

**Financial Risk Outlook
2009**



Promoting efficient, orderly and fair markets





Helping retail consumers achieve a fair deal

Improving our business capability and effectiveness

**Financial Services Authority
Financial Risk Outlook
2009**

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Contents

	Foreword	1
	Section A Financial and economic crisis	5
	Origins of the current crisis	5
	Stages and nature of the crisis	12
	Regulatory issues and changing context for some firms	15
	Key messages for firms	20
	Section B Economic outlook	23
	Central economic scenario	23
	Deleveraging and deflationary effects	26
	Alternative scenarios	37
	Key messages for firms	38
	Section C Outlook for financial sectors and consumers	43
	Banks	43
	Building societies	52
	Life insurance	53
	General insurance	57
	Retail intermediaries	59
	Asset management	63
	Consumers	68
	Capital markets	71
	Accounting and auditing	75
	Financial crime	77
	Index of charts, tables and figures	80
	Glossary	81



Foreword

Over the last 18 months, and with increasing intensity over the last 6, the global financial system has suffered its greatest crisis in more than 70 years. At the core of that crisis was a collapse of confidence in some major banks in several countries. Intervention by the authorities in a wide range of countries – recapitalisation, funding guarantees and central bank liquidity – prevented a collapse of the banking system, successfully protected retail depositors, and avoided the failure of systemically important commercial banks. But, the ability of banks to perform their essential function of lending to the real economy is still impaired and deleveraging of banks, other financial institutions and households is exerting deflationary pressure on the real economy, making the scale and length of the economic downturn very difficult to predict.

This context has major implications for the work of the FSA, and the structure of this year's *Financial Risk Outlook* has been shaped to reflect the changed context. Macroeconomic and financial system risks have become more closely interconnected than in previous years. The future health of the financial system will be critically influenced by the pattern of economic growth or contraction, and therefore the severity of credit losses arising in the real economy. But, to a far greater extent than in any other recent economic downturns, real economic developments are in turn likely to be affected by the ability of the banking system to maintain lending. The *Financial Risk Outlook* structure of previous years, with a section on the economic outlook and then a section on implications for financial market developments does not fit this reality. In addition, it is important to realise that the interrelated health of the financial system and real economy will continue to be significantly influenced by the special interventions that the authorities have taken, and will take again if necessary; measures which the FSA, as one of the Tripartite Authorities, has a role in shaping. The scenarios which we present this year are therefore ones which the Tripartite Authorities are determined to influence, if necessary by exceptional measures.

The scale of the financial crisis has also created uncertainty over the future shape of the financial system and in particular the banking system, which the FSA in the future will be regulating. It also means we need to review regulation within the UK and in association with our international counterparts, to assess whether major changes are required in regulatory policies which are used to contain financial risks.

This review of regulation will focus on issues relating to banks and bank-like institutions. The crisis has not suggested the need for a fundamental review of our approach to, for instance, the regulation of insurance companies or retail intermediaries. Clearly the financial crisis and economic outlook have implications for all categories of firms and these are highlighted. In addition, there are many risks facing consumers, firms and the FSA, which have not changed dramatically but on which we need to maintain our focus. Financial crime and market abuse remain crucial concerns. Poor conduct of business remains a continuing issue and in some cases its impact on individual consumers will be exacerbated by the worsening economic environment.

To reflect these considerations this year's *Financial Risk Outlook* has a different structure from that of previous years:

- *Section A: Financial and economic crisis* sets out an integrated view of the macroeconomic, financial and regulatory developments which lie behind the crisis; highlighting the interlinkages and self-reinforcing feedback loops between the financial markets and the real economy. We also briefly consider the weaknesses in regulation revealed and the policy issues which will be discussed in the forthcoming *Turner Review*.
- *Section B: Economic outlook* describes the *Central economic scenario*, focusing in particular on how deleveraging is likely to affect firms, markets, consumers and the FSA. This central scenario is not a forecast, but simply reflects the average 'consensus' of major published forecasts. As in previous years, the *Financial Risk Outlook* also presents three *Alternative scenarios*. These are presented in order to encourage firms to think about the range of possible economic outcomes in which they may have to operate. These are scenarios which the Tripartite Authorities are determined to influence, if necessary, by taking exceptional measures.
- Finally, *Section C: Outlook for financial sectors and consumers* identifies the risks and implications of the financial and economic environment for firms, market participants and consumers. We also explore risks which we recognise to be of continuing importance even as the financial system faces major changes.

The *Financial Risk Outlook* plays an important role in how we prioritise our activities. Our *Business Plan*, which we publish later this week, sets out how we plan to respond. To help firms consider how they should respond to the issues raised we have included *Key messages for firms* at the end of each section. More detailed, sector-specific and consumer messages are provided in *Section C*.



Financial and economic crisis

The origins of the greatest post-war financial crisis can be traced back to a combination of macroeconomic factors and financial market developments. The resulting exuberance in pricing credit and volatility risk developed into a self-reinforcing cycle, exacerbated by a failure to develop appropriate macro-prudential policy responses. As the factors behind this exuberance reversed, an accelerating negative spiral emerged. While UK and international government interventions have halted an extreme collapse in market confidence, the global banking system is still in a weakened state, and the wider financial system is under significant strain. Regulatory policy reform is needed to reduce the probability and severity of future financial crises.

Macroeconomic imbalances and financial market developments were at the core of the crisis

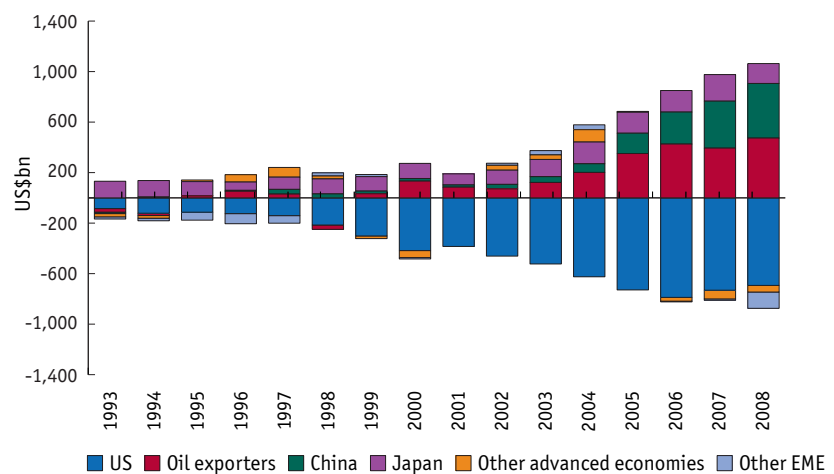
Origins of the current crisis

Although the origins of the current financial crisis are likely to continue to be the subject of much research and debate in the coming years, some key factors are already clear. At the core of the crisis was an interplay between macroeconomic imbalances, which have become particularly prevalent over the last 10 to 15 years, and financial market developments which have been underway for 30 years but intensified over the last decade under the influence of these imbalances. A failure to develop appropriate macro-prudential policy responses exacerbated these trends.

Macroeconomic imbalances

One key contributor to the current crisis has been the growth of significant global macroeconomic imbalances over the last decade. Large current account surpluses accumulated in many Asian and oil-exporting countries, while fiscal and current account deficits grew in the US, the UK, and in parts of the Euro area.

Chart A1: Global current account balances



Source: Datastream, FSA calculations

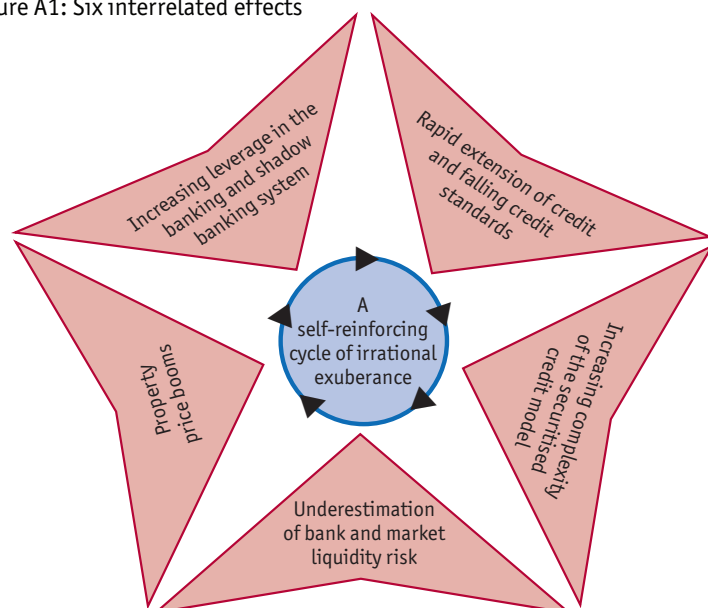
Global liquidity increased and real risk-free interest rates fell

Following the Asian financial crisis of 1997 to 1998, previous excesses in investment and the extension of credit in Asian countries were reversed and debt restructured. Helped by weakened currencies, Asian exports became highly competitive, resulting in significant current account surpluses and an increasing savings-investment gap in the emerging economies. As countries were keen to avoid another currency crisis, they either fixed or actively managed their exchange rates. Consequently, these countries accumulated significant foreign exchange reserves, which were invested predominantly in US government securities. This in turn led to a marked increase in global liquidity and a consequent reduction in real risk-free interest rates.

Six interrelated effects

Very low yields, both real and nominal, on risk-free government securities created the macroeconomic background which, combined with financial innovation, produced six interrelated effects that ultimately proved unsustainable (see Figure A1). These trends reversed in 2007 and 2008, resulting in the greatest financial crisis of the post-war era.

Figure A1: Six interrelated effects



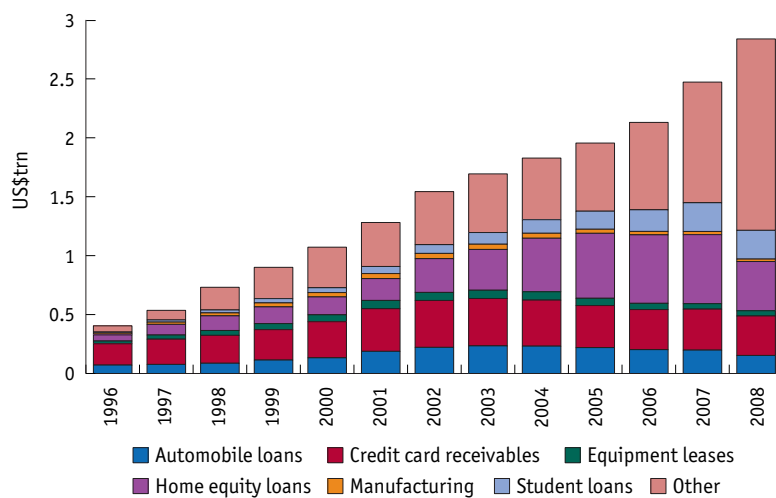
Source: FSA

Intense search for yield led to rapid growth in credit securities

1. Increasing complexity of the securitised credit model

Lower risk-free interest rates led to an intense search for higher yield. Desire grew among fixed income investors, such as pension funds and insurance companies, to increase the yield on their investments, while keeping risk at apparently low levels. This demand was met by an increasingly complex securitised credit model of credit intermediation. Although securitised forms of credit intermediation had been growing since the 1970s, especially in the US, the growth in the total value of credit securities exploded in the late 1990s in both the US and the UK. By the end of 2007, the total amount of outstanding credit securities in the UK had grown to £180 billion, nine times as much as at the end of 2000 (*Chart A2 and A3*).

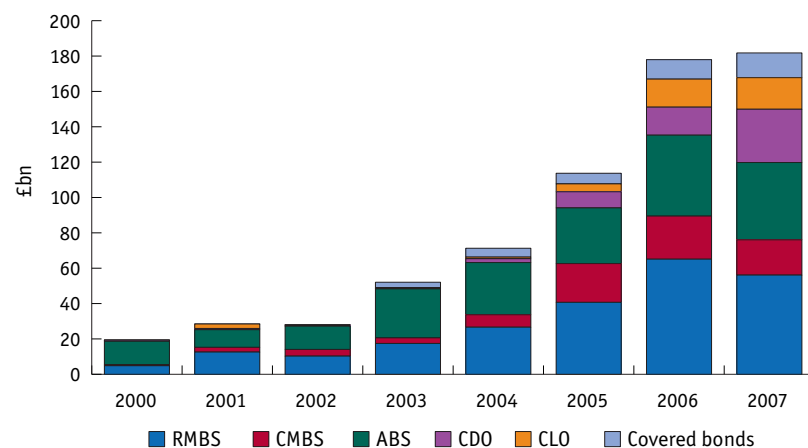
Chart A2: ABS volumes outstanding (US)



Source: SIFMA

Note: 2008 figures are for the period up until the third quarter.

Chart A3: Securitisation issuance trends in the UK



Source: Oliver Wyman

Rapid growth in the complexity of financial products accompanied this growth in value. The emergence of the credit default swap (CDS) market made it possible for intermediaries and investors to hedge risk and to create synthetic instruments. Considerable growth occurred in structured credit products, such as collateralised debt obligations (CDOs), which took credits

of a particular quality (such as BBB) and created several tiers of instruments ranging from those of apparently much higher quality (AAA) through to those apparently loss-absorbing, equity-like features.

These financial innovations aimed to deliver investors combinations of risk and return which were more attractive than returns available from direct investment in the underlying instruments. They depended on complicated mathematical models for the measurement and management of risk, and on ratings provided by credit rating agencies to communicate risk characteristics to investors. Both internal models of risk and external credit ratings proved to be inadequate in identifying the risks which crystallised in 2007 and 2008.

Rapid development of securitisation and wholesale funding...

2. Rapid extension of credit and falling credit standards

Between 2000 and 2007, credit extension in the US and the UK grew rapidly, especially in the form of mortgage lending to the household sector. Growth also occurred in some subsets of the corporate debt market, such as leveraged buyouts. This credit extension was partly driven by the rapid development of securitisation, with an increasing proportion of UK mortgage credit packaged and sold as residential mortgage-backed securities (RMBS), thus not appearing on the originator bank's balance sheet. In addition, lending on balance sheet grew rapidly, as banks competed for market share, often funding their rapid growth with wholesale funding.

...led to increased lending and falling credit standards...

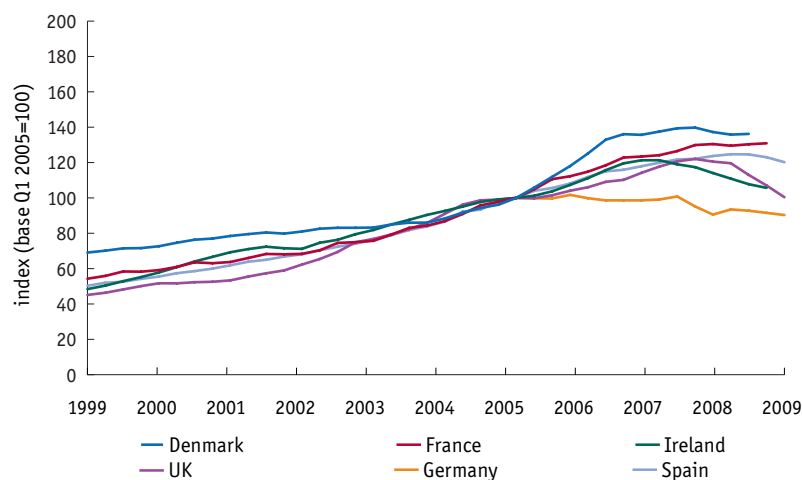
This rapid expansion of credit was accompanied by declining credit standards in both the household and corporate sectors. In residential mortgage markets loan-to-value (LTV) ratios rose, in some cases to over 100%, and mortgages were extended to classes of borrowers who would not previously have gained access to long-term credit. In the corporate market, in particular the leveraged buyout market, required coverage ratios fell and covenants became increasingly light.

...this and the expectation that house prices would continue to rise drove the supply and demand of mortgage credit

3. Property price booms

The rapid extension of mortgage credit and of commercial property loans helped expand the property market in the UK, the US, Spain, Ireland and Denmark (*Chart A4*). This quickly developed into a cycle where property prices increased rapidly. Continuously rising prices convinced both borrowers and lenders that high loan-to-income (LTI) ratios or high LTVs were acceptable given the potential for future capital appreciation. This drove the demand and supply of mortgage credit. The widespread extension of credit, on terms that could only be justified on the assumption of future house price appreciation, was particularly symptomatic of the US subprime market. Loans had low initial rates which rose markedly after the introductory period. Borrowers were expected to be able to afford these increases as rising house prices would allow them to re-mortgage with another low initial rate loan.

Chart A4: House price trends in selected European countries



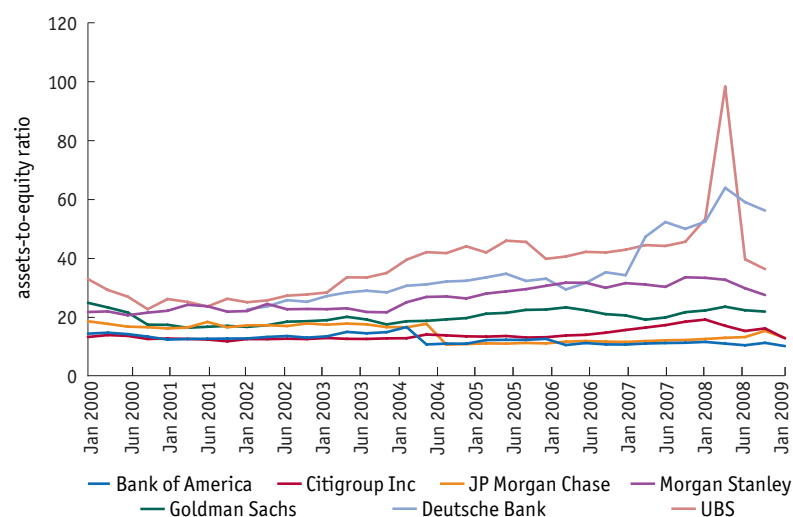
Source: Datastream

This was accompanied by significant growth in leverage

4. Increasing leverage in the banking and shadow banking system

The need to support the growing levels of property and mortgage lending led to the increasing scale and size of securitised markets, and their mounting complexity were accompanied by a significant escalation in the leverage of banks, investment banks and off balance-sheet vehicles, and the growing role of hedge funds. (Chart A5 and A6) Large positions in securitised credit and related derivatives were increasingly held by banks, near banks, and shadow banks, rather than passed through to traditional hold-to-maturity investors.¹

Chart A5: Investment banks' leverage

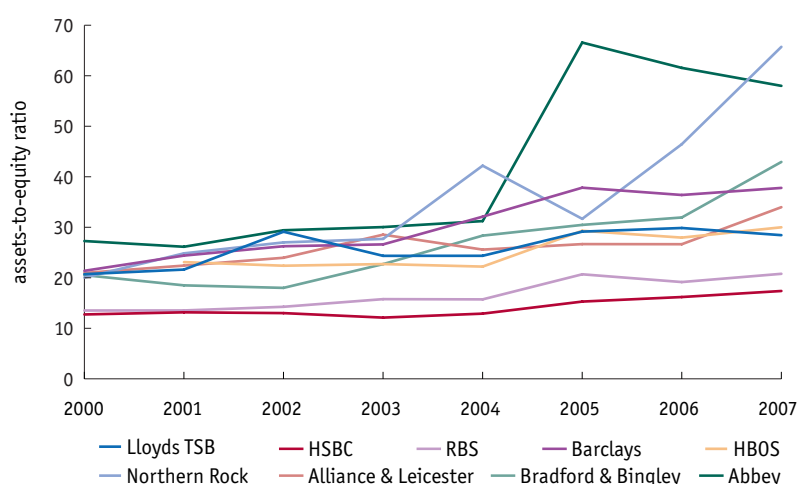


Source: Bloomberg

Note: The European banks (UBS and Deutsche Bank) use IFRS accounting standards, whereas the American banks use US GAAP. Due to the different accounting principles, including differences in recognising mark-to-market losses, the leverage ratios cannot be meaningfully compared across the two categories.

¹ Near banks and shadow banks are financial institutions that undertake banking-like activities without being fully subject to bank regulation and supervision. In the context of the current decade, this included SIVs, ABCP conduits and credit arbitrage funds, which leveraged with short-term borrowed funds to invest in longer-term credit portfolios.

Chart A6: Major UK banks' leverage

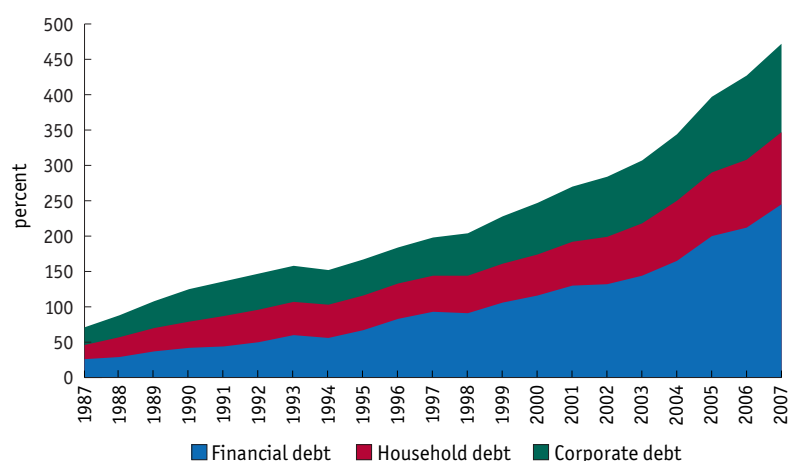


Source: Bloomberg

The 'acquire and arbitrage' model meant that risks remained within the banking sector

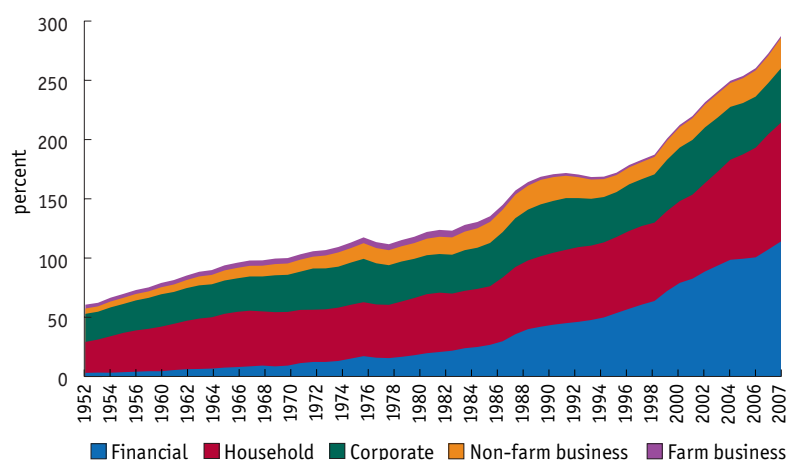
Hence, the new model of securitised credit intermediation was not solely or indeed primarily one of originate and distribute. Rather, credit intermediation passed through multiple trading books in banks, leading to a proliferation of relationships within the financial sector. This 'acquire and arbitrage' model resulted in the majority of incurred losses falling on banks and investment banks involved in risky maturity transformation activities, rather than investors outside the banking system. This explosion of claims within the financial system resulted in financial sector balance sheets becoming of greater consequence to the economy. Financial sector assets and liabilities in the US and the UK grew far more rapidly as a proportion of GDP than those of corporates and households (see *Chart A7 and A8*).

Chart A7: Unconsolidated UK debt as a percentage of GDP by borrower type (1987 to 2007)



Source: SDC, Oliver Wyman

Chart A8: Consolidated US debt as a percentage of GDP by domestic non-government sector (1952 to 2007)



Source: Datastream, US Federal Reserve Flow of Funds

The wider use of maturity transformation made the financial system more reliant on liquidity

5. Underestimation of bank and market liquidity risk

The growth of the securitised credit market, bank leverage and inter-bank claims were also accompanied by changing patterns of maturity transformation. In many cases there was a serious underestimation of bank and market liquidity risk.

