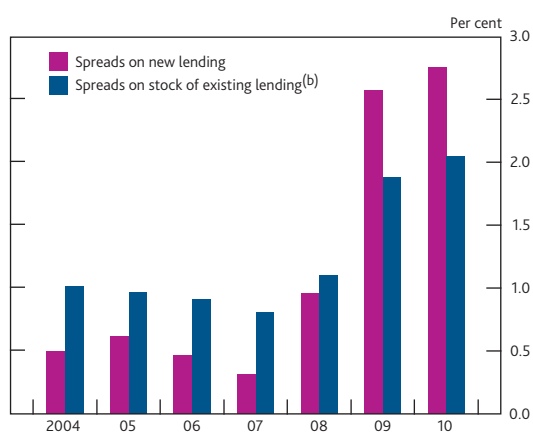
(a) Retained profits are calculated as profit attributable to group minus ordinary dividends.

**Table 4.A** Banks' CDS premia in 2010<sup>(a)</sup>

	Current level	Change in 2010	Percentage change in 2010
Germany	144	43	43
United States	157	57	56
Italy	182	103	130
United Kingdom	183	82	81
France	202	95	88
Spain	359	190	112
Ireland	397	77	24
Portugal	497	407	453
Greece	582	299	106

Sources: Thomson Reuters Datastream and Bank calculations.

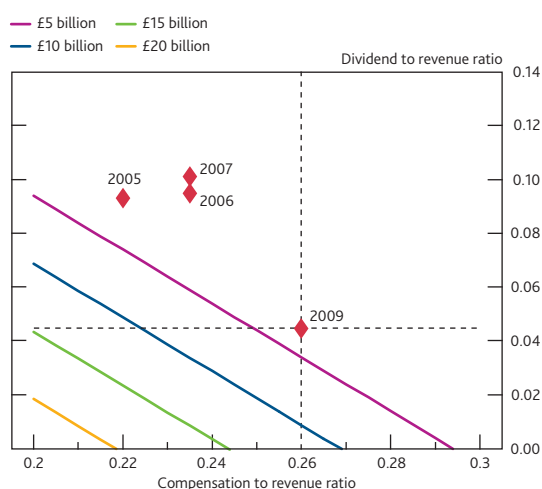
(a) Average senior five-year CDS premia of banks with assets exceeding US\$100 billion, in basis points.

**Chart 4.21** Spreads on floating-rate mortgage lending by the major UK banks<sup>(a)</sup>

Sources: Bank of England and Bank calculations.

(a) Excludes Bank of Ireland. Includes Britannia and Nationwide from 2008.

(b) Spreads calculated as the average of the monthly observations of the effective mortgage rate less Bank Rate. 2010 data are to end-April.

**Chart 4.22** Capital accumulation achievable through variations in compensation and dividend expense<sup>(a)(b)</sup>

Sources: Published accounts and Bank calculations.

(a) Lines indicate staff compensation and dividend ratios that would generate various levels of retained capital, and are based on major UK banks' 2009 results. Diamonds indicate compensation to revenue and dividend to revenue ratios for the major UK banks in various years. Diamonds for 2005–08 are not indicative of capital retained in 2005–08, as results in these years differ from the 2009 results used to calibrate the lines.

(b) Compensation to revenue and dividend to revenue ratios were high in 2008, partly due to lower revenue in that year. Though the 2008 ratios are outside the limits of this chart, they are presented in **Chart 4.20**.

While future financing and regulatory challenges exist, the UK banks are well capitalised by recent historical standards and relative to plausible stresses short of a conflagration. Significantly, UK banks have not been singled out during recent turbulence as potential sources of weakness (**Table 4.A**). This suggests that progress in bolstering their capital position is recognised by market participants.

But despite appearing profitable (**Chart 4.21**), lending has remained weak. There is a risk that banks' funding strategies could constrain lending to the household and, in particular, the corporate sector in 2010 and 2011. The effect might well sustain tight credit conditions and temper economic growth. That could imply lower income and higher levels of impairments — and so lower levels of capital — for the UK banking sector.

There remains scope for banks to build capital while sustaining lending to the real economy. This would require banks to increase their efforts to contain discretionary distributions to shareholders and staff. The benefits from more concerted action are potentially considerable. **Chart 4.22** illustrates the capital which could be created through different combinations of dividend and compensation ratios, assuming current revenue levels for the largest UK banks. Based on 2009 results, it suggests that constraining compensation ratios to pre-crisis levels, while limiting dividend payouts to 2009 levels, could enable the major UK banks to generate around £10 billion of additional capital over 2010. There is considerable scope to increase capital further by constraining dividends below 2009 levels (or paying them in equity).

Based on average risk weights on domestic lending derived from 2009 balance sheets, if the UK banks were to use that £10 billion of additional capital, then around £50 billion of new UK lending could be sustained. This would help offset any reduction in lending that could otherwise be necessary if banks are to meet the funding challenges set out above.