Maturity transformation – holding longer term assets than liabilities – was increasingly performed not only by banks, but also investment banks, off-balance sheet vehicles and, in the US, mutual funds. This made the financial system increasingly reliant on liquidity through marketability – the ability to meet liabilities through the rapid sale of an increasingly wide range, and much increased value, of long-term credit instruments. When the crisis struck, the assumption that the markets for these instruments would remain liquid was proven wrong as concerns spread around their quality.

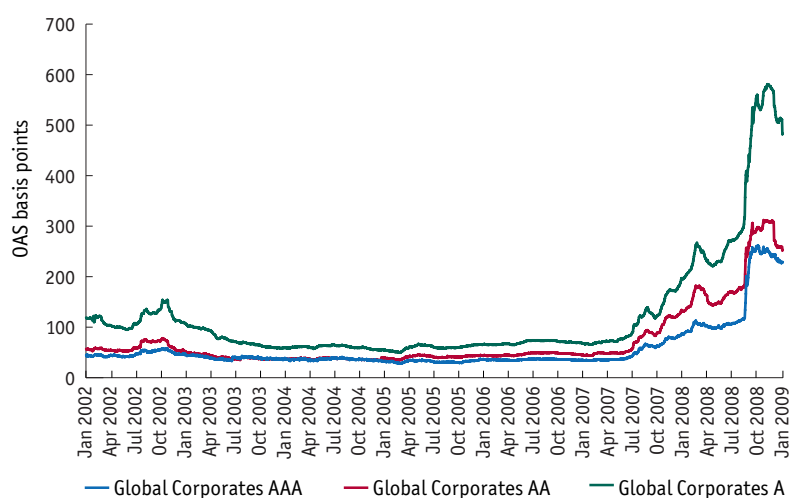
Furthermore, with the increasing depth and globalisation of inter-bank funding markets, banks were able to grow their credit market share more rapidly than their own deposit base. This model was used by some UK mortgage banks. As the crisis unfolded, these banks found that their ability to draw on wholesale inter-bank funding disappeared. At the same time liquidity in the RMBS market collapsed, leaving them with securitised mortgages on their books that they could not sell.

These interrelated effects resulted in a self-reinforcing cycle of irrational exuberance...

6. Self-reinforcing cycle of irrational exuberance

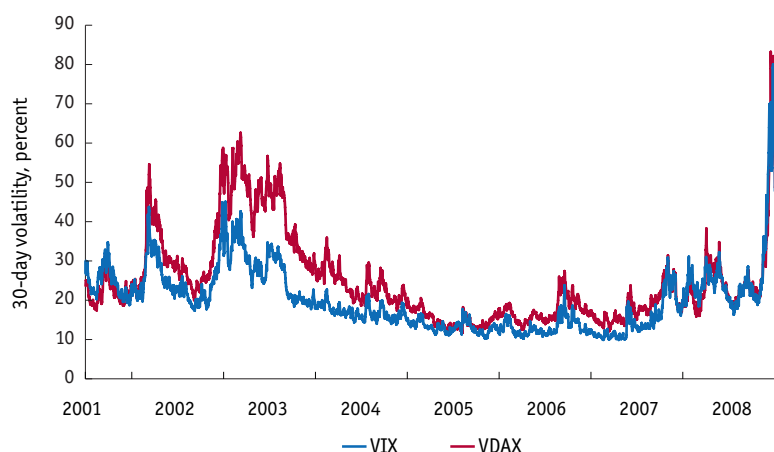
The interrelated effects and relationships discussed above resulted in a self-reinforcing cycle of irrational exuberance in pricing of both credit and volatility risk. Credit spreads on a range of securities and loans fell steadily from 2002 to 2006 (*Chart A9*), to reach very low levels relative to historical norms (*Chart A10*). In addition, the price charged for the absorption of volatility risk fell, since volatility itself appeared to have declined to very low levels.

Chart A9: Corporate spreads



Source: Bloomberg

Chart A10: Implied volatility of the S&P 500 and DAX



Source: Datastream

Note: VIX and VDAX are indices of implied volatility for stock option prices on the S&P 500 and DAX respectively.

Stages and nature of the crisis

...which unwound in 2007 and 2008

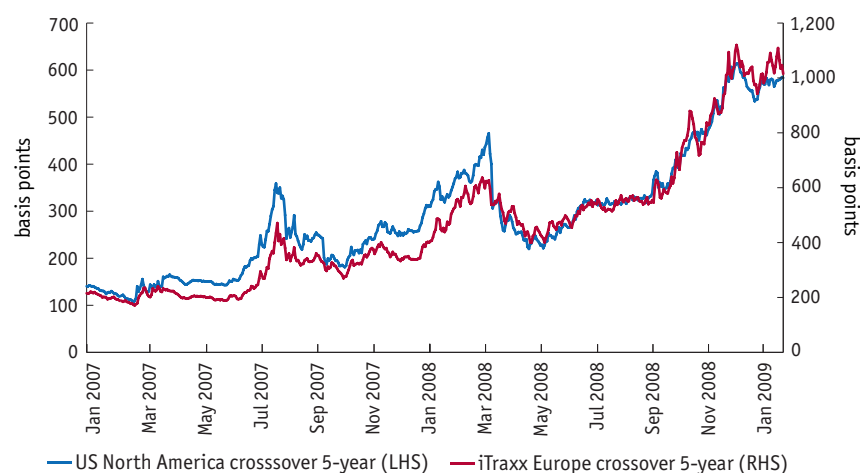
The trends that fuelled the self-reinforcing cycle halted and reversed in the course of 2007 and 2008. Initially the changes were gradual, but since the summer of 2008, the pace of events has accelerated markedly. Six stages can be identified:

1. **Localised credit concerns.** During 2006 and 2007 credit quality problems emerged in the US housing market. These became increasingly severe with rising defaults in subprime and Alt-A loans,² resulting in prices of lower credit tiers of structured debt securities falling. Consequently, expectations of property prices began to fall.
2. **Initial loss of confidence and collapse of liquidity.** Confidence began to weaken in June 2007 with the failure of two major hedge funds sponsored

² An Alt-A loan is generally a mortgage loan that can be underwritten with lower or alternative documentation than a full documentation loan, but may also include other alternative product features.

by Bear Stearns. By August 2007, credit spreads both in inter-bank funding markets and in a number of credit markets had risen sharply (*Chart A11*). In addition, inter-bank funding dried up rapidly for the RMBS market and for banks that were not considered to be systemically important. This culminated in the collapse of Northern Rock in September 2007.

Chart A11: Credit default swap indices



Source: Markit

3. **Accumulation of losses and continuation of liquidity strains.** Between autumn 2007 and early summer 2008 there was a steady accumulation of severe mark-to-market losses on the trading books of banks and investment banks. These losses were driven by the growing evidence of underlying credit problems, and by the collapse in both market and funding liquidity.

Market liquidity decreased in part because of monoline downgrades, since the ratings of a number of credit instruments were linked to those of the monoline insurer who had provided credit insurance. Although the performance of the underlying investment might have continued unaffected by a reduction in the monoline wrap, the traded value suffered, reflecting the reduced value of the credit protection offered by the monoline. Hence many credit securities, especially the more opaque, could only be sold at discounted prices, leading to difficulties in effective valuation.

Commercial paper markets had been used to fund many structured investment vehicles (SIVs). However, the collapse in funding liquidity in this market forced some sponsoring banks to take SIV assets back onto their balance sheet. This, in turn, increased funding strains at the bank level. Access to secured funding for trading books dried up owing to uncertainties around the value of assets offered as collateral. Worries about the liquidity of some major institutions grew, resulting in the US government-assisted rescue of Bear Stearns by JP Morgan Chase in March 2008. At this point, the crisis of confidence was still contained to a few market segments and had not spread to core banking institutions.

4. **Intensification of losses and liquidity strains.** Over the summer of 2008, liquidity concerns and estimates of mark-to-market losses in trading books continued to accumulate. In addition, it became increasingly obvious that the problems in the housing markets were not limited to subprime borrowers. Problems were becoming more widespread as house prices fell in the US, UK and other countries due to declining expectations of future property prices and of the future credibility of credit. In July 2008 it became necessary for the US government to extend funding guarantees to Fannie Mae and Freddie Mac to ensure their viability.³ Anxiety about the sustainability of some investment banks and the funding position of the UK mortgage banks intensified.
5. **Massive collapse of confidence.** These rising concerns turned into a sudden breakdown of confidence, owing to events in one week in September 2008. The bankruptcy of Lehman Brothers ended the belief that major banks and investment banks were ‘too big to fail’ (refer to *Issues arising from the international supervision of Lehman Brothers* box later in this section and *Lehman Brothers collapse: Market infrastructure implications* in Section C). Also, the scale of the problems in a wide range of credit securities were revealed after the US authorities were forced to rescue the insurer AIG from near collapse. In the ensuing turmoil, non-bank wholesale depositors became unwilling to lend to many banks except at very short maturities. Inter-bank liquidity collapsed, spreads soared and many banks were increasingly dependent on central bank support to ensure survival. A mix of credit problems, wholesale deposit runs and incipient retail runs led to the collapse of Washington Mutual in the US, as well as to the part nationalisation of Bradford and Bingley and the Icelandic banking crisis (see box later in this section).

Credit default swaps and equity prices indicated serious concerns about the future of an increasing number of the largest financial institutions across the globe. In hindsight it had become apparent that by mid-October 2008 the fall in confidence in the core banking system was more severe than any since the Great Depression of the 1930s.

6. **Government intervention: recapitalisation, guarantees and central bank support.** The severity of the crisis meant that exceptional government intervention was needed in the largest banking markets across the world. A wave of actions were announced in mid-October 2008. The UK package, in common with many others, combined government recapitalisation of some banks, government guarantees of some banks’ medium-term funding, and a significant extension of central bank liquidity support. In addition, banking systems were underpinned by the clear understanding that no major systemically important bank would be allowed to go bankrupt, and that retail deposits would be protected.

These interventions and subsequent further measures by the UK authorities have stabilised the situation; largely halting wholesale and retail deposit runs, producing gradual falls in inter-bank and CDS spreads, and a limited recovery of term-funding markets and inter-bank lending. However, the banking system is still in a weakened state and the wider financial system is under significant strain.

3 Fannie Mae and Freddie Mac were taken into conservatorship on 7 September 2008.

Banks' ability to extend credit to the real economy is impaired...

The funding position of major UK banks has been strengthened by government intervention, but their ability to provide sufficient credit to the real economy remains uncertain, given the disappearance of the major sources of credit (such as securitised credit). A major process of deleveraging is now in hand with potentially deflationary effects. Without effective policy responses, the banking system and the real economy are in danger of being caught in a self-reinforcing cycle, where constrained lending leads to falling property prices, troubled corporates and credit losses which further impair banks' ability to lend. Credit spreads remain very high, increasing the cost of credit to corporate borrowers, despite cuts in official interest rates. This creates difficult economic and risk management challenges, in particular for insurance companies and pension funds.

...and the economic outlook is uncertain

The economic outlook is therefore particularly uncertain. It crucially depends on the ability of financial authorities and those in the financial services sector to limit the negative feedback loops between the financial system and the real economy. *Section B: Economic outlook* describes these uncertainties and how the authorities are attempting to influence them. The implications for firms and consumers are described in more detail in *Section C: Outlook for financial sectors and consumers*.

Whatever the short-term prospects, the analysis of the crisis clearly carries implications for risk management in financial institutions. These are discussed under *Key messages for firms*. There are also important lessons for regulators and other financial authorities.

Regulatory issues and changing context for some firms

The crisis has raised regulatory issues around the banking system in particular...

The scale of the crisis has raised major issues relating to the regulation and supervision of banks, other deposit-takers and bank-like institutions. The FSA has already introduced some major changes in its regulatory approach, and is intensively involved in debates at an international level which could lead to further significant changes. The Chancellor of the Exchequer has asked the Chairman of the FSA to produce a comprehensive report on the future of bank regulation, and this *Turner Review* will be published by the end of March, accompanied by an FSA Discussion Paper.

The changes in regulatory approach resulting are likely to have important implications for the context within which banks, building societies and bank-like institutions operate and will themselves influence the future shape of the of the bank and near-bank system. For that reason, we briefly set out below the range of issues which are under consideration.

...but together with the economic outlook will have implications for all sectors

But it is also important to recognise that there are many aspects of regulation which are not covered by the *Turner Review*, and where the crisis which has occurred does not suggest the need for a major change in regulatory approach. We do not believe, for instance, that the crisis has raised any doubts about the overall appropriateness of our capital adequacy regime for insurance companies, following its significant revisions in 2002 to 2004 (although we are keeping under review the possibility that there are further lessons to be learned); nor do we believe that the crisis suggests the need for a change of direction in the approach to retail intermediaries from what we have proposed in the *Retail Distribution Review*. There are of course implications for these sectors arising from the economic outlook, and these are discussed briefly at the end of this section and then in *Section C*.

The *Turner Review* will consider a wide-ranging set of issues. Among those not discussed here are the role of credit rating agencies, appropriate remuneration approaches, issues relating to fair value accounting, and arrangements for the clearing of CDS contracts. Three changes in particular are likely to have implications for firms, and for the shape of the bank, building society and investment banking sectors.

- **New rules on capital adequacy.** There is an emerging international consensus that rules on capital adequacy need to be revised to increase the capital held against trading books and market risk, and to introduce a counter-cyclical element to bank capital requirements. In the years running up to the crisis, banks were able to increase leverage significantly through trading book expansion, taking on securitised credit exposures, because of inadequate capital requirements against market risk. Increases in capital requirements are likely to produce major changes in the scale and riskiness of trading activities which firms will choose. Meanwhile, the absence of a counter-cyclical capital regime supported over-rapid credit expansion in the bull market; a new counter-cyclical regime is required to restrain over-rapid growth in the future with implications for firms' strategies.
- **New liquidity rules.** Liquidity regulation needs to be reviewed. New forms of maturity transformation in investment banks, bank trading books and mutual funds were key factors in the crisis, as was aggressive use of wholesale funding by rapidly growing banks. New more effective regulations, supervisory processes, reporting requirements and internal risk management approaches are required. The FSA has already issued a Consultation Paper on liquidity which proposes more intensive regulation and supervision of liquidity.⁴ Meeting these new requirements will mean significant improvements in some firms' internal analytical and liquidity risk management approaches will need to be made. We anticipate that the new regime will have important implications for the size of liquid asset buffers held, and for the reliance placed by some firms on retail demand deposits or wholesale funding.
- **Institutional coverage.** In future the institutional coverage of regulation needs to be driven by economic substance, not legal form. Especially but not exclusively in the US, the growth of complex investment banks, SIVs, conduits, mutual funds and hedge funds created risks which were inadequately covered by current regulation and supervision. There is increasing international consensus in favour of a regulatory approach, which will not allow this to occur in the future and bank and investment bank practices are likely to be significantly affected as a result. This approach will probably also entail the gathering of more extensive information from those firms whose activities do not require prudential regulation today. The aggregate of such activities may have systemically important effects and in some cases, individual firms engaged in such activities may themselves become systemically important. At such a point, prudential regulation may be necessary.

4 *Strengthening liquidity standards*, FSA CP08/22, December 2008.

*Application of system-wide risk analysis
needs to be enhanced*

These new approaches to regulation will be applied within the context of much more intensive macro-prudential analysis. A crucial failure of the overall regulatory approach in the years running up to the crisis, which probably played a more important role in the origins of the crisis than deficiencies in the supervision of individual firms, was the failure to recognise large system-wide risks and the dangers of a cycle of irrational exuberance. Both the FSA and the Bank of England will need in future, and in cooperation, to be far more extensively involved in the identification of such risks, and in decisions on appropriate offsetting action.

Finally, the events of the last six months have raised major issues about our approaches to the regulation and supervision of international cross-border firms. The appropriate responses, which need ideally to be agreed at global and European Union levels, may have significant implications for the management of such firms. The Lehman case, discussed overleaf, raises important issues about the balance between global and national approaches to the prudential supervision of systemically important firms active in wholesale markets. The Icelandic bank case suggests that, present European rules which allow banks to raise retail deposits in another member state on a passported branch basis, are untenable, and that either more national powers over local operations, or more European-wide approaches are required (refer to *Lessons from the Icelandic banking crisis*).

Issues arising from the international supervision of Lehman Brothers

Lehman Brothers collapsed in September 2008 following a loss of market confidence in the firm's solvency, arising from its over-exposure to troubled asset classes, in particular mortgage backed securities and commercial real estate.

The *Lehman Brothers collapse: Market infrastructure implications* box on *Section C* sets out specific issues which have arisen from the bankruptcy process, relating to, for instance, the protection of client money and the effective operation of market infrastructure. In addition, Lehman Brothers raises a fundamental issue about the appropriate long-term approach to the supervision of large cross-border financial institutions.

In the past, regulation of these has relied significantly on the assumption that primary responsibility for ensuring prudential soundness lies with the home-country supervisor (though with extensive information sharing between home and host supervisors) and that it is appropriate for firms to gain the efficiency benefits which result from global approaches to, for instance, the management of liquidity.

The failure of Lehman Brothers demonstrated that decisions about fiscal and central bank support for the rescue of banks or other firms, are ultimately made by home-country national authorities who may tend to focus on national rather than global considerations, and that in failure, separate legal entities and nationally specific bankruptcy procedures have major implications for creditors.

This raises fundamental issues about the appropriate future regulatory and supervisory approach, including:

- How effective international 'colleges of supervisors' can be in enhancing cooperation between home and host supervisors.
- Whether it is feasible to achieve greater cooperation in crisis resolution; whether this could extend as far as shared decision making and agreed burden sharing.
- Whether host-country supervisors should take a more national approach, requiring strongly capitalised local subsidiaries, ring-fenced liquidity and restrictions on intra-group exposures and flows; how far this would mitigate risks in inherently interlinked global groups; and what implications for cost efficiency and international capital flows would result.

These issues are being addressed at an international level by the Financial Stability Forum working groups and will be covered in the forthcoming *Turner Review*.

Lessons from the Icelandic banking crisis

The collapse of the Landsbanki HF in October 2008 raises important issues relating to the appropriate regulation of bank branches within the European single market, and appropriate approaches to deposit insurance.

Landsbanki operated in the UK as a branch, raising retail internet deposits under the Icesave brand. It had around £4.5 billion retail deposits outstanding at the time of failure. These deposits were legally covered by the Icelandic deposit insurance scheme to a value of €20,887. In addition, they were covered on a top-up basis by the UK Financial Services Compensation Scheme (FSCS), to which Landsbanki had chosen to opt in. As a top-up member, Landsbanki would have been liable to meet a share of the costs in the event of the default of another bank covered by the UK scheme.

The Icelandic government indicated that it would not be in a position to meet the liabilities of the Icelandic deposit insurance scheme immediately, and is currently discussing the terms of a loan from the UK to allow it to meet those liabilities. In addition, there were £800 million of retail deposits which, because above £50,000, were covered neither by the Icelandic scheme nor by the FSCS top up. The UK government concluded that these deposits should be protected to underpin depositor confidence in the banking system. The total initial costs of retail depositor protection arising from the collapse of Landsbanki's UK branch have therefore been met by a combination of the UK government and the FSCS.

Landsbanki's UK branch was not subject to full prudential supervision by the FSA. This is because European Union single market rules – which cover Iceland as a member of the European Economic Area (EEA) – allow banks in one country to operate as branches in another, with the supervision of solvency and of whole bank liquidity resting with the home-country supervisor (this right is known as 'passporting'). The FSA, as host-country supervisor, had only limited powers relating to the supervision of local liquidity in cooperation with the home supervisor, conduct of investment business and financial crime.

The insolvency of Landsbanki therefore illustrates a weakness in the current European approach to a single market in retail banking. Depositors in one country (or their government) are vulnerable to the failure of banks in another country if the home country concerned lacks the supervisory resources to ensure bank solvency, or the fiscal resources and willingness to fund bank rescue, and if the deposit insurance cover is low and unfunded.

The approach to bank branch passporting rights, at least as they apply to branches conducting retail business, therefore requires review. In November 2008, the Chancellor of the Exchequer wrote to the European Commission with proposals to ensure that sufficient safeguards are in place to deal with the failure of cross-border banks within the EU and EEA. Options for change could include:

- The restriction of branch passporting rights and the requirement that retail deposit gathering be conducted through fully capitalised subsidiaries supervised by the host-country regulator.
- Host countries' supervisory powers to conduct a whole bank assessment and to refuse local branches the right to operate if not satisfied.
- European-wide processes to assess the effectiveness of home-country supervision of those banks wanting to conduct retail business in other member countries.
- Cross-European requirements for pre-funded and ring-fenced deposit insurance, combined with more overt warnings to consumers of the limits of deposit insurance.
- Host country to have powers requiring engagement by the home country on contingency planning and resolution options.

The relative merits of these different approaches must now be debated. However, it is clear, that the current situation should be reviewed.

Key messages for firms

Over the last 18 months, the financial system has experienced one of the deepest and longest financial crises and this year firms will face further challenges. Due to interactions between the disrupted financial markets, and the global economic downturn, firms and their senior management will need to be more vigilant and adapt to a more challenging environment.

- Senior Management should ensure **appropriate risk management** is undertaken and that there is a clear understanding of the underlying risks to their business model, particularly risks associated with complex hedging strategies. Firms need to satisfy themselves that key risks are appropriately managed and continually re-assessed as financial market and economic conditions evolve.
- **Stress testing and scenario analysis** should form an integral part of firms' risk management, business strategy and capital planning decisions. It is of particular importance in this unpredictable environment, when the financial sector is vulnerable to further shocks, that firms also consider the implications of deteriorating economic conditions and the long-term viability of and weaknesses present in their business models. In addition, the **financial sector and economy will also remain vulnerable** to potential shocks, such as a large-scale terrorist attack. Firms should continue to consider such risks in their business planning to ensure effective plans are in place for dealing with these shocks (see *Stress testing and scenario analysis* box below).
- Higher levels of leverage mean that firms need to be more aware of how vulnerable their **capital** is to volatility in asset valuations, foreign exchange and interest rates. Scenario analysis needs to be embedded into day-to-day management of the business to ensure that hedging strategies are effective and that sufficient cash is being held to meet margin needs.
- **Funding strategies** have become increasingly reliant on government guarantees and, although capital injections have eased credit constraints, many banks are still facing funding difficulties. While government interventions have guaranteed medium-term funding and liquidity support, firms need proactively to develop funding strategies and seek independent solutions. Firms need to be aware of the vulnerabilities of their capital arising from the closure of individual markets and ensure that they have diversified funding channels and a varied investor base within each funding source. They also need a clear understanding of the availability of liquid assets which could be converted to cash if funding is suddenly unavailable, and the extent of their over-reliance on such 'liquidity through marketability'.
- Many financial institutions continue to face **liquidity** pressures. Firms need to manage liquidity risk to ensure any gaps are filled by appropriate funding strategies. Internal risk management of liquidity issues needs to be addressed and reported effectively.
- Events leading up to the global financial crisis indicate that **procyclicality** has been led by the behaviours of market participants. In a market-based financial system, risk measurements are increasingly important. Prudential policy and accounting frameworks will need to be re-assessed and the *Turner Review* will discuss these further.

Stress testing and scenario analysis

There are a number of firms in which stress testing and scenario analysis is not as robust, nor as embedded in senior management decision-making as is necessary. Recent market events have highlighted the importance of stress testing and scenario analysis within all financial institutions and revealed weakness in firms' stress testing practices: scenarios have not been sufficiently severe; impacts too small; management actions overly optimistic; and assumptions too favourable.

While there is evidence that firms have been placing more emphasis on stress testing and scenario analysis over the last year and there have been some improvements, more needs to be done. Firms need to address lessons learned from past experiences and improve stress testing for the future.

In carrying out stress testing, firms should consider scenarios in which events occur simultaneously, rather than in isolation. Firms should also be employing 'reverse stress testing', whereby firms consider scenarios most likely to affect the viability of their current business model and work from this point. In doing so, firms will be able more fully to explore 'tail risks' which, if they were to crystallise, would cause a loss of confidence in the firm. This practice will enable firms to improve their awareness of vulnerabilities in business models when making strategic decisions, contingency plans and considering their risk management arrangements.

Firms that make significant enhancements to their stress and scenario arrangements and address the vulnerabilities highlighted during this analysis, are less likely to fail in the event of an extreme shock. This will also have a positive outcome for market confidence and consumer protection.



Economic outlook

The *Central economic scenario* on which our analysis is based consists of a global and domestic recession in 2009 and recovery in 2010. However, the risks are weighted to the downside and, while the effects of fiscal stimulus and monetary easing remain unclear, the recession may be deeper and more prolonged than expected. The economic adjustment process will be shaped by both the characteristics of the deleveraging process and the effectiveness of recent policy measures in the UK and elsewhere. Our *Alternative scenarios* are not forecasts but they serve to highlight the considerable uncertainties regarding the economic outlook that both firms and consumers need to consider in their planning.

Central economic scenario

Global economic conditions

The consensus forecast is for a mild and short-lived global recession in 2009

Consensus forecasts suggest that the total global economy will be close to zero growth in 2009. Developed countries will suffer recessions, and developing countries significantly lower growth than in 2008. However, absolute growth figures for some developing countries are expected to remain robust and growth in these economies should aid the global economic recovery. The consensus forecast suggests a recovery in 2010, with global growth at 2.0% (see *Table B1*). There is still considerable uncertainty over the forecasts and the global recession could be more prolonged than expected.

The global recession will be led by the developed economies...

This year is likely to mark the first annual contraction in economic growth among the developed economies in aggregate in the post-war era. Deteriorating financial conditions have affected the real economy, resulting in reduced economic activity, falling business and consumer confidence and rising unemployment. Germany, Japan, the UK and the US all entered recession in 2008 and other developed countries are expected to follow this year.¹ While the risks to the economic prospects for these developed economies appear weighted to the downside, fiscal stimulus and monetary easing should help limit the duration of the recessions and aid recovery.

1 Recession is typically defined as two consecutive quarters of contraction in real GDP.

Table B1: Consensus forecasts for the global economy

	Real GDP growth (%)				Inflation (%)			
	2007	2008e	2009f	2010f	2007	2008e	2009f	2010f
World	3.9	2.3	-0.2	2.0	3.2	4.8	1.8	1.7
UK	3.0	0.8	-2.2 (-3.0 to -0.5)	0.6 (-1.3 to 2.5)	2.3	3.6	1.0 (-0.5 to 2.6)	1.9 (0.8 to 3.0)
US	2.0	1.2	-1.8 (-2.8 to -0.5)	2.3 (0.5 to 3.7)	2.9	3.9	-0.5 (-2.2 to 1.2)	2.0 (0.7 to 3.3)
Euro area	2.6	0.9	-1.4 (-2.5 to 0.5)	0.8 (0.2 to 1.6)	2.1	3.3	1.0 (0.5 to 1.6)	1.7 (1.0 to 2.6)
Japan	2.4	0.0	-1.7 (-3.8 to -0.5)	1.1 (0.4 to 3.4)	0.0	1.5	-0.4 (-1.0 to 0.1)	0.0 (-0.6 to 0.8)
India	9.0	6.7	5.6 (4.5 to 6.8)	7.8	6.4	8.0	5.3 (2.4 to 6.8)	5.3
China	11.9	9.2	7.4 (5.6 to 8.5)	8.4 (6.6 to 9.7)	4.8	6.0	1.1 (-0.5 to 4.5)	2.0 (0.8 to 3.5)

Source: *A Digest of International Economic Forecasts*, Consensus Forecasts, January 2009. *A Digest of Economic Forecasts, Asia Pacific*, Consensus Forecasts, January 2009

Note: Figures in brackets show the upper and lower bounds of forecasts for the given year. 'e' denotes an estimate figure and 'f' denotes a forecast.

...while economic growth in developing countries will continue but at a slower pace

The outlook for developing economies as a whole is for continued economic growth, but the growth rate will be lower than in recent years and performance will vary significantly by individual countries. The countries likely to suffer most are those with a combination of a large current account deficit, reliance on exports (particularly commodities), a heavily indebted government and a large banking sector relative to the size of their economy. Hungary, Ukraine and Latvia, as well as Iceland, were early casualties of these vulnerabilities and received IMF support in 2008.

Uncertainty and reassessment of risk have triggered sharp exchange rate adjustments

One of the effects of the global slowdown has been sharp exchange rate adjustments. As the economic slowdown has evolved, market participants have reassessed risks across markets and sought safer investments. Emerging market currencies in particular have come under significant pressure. There have also been sharp adjustments in the major currencies with the US dollar, the euro and the yen strengthening and sterling depreciating significantly in the second half of 2008. Such sharp movements in currencies, driven in part by reassessment of risk and uncertainty, could reverse equally as quickly.

Policy measures aimed at limiting the duration and depth of recessions necessarily focus on the domestic economy, but in most circumstances also tend to stimulate demand in other countries. One specific feature of policy responses in this global downturn, however, is the focus on banking systems and on the need to maintain domestic lending. There is a danger that this focus, combined with the desire to improve bank capital positions, could result in a reduction in international bank lending to other countries, including developing countries. It is important that the dangers of this new form of economic protectionism, and of protectionist trade measures, are avoided.

UK economic growth is expected to continue to contract in 2009

Domestic economic conditions

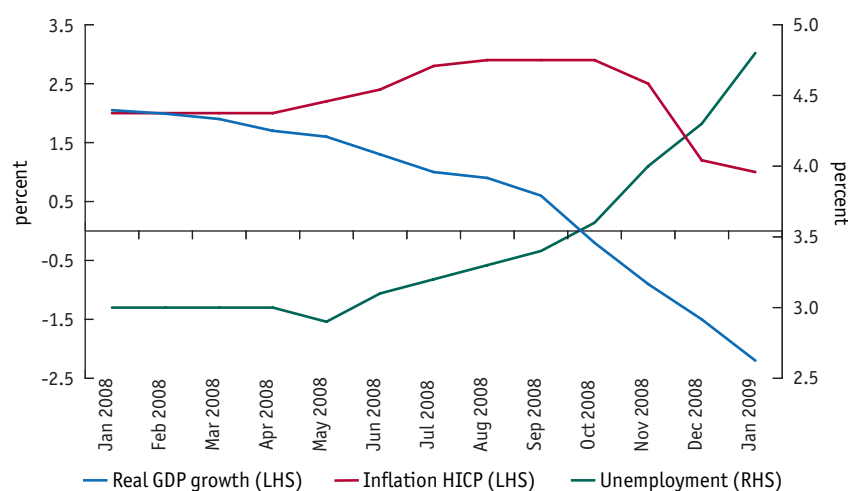
The consensus forecast on which our central UK economic outlook is based suggests a more pronounced recession, but of shorter duration, than that experienced in the early 1990s. Inflation is expected to decline sharply and remain at a low level for a sustained period, while unemployment is projected to continue to rise (refer to *Table B2*). Consensus forecasts have lagged economic conditions and were continually revised downwards as illustrated by *Chart B1*. While it is too early to tell what effect recent policy decisions will have, this central economic outlook could prove overly optimistic. It is therefore important that firms and consumers plan for a greater degree of uncertainty than normal.

Table B2: Forecasts for the UK economy

	2006	2007	2008e	2009f	2010f
Real GDP growth (%)	2.8	3.0	0.8	-2.2	0.6
Consumer spending growth (%)	2.0	3.0	1.7	-1.8	0.0
Current account balance (£bn)	-45.0	-39.5	-40.3	-32.4	-28.5
Unemployment (%)	2.9	2.7	2.8	4.8	5.9
Inflation HICP (%)	2.3	2.3	3.6	1.0	1.9

Source: *A Digest of International Economic Forecasts*, Consensus Forecasts, January 2009
Note: 'e' denotes an estimated figure and 'f' denotes a forecast.

Chart B1: Revision to the consensus forecasts for 2009



Source: Consensus forecasts

Note: Data points represent forecasts for 2009 from the consensus forecast survey in the given month. Unemployment forecasts are of the annual average claimant count rate.

Inflationary pressures have eased...

After a period of rising inflationary pressures, inflation started to ease in the last three months of 2008 and a sustained period of low inflation is now expected. The Bank of England's Inflation Report in November 2008 showed a sharp downward revision to the inflation outlook and highlighted the increased uncertainty about the precise path of future inflation. In the current recessionary environment, lower inflation makes it easier for the Bank of England to keep interest rates low and underpin general macroeconomic stability. However, lower inflation can increase the real expected cost of the debt burden.

The significant increases in inflation in 2008 largely reflected major increases in commodity, energy and food prices. The rapid reduction in inflation is now being driven by a reversal of these increases, combined with the more general deflationary impact of the financial crisis, lower consumer confidence and lower consumption growth. As a result, inflationary pressures seem unlikely to be a major risk factor over the next few years; only a more rapid global recovery and more significant depreciation of sterling than currently anticipated would change this outlook.

...sterling has fallen significantly...

Sterling has now fallen by 19.3% on a trade weighted basis since January 2008, 17.1% against the euro and 26.9% against the US dollar. The drivers of these movements – and in particular of the significant strengthening of the US dollar despite the scale of the financial crisis in the US – are imperfectly understood and future movements therefore impossible to predict. One possible reason why sterling may have fallen relative to other currencies is the importance to the UK economy of the export of wholesale financial services, and the reductions in the scale of that sector that is now occurring. As long as the fall in sterling does not endanger significant inflationary effects, it will improve the competitiveness of other internationally traded sectors of the economy.

...and unemployment is rising

Attempts by corporates to deleverage, cut costs and reduce production in response to falling demand have fed through to the labour market, resulting in redundancies across several sectors and accelerating falls in the number of new vacancies. The unemployment rate was 2.8% in 2008 and consensus forecasts suggest it could rise to 4.8% in 2009 and 5.9% in 2010 (see *Table B2*).² As unemployment lags the economic cycle, unemployment may continue to rise even after the economy has started to show signs of recovery. In response to rising unemployment households will cut consumption, confidence will be reduced and the probability of default will rise.

Deleveraging and deflationary effects

Deleveraging will influence the economic adjustment process

The depth and duration of the recession will be determined by the characteristics of the deleveraging process, both within the financial system and in the real economy, and by the effectiveness of policy measures aimed at offsetting the dangers of self-reinforcing feedback loops between the banking system and the real economy.

Section A described the significant increases in leverage in household, corporate and financial sector balance sheets that were a key feature of the pre-crisis upswing (refer to *Chart A7* in *Section A*). Reductions in leverage are now both inevitable and desirable to create a less risky and more sustainable financial system and real economy in the long run. However, the process of deleveraging can be deflationary. Deflationary pressures can arise from asset sales, which depress values and increase spreads, and from bank decisions to limit lending growth in order to offset the impact of losses on capital ratios. Meanwhile attempts by consumers and corporates to cut debt levels reduce consumer spending and investment.

² *Consensus Forecasts: A Digest of International Economic Forecasts*, Consensus Economics, January 2009. Consensus forecasts use the annual average claimant count rate to measure unemployment.

Much of the growth in leverage has occurred within the financial sector

Financial sector deleveraging

The deflationary impact of the deleveraging process is greatly determined by the extent to which the deleveraging process can occur through reduced asset and liability claims within the financial system, rather than between the financial system and the real economy. *Chart A7* shows that one of the striking features of the increase in leverage has been that it is greatest within the financial system, with the increased complexity of the securitised credit model driving a proliferation of activity in credit securities and derivatives. Hence, it is important to assess how far these intra-financial sector claims can be eliminated, thereby freeing up capital to support lending to the real economy.

Formally organised netting out processes have been proposed but the reduction may also be strongly driven by changes in banks' corporate strategy in the face of large trading losses, and by changes in capital regulation. The Basel Committee has already published proposals for a significant increase in the capital held against trading books, and new leverage ratio constraints introduced by the Swiss authorities have been deliberately designed to limit proprietary trading. Corporate strategy changes, reinforced by regulatory encouragement and by the anticipation of future increased capital requirements, are already driving major reductions in the scale of investment bank trading books, both within the remaining independent investment banks and the investment banking activities of commercial banks.

Part of this reduction in trading book activity need not have an adverse impact on the real economy. However, since the process may involve the sale of assets at depressed values, impairing bank capital and increasing credit spreads, some of it will spillover to the real economy. Alongside the deleveraging on bank and investment bank balance sheets, the leverage employed by hedge funds is falling.

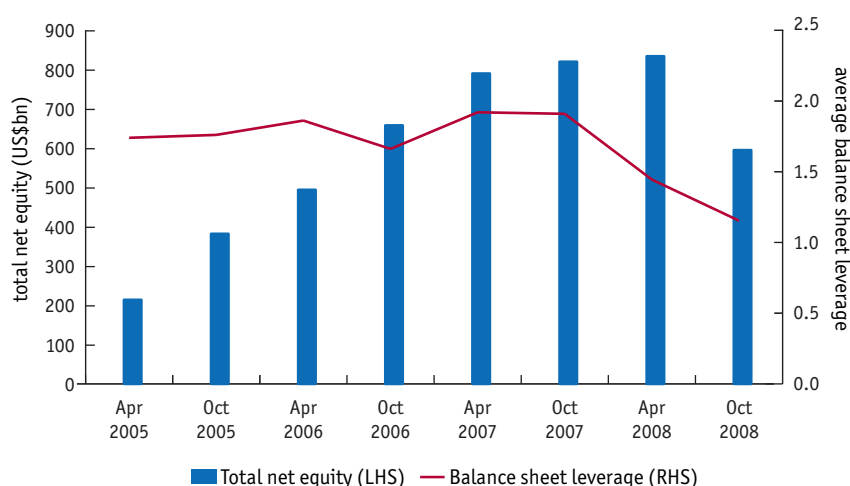
Financial sector deleveraging is still in the early stages

A crucial empirical issue is therefore how far the process of deleveraging within the financial sector has already progressed, and how much more is therefore likely to occur. Several analyses suggest that until the end of the third quarter of 2008, the process of financial sector deleveraging had not progressed far. This is partly because deleveraging was offset by adding, large assets and liabilities previously held in off-balance sheet vehicles, back onto banks' balance sheets. Write-downs of asset values resulted in losses which depleted capital. It seems likely that more rapid progress towards financial sector deleveraging may have occurred in the fourth quarter of 2008, with government recapitalisations helping to sustain capital bases despite further losses, and with large reductions in gross balance sheets now being reported by major investment banks and the trading operations of large commercial banks.

Data collected by the FSA also suggests that significant deleveraging of hedge funds has occurred, with gross assets under their control falling more rapidly than the 'equity' investment in them, which has itself been reduced by asset value falls and by redemptions. In the six months to October 2008, FSA calculations indicated that net equity of hedge funds declined by 29% (see *Chart B2*); combined with falls in leverage, this implies a fall in gross funds managed by hedge funds.

While it is not possible to be definitive, it therefore seems likely that deleveraging within the financial system is proceeding at a pace which by the middle of 2009 should have markedly reduced the leverage from previous levels.

Chart B2: Prime brokerage net equity and prime brokerage long leverage



Source: FSA calculations

Some aspects of deleveraging will have implications for the real economy

Real economy deleveraging and financial system feedback loops

Some of the financial sector deleveraging discussed above will be beneficial to the real economy, for example through releasing capital to support lending activities. However, the deleveraging process could also have a deflationary effect on the real economy. Furthermore, some households and corporates have extended their debts to unsustainable levels and there is a need for these households and corporates to deleverage their balance sheets. The key risk is that attempted deleveraging, combined with adverse feedback loops between the financial system and the real economy, could generate a self-reinforcing deflationary cycle.

Household and corporate leverage has reached unsustainable levels...

Both the UK household and corporate sectors increased their leverage significantly in the years running up to the crisis (*Chart A7*). In the household sector, while initial loan-to-value ratios increased and credit was extended to more risky and less creditworthy borrowers, average asset leverage (the debt-to-asset ratio) did not increase because rising house and other asset prices outweighed the increase in debt. However, households' debt-to-income ratio increased from 1.2 to 1.6 between 2002 and 2007 (see *Table B3*). Falling house prices will now feed through to rising asset leverage as well.

Table B3: Comparison of leverage measures for UK non-financial corporates and households

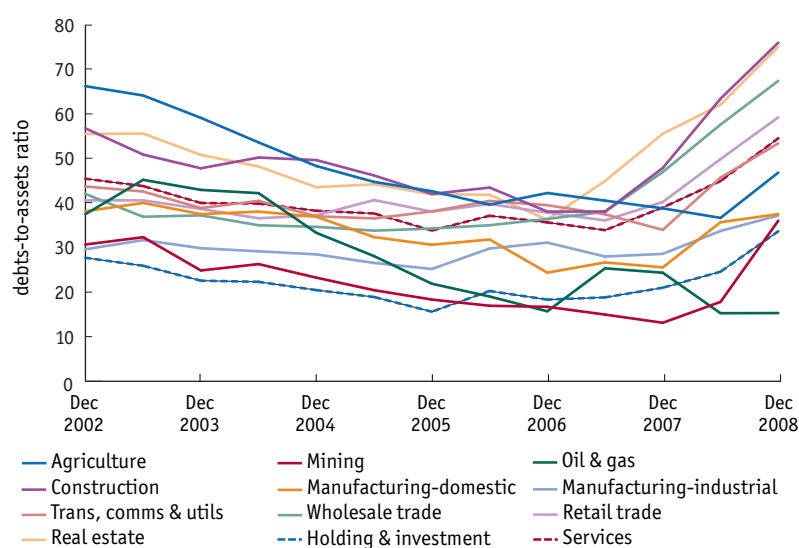
	Asset leverage (%)		Income leverage	
	2002	2007	2002	2007
Non-financial corporates	38	46	4.9	6.0
Households	15	16	1.2	1.6

Source: ONS, FSA calculations

Note: Asset leverage is measured by the debt-to-assets ratio for non-financial corporates and households. Income leverage is measured by the debt-to-income ratio, where income is defined as gross disposable income for households and gross operating surplus for corporates.

While there was not a general increase in leverage across all parts of the corporate sector, leveraged buyouts and share buybacks by some listed companies drove an increase in overall leverage. Average asset leverage for the corporate sector (on a book-value basis) rose from 38% to 46% and average income leverage rose from 4.9 to 6.0 between 2002 and 2007 (see *Table B3*). Calculated on a market value basis (debt-to-market value of assets) the leverage of UK listed companies appeared to fall between 2002 and 2007, but has now increased significantly as market values of these assets have fallen (see *Chart B3*).

Chart B3: FTSE all share sector trends (debt-to-assets ratio)



Source: Moody's-KMV data on book liabilities and market value of assets aggregated across the FTSE all share index by sector

Note: The data is calculated on a weighted rather than average basis; the total book value of liabilities for all firms in a given sector is divided by the total estimated market value of assets of those same firms.

Deleveraging and self-reinforcing cycles

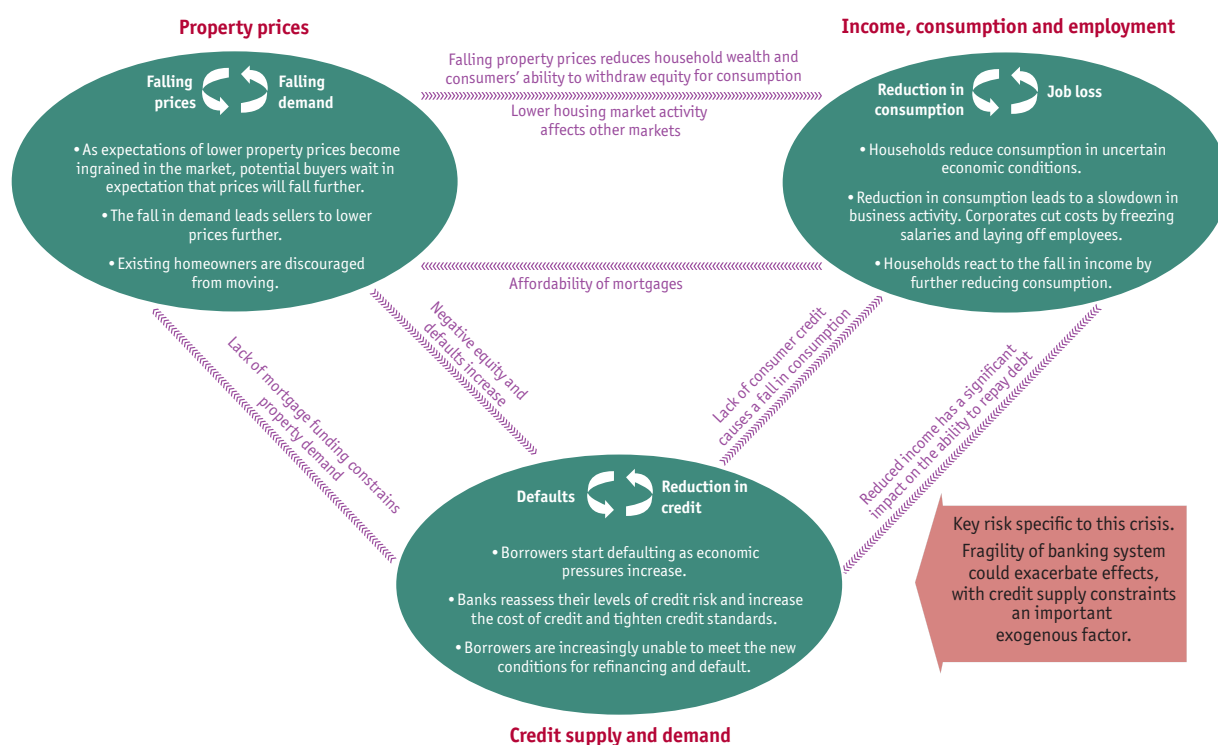
...and some reduction in debt levels is desirable to reduce long-term financial risk

Some deleveraging of the household sector and some parts of the corporate sector is desirable to reduce long-term financial risks, both to individual households and corporates and to the economy as a whole. However, this deleveraging cannot occur rapidly in a period of low growth and low inflation. As property prices fall, asset leverage will increase, and if corporate and household incomes are depressed, income leverage may also rise.

Therefore, attempts by households and corporates to rapidly reduce their leverage through increasing savings, cutting household consumption and business investment, could prove ineffective. At the aggregate level, this could also be self defeating, as reduced household consumption cuts business revenues, and reduced household borrowing depresses property prices.

Figure B1 illustrates a set of self-reinforcing relationships that could deepen and prolong the recession: property prices; the demand and supply of credit; and income, consumption and employment. These self-reinforcing cycles exist in any economic downturn, but the crucial danger in the current crisis is that weakness in the banking system could stimulate and reinforce them. This could become even more serious if price deflation resulted in a rise in the real value of existing debt.

Figure B1: Three self-reinforcing cycles



Source: FSA

Hence, there is a danger of a self-reinforcing deflationary cycle in which:

- Banks are constrained by inadequate capital positions resulting from bad debts and asset write-downs, and by difficulties in attracting funding given low confidence in the banking system. This could lead to lending to the corporate and household sectors falling more than in a mild recession.
- House prices fall because first-time buyers and owners wishing to trade up cannot gain access to credit, and because potential buyers are more cautious about their future earnings. Lower house prices mean that mortgages which default generate much larger losses-given-default (LGDs) and this feeds through to higher write-offs for banks.
- Households cut consumption and increase their savings in the face of uncertainty about future income and employment prospects. This in turn produces falling demand for goods and services, leading to falling business profits, depressing investment, and falling employment, depressing household income, consumption, and property prices.
- High levels of corporate and household defaults further weaken the balance sheets of banks, and thus their ability and willingness to lend to the real economy. Higher probabilities of default combined with higher LGD increase the capital required by banks to support their business, thereby reducing their capacity to provide new lending. (This is the so-called procyclical aspect of the current capital regime).

- Actual or expected minimal and even negative inflation exacerbates these effects by increasing the present and prospective real rate of interest and thus the real debt burden.

Actions by UK authorities

Direct intervention in the banking and credit markets has been necessary to stabilise the adjustment

The policy response to these dangers include measures of fiscal and monetary stimulus which would be relevant in any economic recession. However, the effectiveness of these measures may be impaired by the fragility of the banking system, and by the inability to drive monetary policy interest rates below zero. Thus, the appropriate policy response has involved more direct interventions in banking and credit markets, with implications for the FSA's regulatory approach.

In the UK, two packages of measures, introduced in October 2008 and January 2009, have combined the following elements:

- The deliberate creation of bank capital buffers sufficient to enable banks to maintain lending to the real economy even if future credit losses and asset write-downs are large. To achieve this, the Tripartite Authorities conducted stress tests which modelled the potential for future credit losses and write-downs in the event of a severe economic recession. Banks were required to attain capital levels such that, even if such stresses arose, their core Tier-1 capital ratios would be above 4%. The government stood ready to provide the required capital if it was unavailable from private sources, making capital investments in RBS, HBOS and Lloyds.
- The FSA explicitly clarified, that these capital buffers are intended to be used to absorb losses, not to maintain core Tier-1 ratios significantly and permanently above 4%. This was accompanied, in January 2009, by FSA action to ensure that the detailed implementation of Basel 2 capital adequacy rules did not introduce unnecessary and unintended procyclicality in capital requirements.
- Government guarantees of bank medium-term funding to overcome the decline of confidence in the banking system, and to ensure that banks are not constrained from extending credit by inability to raise funds.
- Government guarantees, announced in principle in the January 2009 package, for the issue of securitised credit and in particular of residential mortgage-backed securities (RMBS).
- The announcement in principle of a government bad asset insurance scheme which will help ensure that bank losses do not exceed stress test estimates, thus offsetting potential fears that lending growth combined with higher than expected losses could drive capital ratios below minimum acceptable levels.
- The extension of Bank of England liquidity support facilities.
- Authority to the Bank of England to directly buy assets, such as corporate bonds in markets, where it appears yields have been significantly inflated, and prices depressed, by exceptionally high liquidity premia.

On the basis of these measures, the government now agrees lending commitments with the UK's major lending institutions, eight of which have

been defined as the Lending Panel Banks.³ The Lending Panel Banks meet regularly with the financial authorities to discuss bank lending practices and the policies which can support lending and thus economic growth.

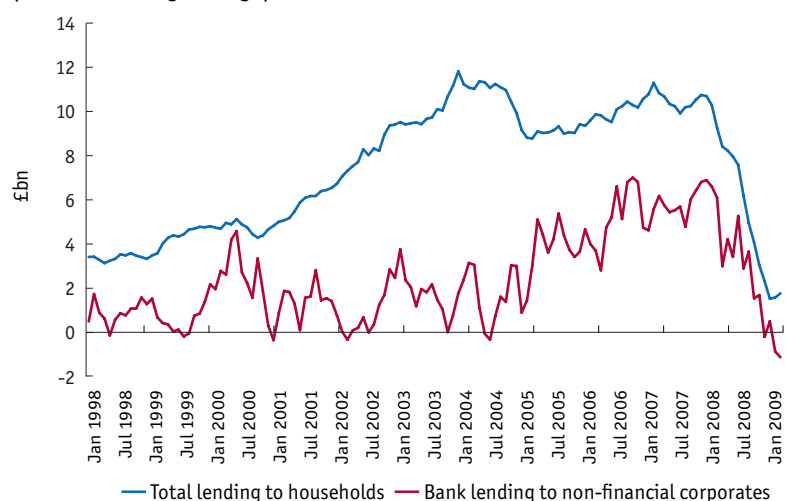
The degree to which these exceptional measures will limit the impact of the three self-reinforcing cycles illustrated above is inherently uncertain given the unprecedented scale of the crisis, and the lack of relevant historical comparisons. However, actions by UK authorities, pursued in parallel with similar measures in the US and in many other major economies, should be effective in reducing the severity and duration of the recession. Further exceptional measures could also be introduced if needed. The need for and nature of such measures should be determined in the light of developments in the three self-reinforcing cycles. We now discuss the latest developments in each of these.

Credit demand and supply

Net new lending to the UK real economy is falling...

Net new lending to the UK real economy fell significantly in 2008. Net ending to individuals declined from over £10 billion a month in late 2007, to an average of less than £2 billion a month in the fourth quarter of 2008. Net lending to private non-financial corporates fell from an average of £6 billion a month in the last quarter of 2007 to an average of -£1 billion at the end of 2008 (loan repayments were on average about £1 billion higher than gross lending).

Chart B4: Net new lending to UK households and non-financial corporates (3-month rolling average)



Source: Bank of England

...as a result of falling supply...

These falls have primarily been driven by the large-scale exit from the market of previously important sources of lending capacity: rapidly growing mortgage banks Bradford & Bingley and Northern Rock failed and foreign bank lending capacity has been reduced. The supply of securitised credit has dropped dramatically, with an almost complete disappearance of the RMBS market in 2008. In addition, there are signs that the supply of trade credit, an important source of non-bank finance for many businesses, has significantly reduced.

³ The eight banks include HBOS and Lloyds, now merged in the Lloyds Banking Group. The others are: HSBC, Barclays, RBS, Abbey National, Nationwide Building Society and Standard Chartered Bank.

...and falling demand

There is a danger that these reductions in lending capacity could result in an excessive reduction in corporate and household debt. Some reduction in debt is desirable in the long term, particularly in the household sector, and some will occur naturally and unavoidably in a recession for demand driven reasons. Demand for borrowing will reduce as households seek to increase their savings and as companies reduce investments and inventories. As a result the aggregate value of loan applications will fall. Even if banks leave credit scoring standards unchanged, the proportion of applicants which meet those standards will fall. Offsetting this effect is difficult without creating future bad debt problems.

But some lending needs to be maintained to ensure macroeconomic stability

It is vital to ensure that the restriction in the supply of credit to creditworthy consumers does not itself become a driver of these effects. A crucial policy issue is therefore whether the Lending Panel Banks have the capital and funding resources to at least maintain their lending levels and ideally to expand to fill some of the gap left by the disappearance of other sources of lending capacity. Lending Panel data analysis has now been put in place to assess the relative importance of demand and supply constraints in the extension of credit to household and corporate sectors. Government policies on bad asset insurance and risk sharing (whether on existing or new loans), capital support and funding guarantees will need to be kept under review as the pattern of credit extension evolves.

The design of effective public policy will be a key determinant of how powerful the self-reinforcing cycles shown on *Figure B1* are and how long they last. However, it is clear that even the best designed policy will not be able to remove entirely the adverse economic effects seen in all recessions.

These include:

- A decrease in company investment, with the BCC economic survey already registering the largest fall in investment intentions on record in the fourth quarter of 2008.⁴
- A likely significant increase in corporate insolvencies during 2009. Euler Hermes, the trade credit insurer, has forecast a 34% rise in corporate insolvencies in the UK during 2009 (from 28,500 in 2008 to 38,200 in 2009).⁵ Increasing corporate defaults will lead to rising non-performing loans and pressures in the CDS market, which will in turn place further pressure on banks' balance sheet. Households and corporates defaulting on their debt will generate new losses for lenders and a further tightening of credit standards.
- Falling property prices, both residential and commercial, and increases in unemployment, which are discussed below.

Property price cycle

Commercial property prices have fallen more steeply than in the early 1990s...

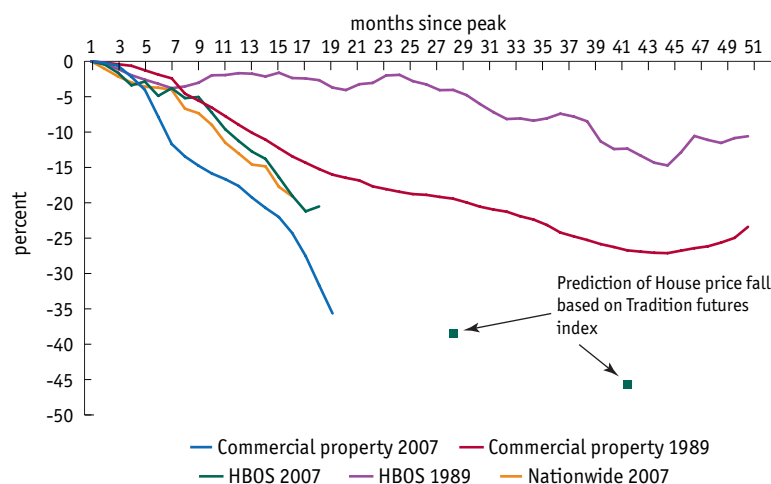
Commercial property was one of the first asset markets to show signs of correction. Commercial property values have already fallen approximately 36% since their peak in 2007 and further falls are expected. Initially the falls reflected expectations of future price declines rather than lower rental income, which only started to fall more recently. A more general slowdown in the economic environment will lead to an increase in un-let properties,

⁴ *Fourth Quarter Economic Survey*, The British Chambers of Commerce, 2008.

⁵ *Euler Hermes Insolvency Outlook No. 2*, Euler Hermes, Autumn/Winter 2008.

placing further downward pressure on rents and prices. Given the high levels of financial gearing in this sector, this will increase the levels of write-offs by banks and other financial institutions, as in the early 1990s.

Chart B5: Residential and commercial property prices in recent downturns



Source: IPD, Nationwide, HBOS

...as have residential property prices

Residential property prices have fallen more steeply than in previous housing market corrections and could fall significantly further. However, both the trend in prices and the impact on arrears, defaults and bank bad debts is difficult to predict, since the trend in nominal interest rates in the present downturn is quite different from those of the early 1990s.

The presence of buy-to-let partly explains the rapid fall in house prices

According to the Nationwide House Price Index, house prices have already fallen 19.1% since their peak in 2007.⁶ Traded options prices would suggest that the total fall in house prices could be as much as 35% peak-to-trough. The actual path may be significantly influenced by the success of policy measures. The steeper decline in residential property prices in this downturn may in part, be explained by the increased importance of the number of buy-to-let properties, as investment properties are more sensitive to expectations of property prices and rental yields than residential purchases. Weaknesses in the buy-to-let market, in turn, may have tended to reinforce the weaknesses in the wider residential market, and expectations of future house price falls could in turn become self-fulfilling.

There is an increased risk of negative equity...

For some borrowers, falling house prices will lead to negative equity. There are a number of ways to estimate negative equity; we have used the methodology originally developed by Hometrack to estimate the impact of various falls in house prices on the number of households which might move into negative equity.⁷ If house prices were to fall by 30% from the end of 2007, it is estimated that over 2 million residential mortgage holders and 500,000 buy-to-let mortgage holders would be in negative equity.

...with adverse implications for economic activity and banks' balance sheets

For many households, negative equity is only a problem if the property needs to be sold. But households in, or close to, negative equity are more likely to reduce consumption and less likely to move, resulting in lower economic activity. Moreover, negative equity could change both homeowner

⁶ House price data from Nationwide is not seasonally adjusted.

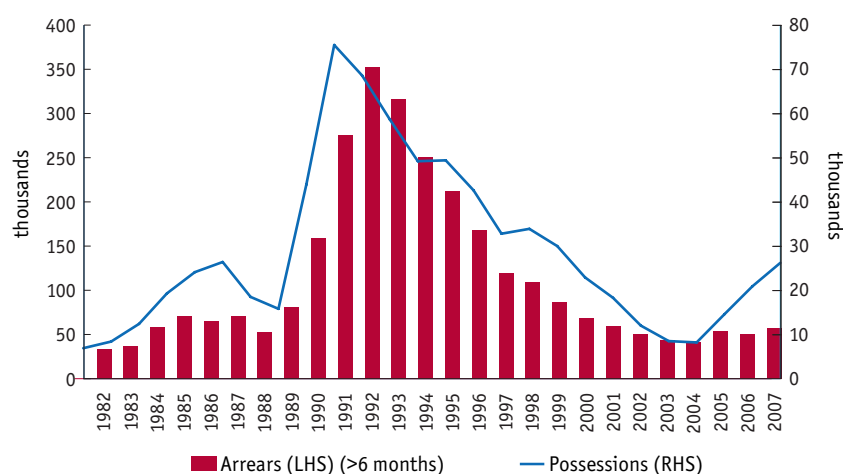
⁷ *Just how exposed are lenders to a house price adjustment*, G. Styles, June 2008. We are grateful to Hometrack for providing their analysis.

and lender behaviour in ways which could increase defaults. According to CML estimates, around one quarter of possessions during the early 1990s recession was the result of borrowers voluntarily handing back their keys, believing they were no longer able to pay off their debts. This behaviour is more likely if people are in negative equity. From the lenders' perspective, negative equity could give rise to further losses and write-downs. Lenders could therefore have an incentive to possess homes before property prices fall further below the value of the mortgage, potentially leading to consumers being treated unfairly. Appropriate firm practice in relation to possessions – recently reinforced by the Governments' code of conduct – is therefore not only important from the perspective of treating customers fairly, but can have a macroeconomic effect.⁸

Mortgage arrears and possessions have been rising among less creditworthy and buy-to-let borrowers

Mortgage arrears and possessions are already significant and worryingly their numbers increased while economic conditions were still benign (Chart B6). To date, mortgage arrears and possessions have been rising among less creditworthy and buy-to-let borrowers. The problem is likely to become more widespread as the impact of the recession is felt by households via higher unemployment and lower real incomes. The CML has suggested that the level of 3-month mortgage arrears could rise to 500,000 cases in 2009, from 129,600 in 2007 and it forecasts that 75,000 households will suffer possession in 2009, up from an estimated 45,000 in 2008.

Chart B6: UK mortgage arrears and possessions



Source: CML

However, the impact of falling property prices on arrears, defaults and bank provisions and write-offs is difficult to model because this recession differs from those of the early 1980s and 1990s in one crucial respect. In both of these recessions, falling real incomes and rising unemployment were accompanied by high inflation and high nominal interest rates – mortgage rates increased from around 9% in 1988 to over 14% in 1990. In this recession, the overall trend in mortgage rates – after some initial rises caused by the removal of aggressively priced initial offers and by strains in funding

⁸ On 17 November 2008, the Civil Justice Council issued the Pre-action Protocol for Possession Claims Based on Mortgage Arrears or home purchase plan in Respect of Residential Property. This protocol aims to make proceedings for residential possession claims a last resort. Major lenders agreed to allow three or six months before beginning possession proceedings against homeowners who have fallen into arrears with mortgage payments.

markets – has on average been a slight decline and, for borrowers on tracker mortgages linked to the base rate, a significant reduction.

Therefore, despite rising unemployment, it is possible that mortgage arrears, defaults and possessions might not rise as significantly as the fall in house prices first appears to suggest. Large falls in house prices, however, will increase the scale of bank losses when default does occur.

Income, consumption and employment

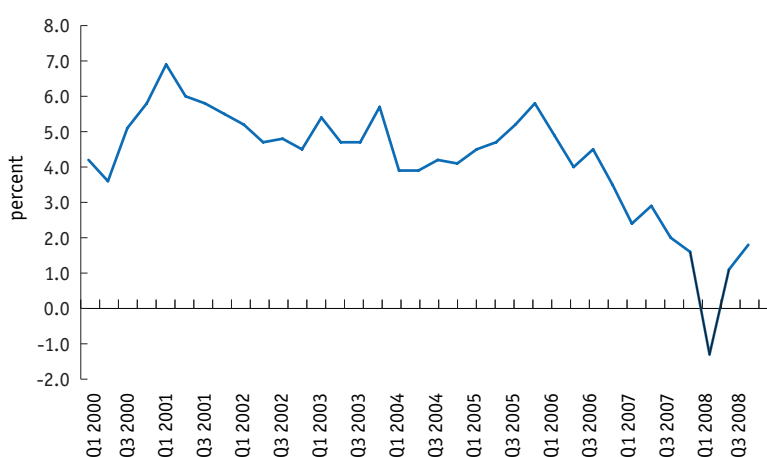
Falling inflation and reduced mortgage interest rates mean that, trends in real disposable income have recently been favourable. But consumption is being depressed by concerns about future earnings and employment prospects, and as consumers respond to economic uncertainty and falling wealth by increasing savings.

Falling inflation and interest rates have boosted real disposable income...

Real average earnings growth was negative in the first half of 2008 as month by month inflation rose above nominal earnings growth. The last quarter of 2008 saw an improved trend in real earnings for those in work as a result of the fall in the rate of inflation. Disposable income has been boosted by falling interest rates. Flat real income was offset by a significant 18% reduction in total interest payments, as most existing mortgage payers enjoyed falling interest rates. Indeed, even over the year to the third quarter of 2008, gross household disposable income grew at a robust 5.3% rate (nominal) and 2.2% (real).

Real household consumption fell in the third quarter of 2008 as the savings rate increased from very low levels (see *Chart B7*).

Chart B7: Households' savings rate

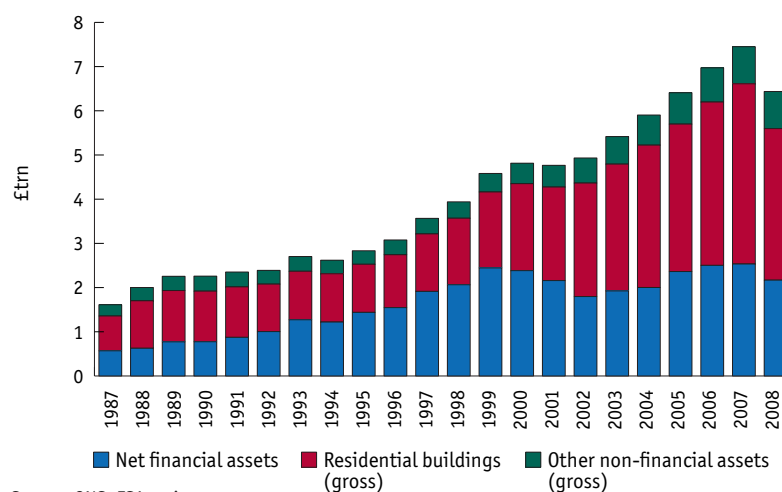


Source: ONS

...but consumption has fallen due to uncertainty around future earnings and house prices...

Looking forward, consumption growth may be held back by concerns about the future trend in real earnings, employment prospects and house prices. Robust growth in consumption over 2005 to 2007 was, to a significant degree, driven by the fall in the savings rate, which was in turn underpinned by rising property prices. We estimate that during 2008 falling property prices and financial asset prices had reduced household wealth by about £700 billion or 10% over the year (*Chart B8*).

Chart B8: Composition of household wealth



Source: ONS, FSA estimates

Note: Net financial assets (total financial assets minus total financial liabilities) includes household debt, while the value of residential buildings is gross.

This fall in wealth, combined with the reduction in the availability of mortgage credit, is directly reducing consumption, in part via the reduced use of mortgage equity withdrawal. It is also having an indirect effect and reducing consumption via its impact on consumer confidence.

...and rising unemployment

Unemployment has risen over the last four months from 2.9% to 3.6% (on a claimant count basis) and consensus forecasts suggest an increase to an annual average of 4.8% in 2009 and 5.9% in 2010.⁹ If this consensus is correct, the increase in unemployment in this recession will be less severe than in the early 1990s, when it reached 9.9%. Expectations of an increase in unemployment will tend to reduce consumption as people undertake precautionary saving. Unemployment is likely to be the most important driver of mortgage arrears, defaults and write-offs, given that most people who remain in employment are likely to be able to continue servicing mortgage debt due to the low interest rate environment.

Alternative scenarios

In addition to the *Central economic scenario* on which our analysis is based, we consider the potential impact of three plausible *Alternative scenarios*. We explore the transmission mechanisms through which these scenarios can affect the real economy and the financial services industry. We do not assess how likely the scenarios are to occur and they should not be interpreted as forecasts.

This year we have chosen to explore the ways in which the economy and financial sector could plausibly evolve over the medium and long term to highlight the substantial uncertainties that face both firms and consumers. We consider both a mild recession in which policy measures work to ensure that there is a smooth and swift economic recovery, and a more prolonged and severe recession than currently expected under the *Central economic scenario*.

⁹ *Consensus Forecasts: A Digest of International Economic Forecasts*, Consensus Economics, January 2009. Consensus forecasts use the annual average claimant account rate to measure unemployment.

We also consider the possibility of a stagflation scenario. We consider this less likely than the other two *Alternative scenarios*, except in the case where sterling depreciation creates inflationary pressure.

1. Policy measures restore confidence and growth

The global economy proves resilient and the downturn is of limited duration. Commodity prices settle at sustainable levels, thereby easing inflationary pressures.

There is a mild domestic recession, but policy measures are effective in ensuring that the recession is short lived and the recovery is rapid. Inflation falls below the 2% to 3% target range, but only temporarily, and recovers towards 2% within the next two years.

The actions taken to recapitalise financial institutions are successful and confidence in the financial sector is restored. Credit growth slows, but remains positive and most households and corporates are able to repay their debt. House prices stabilise by 2010.

2. Recession is more severe than expected

The global downturn is deeper and more prolonged than expected. Trade activity is reduced and some countries resort to protectionist measures. Commodity prices continue to fall.

There is a deep and prolonged domestic recession. Falling asset prices and the decline in economic activity produce self-reinforcing deflationary pressures. Policy measures to stimulate the economy prove ineffective.

Problems in the financial sector persist. Constraints in credit supply continue to be important and costly and reduced demand and high unemployment lead to significant corporate and household defaults. Consumption stagnates and savings increase. There is an increase in bankruptcies. Property prices continue to fall through 2010 and beyond.

3. Over the longer term, stagflation emerges

The global economy recovers gradually, led by emerging markets. This creates upwards pressure on commodity prices.

The domestic economy is a laggard in the global economic recovery, due to the impact of the financial crisis and high initial leverage in the household sector.

A combination of expansionary monetary policy, rising commodity prices and significant sterling depreciation lead to rising inflation. Wages react to inflation faster than expected. Monetary tightening to offset inflation has an adverse effect on real economic activities, with continued high unemployment.

The measures taken by the Tripartite Authorities are successful in restoring financial stability. Higher inflation and wage risks facilitate mortgage repayment for households who remain in work. Inflation helps stabilise nominal house prices.

As the scenarios are different variations of the same theme – the economic adjustment process – the implications of these scenarios for firms and consumers are similar but differ in magnitude. We consider the *Key messages for firms* and consumers of our *Central economic scenario* and these *Alternative scenarios* below. *Section C: Outlook for financial sectors and consumers* discusses these themes in more detail.

Key messages for firms

In some ways the implications of the financial crisis and the economic outlook vary by category of firms, but many of the messages for firms are relevant for all.

Banks and building societies have been the financial sector most noticeably affected by the financial and economic crisis. They continue to be significantly influenced by the aftermath of the crisis and firms need to ensure both liquidity and capital are managed effectively. Lending banks will also be

influenced by government policies and will need to extend their capital buffers to allow for further lending.

However, the crisis has far-reaching implications for all sectors of financial services. **Life insurers**, for example, need to consider issues arising from the significant increase in corporate bond yields. They will need to consider the extent to which these reflect a higher probability of default or a higher liquidity premium. Given the long-term nature of life insurers' investments, the impact of the latter should be less severe.

Retail intermediaries, meanwhile, may experience a considerable downturn in business volumes in the coming months. This will be most significant for mortgage intermediaries, as the property market slows further, but could also spread to financial advisers and general insurance intermediaries if risk-averse households increasingly shun long-term, less liquid forms of saving.

All firms should ensure they continue to meet our prudential standards and have sustainable business models despite the challenging environment.

- The risks to the domestic and global economic outlook are heavily weighted towards the downside. Firms need to factor the significant **degree of uncertainty** about economic prospects into their planning, including the possibility of a more severe recession than consensus forecasts suggest.
- Firms need to consider both adverse and benign financial and economic conditions when designing and adjusting their **business models**. Firms must ensure resources and funding strategies are flexible and able to react in a timely manner to changes both in their external and internal environments. Long-term projections of profitability, and business strategy need to be challenged, and firms should consider the worst-case scenario.
- **Household and corporate defaults** are expected to increase during 2009 due to a combination of high indebtedness, rising unemployment and, falling housing prices. This will further weaken firms' balance sheets and firms should plan accordingly.
- The financial sector has a critical role in the deleveraging process by **making lending available** to viable businesses, contributing to restructuring or winding down businesses that are not viable, lending to solvent households and renegotiating payment terms for households unable to meet the full payments.

All firms need also to consider some critical risks arising in their conduct of business which may be exacerbated as their business models and profitability come under strain.

- Lower levels of new business and lower persistency for existing business could place firms under significant pressure. Despite these pressures, firms need to ensure that they continue to **treat customers fairly and not cut important resources** in a bid to retain capital. For example, some firms may reduce their resource devoted to complaints handling, which in the long run could reduce the likelihood of firms taking appropriate corrective action. Similarly, the resource devoted to key control activities should not be reduced to a level where the effectiveness of those controls is compromised.

- In an attempt to diversify income streams some authorised firms may move into new or unfamiliar areas of business. Firms must not engage in activities for which they do not have **appropriate permissions** or adequate controls in place. Sales made under such conditions could mean that consumers could be ineligible for redress through Financial Ombudsman Service (FOS) and FSCS.
- Firms should not introduce **unfair terms** into their contracts of sale to the detriment of consumers. Examples of such unfair terms would include, unclear exclusion clauses in general insurance products or in other products like tracker mortgages with unfair ‘collars’, which restrict the extent to which rates charged can fall.
- Some firms will experience higher levels of arrears, defaults and possessions. Under our **conduct of business** rules for mortgage lending (MCOB), possession should be a last resort, but there is a risk that lenders may resort to possessions more quickly in a falling market. This may not constitute fair treatment of borrowers.
- Firms need to continue to ensure that the **advice** given to consumers is appropriate and that suitable products are recommended.

We consider the main risks and key messages for consumers and each financial sector in more detail in *Section C*.



Outlook for financial sectors and consumers

The outlook for consumers and firms in all sectors of financial services will be shaped by the adjustment taking place in the economy and financial markets. Alongside the risks posed by this adjustment, there are many risks facing consumers, firms and the FSA, which have not significantly changed since last year's *Financial Risk Outlook*, but on which we need to maintain focus even while addressing a crisis of financial stability.

Banks

Banks have been considerably weakened by adverse economic and financial market conditions. Banking fragility at the beginning of 2008 escalated into a banking crisis of systemic importance, and has been met with unprecedented policy responses. Funding liquidity remains difficult, especially term-money market funding, and the sector remains vulnerable to further shocks.

Sustainable business models need to be supported by ample liquidity, robust capitalisation and prudent risk management

Strategic challenge

To survive adverse conditions, banks need a strategic shift away from short-term profit maximisation towards ensuring medium-term survival and sustainable growth. Banks need to base their strategies around ample liquidity, robust capitalisation, prudent risk management and sustainable business models. Prudent risk management also needs to be supported by compatible incentive structures in remuneration policies and compensation practices.

Recent events have shown the importance of medium-term resilience to financial shocks and the risks in short-term profit maximisation, if shareholders equity can be eroded quickly by extreme market movements. Investors now appear to value banks based on long-term survival prospects – dependent on ample liquidity and high capitalisation – rather than on short-term leveraged profit potential.

This strategic challenge will, for many banks, involve risk reduction and deleveraging. This should be positive for each individual bank's intrinsic strength. However, when many banks attempt to deleverage simultaneously within a short timeframe, it can create negative feedback effects through fire sales in financial markets and tightening of credit conditions in the real

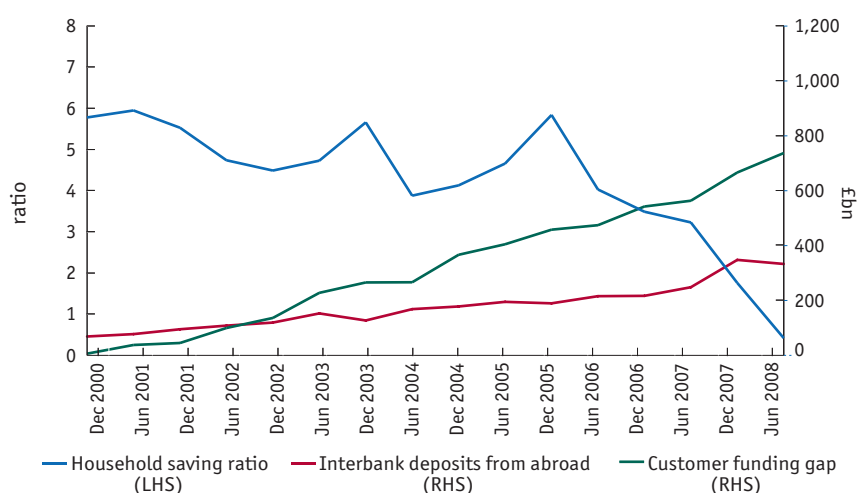
economy, as discussed in *Section B*. Challenges to credit risk management will involve a careful balancing act between: continuing to lend to economically viable, credit worthy borrowers; treating all customers fairly; and reducing exposure to the minority of least credit worthy borrowers, who would be economically unviable even in benign economic conditions.

Funding liquidity

Increasing reliance on funding from international financial markets...

Funding liquidity risk has always been an intrinsic part of the normal maturity transformation of banks that take short-term deposits and extend longer-term loans. As UK households savings rates declined steadily over the past decade, banks filled the growing deposit gap between sluggish deposits and fast-growing loans with funding from international financial markets (*Chart C1*).

Chart C1: Major UK banks' customer funding gap, household saving ratio and foreign interbank deposits

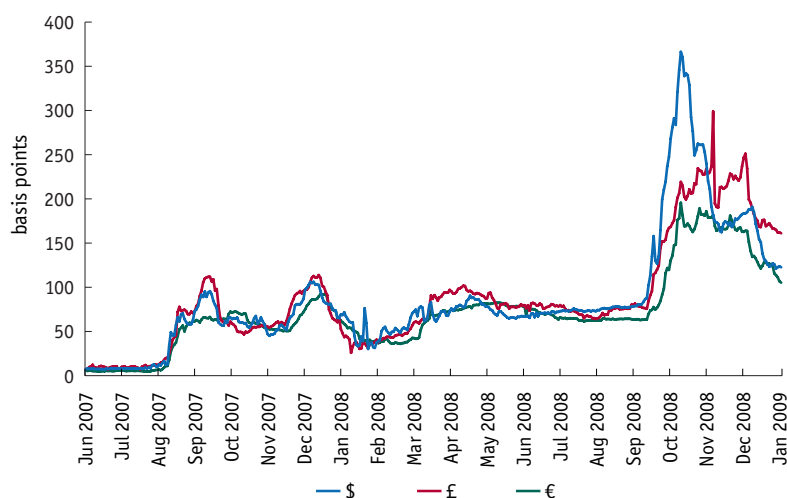


Source: Bank of England, Dealogic, ONS

...proved to be a key vulnerability for the banking sector

Reliance on short-term external funding to fill this funding gap turned out to be a significant vulnerability in the autumn of 2007. Banks which experienced liquidity problems generally relied on interbank and short-term market funding. This can play a useful part of a diversified funding mix, matching the maturity of short-term loans to consumers or to fill a temporary funding gap. Recent events have shown that unsecured interbank funding can prove costly (as illustrated in *Chart C2*), or even unobtainable in stressed market conditions, and cannot be regarded as a completely reliable funding source for supporting business growth.

Chart C2: 3-month LIBOR-OIS spreads in sterling, US dollar and euro

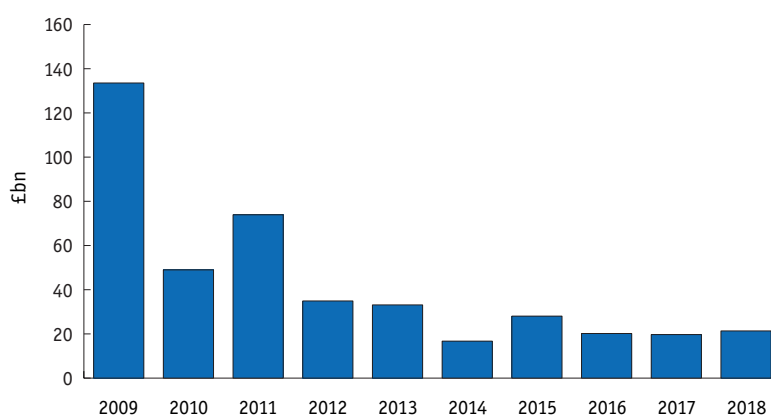


Source: Bloomberg

Lack of long-term funding creates difficulties in managing maturity risk

Longer-term funding normally plays a key role in limiting the maturity risk involved in extending long-term loans. However, longer-term market funding has also been difficult as markets for asset-backed securities (ABS) have been virtually shut to new issuance. The old high-volume structured credit securitisation model, especially when based on subprime assets, has probably disappeared for the foreseeable future. The government guarantee scheme for ABS issuance, due to commence in April 2009, should help resuscitate ABS issuance based on prime quality mortgage assets. With the real risk that securitisation markets stay closed for a long period, there could be a retrenchment towards traditional matched deposit-lending banking books. UK banks have a significant amount of outstanding bonds, which mature over the next few years, (see *Chart C3*).

Chart C3: Major UK banks' bonds maturing over the next five years



Source: Bloomberg data for Barclays, HBOS, HSBC, Lloyds, RBS, Abbey, Nationwide and Standard Chartered
Note: Based on formal maturities, ignoring embedded options for earlier expected redemptions.

Some more established EU covered bond markets have proven more resilient than securitisation markets, which are more dependent on international investment flows. However, covered bonds as funding instruments are less well established in the UK, and have been somewhat tarnished by the

deteriorating performance of mortgage loans in the cover pool of some UK covered bond issues. Unsecured bond issuance by financial institutions has been minimal and very costly for many months, although it has been somewhat revived by the government's Credit Guarantee Scheme (as discussed in *Section A*).

Increased competition for retail deposits has increased

Inevitably, competition for retail deposit funding has increased. Established banks may have some limited pricing power and customer loyalty, but face the risk of aggressive pricing; a combination of keen competition and the 'zero bound' has already prevented banks from covering deposit interest rates by as much as the cuts in official interest rates.

Financial problems at a few deposit-takers with higher interest rates should have increased risk awareness among depositors. However, with increased deposit protection ceilings and no losses for UK retail depositors to date, many retail depositors may still be enticed by savings products that offer comparatively higher interest rates. In this environment, only those deposit-takers with a strong franchise, comprehensive and convenient product line-up and resulting customer loyalty may be able to obtain retail funding reliably at competitive rates.

Funding challenges remain

The expanded availability of central bank funding has alleviated the banks' funding problems in the short term. But the funding challenges remain. Longer term, these measures may create a risk of dependence on public financial support and complicate the eventual need for the banks to be weaned off this liquidity support.

Capital

Recent events have put bank capital ratios under pressure in several ways:

- Existing buffers of profits and capital have been eroded by write-offs and losses.
- Risk weights have been subject to upward pressure from deterioration in credit quality, falls in collateral values and increases in market volatility.
- Risk assets have been increased by draw-downs on committed credit lines and by the return of previously off-balance sheet exposures back onto bank balance sheets.
- Bank portfolio adjustments toward shorter-term and lower-risk assets, and towards deleveraging, have tended to work in the opposite direction to reduce banks' risk weighted assets.
- Heightened concerns with respect to bank default risk have raised expectations towards banks' capitalisation, both in terms of the quality and quantity of excess capital needed to accommodate prospective losses in the economic recession.

Core capital has been boosted by government measures

Low core Tier-1 capital ratios, after excess capital in previous years had been returned to shareholders, proved a key vulnerability in the autumn of 2008. The Government Bank Recapitalisation Scheme sought to rectify this, by ensuring that banks had access to sufficient capital to sustain market confidence, absorb losses and continue normal lending. While the Government's new Asset Protection Scheme will enable banks to hedge the risk

of further unexpected losses and thereby reassure markets that their capital is more than adequate for the remaining risk on their existing portfolios.

The competitive pressures in recent decades for banks to free up excess capital and return it to shareholders has probably come to an end. Although it is still too early to fully assess the cyclical impact of the new Basel 2 capital requirements, the international policy debate presumes that the current capital framework is likely to create a degree of procyclicality, and is considering policy options to address this (discussed further in *Section A*). To ensure that banks have sufficient capital to accommodate cyclical downturns, there are calls to require them to set aside some form of dynamic reserves or countercyclical capital for loan losses or equivalent extra capital during the cyclical upturn. Looking beyond the current economic downturn to the eventual recovery, banks may face the challenge of both repaying government capital injections and setting aside more capital for future downturns, leaving less scope to remunerate existing shareholders.

Risk management

Recent events have highlighted the shortcomings and limitations of quantitative risk models and revealed the importance of disciplined risk management processes. Structured product credit ratings based largely on quantitative credit risk models and inadequate data have proved misleading. Risk management based purely on such external ratings has failed for instance where, banks buying highly rated high-yielding structured products with sufficient risk management resources to independently understand and assess the risks. Banks need to have strong risk management, combining the insights of models, intuitive and prudent decision-making by experienced risk professionals.

Banks face a careful balancing act in lending decisions

In credit risk management, banks face a careful balancing act between continuing to lend to the vast majority of normally economically viable, credit worthy borrowers, and reducing exposure to the minority of ‘bad’ borrowers, who would be economically unviable even in a less severe economic environment. Banks will need to guard against the risk of triggering unnecessary bankruptcies by withdrawing or refusing lending to economically viable borrowers. But equally, banks need to guard against the risk of making imprudent lending decisions. Government measures to insure parts of the credit risk on bank lending to various types of borrowers should reduce the risks to banks and increase their capacity to continue lending to economically viable companies.

Trading systems and controls were tested by financial market crisis

In market risk management, recent market stress has severely tested banks’ trading systems and controls, highlighting the risk that such systems are unable to monitor and control exposures at times of extreme volatility. The failure of a large counterparty has again highlighted the significant risks posed by the still large over-the-counter (OTC) derivatives confirmations backlog, and prompted calls for a better solution to this counterparty risk problem (refer to the box on the *Lehman Brothers collapse: Market infrastructure implications* later in this section).

At a time when banks may be under pressure to cut costs, they need to guard against the risk that risk management and control functions could suffer. This applies not just to management of financial risks, but also to conduct of business risks, compliance with relevant rules, codes and standards, and managing risks of fraud and financial crime. Banks need to guard against the risks of treating existing customers unfairly, for example handling arrears

and possessions inappropriately, and against the risk of misselling to new customers when pursuing new business opportunities.

Financial crime risks may increase in recessionary period

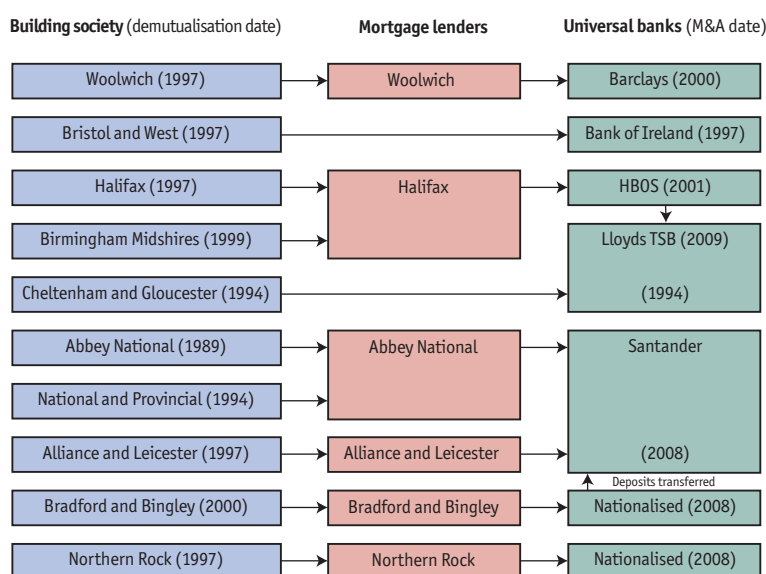
The recession may increase the motivation for employees and consumers to commit fraud against banks in an attempt to maintain their existing lifestyles, replace lost funds, or meet increasingly challenging revenue and sales targets. In addition to the direct financial impact of such an act, firms should also be aware that actual or rumoured insider and consumer fraud may cause significant reputational damage and hurt their credit fundamentals.

Business models

Business models are vulnerable to several risk factors

Strains on existing business models have intensified over the past year and called into question the strength of a number of bank business models. In the UK domestic financial system, the high-growth, wholesale-funded business model of the demutualised building societies proved vulnerable to several risk factors: concentration risk (by geography, product and sector) in exposure to UK mortgages; maturity risk in funding long-term mortgages with shorter-term funding; basis risk in tracker mortgages funded with LIBOR+ funding; leverage risk as low-risk weights would rise if property prices fell; and new-product risk in self-certified mortgages. As these risks have crystallised, the remaining demutualised building societies have been absorbed into universal banking groups or nationalised, see *Figure C1*.

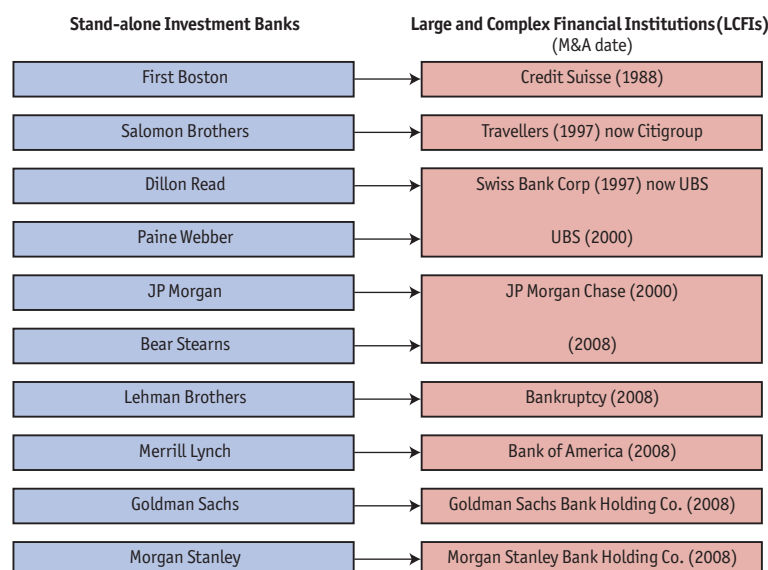
Figure C1: What happened to the demutualised building societies?



Source: FSA

In the US financial system, the innovation- and turnover-based, highly-leveraged business model of stand-alone investment banks also proved vulnerable to similar risk factors. Market dislocation squeezed investment banks in three ways: by increasing the value-at-risk of existing portfolios; by making it difficult to reduce risk through selling portfolios; and by making it difficult to fund portfolios through secured borrowing, especially without direct access to central bank liquidity facilities available to other banks. As these risks crystallised, the remaining stand-alone US bulge-bracket investment banks have failed, been absorbed into Large Complex Financial Institutions (LCFIs), or applied to become bank holding companies, see *Figure C2*.

Figure C2: What happened to the Wall Street Investment Banks?

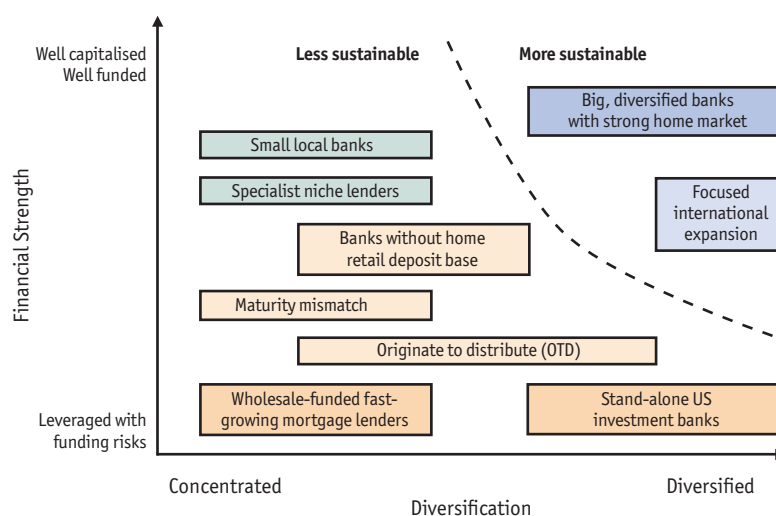


Source: FSA

Financial strength and diversification of risk are key to business models sustainability

Business model sustainability depends in part on the firm's franchise value, defined as its capacity to preserve and grow a stable and predictable risk-adjusted earnings base in activities and markets in which it maintains a material presence. Recent events suggest several general lessons about banking sector business model sustainability and key success factors (see *Figure C3*). These include financial strength – in terms of ample funding liquidity and strong capital ratios (both already discussed) – as this provides buffers to help ensure short-term survival and accommodate underlying volatility in earnings and risk exposures. Genuine and well-managed diversification of risk – by counterparty, geography, product and underlying risk factors – is also important and can help ensure stability of assets and income, and thereby reduce the need to draw down on financial strength.

Figure C3: Business model sustainability stylised analysis of key success factors



Source: FSA

Genuine and well-managed diversification of risk is easier to achieve for larger financial institutions. Size facilitates economies of scale and scope. Large universal banks can offer a full range of products to their consumers, and this strengthens their pricing power and the stability of their retail deposit funding base. Commercial pressure towards further consolidation, within national financial systems and across borders may therefore occur.

The originate-to-distribute (OTD) business model, with its multiple problems of information asymmetries, principal-agent problems, moral hazard, complexity and model risk, has fallen out of favour. More traditional business models of originate-to-hold (OTH) have proven more resilient to recent market turmoil. Both models face the growing challenge of how to raise long-term funding to support long-term lending and investment. Bank risk appetite looks set to remain diminished for some time, resulting in near-term balance sheet adjustment and medium-term restraint.

The international banking business model, intended to diversify and dampen banks' business risk profiles, may face increasing pressure. Cross-border banking problems have highlighted some of the inherent operational and funding risks, particularly when cross-border banks have large loan-deposit imbalances. As national rescue plans focus on supporting local banks, in order to support the local economy, many banks feel pressured to focus their capital on their core domestic banking businesses.

Increasing legal risks place higher costs on banks

The 'diversified retail bank' business model, based on product bundling, cross-subsidies and economies of scope, also faces near-term risks. A number of legal risks arise from past business practices, such as arguably unfair bank charges and cross-selling of other financial products such as payment protection insurance. Banks could well face costs from these legal risks, both in terms of compensation for past failings and increased compliance burden for future business. Increased sensitivity to such risks could make banks more cautious about fee-based sales by agents of financial products. Combined with other pressures on profitability (for example, from low interest rates and increased competition for retail deposits) it could put significant pressure on the traditional 'free current account' model, which could end up becoming less widely available.

Remuneration

Remuneration policies and prudent risk management need to be aligned

Although it is hard to prove a direct causal link, there is widespread concern that remuneration policies may have been a contributory factor to the market crisis. The policies used during the period leading up to the crisis, mainly but not exclusively in investment banking, tended to reward short-term revenue and profit targets. They also tended to be structured with large potential rewards and limited downside risks for the employee. As a result, staff had incentives to pursue risky policies, for example by undertaking higher-risk activities which provided higher income in the short run, despite exposing the institution to higher potential losses in the longer run. In many cases, remuneration policies were running counter to sound risk management, effectively undermining systems that had been set up to control risk. To support prudent risk management, the incentive structure in compensation practices must be compatible with risk management and controls and not encourage excessive risk taking.

Some of the risks in remuneration policies include:

- Performance measures which are over-reliant on revenues, or profits that are not adjusted to reflect risk. When determining bonuses, insufficient account is taken of non-financial performance, such as attitude to risk, willingness to comply with company ethics and culture and team working.
- Significant cash bonuses which are not deferred can encourage employees to adopt a short-term approach which expose companies to risks which in the long term prove unacceptable. Deferred bonuses, in stock or cash, provide employees with incentives to take a longer-term approach.
- Governance arrangements for remuneration, both at the level of the board via remuneration committees, and within the executive structure, need to ensure that the views of control departments, such as risk and compliance, can be expressed independently of front office staff and are acted on appropriately.

Key messages for banks

- The sector remains **vulnerable to further shocks**, including the macroeconomic effects of deleveraging by banks, households, companies, potential further deterioration in the quality of both financial assets and housing market assets and the heightened risk of counterparty defaults in a closely interconnected banking system. Firms should ensure that they take steps to mitigate these risks.
- To cope with the current difficult operating environment, banks will need to focus their strategy on **medium-term survival**, rather than on short-term profitability.
- **Business models** will need to be sustainable, with reliable and diversified income streams and less dependence on originate-to-distribute activities and acquire-to-arbitrage activities.
- Strategies need to be underpinned by **strong risk management** systems and controls for all areas of risk: credit; market and operational risk; conduct of business risks; compliance with relevant rules, codes and standards; and managing risks of fraud and financial crime.
- Given current macroeconomic, market and credit conditions, banks will need to maintain **strong core Tier-1 capital** ratios and use the current buffers above regulatory targets to absorb losses and sustain lending to creditworthy clients on commercial terms.
- Measures to support the banking system and credit growth have and will help meet these needs in the near term. In due course, banks will need to prepare to cope with the eventual **withdrawal of systemic support**, which will require by consolidating their operations with sustainable business models, regaining trust and revitalising wholesale funding markets.
- **Remuneration policies** should be in line with sound risk management. Firms should ensure that staff are not given incentives to pursue higher-risk strategies than are consistent with the firm's overall risk appetite, undermining the impact of systems designed to control risk to the detriment of shareholders and other stakeholders, including depositors, creditors and ultimately taxpayers.

Building societies

Although building societies have also been weakened by adverse economic and financial market conditions, the extent of that weakening has generally been less than that experienced by the large banks, mainly because of their lower exposure to wholesale funding and complex financial instruments. However, they continue to be at risk from the effects of a low interest environment, falling house prices and increasing levels of arrears.

Building societies are exposed to maturity transformation risk

Building societies, like banks, perform a maturity transformation role, taking in short-term deposits and extending longer-term loans. As such, their experiences in the crisis bear some similarity to those experienced by the banking sector. However, the differing business models mean that market pressures have not been identical.

A few societies have, in recent years, responded to the statutory constraints on their business model by pursuing higher-risk strategies, in particular, diversifying heavily into commercial, self-certification and non-prime lending. The adverse market conditions have proved particularly difficult for these societies and led to several mergers in 2008.

Concentrated in residential mortgage lending leaves sector particularly vulnerable to current environment

The Building Societies Act 1986 (“the 1986 Act”) requires building societies to ensure that at least 75% of their lending is for residential mortgages. Therefore, they inevitably face a concentration of risk within residential mortgage lending, and this risk is exacerbated if their lending book is concentrated in a restricted geographic area. As with banks, societies already face an increase in loan-to-value (LTV) ratios on their existing mortgage books and further deterioration is to be expected as house prices fall, leading to rising arrears on impairment charges will increase.

They are also restricted as to the amount of wholesale funding they can raise; all societies raise the majority of their funding from retail depositors. Nevertheless, the larger societies have been impacted by the closure to them of the long-term capital markets, although they have offset this in part by increasing their retail funding performance. Asset-side liquidity in almost all societies has remained above 20% of their total funding.

Competition for retail deposit and lower interest rates are squeezing margins

Competition with other deposit takers for these retail deposits has meant that societies are pushed to maintain interest rates for savers. At the same time they are being subjected to pressure to pass on rate cuts to borrowers in full. This has resulted in a squeeze on margins for societies, which together with the higher impairment charges – and FSCS levies arising from bank failures – can be expected to cut profitability in the short term. Indeed, a number of societies are expected to record losses for 2008 as a result of these factors. However, societies have relatively strong capital positions and are not profit maximisers; most are likely to respond to market conditions by curtailing growth and therefore may be in a better position to cope with reduced profits than banks.

Key messages for building societies

- The building society sector remains **vulnerable to further shocks**. Societies should ensure that their **business models** together with their supporting risk management systems and controls are sustainable.
- Societies will need to respond to additional changes posed by the **low interest rate environment**.

Life insurance

Market conditions have put pressure on life insurers' earnings and excess capital. They have also increased the operational risks insurers face and reduced the scope for managed risk taking. Although the UK life insurance sector was generally well positioned going into the market downturn following changes to the regulatory regime in 2004, and had a better understanding of risks and their capital implications, firms need to maintain their focus on effective risk management in the current market. Failure to do this may lead to policyholders being treated unfairly or further capital erosion. Insurers also face challenges from declining levels of new business volumes and margins. Longevity risk continues to be significant, and annuity providers – who are particularly subject to a concentration of longevity and credit risks – must carefully manage their risk profile.

Market conditions

Life insurers have been exposed to falls in asset values...

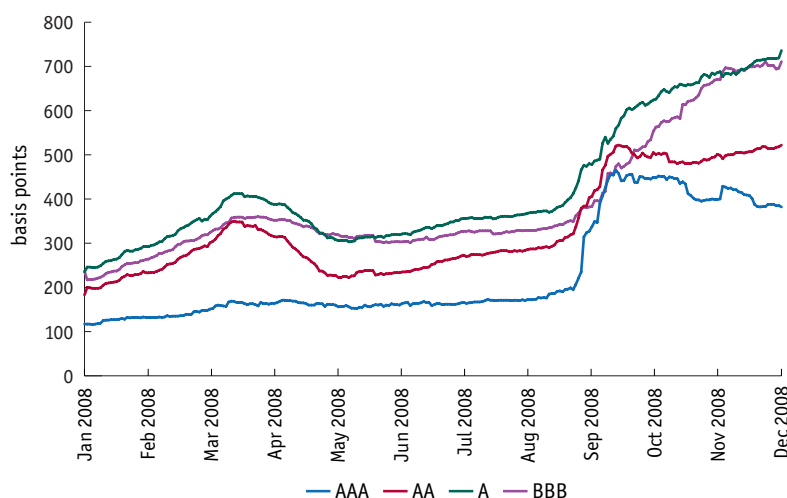
The financial position of firms and groups will be influenced by the extent to which they hold assets, such as equities and property, and the nature of their bond portfolio. While some insurers have hedging strategies in place that have protected them from falling equity markets (and to a lesser extent widening bond spreads and falling property markets), those that are more exposed to falls in asset values run a greater risk of further reductions in excess capital. For some insurance groups, this would also be reflected in falls in Insurance Groups Directive surpluses.

...and widening bond spreads

As most life insurers hold corporate bonds to back various classes of business, analysis of market developments should be a key consideration for them in determining the discount rate used to value long-term liabilities. In setting this discount rate, most insurers make an assessment of the extent to which bond spreads can be explained by liquidity premiums, rather than the probability of default. Bond spreads have widened significantly, particularly in the third quarter of 2008, and whether insurers attribute this to an increase in the liquidity premium or an increase in credit default risk affects the value of their liabilities. Moreover, asset values will themselves be affected by the increased risk of corporate bond defaults. It is therefore critical that insurers holding corporate bond portfolios properly review underlying credit developments, in order to understand the state of their balance sheets and their capital positions.

Some insurers may have experienced difficulty with the valuation of their assets and, in particular, corporate bonds, because of the considerable reduction in market activity in many asset classes. We would expect firms to have regard to guidance of the IASB's Expert Advisory Panel (published in October 2008) in this regard. Mark-to-market valuations are still likely to be the norm, but if this guidance were to steer some firms towards adopting a 'mark-to-model' approach for valuing some of their assets, they may need to develop their modelling capability and enhance the relevant internal controls on this activity, including appropriate involvement of senior management.

Chart C4: Credit spreads of corporate bonds with 7-10 year terms



Source: Datastream

Pressure on earnings...

There is a risk that the deterioration in market and economic conditions could also put life insurers' earnings under pressure. Declining consumer confidence and falling disposable income, for example, could lead to significant reductions in new business levels. Data shows that new business fell by 9% on a rolling-year basis to the third quarter of 2008 for single premium business.¹ Regular premium pensions business increased over the same period, but this may in part be due to business being redirected from existing arrangements. However, levels of regular protection business have already started to decline. Further falls in new business levels may derive from structural issues in the market (discussed below). The slowdown in residential property sales could lead to a fall in demand for lump-sum and income protection products. Life insurers writing unit-linked business could also face lower revenue from fund-based management charges as the underlying asset values fall.

...and excess capital levels

Pressures on earnings combined with pressure on excess capital levels have reduced the scope for risk taking and insurers are operating in an environment in which they face new challenges and uncertainties. In this type of environment, insurers may also be subject to management stretch as well as increased operational risks, such as external and employee fraud. While risk management standards in the sector have generally improved, in order to maintain effective operational controls, firms need a clear appreciation of the new risks facing their business and must take necessary actions to manage them. This should include robust stress and scenario testing and effective and fully integrated capital management, as highlighted in *Key messages for life insurers*.

Impact of structural market developments*Business models under strain from structural changes...*

In addition to the implications of weak market and economic conditions, life insurers may be affected by other structural market developments. The structural changes introduced by the Pensions Act 2008, for example, could reduce insurers' share of the pension savings market, both in the short and longer term. The Act creates a new obligation for employers from 2012 to provide, and contribute to, a pension for their employees (dependent on age and earnings) on an automatic enrolment basis.

¹ New Long-term Insurance Overview Statistics, ABI, Q3 2008.

The Act also allows for the creation of a central occupational pension scheme – currently referred to as Personal Accounts – to enable employers without their own schemes to meet the obligation. In the short term there may be some uncertainty, which could result in consumers delaying decisions about retirement saving. In the longer term, while insurers will continue to be able to offer pension products and services, there could be an impact on their new business revenues; for example, if many employers choose to use the Personal Accounts Scheme rather than a Group Personal Pension arrangement.

...and competitive pressures

Competitive pressures from asset managers and platform providers continue to pose a risk to life insurers' revenue streams. Some insurers may find it difficult to compete with asset managers or move to a low-cost model because of their high legacy and distribution costs. This is a particular issue in the insurance bond market, where the characteristics of this product can most easily be replicated by asset managers. Insurers operating in this market have also had to take into account changes in the capital gains tax rules which introduced a single rate of 18% and abolished taper relief (announced in the HM Treasury 2008 Budget Report). As a result, for a relatively small proportion of bondholders, insurance bonds no longer have possible relative tax advantages compared with other products, which could affect the potential for future sales of this product.

Some market developments may offer beneficial opportunities for insurers and their consumers. For example, the *Retail Distribution Review* will benefit those insurers who can compete most effectively on the basis of the quality and prices of their products and services.

More generally, the recessionary economic environment could exacerbate the effect of, and bring forward the pressures on individual insurers' business models. This means that insurers may need to accelerate their response to these strategic pressures or they may not deliver required profits. Insurers will need to manage the additional risks this might bring; for example, by assessing and understanding the nature of the underlying risks of expanding into new areas of business, developing the capabilities to manage these risks and ensuring existing policy holders are treated fairly.

Annuity business

Annuity business is exposed to longevity and credit risk

Insurers operating predominantly or exclusively in annuity business are exposed to a concentration of longevity and credit risk. Market conditions have added to the impact of these risks, increasing the risk profile of this part of the sector. The risks arising from widening corporate bond spreads (as outlined above) are a particular issue for annuity business, in which long-term assets such as corporate bonds are used to match long-term liabilities (such as annuities in payment).

We have discussed the potential impact on life insurers of an ageing population and higher-than-expected life expectancy in previous *Financial Risk Outlook's*. This continues to be a significant risk and firms that do not adequately allow for improvements in mortality (particularly for older ages) will be underpricing their annuity products, overstating profitability and understating reserves. While there have been proposals to address the risks arising from uncertainty in the projections, as yet there is no consensus as to what extent the mortality projections should be adjusted.

With-profit firms affected by falling asset values and lower interest rates

With-profits

Falling asset values combined with low interest rates are a particular issue for with-profits firms, as this increases the cost of providing policy guarantees. In response, some firms are taking actions to preserve capital. In addition to de-risking and hedging, with-profits insurers may seek to implement planned management actions, such as imposing or increasing charges to policies, reducing terminal/annual bonuses and imposing or increasing Market Value Reductions (MVRs) on surrender.

While there are safeguards in FSA rules for policyholders (including around the application of MVRs and the requirement to manage the fund in line with the publicly available Principles and Practices of Financial Management), there is a risk that the mitigating actions firms take to deal with their financial pressures may result in policyholders not being treated fairly. Even if the actions firms take are consistent with our rules and principles, there is also a risk that poor communication may mean policyholders' expectations are different to their experience. If either of these issues is widespread it could have a further negative impact on consumer confidence in the sector.

Key messages for life insurers

- Market conditions have put pressure on life insurers' **earnings and excess capital**, increasing the operational risks they face and reducing the scope for risk taking. Senior management need to have a clear appreciation of the risks facing their business and take necessary and appropriate actions early enough to manage them. Robust **stress and scenario testing** is an important risk evaluation tool and insurers should take into account the key messages in the *Stress testing and scenario analysis* box in *Section A*. In the longer term, all firms, particularly those wishing to use internal models under Solvency II, will need to further evolve their **risk management** so that it is effective and fully integrated with capital management.
- In determining necessary management actions, insurers must take into account their obligations to continue to **treat their customers fairly**.
- There are increasing threats to future **levels of new business**, and to the retention of existing business, posed by current market conditions. Taken in conjunction with other developments, for instance the Pensions Act 2008, recent changes to capital gains tax and the *RDR*, insurers need to reassess their business strategies.
- Firms, in particular those writing annuity business, need to ensure they set aside **sufficient reserves and capital** to reflect the extent of uncertainty around life expectancy.
- Firms holding corporate bonds should make a prudent assessment of the extent to which bond spreads reflect liquidity premiums, as opposed to the probability of default in valuing their **long-term liabilities**.
- Insurers should maintain **effective operational controls** to address the risks of financial crime which may be exacerbated by current market conditions.

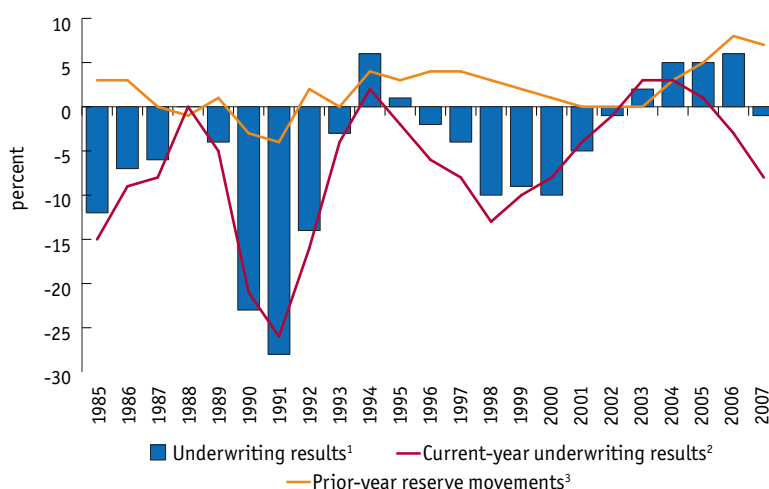
General insurance

Underwriting results in recent years have been supported by reserve releases and investment returns. Market conditions make the need to underwrite for profit even more important. In addition, if there were a major catastrophe, insurers might need to recapitalise. However, the sector is currently more attractive to investors because it is less heavily exposed to the asset risks affecting other sectors. In the retail market, there is a mixed picture in changes in premium rates. Pressure on pricing could affect profitability leading to changes in coverage or terms and conditions, which may result in poor consumer outcomes. Some insurers may also be exposed to potential claims on certain liability lines related to the wider financial markets, although the size of these potential claims remains unknown.

Outlook for underwriting results

Prior to the inclusion of investment income, the UK Company market as a whole made a 1% underwriting loss during 2007.² Sizeable prior-year reserve releases supported the underwriting results, and in many classes of business masked an increase in the loss ratio attributable to the most recent business.

Chart C5: Total UK general insurance underwriting results



Source: Calculation based on FSA annual returns

Note: ¹ Underwriting results arising from current-year earned premium, together with the impact of adjustments to prior-year reserves. ² Underwriting results arising from current-year earned premium which do not reflect any adjustments to prior-year reserves. ³ Adjustments to prior-year reserve estimates.

In aggregate, the industry released £2.2 billion or 7% of net reserves, which follows significant reserve releases in both 2005 and 2006.

In addition to prior-year reserve releases, 2007 also benefited from sizeable investment returns which will have supported profits. Although there have been recent rate increases in motor and certain lines of reinsurance, there is no evidence of consistent hardening across the board. Reserve releases to the same extent as seen over the last three years may not be sustainable in the longer term, particularly if premium rates do not increase.

Potential difficulties in maintaining adequate capital

If insurers do not maintain pricing discipline in the current economic environment, they may have difficulty maintaining adequate capital. With an outlook of lower investment returns it will be more difficult for insurers to support poor underwriting results through investment activities. In addition, where reinsurance premium rates have hardened and the direct business rates have remained soft, we have historically seen some insurers choosing to reduce the level of reinsurance cover which increases their exposure to major losses. Finally, rapid changes in valuation of a major currency can potentially have a substantial impact on the balance sheets of wholesale insurers and intermediaries. In order to absorb these losses, particularly if there were to be a major catastrophe, some firms may need to raise more capital.

Although premium rates in motor and household have increased over the last year, for most insurers the rate increases were not significantly above inflation. The use of aggregators within the personal lines market continues to increase and this may maintain pressure on premiums. For consumers, aggregators may make assumptions to generate quotes quickly, and there is a risk that if a consumer is not aware of such assumptions, they may find that they are unable to make a claim. Additionally, if information about policy excesses is not provided clearly, consumers may end up with less cover than they intended to buy and insurers may fail to treat their customers fairly.

Reported liability claims arising from the subprime crisis, have to date, been manageable. However, some potential claims relating to this and other recent market events (for instance the Madoff case) may take a number of years before they are reported to the insurer, which means significant claims could still arise in certain sectors. If firms do not monitor their exposures, they could experience unexpected losses in certain lines of business.

Key messages for general insurers

- Insurers must ensure that they have **effective risk management** in underwriting and reserving, and review their business plans in light of recent and expected claims experience. Insurers need to monitor their exposures to potential claims relating to market events. It is increasingly important for insurers to carry out regular **stress and scenario testing** to ensure that they remain adequately capitalised. In the longer term, all firms, particularly those wishing to use internal models under Solvency II, will need to further evolve their **risk management** so that it is effective and fully integrated with capital management.
- Insurers should maintain **effective operational controls** to address the risks of financial crime, which may be exacerbated by current market conditions.
- Higher claims on protection products could arise in the economic downturn. Firms need to ensure that **contract terms are interpreted fairly** and legitimate claims are met in a timely manner. Firms should also ensure that protection products sold to consumers are appropriate and that the consumer would be eligible for claims under their terms and conditions.

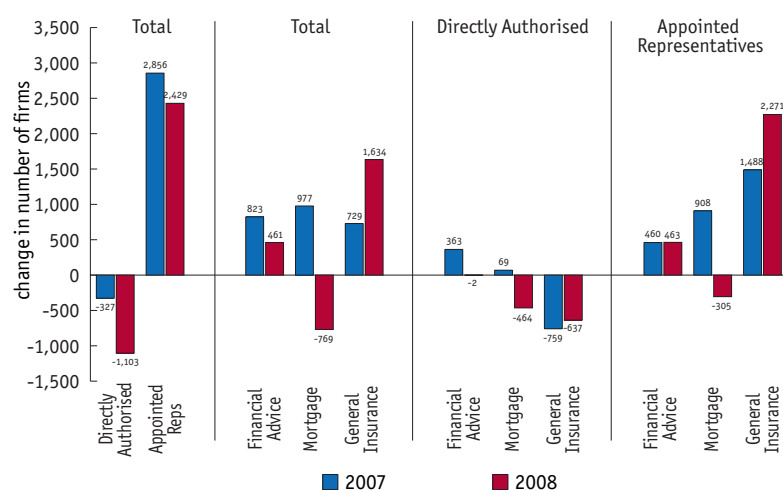
Retail intermediaries

The retail intermediaries sector plays an important role in helping consumers meet their financial needs. This sector faces huge challenge in adapting to current economic conditions. Mortgage intermediaries have been particularly affected by the weak property and lending markets, but firms across the sector are also being affected. Risk to the sustainability of the sector, improving management and control, and improving the quality of advice, will remain the key issues facing this sector for the foreseeable future.

Changing structure of the retail intermediary sector

Trends in the number of firms in the retail intermediary sector were relatively stable up until mid-2007. However, since then there has been a marked change in these trends. The total number of firms has increased strongly, with a net increase of over 1,300 firms through 2008, and this is mainly due to the growth in general insurance intermediaries. Previously, the mortgage intermediary sector grew in line with activity in the property market and the number of firms increased to levels that were (with hindsight) probably unsustainable. In 2008 there was a net fall of 769 mortgage firms (equivalent to 9% of the mortgage intermediary population) compared to growth of 13% in 2007. The number of financial advice firms continued to grow in 2008, although at 3%, this was half the rate of growth seen in 2007. Across all three sub-sectors, the number of directly authorised firms was static or declining, whereas the number of appointed representatives remained comparatively strong.

Chart C6: Changes in the number of retail intermediary firms



Source: FSA

Sustainability

Intermediaries may find strategies unsustainable

At the end of 2008, 80% of mortgage intermediaries reported that current economic conditions were having a negative impact on their cash-flow, with 65% reporting that they were seeing a negative impact on the level of capital reserves they hold.³ Those involved in the specialist and non-conforming areas of the mortgage market have been particularly affected by the slowdown

3 Mortgage Intermediary Census, NMG, December 2008.

Income and capital resources are under strain

in the property market and tightening credit standards. Lenders have greatly reduced their appetite to lend to consumers, with complex or more risky characteristics, an area that intermediaries have found profitable in the past. Even when the property market starts to recover, it is unlikely that intermediaries will be able to rely on this specialist area for revenue. In addition, many lenders totally reliant on intermediary business have left the market, and mainstream lenders are likely to focus on direct distribution channels and key national intermediary relationships in the future.

With the majority of mortgages yielding one-off commissions, advisers are reporting that on average only around half of their business now comes from mortgages. With firms struggling to maintain income and capital resources, it is likely that the number of firms in the sector will continue to contract significantly, reducing access to advice for consumers. Another consequence is that there is an emerging risk of ‘phoenix firms’, whereby directors of one firm try to close it and transfer all the business to a new entity, leaving only the liabilities behind.

The financial advice sector has seen strong growth in recent years, with the value of life and pensions sold through IFAs increasing by over 20% a year between 2003 and 2007.⁴ The number of firms has continued to grow and, despite market and economic conditions deteriorating, only around 20% of advisers say that their investment and pension business is declining.⁵ However, there are a number of threats to the ability of financial advice firms to maintain income levels, especially as many rely substantially on mortgage business.

Financial market turbulence means that many consumers have become cautious of investing in equity-based products, especially as many sectors that have been heavily recommended by advisers in recent years have seen falls in value. In addition, consumers looking for investment opportunities may be attracted by the security offered by bank deposits, despite current low interest rates. Global economic and financial market conditions mean that it will continue to be challenging for advisers to find opportunities that give their clients an attractive combination of risk and return. However, there are still many investors with existing portfolios who will continue to need good quality advice. Many advisers are already seeing the benefits of moving towards a holistic approach to providing financial planning and advice, based on ongoing customer relationships and a greater emphasis on recurring income streams.

Despite the fact that we have seen strong growth in the number of general insurance intermediaries over the last year, the sector still faces significant challenges. The current economic conditions mean that consumers will be looking to reduce their outgoings, including those relating to insurance and protection products. Most will continue to purchase core general insurance products, but demand for protection products could decrease, especially if the price of cover rises to reflect increasing risks. This will also impact on financial advice and mortgage firms who sell protection products.

In recent years the growth of insurance aggregator (or price comparison) websites has posed a particular threat to established intermediaries, particularly on home and motor business. Now firmly established in the UK market, they will continue to place the general insurance intermediary

⁴ UK IFAs 2008, Datamonitor, 19 November 2008.

⁵ IFA Census, NMG, January 2009.

sector under competitive pressure. But the growth of aggregator businesses has moderated and the level of threat they pose appears to have stabilised. Many intermediaries have made an explicit choice to exploit the opportunities available by joining aggregator panels. Others have chosen to avoid trying to compete directly, concentrating on higher value, specialist and non-conforming business, where they are well positioned to provide a good service to their clients.

Many general insurance intermediaries serve both retail and commercial clients, so there is a risk that any deterioration in demand for commercial insurance could impact on the ability of their business. Small business clients are likely to be under particular pressure through the economic recession, and businesses of all sizes could look to reduce costs, including insurance costs, where possible. Additional competitive pressure could come from aggregator websites seeking to reproduce the success they have achieved in the retail markets, particularly targeting smaller businesses with relatively simple insurance needs.

Management and control

Oversight and control may be inadequate

We continue to be concerned about the inadequate levels of oversight and control often seen in retail intermediary firms, particularly given the increased pressure firms are under in the current environment. Firms who rely heavily on maintaining volumes of transactions, with few recurring income streams, may suffer. Advisers who are remunerated wholly or partly based on sales volumes will have particularly large incentives to maintain business levels, and firms need to have the controls in place to ensure that products are sold appropriately. This environment also increases the risk that staff may be tempted to engage in a variety of frauds, either to meet sales targets or to supplement declining personal income. Firms need to maintain the checks they make against consumers, as consumers in financial difficulty may be more likely to make attempts at defrauding businesses.

We recognise that many firms will be considering how they can reduce costs and will see customer-facing functions as the areas of their business where they want to maintain resources, if at all possible. As is usual in any industry, firms will be taking a close look at back-office functions that can be reduced in size or made more efficient. However, it is important that resources dedicated to oversight and compliance activities are maintained at a level appropriate to the risks and conflicts inherent in the business. Arguably with the current challenges and changes in the sector, firms should be thinking about whether they actually need to increase resource in this area as part of their strategy for building a strong, sustainable and compliant business.

Increasing numbers of firms are becoming appointed representatives (see *Chart C6*), including some directly authorised firms who have migrated across to this business model. This is leading to an increase in the size of some network firms at a time when they too are under significant pressure. We have previously reported our concerns that some firms with appointed representatives rely too heavily on remote monitoring, with inadequate consideration given to overall monitoring procedures. Not only do principal firms need to improve their approach, they may also need to increase the level of resource they dedicate to oversight and compliance functions to cope with increasing numbers of advisers. This includes carrying out appropriate due diligence to ensure the quality and sustainability of new member firms, and avoiding inadvertently taking on a 'phoenixing' firm.

Steps towards maintaining professionalism need to continue

Quality of advice

Low levels of consumer trust in financial advisers has been a long-running issue in the sector, partly driven by concerns over the quality of advice and service given to consumers in the past. This is a significant concern as it could deter consumers from seeking advice, resulting in inadequate provision for their needs. The implementation of the *Retail Distribution Review (RDR)* and related proposals will be a major challenge for the financial advice market for the foreseeable future, requiring the whole retail distribution market to implement proposals that will: improve the clarity of the service they offer; remove product provider influence over adviser remuneration; increase professional standards; and improve the sustainability of the sector. Many financial advisers have already taken steps towards enhancing their professionalism, partly in anticipation of the outcome of the *RDR*, but also as a way of improving their customer proposition. This includes attaining the higher qualification standards that may be required, but also offering improved service-based propositions that build ongoing relationships with clients. There is a risk that some advisers and firms will choose to exit the market rather than implement these proposals, but over time the result will be a stronger, more sustainable sector, with greater access to good quality advice for consumers.

There are now few specialist and non-conforming mortgage products being sold by intermediaries. In these areas in particular, but also in the wider market, we have previously had significant concerns about the quality of advice, which has often resulted in consumers entering into potentially unaffordable mortgages. Too many firms failed to adequately establish consumers' needs, with senior management failing to ensure that customers were treated fairly. We have not seen any substantial evidence that quality of advice has improved, meaning that there is a risk that when the mortgage market recovers, problems of consumers being sold unaffordable and unsuitable mortgages will re-emerge.

Regulatory action taken over the last year demonstrates our ongoing concerns about the quality of advice given to consumers on payment protection insurance products, particularly where they are supplementary to the primary business of the firm. Poor sales practices too often result in consumers purchasing cover that is not suitable for their needs.

Across all three sectors, as current economic and financial conditions cause firms to come under pressure, they may look to diversify and build income streams in new areas to ensure the sustainability of their business. Where this is the case, they must ensure that their advisers are competent to offer advice on this broader range, having the appropriate knowledge and experience.

Key messages for retail intermediaries

- Measures need to be taken to ensure the **sustainability of their business model**, particularly in terms of ensuring that they have the financial resources that will enable them to withstand the current economic and financial climate, while still ensuring that they treat their customers fairly.
- **Robust management and systems and controls** must be in place. Firms should resist the temptation to reduce expenditure on compliance given that pressure on income and profitability could tempt advisers to treat customers unfairly or act fraudulently. Firms with appointed representatives should ensure that they continue to have compliance resources in place that reflect the risks inherent in their business.
- Advisers need to do more to ensure the **quality of the advice** they give, collecting sufficient information from consumers so that advisers can properly assess their needs and recommend suitable products. If firms do wish to diversify into new areas as a response to difficult market conditions, they should ensure that their advisers are competent, and have appropriate knowledge and experience.

Asset management

The asset management industry is likely to suffer as a result of the economic adjustment and difficult financial market conditions. In response to falling revenues, efforts to cut costs may result in a weaker control environment among firms, and some asset managers may not have adequate resources to manage the full range of investments in their portfolios. Failure to understand inherent risks may lead to investors holding asset management products which are inappropriate for their needs. An increasing number of defaults over 2008 highlighted ongoing issues which asset managers face in managing counterparty risk on behalf of their clients. Asset management firms also face liquidity issues emerging from the rapid contraction in their assets, as well as continuing to face the risk of financial crime.

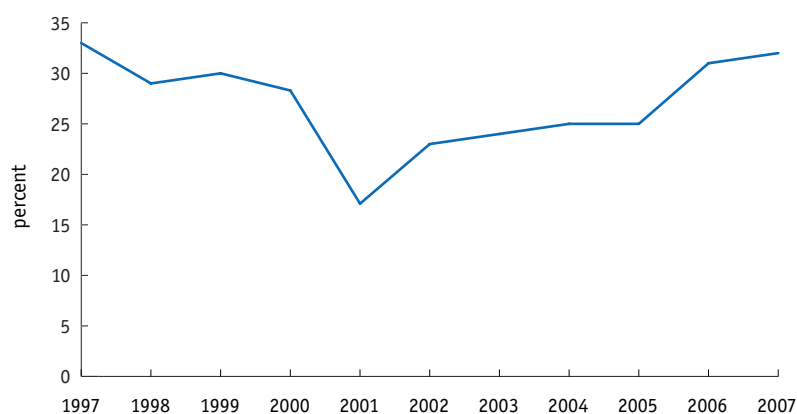
Impact of economic pressures

Assets under management are falling

Asset management firms will face a decline in revenue in 2009 resulting from reduced ad valorem fees from falling assets under management (AUM). Falling AUM have, and will continue to be, primarily driven by the reductions in prices of underlying asset classes. Net outflows from the industry as some investors opt for lower-risk products, will also lead to a reduction in AUM. Furthermore, reduced performance fees due to underperformance in difficult conditions and competitive pressures forcing firms to accept lower fees in order to retain mandates, will also place downward pressure on firms' revenue.

We expect firms to offset these declines in revenue through cost reductions. However, the higher fixed element of the cost bases of many firms operating in the sector will make this challenging. A key risk in these circumstances is that cost-cutting measures could result in a weaker control environment within firms. A strong control environment requires not just the robust performance of compliance, risk and audit functions, but also effective senior management engagement and oversight.

Chart C7: Profit margins as a percentage of revenue for UK fund managers



Source: IBM, IMA, IFSL

Note: Sharp fall in 2001 was due to equity market declines, similar falls are likely over 2008/2009.

*Investors more risk averse***Investors' changing risk appetites and firms' responsibilities**

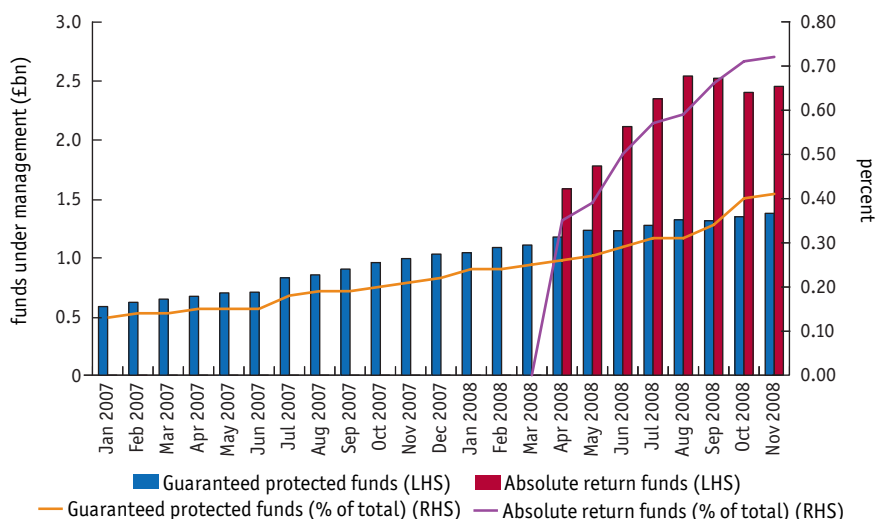
Retail and institutional investors may shy away from asset management (and other financial) products that are perceived as being higher risk and complex in favour of perceived lower-risk products. Investors need to be mindful of the risks associated with these nominal low-risk products. For example, absolute return funds can encompass a broad range of strategies ranging from hedge-fund style equity long/short strategies to complex multi-strategy fund-of-fund arrangements. Potentially unappreciated risks include possible underperformance in an equity market recovery, higher volatility than expected in different market conditions and some investors failing to understand that an absolute return strategy aims for, but does not guarantee, a positive return.

Reduced retail investor risk appetite is likely to result in a continued interest in funds promising some level of capital preservation and in structured products offering capital guarantees. Consumers may fail to understand the implicit costs of capital preservation in these funds, especially the likely reduction in total returns (compared with similar risk products) in the long term. Consumers may also not realise that capital guarantees in structured products are only as strong as the financial strength of the guarantee provider.

As a result of short-term high-risk aversion, investors (both retail and institutional) could be at increased risk of buying or being sold inappropriate products that may not be a prudent choice for those seeking long-term investments. While asset managers are increasingly distant from retail investors, given intermediation via advisers and platforms, the risk remains that firms may not produce or effectively communicate product descriptions that adequately reflect the nature of the product.

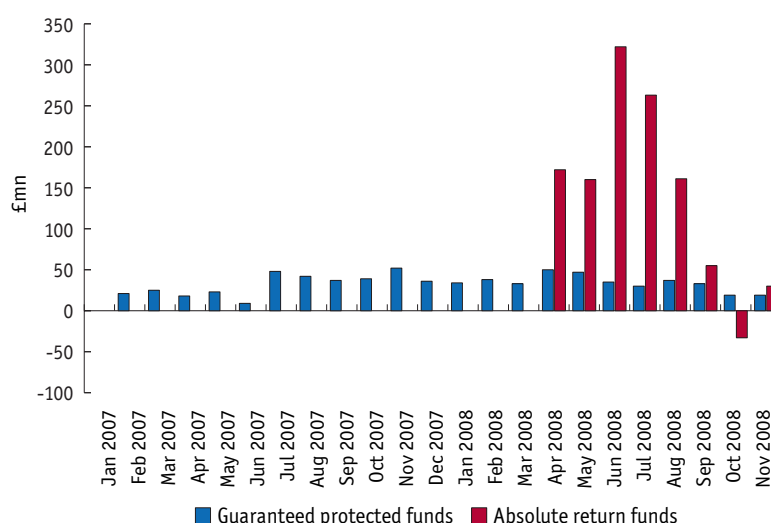
The risk of retail investors being sold 'hand-me-down' institutional products is ongoing. This refers to when asset managers adapt successful institutional products for retail distribution. Firms may fail to consider whether these are appropriate for retail investors, whether they represent value for money and whether they are being launched at the wrong time (for example, at the peak/end of a cycle of opportunity).

Chart C8: Funds under management (UK domiciled collective investment schemes)



Source: IMA monthly statistics

Chart C9: Net sales (retail and institutional) of guaranteed protected funds and absolute return funds



Source: IMA monthly statistics

Asset management firms may have inadequate resources

Adequacy of asset managers' resources

There are concerns that firms may not have adequate resources in place to allow them to robustly trade, settle, value and risk manage the full range of investments within their mandates. Furthermore, firms may not be adequately equipped to perform their own due diligence on the full range of investments being used in their portfolios. As over-the-counter (OTC) derivatives become more commonplace in portfolios, firms face the risk of not being adequately resourced to monitor and manage these alongside traditional investments such as bonds and equities.

While risk averse investors may become wary of new or complex products in the immediate future, in the medium term we expect investor interest in innovative asset management products to return. New styles of asset management products are inevitable both during a downturn (as firms seek higher margins) and even more so during a recovery. There is a risk that managers may rush into these markets with copycat products, when they have not performed adequate robust product development, or resourced themselves appropriately to provide and risk manage these products. This risk may be compounded by some firms responding to falling revenues by cutting back on developing their infrastructure to use more complex strategies in the short term.

Sector remain vulnerable to counterparty and outsourcing risk

Counterparty risk and outsourcing risk

Counterparty risk remains heightened in turbulent financial market conditions, particularly as the rate of defaults are expected to rise this year. During 2008 counterparty risk crystallised in a variety of ways. Some firms incurred costs arising from replacing OTC derivative positions with bankrupt counterparties, in part due to having demanded insufficient collateral or rebalancing collateral too infrequently. Firms engaging in stock lending allowed cash collateral received to be invested in money market instruments, which carried more risk than had been expected. Some of these money market instruments experienced losses, while others became highly illiquid, reducing their efficacy in offsetting counterparty risk. Hedge funds which posted assets as collateral in funding transactions also experienced difficulties in reclaiming

these when counterparties had engaged in rehypothecation and subsequently went bankrupt.

Some asset management firms experienced difficulties in concluding or closing out trades after the Lehman Brothers bankruptcy (see *Lehman Brothers collapse: Market infrastructure implications* box later in this section). While firms may have expected these trades to have involved limited or no counterparty risk (given that many involved a central clearing counterparty), it materialised that complexities in the administration of Lehman Brothers resulted in some uncertainty for clients as to the position of trades conducted through Lehman.

While some of these issues need to be addressed centrally by market infrastructure providers, these examples highlight the importance of diversifying across counterparties and the need for firms to understand their terms of engagement with counterparties, particularly in the event of default. Asset managers will be vulnerable should another broker fail, making it especially important for firms to understand the default provisions underlying their transactions. Firms also need to have robust contingency plans to address the risk of being unable to trade with a particular counterparty.

Asset managers are also exposed to risks posed by custodians offering them services which include the safekeeping of assets and cash deposits. Firms need to manage the counterparty risks in their relationship with custodians paying particular attention to how cash, which may not benefit from the same levels of segregation as other assets, is invested. The risk involved in outsourcing functions to third-party service providers is another risk that is exacerbated by the continued volatility in market conditions. In these challenging times it is of great importance that effective oversight and risk management of third-party service providers continues to be exercised. It is also important that firms are aware of the risks posed by the concentrated exposure to a small number of vendors providing critical services (for example, of pre/post-trade compliance systems), and to ensure that firms have contingency plans in place to deal with interruption of service.

Issues arising from contraction in assets and wind-down of funds

Funds have been affected by rising redemption requests...

Significant falls across asset classes has resulted in an increase in the number of redemption requests by investors as volatile markets have affected the performance of funds. The challenges faced by some firms in dealing with high-volume redemption requests illustrates the continued risk posed by firms failing to adequately allow for investor demand for liquidity. While financial market conditions remain volatile, investors are expected to continue to favour high-quality and liquid assets. Investors that choose not to redeem their investments are exposed to the risk of better quality and more liquid assets being sold to fund withdrawals; potentially leaving them with concentrations of investment risk which may be outside their original mandate or expectations.

...and this could lead to the wind-down or consolidation of some funds

The pressure of an increase in redemptions, coupled with continued challenges in the financial and economic environment, may result in the wind-down or consolidation of some funds, and potentially some asset management firms. The complexity of some investment strategies poses a risk to firms' ability to manage an orderly and rapid unwind. This is a greater risk for smaller and thinly-resourced firms and for firms with particular concentrations in their business model or with a small number of business lines. These firms may be highly reliant on a smaller group of clients who could withdraw their

assets or default on payments. The hedge fund sector in particular, is likely to experience the greatest level of attrition, both in terms of the number of firms in operation and in terms of AUM, as the standalone boutique business model comes under pressure.

In an environment where funds are likely to continue experiencing poor performance, investors are more likely to scrutinise investment management agreements. This may result in more liability claims against asset managers for failing to deliver to clients expectations. Firms also need to consider the potential cost of measures that may need to be taken to protect against reputational risk.

Financial crime

At a time of economic difficulty there is an increased risk of account takeover fraud, and this is potentially exacerbated by possible resource cuts at both asset management firms and their third-party service providers. Market conditions may also lend themselves to the heightened risk of fraudulent manipulation of the valuation of underlying investments in funds. This is something which we expect to be a key focus of auditors over this year.

Key messages for asset managers

- Firms' management need to consider carefully any cost-cutting exercises that could **compromise essential functions**, especially those in roles such as compliance, risk and audit, as well as back-office functions.
- **Effective communication** of product descriptions adequately reflecting the nature of products (such as risk and return characteristics) should be provided. Firms also need to exercise reasonable care over the distribution of their products to mitigate the risk of misselling. Products should only be offered after careful development and once the firm has appropriate systems and controls in place to support the product.
- **Systems and controls** should also be in place to manage valuation difficulties and to ensure that questionable prices are identified. Appropriate governance procedures are also important when using non-independently sourced values. Asset managers should be able to perform due diligence on all assets in their portfolios and be able to monitor and manage the risks in portfolios in light of client mandates.
- Firms should have in place appropriate systems and controls to manage **counterparty risk** in their investment activities on behalf of clients. Firms should understand the terms of engagement with their counterparties, paying particular attention to what conditions apply in the event of default. Effective oversight and risk management of any outsourced relationships should also be exercised.
- Firms need to model likely client demand as well as **considering stresses** around this to prepare for the unexpected. Management of firms must be alive to the need to treat different sets of investors equitably, especially when dealing with redemptions or transitioning assets between providers.
- Risks that could affect an orderly wind-down should be analysed appropriately. Firms should adequately quantify their **operational risks** and demonstrate robust mitigation strategies for risks identified.
- Robust systems and controls must be maintained to guard against account takeover fraud, market abuse and fraudulent valuation of investments and other **financial crime**.

Consumers

While some consumers may be benefiting from lower interest rates on loans, for example existing borrowers on tracker rates, many others are being affected by falling property prices, credit tightening, and poor investment returns. Job insecurity is growing, and this is affecting consumer behaviour regarding borrowing and savings. Consumer confidence in the general economic situation has fallen and trust in financial services has been damaged.

Falling consumer confidence could lead to consumer disengaging with financial services

Trust in financial services

Loss of confidence in financial markets can have a long-term effect on the willingness of consumers to engage with financial services. Research carried out by de Meza *et al* for the FSA suggests that psychological factors are a major influence on individuals' willingness to engage in financial decision making.⁶ In the short term, where consumers are aware of increased risk, uncertainty may lead them to engage with financial services, and take steps to protect their financial interests. We have observed this in changes in consumer behaviour in response to financial services compensation arrangements. Over the longer term there is a risk that a loss of confidence and trust in financial services, and poor experience of some products, may make it harder to engage consumers.

Rebuilding consumer confidence and trust in financial services will require concerted action from firms, regulators and the government. Appropriate access to financial services, fair treatment of customers in distress, and high levels of consumer protection will all help to reduce the risk of longer-term disengagement and distrust in the market. This will be of particular importance this year, as personal finances come under strain.

Tightening credit conditions

Credit conditions are tightening and consumers struggling with repayments on existing debts will find it increasingly difficult to obtain loans or refinance to help alleviate such pressures. Those in financial difficulty may find themselves unable to use equity in their homes to fund current spending and debt, which may lead to further credit problems. Consumers are more likely to default on repayments, maximise unsecured credit lines (such as credit cards) or seek out loan shark debts to fill the gap.

Debt management

Rising unemployment (and a possible rise in the number of partnership breakdowns, which become more common in economic downturns) will trigger mortgage repayment problems for many households. Households in arrears could be more vulnerable to being mistreated by financial firms. Fairness in the court processes will need to be a key consideration. The courts should ensure that providers have followed FSA consumer protection standards when there is an application for a mortgage possessions. If this does not happen, consumers may be treated unfairly and the reputation of the financial services industry will suffer.

More consumers may experience debt repayment problems...

⁶ *Financial Capability: A Behavioural Economics Perspective*, David de Meza, Bernd Irlenbusch, and Diane Reynier, July 2008.

...and may seek some form of debt resolution

Research from KPMG suggests that this year more than 150,000 people may opt for bankruptcy, an IVA or the new Debt Relief Order.⁷ While these options will provide relief from debt in the short term, it will be very difficult – and in certain cases impossible – to access credit for a number of years. Those most likely to suffer exclusion will be recent first-time buyers, subprime borrowers and the elderly or retired who have experienced a fall in equity and may have limited access to alternative sources of income.

Savings

Savings behaviour may change

As discussed in *Section B*, savings rates remain relatively low. Concerns over job security and falling house prices could encourage some consumers to save more. However, other consumers who are struggling to make ends meet or repay outstanding debts, could be left with little extra income for saving. Cuts in interest rates have seen savings account returns reduce significantly, and may also reduce the incentive to save. Furthermore, should unemployment continue to rise, an increasing number of consumers may need to use their savings in place of an income. Savers, especially younger workers and families facing job insecurity, are increasingly likely to move away from longer-term savings in favour of more liquid savings. Prioritising more liquid options, such as savings accounts, may be a rational response to financial uncertainty, but there is a risk of embedding behaviours that are difficult to reverse when more stable conditions return.

Consumers nearing retirement are particularly vulnerable

Older workers, especially those nearing retirement, tend to save more for their pensions. Confidence in pension products may suffer due to poor investment returns resulting from falling equity and asset prices and low annuity rates. Consequently, older workers may face difficult choices, either postponing retirement plans, or facing a larger than expected drop in income. Two groups of consumers are most vulnerable: those about to retire with self-invested pensions who may be exposed to a combination of falling equity prices and lower than expected annuity rates; and those retiring in the next two to three years who may still be exposed to falling equity values. Older workers expecting to generate income from property may also find this less valuable than expected, and some may be faced with a mortgage endowment shortfall.

All savers are likely to place an increased premium on security of their savings. This may be reflected in more conservative choices of investments, and investments backed by higher levels of compensation.

Protection products

Consumers looking to make savings in household expenditure might be tempted to cut spending on protection products even though they may need access to such products. In the recessionary environment there is increased uncertainty over job security and households could face losing their principal household income. Estimates by the Association of British Insurers (ABI) suggest that up to a quarter of people in the UK do not have adequate contingency plans in place for such an event.⁸ Lack of appropriate protection against an unexpected drop in income will leave consumers vulnerable to losing their homes, or being forced to change their standard of living.

⁷ KPMG predicts record year for personal insolvencies in 2009, KPMG, December 2008.

⁸ *Coping With Crises: Household Protection Needs*, ABI, 2008.

Consumers who have purchased protection products may be affected by claims being declined due to ineligibility, limitations or exclusions that they may not have been aware of. This applies particularly to payment protection insurance policies, which may also have limitations on sums or durations of payment. The economic recession may increase the impact of these failures on consumers' trust in financial products and services. Where income protection is provided under a pure protection contract, this may be more comprehensive and longer-lasting, but problems at claims stage can still arise where there was inadequate disclosure by firms or consumers at point of purchase.

Key messages for consumers

- In 2009 more people will be struggling to make ends meet, and keeping on top of personal finances will be more important than ever. Typical warning signals of financial difficulty include struggling to pay monthly bills, reaching overdraft limits and dipping into emergency savings. It will be important to recognise the signs of financial difficulty, and to **take action**.
- Consumers who are aware of their **rights and responsibilities** are better able to buy products which meet their needs. Firms should inform consumers of their rights. If in doubt, free advice is available for consumers on websites such as *Consumerdirect* or *Moneymadeclear*.
- Consumers should **beware of deals** which seem 'too good to be true'. Criminals may try to use the economic recession to their own advantage.

Capital markets

Capital markets have experienced increased levels of turbulence over the last year. Both market participants and infrastructure have been under significant pressure to adapt quickly to the changing economic and financial conditions. Market events have re-emphasised the importance of appropriate management of operational, credit and counterparty risk. Market structures have also come under additional stress. Post-trade infrastructure held up broadly as expected as the events of a major counterparty collapse unravelled.

Credit rating agencies

Loss of confidence in credit ratings...

Credit ratings play an important role in reducing asymmetries of information regarding credit risk that exist in capital markets. However, there has been a widespread loss of confidence in the accuracy of ratings and timeliness of review of certain structured finance products. This arose following the large number of downgrades on US subprime RMBS and other structured products exposed to similar collateral from mid-2007. The performance of certain structured finance product ratings, and the impact that this has had on market confidence, has led to a number of international regulatory bodies reviewing the appropriate approach for engagement with credit rating agencies.

...is leading to a move towards more formal oversight and regulation

In response to criticism regarding the use of ratings and rating methodologies, there have been moves towards more formal oversight and regulation of credit ratings agencies in a variety of jurisdictions. These initiatives are designed to address issues associated with the conduct of business of credit ratings agencies, such as: the adequacy of oversight and governance; the appropriateness of systems and controls; and the management of conflicts arising as a result of the 'issuer pays' business model. However, formal regulation of credit ratings agencies might unintentionally encourage investors to place, and in some cases continue to place, excessive reliance on ratings as a form of guarantee on asset quality.

There is also a risk that a divergence in approach to the oversight of credit ratings agencies at an international level will create uncertainty within global capital markets as to the appropriate use of credit ratings, and lead to increased operating complexity for firms active at an international level. The EU Commission has put forward legislative proposals for the registration of credit ratings agencies within Europe. It remains unclear how these will impact on other territories, but there is a risk that some of the restrictions placed in the legislation may affect the ability of firms to operate and trade as they have done previously. Firms should consider what impact the new legislation might have on their current activities.

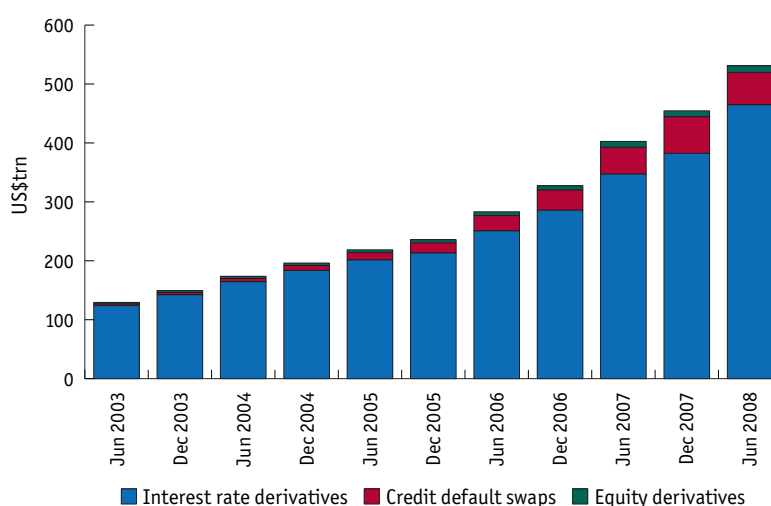
OTC derivatives

Increased focus on OTC derivative risks...

While recent events, including the failure of a major counterparty, have seen the post-trade infrastructure perform broadly as anticipated, given the current legislative and regulatory framework, there has been increased focus on the key risks which are inherent to OTC derivatives markets: counterparty risk; operational risk; and the risk that limited transparency affects market confidence and effective regulatory oversight. There is a concern that, within firms, these risks associated with OTC derivatives could be addressed more effectively than is currently the case.

The OTC derivative market accounts for a significant amount of trades in financial markets and comprises a wide variety of products, including *inter alia* interest rate derivatives, credit derivatives and equity derivatives. The aggregate gross notional amount of these three OTC derivative markets alone is currently estimated at US\$531 trillion, with interest rate derivatives currently dominating the market by notional amounts outstanding.⁹ While it should be acknowledged that these gross notional figures do considerably over-estimate the amount of risk being transferred via the OTC derivatives in question (as they include trades which could be bilaterally or multilaterally netted, while leaving the amount of risk transferred unchanged), they are a measure of the cumulative market activity. The rapid growth of this market has increased the significance of the risks identified above.

Chart C10: Volume by product type



Source: ISDA

...and there are regulatory initiatives underway to address them

Multiple international regulatory initiatives are underway to address the operational and infrastructure risks in this market and several have achieved significant progress. The most prominent development is the drive for the market to establish a central counterparty (CCP) for the CDS market, which should mitigate a significant portion of the counterparty risk. In addition, a CCP is expected to improve price transparency for liquid contracts and standardise the market. However, while a CCP will mitigate some of the aforementioned risks, it will centralise the counterparty risk and it may have only limited scope as not all CDS products will be suitable for clearing.

As well as being subject to appropriate regulatory oversight, it is important that such CCP initiatives are appropriately analysed, especially with regards to risk management, by firms to ensure they are fully understood. For products that remain outside of the new infrastructure, firms should continue to build on recent progress to improve the existing systems and processes in a timely manner.

⁹ ISDA Market Survey – 2008 mid-year survey, ISDA, 2008.

Market infrastructure providers: competition, consolidation, and fragmentation

Greater competition...

In 2008 we witnessed greater competition spurred further by the implementation of the Markets in Financial Instruments Directive (MiFID). This has been most evident in the equity market, where three new trading platforms have begun offering competing equity venues, and a further number of similar platforms are expected to enter the market. This development, along with greater scalability and lower technology costs, has created opportunities for new clearing providers, and a number of new clearing venues are now operational. Existing equity and clearing providers have adjusted their strategy accordingly. For infrastructure providers, greater competition may mean a reduction in, or limitation to, revenue streams and market share. This highlights the need for Recognised Bodies (RBs) and Multilateral Trading Facilities (MTFs) to stress test their business models to ensure resilience in the face of such competition. There is a risk that infrastructure providers may not be adequately prepared for these strains on their business models, which could result in unforeseen or additional costs.

Greater competition has already been associated with fragmentation of the market, which could temper innovation and efficiency gains. In particular, there is a risk that fragmentation of various aspects of market data makes surveillance and monitoring more difficult.

...and consolidation among market infrastructure providers

The global context of the consolidation between Market Infrastructure Providers continues to bear significance. Global multi-jurisdictional group structures that include UK RBs and MTFs pose a number of challenges to the FSA's objectives of achieving effective and efficient regulatory arrangements. Firstly, the process of integration following any merger or acquisition involving a UK entity has ramifications for governance, risk management, and key controlled functions. There is a risk to market participants that commercial pressures for Market Infrastructure Providers to realise synergies take precedence to proper regulatory consideration and resource allocation, which could in turn jeopardise the integrity of the market.

Secondly, there is a risk that the international jurisdictional remit between national regulators becomes unclear, meaning cross-border regulatory risks are ineffectively mitigated. Market participants could also favour operating within one jurisdiction over another, to exploit a perceived regulatory arbitrage. To mitigate this risk we have established a strong dialogue with other national regulators, both bilaterally and within multilateral forums. Without regulatory cooperation, the complexity and cost of conducting business with substantially differing or conflicting regulatory regimes increases. Firms active in these markets should ensure they have a clear understanding of the regulatory arrangements, and the implications of these for their business model.

Key messages for firms and investors

- As a **credit rating** represents only one opinion on the creditworthiness of a particular product, a rating should not replace appropriate due diligence. Investors should assess how much reliance is appropriate to attach to the ratings produced by third parties, in light of rating performance and other forms of risk assessment relevant for the security concerned. Factors such as liquidity risk and price volatility can be as important in making an appropriate decision, and should be considered alongside other relevant indicators regarding the creditworthiness of an investment.
- Firms active in **OTC derivatives markets** should consider their current and possible future use of OTC derivatives: whether appropriate processes are in place; whether they are sufficiently resourced to mitigate the inherent risks; and how the infrastructure initiatives could affect their business models. Furthermore, firms should ensure that the risks associated with OTC derivatives are well understood throughout the firm, including at the most senior levels.

Lehman Brothers collapse: Market infrastructure implications

The failure of the Lehman Brothers group in September 2008 caused unprecedented damage to confidence in the financial system, as markets realised that some institutions that had previously been judged 'too big to fail' turned out not to be. The failure of Lehman Brothers was followed by the takeover of Merrill Lynch and the bailout of AIG. The effects of these events on market confidence were dramatic and rapid. Beyond the impact on market confidence, the collapse of Lehman Brothers also raised new issues from the bankruptcy proceedings for a group of this scale and complexity.

Within the UK, the entry into administration of the regulated investment firm in the Lehman Brothers group raised clear issues in two major areas: prime brokerage and the post-trade infrastructure. In other respects, the UK and international financial architecture was able to manage the default of an entity of this scale. Despite considerable pressure, clearing houses for both securities and derivatives were able to liquidate Lehman Brothers' positions without recourse to their own capital or that of member firms. Other transactions were closed out in accordance with the default rules of the relevant exchange without unexpected difficulties. In addition, credit default swaps linked to the Lehman Brothers' name settled in an orderly way and without causing systemic issues. In this respect, the direct impact of the default of Lehman Brothers (as opposed to the wider market fall-out) was surprisingly contained in view of the complexity of the group, the large number of counterparties involved, and the extreme stress in market prices that followed.

The focus for the Tripartite Authorities has therefore been on the two main areas of concern that have arisen, prime brokerage and the post-trade infrastructure. There is a risk that if these issues are not addressed, in the event that another major counterparty collapses, there could be significant damage to the market and the attractiveness of the UK as a financial centre.

Prime brokerage

Clients of the Lehman Brothers' prime brokerage business experienced delays in recovering client assets and client money held with the firm. The situation was rendered complex by the wide-ranging rights of offset or lien that Lehman Brothers had over the assets held with it, as well as the intrinsic complexity of the supporting contractual arrangements. Since the Lehman Brothers default, the Tripartite Authorities have begun to consider the suitability of the UK insolvency regime for a failure on the scale and complexity of Lehman Brothers. In the Pre-Budget Report, the Chancellor announced his intention to seek to introduce a clause into the Banking Reform Bill to facilitate reform to the insolvency regime for investment firms that hold client money or client assets. In addition, we have begun work with industry practitioners to consider what changes, if any, are appropriate to the contractual structures and market practices used in the prime brokerage business, to ensure that the failure of any prime broker in the future would not result in unreasonable delays in the return of client assets and money.

Post-trade infrastructure

Lehman Brothers' main UK regulated entity was a major user of the UK markets' post-trade infrastructure. Despite significant challenges, the infrastructure proved resilient, but the experience identified a number of enhancements that could be made to clearing and settlement arrangements in case of future shocks. There are three potential areas of improvement: the optimal efficiency of infrastructure providers' internal default management systems and processes; a communications protocol between insolvency practitioners and infrastructure providers to facilitate greater communication between these parties should similar events be experienced in the future; and consideration of whether any default arrangement could be made to both clearing and settlement default arrangement to clarify the way regimes work and to better support resolution of the default situation.

Accounting and auditing

High quality audited financial information is widely recognised as being important in maintaining confidence and efficiency in global capital markets. However, given the ongoing market uncertainty, there are particular risks to the quality of information that may adversely affect market confidence. As economic conditions deteriorate, balanced judgements will need to be made by preparers and auditors over whether firms will continue to be going concerns. Separately, there is a risk that confidence in the role of audit could be impaired should one of the 'Big Four' audit firms collapse.

Care is need in management of liquidity risk in annual accounts

Liquidity risks and going concern disclosure

There has been increased focus on how firms manage their liquidity risk and whether certain firms are going concerns. If firms do not provide adequate disclosure of how they manage liquidity risk, the risks associated with their liquidity position will be misunderstood by investors and creditors. When preparing their annual reports and accounts, directors are obliged to satisfy themselves that it is reasonable to conclude that the firm will be a going concern for twelve months from the date the accounts are finalised. Firms need to take additional care to identify any material uncertainties regarding their businesses' ability to continue as a going concern. With the deterioration in economic and market conditions, previous experience is likely to be less indicative of future cash flows. As auditors react cautiously to the changes in the operating environment, there is also a risk of an inappropriate increase in modified audit reports covering going concerns. This may be detrimental to market confidence.

Fewer auditing firms could be unsustainable

Audit concentration

For the audit of public interest entities the choice of auditors for the largest companies would be severely constrained if one or more of the 'Big Four' accounting and audit firms either collapsed or withdrew from the market. Furthermore, in the current market, auditors may be faced with forming more difficult audit judgements, and there is an increased focus on the role and quality of audit. Clients could rapidly abandon a firm which was perceived to have had particular problems in their auditing practice. This trend in turn could heighten the risk of a collapse. We consider that in the medium term, a market with three or fewer major firms would be unsustainable, and that the implications for audit quality would be sufficiently serious to further undermine market confidence.

Changes to accounting standards

Pressures on fair value accounting, may lead to changes in international accounting standards (IFRS) in specific technical areas, either without appropriate due process or in a manner which makes the accounting standards less robust. In the latter part of 2008, given pressure from the European Commission (EC), the International Accounting Standards Board (IASB) amended its standards on recognition and measurement of financial instruments, to permit firms to reclassify financial instruments, between some categories in line with what was permitted under US GAAP. There is a high risk that if any further amendments are applied to fair value accounting

without appropriate due process and assessment of the impact, this could further undermine market confidence in whether international accounting standards are sufficiently robust. It could also reduce the convergence of international accounting standards and US GAAP, and so damage the potential long-term global application of international accounting standards.

Key messages for firms

- To enhance market confidence, it is important that firms provide **sufficient disclosures** about the key judgements and uncertainties concerning valuations and any reclassifications in the accounts.
- Firms need to provide adequate disclosure of how they **manage liquidity risk** and should take additional care to identify any material uncertainties regarding their business' ability to continue as a going concern.

Financial crime

Deteriorating economic and financial market conditions could contribute to a reduction in firms' capacity to effectively manage and mitigate operational and financial crime risks. Firms may be at greater risk of financial crime as economic stresses at the individual and corporate level increase the incentives for committing market abuse, fraud and other financial crimes. At the same time, fraudsters continue to pose a greater threat to firms and consumers as they seek to commit financial crimes using increasingly sophisticated techniques.

Market abuse

Incentives for market abuse...

There is a risk that firms do not have adequate systems and controls in place to identify and prevent cases of market abuse. Our work on the protection of inside information relating to public takeovers, revealed that firms may be complacent about the robustness of their controls in this area. Even if the number of public takeovers decreases due to economic conditions, many firms will still be in possession of inside information. Firms must react appropriately to current conditions to ensure their systems and controls are sufficiently robust to prevent or uncover any incidents of market abuse, and report any suspicious activity. While market conditions remain very volatile it is also essential that firms have proper procedures for handling market rumours and, in particular, avoid giving credibility to false and misleading information.

Fraud

...and fraud may be heightened in current environment

Recent studies show that the detection of fraud is continuing to rise. The number of fraud cases filed by CIFAS members during January to September 2008 rose by 15% compared to the same period in 2007.¹⁰ In addition, the number of account takeover and misuse of facility cases are also continuing to escalate, with CIFAS reporting a respective increase of 159% and 67% in the number of reported cases between January and September 2008 compared to the same period in 2007.¹¹

The alleged fraud in the US by Bernard Madoff and his firm, Bernard L. Madoff Investment Securities, which came to light in December 2008 was a timely reminder of how the risk of fraud remains high. As we noted in last year's *Financial Risk Outlook*, tighter market conditions have increased the frequency of and discovery of financial crime (and potentially the incidence too). We believe that the increased rate of redemption from investment funds, discussed earlier in *Section C: Asset Management*, has clearly proved a factor in the detection of this type of fraud.

Criminals appear to be changing the way in which they commit financial crime, indicating an increasing sophistication as they require more complete data to commit such crimes. For example, CIFAS reports that 'current-address fraud' now surpasses instances of 'previous-address fraud' comprising two-thirds of all identity fraud cases filed by its members in the first quarter of 2008.¹² Developments in the criminal use of technology allow easier and faster access to valuable personal data, providing an increased opportunity

¹⁰ CIFAS figures confirm that the UK's fraud landscape has changed, CIFAS, October 2008.

¹¹ Ibid.

¹² CIFAS figures emphasise the change in UK's fraud landscape, CIFAS, July 2008.

for committing e-crime. APACS reports that the number of phishing attacks¹³ and money mule advertisements¹⁴ continue to rise. The number of fraudulent phishing websites set up in the first half of 2008 increased by 180% and the number of money mule advertisements rose by 33% (when compared to the same period in 2007).¹⁵ However, consumer awareness of financial crime risks and how individuals may be targeted by criminals does not appear to have kept pace with the change in criminal use of technology, and the 2008 FSA consumer survey shows that the level of consumer awareness of financial crime remains poor.

Criminals may now target employees disgruntled by the threat of redundancy, poor pay increases and increasing financial pressures. Employees may become more desperate as the recession deepens, increasing the risk of crimes such as data theft, mis-marking, the manipulation of financial accounts in a desire to meet company targets, and the theft of client money. Firms should take care to review continually their exposure to financial crime risk, to ensure that shifting trends are addressed via an effective mitigation framework. However, they should also be careful not to divert attention away from managing the risk by more traditional financial crime methods.

Firms need to work with consumers to tackle the threat of being targeted by criminals seeking to commit financial crime. Firms should retain focus on operational controls and risk management, strengthening their controls where appropriate, to reduce the risk of exposure to financial crime.

Key messages for firms

- Firms should maintain **effective operational controls** to address the risks of financial crime which may be exacerbated by current market conditions.
- Firms must ensure that they have **appropriate procedures** for handling market rumours and, in particular, avoid giving credibility to false and misleading information.
- Firms should review their exposure to financial crime risk and ensure that shifting trends are addressed via an **effective mitigation framework**. They should also be careful not to divert attention away from managing the risk of more traditional financial crime methods.

13 Phishing is the practice of sending e-mails which try to persuade unsuspecting victims to provide confidential bank information and personal details. The e-mails often appear to come from genuine bank or payment services, containing links to genuine-looking websites.

14 A money mule advert may be placed by a fraudster looking to recruit someone to transfer money from one country to another on their behalf. The money mule receives a transfer of money into their account which they are then instructed to wire to another account, in exchange for a small commission payment.

15 *Payments industry reveals growth in money mule activity*, APACS, September 2008 and *APACS announces latest fraud figures*, APACS, October 2008.

Index of charts, tables and figures

Note: All data is the most recently available as at end January 2009.

Section A: Financial and economic crisis

Charts

- A1 Global current account balances
- A2 ABS volumes outstanding (US)
- A3 Securitisation issuance trends in the UK
- A4 House price trends in selected European countries
- A5 Investment banks' leverage
- A6 Major UK banks' leverage
- A7 Unconsolidated UK debt as a percentage of GDP by borrower type (1987 to 2007)
- A8 Consolidated US debt to GDP ratio by domestic non-government sector (1952 to 2007)
- A9 Corporate spreads
- A10 Implied volatility of the S&P 500 and DAX
- A11 Credit default swap indices

Figures

- A1 Six interrelated effects

Section B: Economic outlook

Charts

- B1 Revision to the consensus forecasts for 2009
- B2 Prime brokerage net equity and prime brokerage long leverage
- B3 FTSE all share sector trends; (debt-to-assets ratio)
- B4 Net new lending to UK households and non-financial corporates (3-month rolling average)
- B5 Residential and commercial property prices in recent downturns
- B6 UK mortgage arrears and possessions
- B7 Households' savings rate
- B8 Composition of household wealth

Tables

- B1 Consensus forecasts for the global economy
- B2 Forecasts for the UK economy
- B3 Comparison of leverage measures for UK non-financial corporates and households

Figures

- B1 Three self-reinforcing cycles

Section C: Outlook for financial sectors and consumers

Charts

- C1 Major UK banks' customer funding gap, household saving ratio and foreign interbank deposits
- C2 3-month LIBOR-OIS spreads in sterling, US dollar and euro
- C3 Major UK banks' bonds maturing over the next five years
- C4 Credit spreads of corporate bonds with terms 7-10 years
- C5 Total UK general insurance underwriting results
- C6 Changes in the number of retail intermediary firms
- C7 Profit margins as percentage of revenue for UK fund managers
- C8 Funds under management (UK domiciled collective investment schemes)
- C9 Net sales (retail and institutional) of guaranteed protected funds and absolute return funds
- C10 Volume by product type

Figures

- C1 What happened to the demutualised building societies?
- C2 What happened to the Wall Street Investment Banks?
- C3 Business model sustainability stylised analysis of key success factors

Glossary

ABI – Association of British Insurers	IVA – individual voluntary arrangement
ABS – asset-backed security	LCFI – large complex financial institutions
AUM – assets under management	LGD – losses-given-default
bn – billion	LIBOR – London interbank offered rate
bp – basis point	LTI – loan-to-income
CCP – central counterparty	LTV – loan-to-value
CDO – collateralised debt obligation	MBS – mortgage-backed securities
CDS – credit default swap	MCOB – mortgage conduct of business
CLO – collateralised loan obligations	MiFID – Markets in Financial Instruments Directive
CML – Council of Mortgage Lenders	mn – million
EC – European Commission	MTF – Multilateral Trading Facility
EEA – European Economic Area	MVR – Market Value Reduction
GDP – gross domestic product	OAS – Option adjusted spread
FOS – Financial Ombudsman Service	OIS – overnight index swap
FSCS – Financial Services Compensation Scheme	OTC – over the counter
IAS – International Accounting Standards	OTD – originate to distribute
IASB – International Accounting Standards Board	OTH – originate to hold
IFA – Independent Financial Adviser	RB – Recognised Body
IFRS – International Financial Reporting Standards	RDR – Retail Distribution Review
Itraxx Crossover Index – an index offering credit default protection against European companies of sub-investment grade	RMBS – residential mortgage-backed securities
IMF – International Monetary Fund	SIV – structured investment vehicle
IPD – Investment Property Databank	trn – trillion



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